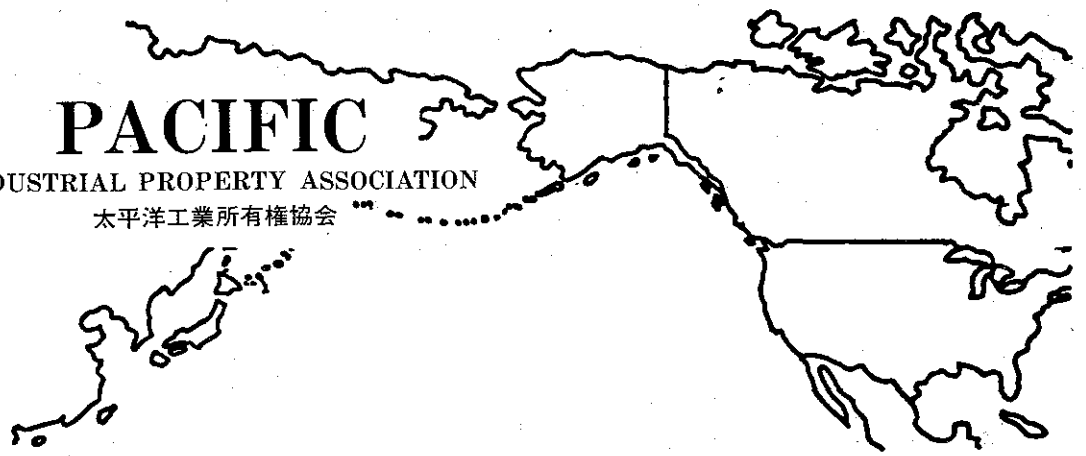

PACIFIC

INDUSTRIAL PROPERTY ASSOCIATION

太平洋工業所有権協会

PRESENTATIONS

The Twelfth International Congress

New York, New York

November 4-6, 1981

Program

WEDNESDAY, NOVEMBER 4, 1981

8:00 a.m. REGISTRATION - College Hall - University Club

8:00 a.m. REGISTRATION - College Hall - University Club

9:00 a.m. OPENING CEREMONIES

Opening of 1981 Congress - Thomas I. O'Brien
Report on 1980 Activities - Koichi Ono
Installation of PIPA Officers for 1981
Keynote Address - Thomas I. O'Brien, President PIPA

HONORARY CHAIRMAN - Warren M. Anderson, President of Union Carbide Corporation (Elected Chairman & Chief Executive Officer of Union Carbide Corporation, effective January 1,1982)

REPORTS OF COMMITTEE NO. 1
Toshiharu Kawase and William T. McClain, Chairmen

10:00 a.m. *Organization and Function of a U.S. Corporate Patent Department*
William F. Thornton

10:25 a.m. Coffee

10:40 a.m. *Description in the Specification*
Katsuhiko Takahashi

11:05 a.m. *Fraud on the Patent Office*
Donald M. Sell

11:30 a.m. *Japanese Utility Model Registration System*
Satoi Kojima

12:00 n *Drug Product Simulation*
Irving N. Stein

12:30 p.m. LUNCHEON - Council Room, University Club

2:00 p.m. *U.S. Re-examination/Re-issue Practice*
Roy H. Massengill

2:30 p.m. *Japanese Counterpart Systems of U.S. Re-examination System*
Iwao Kimata

3:00 p.m. Coffee

3:15 p.m. *Recent Court Decisions on Patents in Japan*
Masahisa Hase

3:45 p.m. *Recent Developments in the Patenting of Micro-organisms*
C. Harold Herr

4:15 p.m. *Recent Court Decisions on Trademarks*
Nobuyoshi Sakuragi

4:45 p.m. *Patent Term Restoration Legislation - An Update*
Rudi Anderson

5:00 p.m. *Delay in Filing a U.S. Patent Application - How Long is Too Long?*
William T. McClain

RECEPTION AND BANQUET - University Club, 5th Ave. & 54th St., New York City

6:00 p.m. - Cocktail Hour
7:00 p.m. - Dinner

THURSDAY, NOVEMBER 5, 1981

REPORTS OF COMMITTEE NO. 2

Kou Kunieda and Alan D. Lourie

9:00 a.m. *Xerox v. SCM Decision - The Right of a Patent Holder with Monopoly Power to Refuse a License*
Robert A. Stenzel

9:30 a.m. *Regulations on Technology Transfer in Southeast Asian Countries*
Kojiro Ozu

10:00 a.m. *New Statute Governing Patent Rights in Inventions Made with Federal Government Assistance*
Richard L. Donaldson

10:30 a.m. Coffee

10:45 a.m. *Handling of Results from Government-Financed R&D Agency*
Katsumi Tanaka

11:15 a.m. *U.S. Justice Department's Antitrust Guide Concerning Research Joint Ventures*
Walt Zielinski

REPORTS OF COMMITTEE NO. 3

Tei Kawaguchi and John E. Maurer, Chairmen

11:45 a.m. *Summary from the American Point of View of the Proceedings in Nairobi*
Alan D. Lourie

12:15 p.m. LUNCHEON - Council Room, University Club
GUEST SPEAKER - The Honorable Gerald J. Mossinghoff,
U.S. Commissioner of Patents and Trademarks

2:00 p.m. TOUR - METROPOLITAN MUSEUM OF ART
(Bus leaves University Club at 1:30 p.m.)

RECEPTION AND DINNER - *Windows On The World* - One World Trade Center, N.Y.C.
(Bus leaves University Club at 5:30 p.m.)

6:00 p.m. - Cocktail Hour
7:00 p.m. - Dinner

9:00 a.m. *Nairobi Proceedings from the Japanese Point of View*
Koichi Ono

9:30 a.m. *Expected Legislation of Patent and Trademark Law in People's Republic of China*
Akio Takahashi

10:00 a.m. *Recent Developments in Central and South American Patent Laws*
Calvin Sparrow

10:30 a.m. Coffee

10:45 a.m. *Expected Regulation for Licensing and Technology Transfer in People's Republic of China*
Hideki Omote

11:15 a.m. *Patent Protection in USSR*
Akira Mifune

11:45 a.m. *Developments in the Law of the Sea Treaty - An Update*
Homer Blair

12:15 p.m. LUNCHEON AND CLOSING CEREMONIES - Council Room, University Club

Ceremonies

Guest Speech

PIPA 12TH INTERNATIONAL CONGRESS

NOVEMBER 4, 1981

OPENING ADDRESS: T. I. O'BRIEN

Good morning ladies and gentlemen, I'm Tom O'Brien, President of the United States Group, and this year, President of PIPA. It is my great honor and pleasure to be here this week with my fellow American colleagues and my old friends from Japan, whom I have had the good fortune to be associated with for several years through this association. Although I hope to have the opportunity during the next three days to greet all of the Japanese members in attendance individually, please accept a warm welcome from me both personally and on behalf of the American Group. I would also like at this time to extend a special word of welcome to Mr. Warren Anderson, President of Union Carbide Corporation, for taking time from his busy schedule in order to be with us and serve as the Honorary Chairman of this 1981 Congress. Thank you, Warren, for joining us. I should also like to extend a greeting and welcome to New York City, the Big Apple, and wish all of our visitors a pleasant stay in our fair city. Mr. Ono, our President from Japan, has told me that he brought this delightful fall weather with him from Europe, and I want to thank him expressly for that.

I'm pleased to report to you that we have a total of about 83 Association members in attendance, 46 from the U.S. Group and 37 from the Japanese Group. In addition, we also have 16 wives that have registered for this Congress.

OPENING ADDRESS: T. I. O'BRIEN

One of the highlights of the 1981 Congress will be the presentation at this evening's banquet of the first PIPA Award for outstanding contributions to international cooperation in the intellectual field. I hope that all of you will find the program prepared for you at this 12th International Congress of the Association to be interesting, productive, and enjoyable too.

The first item on our agenda will be a report on 1980 activities by the President of the Japanese Group, Koichi Ono.

Report on 1980 Activities of PIPA

Koichi Ono
President of Japanese Group

Good morning, honored guest and members of the Pacific Industrial Property Association. It is really an honor to greet you on behalf of the Japanese Group here in this University Club which has a very impressive and dignified atmosphere.

As you know, all of the objects, purposes and activities of our association shall be directed toward subject matter and problems in the industrial property field which are of general interest and importance to members of the association.

Under this principle, our association has made a great contribution in various directions since its establishment in 1970, including annual congress as a main function.

The 11th International Congress of PIPA was held in Tokyo during the period of October 22 through 24, 1980, and was attended by more than 100 representatives from the American and Japanese Groups. Presentations in the congress were directed to the most advanced information of the situation in the field of industrial property rights not only in the U.S. and Japan but also in other countries, including excellent analysis of such situation.

The revision of the Paris Convention has been a subject matter which we have been continuously paying attention to and we have been discussing with a great interest. A diplomatic conference on this subject matter was held in Geneva in February 1980. The conference was suspended for more than

a year and a half until it was reopened in Nairobi last September.

During the suspended period, B-Group countries including the U.S. and Japan had a meeting several times to discuss and find out a reasonable settlement in the hard international negotiation. The PIPA member companies representing industries in both countries gave occasionally advices to each Government. The Nairobi Conference continued until October 24 and PIPA sent a delegation to the Conference from both American and Japanese Groups. Although the activity of PIPA in such conference is limited to observer, PIPA is the only organization having a capacity to send representatives from the U.S. and Japanese industries. The result of the Conference will be reported in this congress.

In November 1980, WIPO called an informal meeting solely of international non-Governmental organizations on the questions concerning WIPO's activity in the field of industrial property and copyright. In this meeting, PIPA was represented by Mr. Jorda and Mr. Ozu.

The purpose of this meeting were 1) to inform the participants about the recent activities and future plans of WIPO and 2) to hear from the participants their wishes and suggestions in those fields. We highly appreciate that WIPO has recognized the role of non-Governmental organizations.

As you know, it was decided in the 11th International Congress that PIPA establishes an Award to recognize and encourage outstanding contributions to international cooperation in the industrial property field. The first Award is being granted in this 12th Congress.

I sincerely hope the activities of our association will continue to grow.

Now, Dr. Pauline Newman was the president of the American Group in 1979 and 1980 when the international situations in the field of industrial property were difficult. Particularly, she was the president of our Association in 1979. Not only in these two years but also since the very beginning of our association, she has served our association with great endevor and warm friendship. On behalf of all members of PIPA, I should like to express to Dr. Newman our great appreciation and I have a pleasure to present Dr. Newman with this certificate and this token of our esteem and affection.

T. I. O'Brien - KEYNOTE SPEECH PIPA CONGRESS
NOVEMBER 4, 1981

THE PATENT SYSTEM TODAY -- OUTLOOK IN THE UNITED STATES

GOOD MORNING AGAIN!

NATIONAL PATENT SYSTEMS ARE CONTINUOUSLY MOLDED BY THE ECONOMIC, POLITICAL AND SOCIAL FORCES THAT PREVAIL IN NATIONS. IN MODERN TIMES NATIONAL SYSTEMS ARE ESTABLISHED AND MAINTAINED TO PROVIDE AN INCENTIVE TO INNOVATION IN TECHNOLOGY. APPROPRIATELY, THESE SYSTEMS NOT ONLY PROMOTE INNOVATION BUT ALSO SERVE TO RECOGNIZE AND HONOR INNOVATIONS AND INNOVATORS. THE SYSTEM OF THE GRANTING OF PATENTS BY THE STATE HAS A VERY LONG HISTORY, AND TODAY's NATIONAL AND INTERNATIONAL PATENT STRUCTURES AND INFRASTRUCTURES HAVE FORMED FROM CENTURIES OF EVOLUTION AND DEBATE. THE GRANT OF MONOPOLY POWER HAS ALWAYS BEEN AND PROBABLY ALWAYS WILL BE A CONTROVERSIAL SUBJECT. IN ENGLAND, AS IN EUROPEAN COUNTRIES IN THE MIDDLE AGES,

PATENTS WERE NOT RESTRICTED TO THE ENCOURAGEMENT OF INDUSTRIAL DEVELOPMENT, AND WERE GRANTED BY THE KING TO ENGLISH MERCHANTS AS WELL AS TO CRAFTSMAN. MONOPOLIES ON COMMERCIAL GOODS GREW IN SUCH NUMBERS THAT NEARLY ALL OF COMMERCE IN ENGLAND FELL INTO THE HANDS OF A LIMITED GROUP OF ENTERPRISES THAT HAD EXCLUSIVE CONTROL OR MONOPOLIES UNDER THE PROTECTION OF THE CROWN OVER GIVEN AREAS OF TRADE. THE EVENTUAL RESULT WAS EXTREMELY HIGH PRICES ON MANY GOODS AND A POLITICAL BATTLE BETWEEN THE KING AND THE PARLIAMENT ENSUED. PARLIAMENT, RESPONDING TO COMPLAINTS OF THE PUBLIC, ATTACKED THESE MONOPOLIES, WHEREAS THE KING, WHO RECEIVED REVENUES FROM THE GRANTS OF THE PATENTS, TRIED TO PROTECT THE MONOPOLIES. THE BATTLE CULMINATED IN THE PASSAGE OF THE "STATUTE OF MONOPOLIES" IN 1623, WHICH ABOLISHED MOST OF THE COMMERCIAL MONOPOLIES AND DECLARED THEM TO BE ILLEGAL. THERE WERE SOME EXCEPTIONS, INCLUDING THE GRANT TO

INVENTORS OF LETTERS PATENT FOR A LIMITED PERIOD OF TIME. THIS ENGLISH STATUTE ESTABLISHED THE BROAD PRINCIPLE THAT PATENTS OF LIMITED DURATION COULD BE AWARDED TO INVENTORS TO INTRODUCE AND ESTABLISH NEW INDUSTRIAL ENTERPRISE, THE PRINCIPLE ON WHICH MODERN PATENT LAW THROUGHOUT THE WORLD IS BASED. THE THEORY FOR THIS UNOBJECTIONABLE MONOPOLY WAS THE SAME THEN IN THE SEVENTEENTH CENTURY AS IT IS TODAY; NAMELY, THAT THIS TYPE OF GRANT OF PRIVILEGE DID NOT TAKE ANYTHING AWAY FROM THE NATION's TRADE AND COMMERCE THAT ALREADY EXISTED BUT WAS ADDING SOMETHING NEW TO THAT TRADE AND COMMERCE.

THE SYSTEM OF PATENTS FOR INVENTIONS DID NOT REALLY FLOURISH UNTIL THE ADVENT OF THE INDUSTRIAL REVOLUTION AND EVEN THEN THEIR NUMBER WAS VERY LIMITED. WOOD IN HIS BOOK ON "PATENTS AND THE ANTITRUST LAW" (1941) WRITES ON THE PERIOD FROM THE STATUTE OF MONOPOLIES UNTIL ALMOST THE MIDDLE OF THE NINETEENTH CENTURY --

"COMPARATIVELY FEW PATENTS WERE GRANTED EVEN DURING THIS PERIOD, FOR THE ANTIPATHY AGAINST MONOPOLIES STILL PREVAILED, AND THE DISTINCTION BETWEEN THOSE THAT WERE TO BE FAVORED OR FROWNED UPON WAS NOT CLEAR IN THE PUBLIC MIND. RESULT WAS THAT THE INCENTIVE AND STIMULATION GIVEN THE INVENTOR WAS NOT GREAT."

THE AUTHOR WOOD, IN SUPPORT OF THAT QUOTE, CITES A QUOTATION FROM ANOTHER PUBLICATION "THE OUTLINE OF HISTORY", J.P.O.S. 5,34 (JULY 1936) WHICH INTERESTINGLY STATES:

"...THE SECURING OF A PATENT WAS DIFFICULT, THE FEES MANY AND EXHORBITANT, THE TREATMENT OF THE PATENTS BY THE COURTS EXTREMELY RIGID AND HARSH, AND THE PUBLIC ATTITUDE STILL ANTAGONISTIC. IT WAS NOT UNTIL THE INVENTIONS OF ARKWRIGHT, WATT AND THE MANY OTHERS WHICH INAUGURATED OUR MODERN INDUSTRIAL PROGRESS THAT A MORE LIBERAL SPIRIT PREVAILED, AND PATENTS BECAME A GREAT BENEFIT TO INVENTORS AND TO THE PUBLIC."

THIS LAST QUOTE WOULD LEAD US TO BELIEVE THAT THINGS ARE STILL THE SAME TODAY AS THEY WERE THEN IN THE EARLY NINETEENTH CENTURY.

THE GROWTH IN THE NUMBERS OF PATENTS MADE THE GRANT OF PATENTS BY SPECIAL ACTS OF THE LEGISLATURES IMPRACTICAL AND THE NINETEENTH CENTURY SAW THE DEVELOPMENT OF FORMALIZED NATIONAL LEGAL SYSTEMS FOR THE ADMINISTRATIVE ISSUANCE OF PATENTS. A DISCLOSURE OF THE INVENTION WITH SUBSEQUENT PUBLICATION THEREOF BECAME STANDARD. NATIONAL PATENT OFFICES WERE ESTABLISHED AND THE PROCEDURES FOR OBTAINING PATENTS IN THE INDUSTRIALIZED COUNTRIES DEVELOPED INTO FORMAL RULES CENTERING ON WHAT WAS AND WHAT WAS NOT PATENTABLE. PATENT OFFICES BECAME THE MOST COMPLETE REPOSITORIES OF LITERATURE ON TECHNOLOGY EXISTING THROUGHOUT THE WORLD.

THE NEED FOR SOME INTERNATIONAL COORDINATION OF NATIONAL

PATENT LAWS AND COMITY OF NATIONS IN THIS FIELD BECAME A PRESSING PROBLEM AS TRADE AMONG NATIONS BECAME FREER AND INTERNATIONAL INVESTMENTS IN TECHNOLOGY EXPANDED. IN 1883, 10 NATIONS SIGNED THE PARIS CONVENTION WHICH AFTER ALMOST ONE HUNDRED YEARS STILL SERVES AS THE FUNDAMENTAL INSTRUMENT FOR CONTROLLING THE RIGHTS TO PATENT PROTECTION IN MEMBER COUNTRIES FOR NON-NATIONALS. BY THE BEGINNING OF THE TWENTIETH CENTURY, THE MODERN WORLD PATENT SYSTEM WAS BASICALLY IN PLACE.

OVER THE ENSUING YEARS OTHER NATIONS PROCEEDED TO ESTABLISH SYSTEMS FOR PATENTS ON INVENTIONS AND TO JOIN THE PARIS CONVENTION AND TODAY ALMOST 90 NATIONS ADHERE TO THAT CONVENTION. ESTABLISHED PATENT SYSTEMS CONTINUED TO BE REFINED IN MANY COUNTRIES. THE MODERN UNITED STATES PATENT SYSTEM, WHICH WAS ESTABLISHED BY CONGRESS IN 1836, HAS REMAINED A FAIRLY STABLE SYSTEM SINCE THAT TIME. IT HAS SERVED AS THE MODEL FOR PATENT SYSTEMS OF MANY COUNTRIES. ITS PRINCIPLES HAVE BEEN SUSTAINED UP TO THE PRESENT TIME DESPITE NUMEROUS ATTACKS BY ITS CRITICS. IT HAS

DEVELOPED MOSTLY IN THE APPLICATION OF THOSE PRINCIPLES IN THE CHANGING ECONOMIC AND SOCIAL TIMES OF THE UNITED STATES MAINLY THROUGH JUDICIAL DECISIONS RATHER THAN LEGISLATIVE ENACTMENT. THE 1953 REVISION OF THE UNITED STATES PATENT LAW REPRESENTED PRIMARILY AN UPDATE AND RE-AFFIRMANCE BY THE LEGISLATURE OF OLD PRINCIPLES IN THE LAW BUT, INTERESTINGLY IN ONE INSTANCE, IT REPRESENTED A REVERSAL OF A JUDICIAL DEVELOPMENT AWAY FROM THOSE PRINCIPLES. THAT JUDICIAL DEVELOPMENT WAS THE ALMOST TOTAL EROSION BY THE UNITED STATES SUPREME COURT OF THE DOCTRINE OF CONTRIBUTORY INFRINGEMENT. THIS DOCTRINE HAS NOW BEEN FIRMLY RE-ESTABLISHED IN THE PATENT LAW BY THE STRONG UPHOLDING OF THE RELEVANT PROVISIONS OF THE 1953 ACT BY THE SUPREME COURT IN THE ROHM AND HAAS DECISION IN 1980.

IT REALLY WASN'T UNTIL AFTER WORLD WAR II THAT REFORM AND SUBSTANTIVE CHANGE IN NATIONAL AND INTERNATIONAL SYSTEMS BECAME

MAJOR SOCIAL, ECONOMIC AND POLITICAL ISSUES. THERE WAS AN EXPLOSION IN RESEARCH AND DEVELOPMENT FOLLOWED BY A CORRESPONDING EXPLOSION IN TECHNICAL LITERATURE. TECHNOLOGY TRANSFER BETWEEN NATIONS PLAYED AN INCREASINGLY LARGER ROLE IN WORLD-WIDE TECHNOLOGY DEVELOPMENT. THE UNITED STATES WAS THE LEADER IN THIS TECHNOLOGY EXPLOSION AND IN TECHNOLOGY TRANSFER TO OTHER NATIONS, BUT FEW OUTSIDE OF INDUSTRY AND THE PATENT BAR ATTRIBUTED ANY MAJOR SUPPORTIVE ROLE TO THE PATENT SYSTEM IN THE SUCCESS OF THE UNITED STATES IN ACHIEVING THIS TECHNOLOGICAL PRE-EMINENCE IN THE WORLD. LIBERAL ECONOMISTS, WITH THEIR INNATE AVERSION TO MONOPOLY, CONTINUED TO QUESTION THE THEORY OF THE SYSTEM IN CREATING INCENTIVE FOR INDUSTRIAL GROWTH. ANTITRUST CRITICS STILL MISAPPREHENDED THE DISTINCTION BETWEEN THE PATENT PRIVILEGE THAT ADDED SOMETHING NEW TO A NATION's COMMERCE AND TRUE MONOPOLIES, WHICH TOOK SOMETHING AWAY FROM A NATION's TRADE AND COMMERCE. BOTH GROUPS OF CRITICS CONTINUED TO BE SUSPICIOUS OF PATENTS AND PECKED AWAY AT

THE SYSTEM AS IF IT WERE AN ABHORRENT ANTICOMPETITIVE MONSTER DESIGNED ONLY TO FOSTER AND MAINTAIN MONOPOLISTIC POWER BY LARGE ENTERPRISES.

DESPITE THE GREAT PROSPERITY AND GREAT GROWTH IN TECHNOLOGY IN THE 1950s AND THROUGH THE 1960s, THERE WAS REALLY A GENERAL DISINTEREST IN, AND A GROWING ANTIPATHY TO, THE PATENT SYSTEM. THE UNITED STATES PATENT OFFICE FOUND ITSELF IGNORED BY THE POLITICIANS AND STRUGGLED TO KEEP UP WITH ITS EXCESSIVE WORKLOAD. GREATER NUMBERS OF APPLICATIONS WERE BEING PROCESSED BUT SUPPORT FROM THE EXECUTIVE AND LEGISLATIVE BRANCHES OF GOVERNMENT FOR FUNDING THE FULL FINANCIAL NEEDS OF THE OFFICE CAN BE CHARITABLY DESCRIBED AS NOT STRONG. IT TOOK LONGER AND LONGER TIMES TO OBTAIN A PATENT, AND EVEN AFTER IT WAS OBTAINED, THE QUALITY WAS UNRELIABLE PRIMARILY BECAUSE THE PATENT OFFICE EXAMINATION HAD WEAKENED SO. PATENT LITIGATION COSTS SOARED IN THE UNITED STATES AND THE LIKELIHOOD OF THE OUTCOME IN PATENT LITIGATION BECAME

MORE UNPREDICTABLE. EVERY PATENT SUIT BROUGHT BY A PATENTEE BECAME A POTENTIAL ANTITRUST LAWSUIT AGAINST THE PATENTEE, AS COURTS EXAMINED MORE CLOSELY THE CONDUCT OF THE PATENT APPLICANT DURING THE EXAMINATION OF THE PATENT APPLICATION AND FOUND THAT THE APPLICANT's FAILURE TO MEET A STRICT DUTY OF DISCLOSURE TO THE PATENT OFFICE COULD BE THE BASIS FOR AN ANTITRUST VIOLATION. UNCERTAINTY, AND FREQUENTLY DISILLUSION, WAS THE FEELING OF MANY BUSINESSMEN AND INVENTORS ON THE VALUE OF THE PATENT SYSTEM IN THE UNITED STATES.

BY THE MIDDLE 1960s, MANY WERE SAYING THAT THE SYSTEM IS FAILING AND UNWORKABLE IN A MODERN, INDUSTRIAL SOCIETY. A PRESIDENTIAL COMMISSION ON THE PATENT SYSTEM WAS APPOINTED BY PRESIDENT JOHNSON IN 1966 TO DETERMINE WHAT IS THE BASIC WORTH OF THE PATENT SYSTEM IN THE CONTEXT OF PRESENT DAY CONDITIONS. THE COMMISSION UNDERTOOK AN EXTENSIVE ANALYSIS OF THE UNITED STATES PATENT SYSTEM AND FOREIGN PATENT SYSTEMS AND CONCLUDED THAT

"THE PATENT SYSTEM TODAY IS CAPABLE OF CONTINUING TO PROVIDE AN INCENTIVE TO RESEARCH, DEVELOPMENT, AND INNOVATION. THEY [THE COMMISSION] HAVE DISCOVERED NO PRACTICAL SUBSTITUTE FOR THE UNIQUE SERVICE IT RENDERS." REFORM OF THE SYSTEM WAS RECOMMENDED TO RAISE THE QUALITY AND RELIABILITY OF THE UNITED STATES PATENT.

ALTHOUGH LEGISLATION WAS INTRODUCED IN THE CONGRESS AS EARLY AS THE MIDDLE 1960s TO IMPLEMENT NEEDED REFORMS IN THE UNITED STATES PATENT SYSTEM, IT WASN'T UNTIL 1980 AFTER MUCH NATIONAL DEBATE AND, MORE IMPORTANTLY, AFTER PUBLIC RECOGNITION OF A DECLINE IN INDUSTRIAL INNOVATION IN THE UNITED STATES, THAT REAL LEGISLATIVE ACTION WAS TAKEN TO REFORM THE SYSTEM. THIS DECLINE IN INDUSTRIAL INNOVATION BROUGHT ABOUT A RENEWED PUBLIC AND POLITICAL INTEREST IN THE LATE 1970s IN OUR NATION's PATENT SYSTEM. THERE APPEARED TO BE AN ASSOCIATION BETWEEN THE DECLINE IN INNOVATION AND THE LEVEL OF PATENT ACTIVITY BY AMERICAN INVENTORS. THE PATENT SYSTEM SUDDENLY FOUND MORE

POPULAR SUPPORT IN MANY CIRCLES IN AND OUT OF GOVERNMENT AS AN IMPORTANT INCENTIVE TO INDUSTRIAL INNOVATION AND GROWTH. A SECOND PRESIDENTIAL COMMISSION WAS APPOINTED IN 1978 TO STUDY THIS DECLINE, AND THIS TIME NO LONGER QUESTIONED THE ROLE OF THE PATENT SYSTEM IN SUPPORTING INDUSTRIAL INNOVATION. RATHER, IT VOICED ITS CONCERN FOR THE SYSTEM BY FOCUSING ON ITS DEFICIENCIES AND SAID THAT NO MAJOR OVERHAUL OF THE SYSTEM WAS NEEDED. THE CLIMATE HAD FINALLY RIPENED FOR SOME THOUGHTFUL LEGISLATIVE IMPROVEMENTS TO THE UNITED STATES PATENT SYSTEM.

TWO MAJOR PATENT REFORM STEPS WERE PASSED INTO LAW IN DECEMBER 1980. ONE OF THESE WAS THE INTRODUCTION OF A RE-EXAMINATION PROCEDURE INTO OUR LAW. THIS PROCEDURE PROVIDES FOR AN ADMINISTRATIVE RE-EXAMINATION OF AN ISSUED PATENT IN THE PATENT AND TRADEMARK OFFICE. IT PERMITS ANY MEMBER OF THE PUBLIC, INCLUDING THE PATENTEES, TO SEEK RE-EXAMINATION OF AN ISSUED PATENT THROUGHOUT THE LIFE OF THE PATENT ON THE BASIS OF PRIOR ART WHICH WOULD HAVE A BEARING ON THE PATENTABILITY OR SCOPE OF ANY CLAIM OF THE PATENT.

ALSO INTRODUCED IN THE SAME NEW LAW WAS A NEW FEE STRUCTURE FOR THE PATENT AND TRADEMARK OFFICE THAT IS INTENDED TO PROVIDE IMPROVED FUNDING TO THE OFFICE ON A CONTINUING BASIS SO AS TO PERMIT THE OFFICE TO ACQUIRE AND MAINTAIN THE STAFF AND TOOLS NECESSARY FOR HIGH-QUALITY OPERATIONS. MAINTENANCE FEES, LONG A STANDARD BURDEN ON PATENT OWNERS IN NEARLY ALL OTHER COUNTRIES OF THE WORLD, BECAME PAYABLE FOR THE FIRST TIME ON ISSUED UNITED STATES PATENTS DURING THE LIFE OF THE PATENTS.

A THIRD MAJOR LEGISLATURE STEP TO REFORM THE UNITED STATES PATENT SYSTEM IS CLOSE TO PASSAGE TODAY IN THE CONGRESS, AND THIS PROSPECTIVE NEW LAW WILL PROVIDE A CENTRAL FEDERAL COURT TO HEAR ALL PATENT APPEALS FROM ALL THE FEDERAL TRIAL COURTS THROUGHOUT THE UNITED STATES. THIS NEW COURT SHOULD PROVIDE GREATER CONSISTENCY IN JUDICIAL DECISIONS IN THE PATENT FIELD AND THUS REDUCE UNCERTAINTY IN PREDICTING THE OUTCOME OF LITIGATIONS INVOLVING THE ENFORCEMENT OF PATENTS AGAINST INFRINGERS.

TWO ADDITIONAL DEVELOPMENTS IN THE PATENT REFORM THAT ARE BEING ADDRESSED TODAY ARE THE UPGRADING OF THE OPERATIONS OF THE PATENT AND TRADEMARK OFFICE AND THE EXTENSION OF THE TERM OF A UNITED STATES PATENT TO OFFSET THE LOSS OF THAT PORTION OF THE TERM THAT RESULTS FROM DELAY IN COMMERCIALIZATION OF PATENTED PRODUCTS BY REASON OF GOVERNMENTAL REGULATIONS. AS YOU KNOW, MANY DIFFERENT TYPES OF PRODUCTS MAY NOT BE LAWFULLY PUT ON THE MARKET UNTIL THEY HAVE UNDERGONE CERTAIN GOVERNMENTAL TESTING AND HAVE OBTAINED APPROVAL BY SUCH AGENCIES AS THE ENVIRONMENTAL PROTECTION AGENCY, THE FEDERAL DRUG AGENCY AND THE LIKE. IF THE PERIOD FOR OBTAINING THIS PRE-MARKETING APPROVAL CUTS INTO THE TERM OF AN ISSUED PATENT, THE TERM OF THE PATENT IS EFFECTIVELY SHORTENED BY ONE BRANCH OF THE SAME GOVERNMENT THAT HAD PROMISED THE PATENTEE A FULL TERM. LEGISLATION FOR EXTENDING THE PATENT TERM TO COMPENSATE FOR THIS LOSS IS CURRENTLY BEING CONSIDERED BY THE CONGRESS AND THE OUTLOOK FOR PASSAGE INTO LAW IS FAVORABLE.

IF THE ROAD TO SUCCESS WERE PAVED WITH GOOD INTENTIONS, THE CHALLENGE THAT EXISTS IN BRINGING THE PATENT AND TRADEMARK OFFICE TO A LEVEL OF FULL SERVICE WOULD BE QUICKLY AND SUCCESSFULLY MET. REGRETTABLY, THE ANSWER TO IMPROVEMENT LIES PRIMARILY IN INCREASED FINANCIAL SUPPORT, AND IT WILL BE VERY DIFFICULT TO OBTAIN THE NECESSARY APPROPRIATIONS FROM CONGRESS DURING THIS TIME OF BUDGET CUTS AND RESTRAINTS UNDER PRESIDENT REAGAN's ECONOMIC RECOVERY PROGRAM. THERE ARE SOME SIGNS TO RAISE OUR EXPECTATIONS FOR IMPROVEMENT, AND ONE OF THESE SIGNS IS IN THE PERSON OF OUR NEW COMMISSIONER OF PATENTS AND TRADEMARKS, GERALD J. MOSSINGHOFF, WHO WILL ADDRESS OUR ASSOCIATION ON THURSDAY. PERHAPS HE CAN TELL US OF SOME OF HIS PLANS FOR IMPROVING OPERATIONS OF THE PATENT AND TRADEMARK OFFICE.

DOMESTICALLY, PATENT REFORM SEEMS TO BE PROGRESSING QUITE FAVORABLY, AND IT NOW REMAINS TO BE SEEN HOW WELL THESE CURRENT CHANGES WILL SERVE THE PURPOSES INTENDED OF THEM.

INTERNATIONALLY, THE OUTLOOK IS QUITE A DIFFERENT MATTER. ON THE ONE HAND, THERE HAVE BEEN SOME VERY POSITIVE DEVELOPMENTS OVER THE LAST FIFTEEN TO TWENTY YEARS. MANY NATIONS GLOBALLY COOPERATED TO CREATE PROCEDURES THAT WOULD FACILITATE MULTIPLE PATENT FILINGS IN SEVERAL COUNTRIES ON THE SAME INVENTION. IN EUROPE, THE COMMON MARKET COUNTRIES AND THEIR NEIGHBORS WORKED TO ACHIEVE A COMMON, SINGLE EXAMINATION OF A PATENT APPLICATION FOR DETERMINING WHETHER A PLURALITY OF NATIONAL PATENTS SHOULD ISSUE. THESE COMMON MARKET COUNTRIES EVEN WENT SO FAR AS TO SET UP THE APPARATUS FOR THE FUTURE FOR THE FIRST SUPER-NATIONAL PATENT, WHICH WILL BE EFFECTIVE ACROSS THE ENTIRE EEC. AS YOU KNOW, THESE EFFORTS RESULTED IN THE PCT, THE PATENT COOPERATION TREATY, WHICH BECAME OPERATIONAL IN 1978, AND THE EUROPEAN PATENT CONVENTION, WHICH WENT INTO FORCE IN 1977.

THE THRUST OF THESE INTERNATIONAL EFFORTS WAS HARMONIZATION OF THE NATIONAL LAWS TO SIMPLIFY PROCEDURES IN OBTAINING PATENTS

ON THE SAME INVENTION IN MORE THAN ONE COUNTRY, AND TO ENHANCE THE RELIABILITY OF PATENT PROTECTION THROUGH ESTABLISHMENT OF CENTRAL INTERNATIONAL SEARCHING AUTHORITIES. ALTHOUGH THESE NEW INTERNATIONAL SYSTEMS ARE STILL IN THEIR INFANCY AND HENCE STILL IN THEIR SHAKE-DOWN PHASES, THEY REPRESENT PROGRESSIVE, CONSTRUCTIVE CHANGE TO THE EXISTING INTERNATIONAL PATENT SYSTEM AND SHOULD ULTIMATELY REDUCE THE COMPLEXITIES AND COSTS OF MULTIPLE INTERNATIONAL FILINGS.

ON THE OTHER HAND, THE THIRD WORLD IS STRONGLY ATTACKING LONG AND WELL-ESTABLISHED TRADITIONAL CONCEPTS IN THE EXISTING INTERNATIONAL PATENT SYSTEM AND ADVOCATING MEASURES WHICH THE AMERICAN PATENT BAR BELIEVES ARE REGRESSIVE MEASURES. THE DEVELOPING COUNTRIES VIEW THE PRESENT INTERNATIONAL SYSTEM AS A CONSTRAINT ON THEIR FREEDOM IN THEIR ESTABLISHMENT OF NATIONAL PATENT SYSTEMS THAT WILL TREAT DOMESTIC PATENTEES MORE FAVORABLY THAN FOREIGN PATENTEES. THE DEVELOPING COUNTRIES ARE SAYING THAT THEY BELIEVE IN A PATENT

SYSTEM FOR THEIR COUNTRIES AS AN INCENTIVE TO TECHNICAL AND INDUSTRIAL DEVELOPMENT, BUT THEY ENACT LAWS AND PURSUE SYSTEMS THAT SEVERELY DIMINISH THE RIGHTS OF PATENT OWNERS, IN SOME COUNTRIES TO THE POINT OF COMPLETE DEVALUATION OF THE SYSTEM.

INDEED, SOME PROPOSALS ARE ACTUALLY NEGATIVE INCENTIVES TO THE USE OF THE PATENT SYSTEM IN A COUNTRY. FOR EXAMPLE, WHY WOULD A FOREIGN PATENTEE WHO IMPORTS A PATENTED PRODUCT INTO COUNTRY X EVER TAKE OUT A PATENT ON THE IMPORTED PRODUCT IF COUNTRY X HAS A COMPULSORY EXCLUSIVE LICENSE PROVISION IN ITS PATENT LAW. THE IMPORTER WOULD BE CREATING A POTENTIAL RIGHT OF EXCLUSION OF THE PRODUCT THAT WOULD BE AVAILABLE TO ANOTHER IN COUNTRY X FOR USE AGAINST THE PATENTEE-IMPORTER HIMSELF.

I WILL NOT DWELL ON THE PROPOSED REVISION TO THE PARIS CONVENTION, AS THAT IS THE SUBJECT OF OTHER SPEECHES AT THIS CONGRESS. SUFFICE IT TO SAY THAT, IN MY OPINION, IT IS THE

FIRST TIME IN THE HISTORY OF THE DEVELOPMENT OF THE MODERN INTERNATIONAL PATENT SYSTEM THAT THE BASIC THEORY OF THE SYSTEM IS CHALLENGED AND THAT NEGATIVE PATENT INCENTIVES ARE BEING SERIOUSLY FOSTERED AS BENEFITS TO THE INDUSTRIAL GROWTH OF NATIONS.

THE WHOLE THEORY OF THE MODERN PATENT SYSTEMS IS BASED ON FOSTERING INDUSTRIAL ECONOMIC GROWTH BY TECHNOLOGICAL INNOVATION THROUGH THE INDUCEMENT OF POTENTIAL REWARDS FOR THE INNOVATOR. PATENTS ARE GOVERNMENT-GRANTED INCENTIVES THAT ARE MADE AVAILABLE TO INNOVATORS AT LITTLE COST TO GOVERNMENT OR TO THE PEOPLE. IT IS THE INNOVATOR THAT MUST SPEND HIS OWN MONEY IN THE DEVELOPMENT OF THE TECHNOLOGY AND OF THE PATENT. THROUGH OUR OWN EXPERIENCE AS PATENT COUNSELORS, WE KNOW THE COURSE OF INNOVATION BEGINS WITH ATTEMPTS TO DETERMINE HUMAN NEEDS AND TO SATISFY THEM THROUGH NEW SOLUTIONS THAT ARE BETTER THAN THE OLD ONES. TO DO THIS THE INNOVATOR MUST NOT ONLY INVENT

THE SOLUTION BUT MUST SUPPLY INVESTMENT CAPITAL OVER A PERIOD OF TIME, INITIALLY AT HIGH RISK, WHILE HE DETERMINES THAT HIS SOLUTION IS IN FACT VIABLE. HE NEEDS AND SEEKS PROTECTION DURING THAT PERIOD FROM OTHERS WHO MIGHT OTHERWISE COPY HIS EFFORTS AND MAKE HIS INVESTMENT UNWISE. HE THEN SEEKS A PERIOD OF PROTECTION TO REAP HIS REWARD FOR THE SOLUTION HE HAS PROVIDED AND THE INVESTMENT HE HAS CONTRIBUTED.

THE INNOVATOR NEEDS THIS SAME KIND OF PROTECTION IN FOREIGN MARKETS AS IN HIS DOMESTIC MARKET. LEAD TIME MAY BE NEEDED TO ENTER AN EXISTING FOREIGN MARKET WITH A NEW PRODUCT OR TO DEVELOP A NEW FOREIGN MARKET. IMPORTATION INTO THE FOREIGN MARKET MAY BE THE ONLY ECONOMIC WAY OF ENTERING OR DEVELOPING THE MARKET WITH HIS NEW PRODUCT AND THUS A NECESSARY PRECEDENT TO INVESTMENT IN NEW INDUSTRIAL PLANT IN SUCH MARKET. THE INNOVATOR IS NOT GOING TO DEVELOP DOMESTIC OR FOREIGN MARKETS WITHOUT SOME PROTECTION FOR HIS RISK-INVESTMENT.

THERE IS OBVIOUS DISCORD BETWEEN THE THEORY OF THE EXISTING INTERNATIONAL PATENT SYSTEM AND THE CHANGES TO THAT SYSTEM PROMOTED BY THE DEVELOPING COUNTRIES. BUT THERE IS A NEED TO WORK WITHIN A NEW WORLD OF SOCIAL AND POLITICAL COMPLEXITIES, AND POLITICALLY, SOME ACCOMMODATION IN THE INTERNATIONAL SYSTEM MAY PERMIT A CERTAIN AMOUNT OF COMPATIBILITY FOR THE DIFFERING SYSTEMS WITHIN A WORKABLE INTERNATIONAL FRAMEWORK. SUCH ACCOMMODATION, HOWEVER, WILL NOT MAKE WEAK NATIONAL PATENT SYSTEMS STRONG OR ATTRACTIVE TO FOREIGN INNOVATORS. THEY WILL LEAD TO FURTHER EROSION OF PATENT CONCEPTS IN THE DEVELOPING COUNTRY AND WILL DISCOURAGE TRANSFER OF TECHNOLOGY TO THAT COUNTRY. THEY WILL BE A SET BACK TO COMITY AMONG NATIONS IN THE INDUSTRIAL PROPERTY FIELD.

HOWEVER WELL-INTENDED, THE PROMOTORS IN THE DEVELOPING COUNTRIES OF THESE REGRESSIVE PATENT LAWS ARE, THEY REGRETTABLY ECHO THE UNFRIENDLY CRITICS OF THE PATENT SYSTEM ITSELF IN THE UNITED STATES AND IN THE UNITED NATIONS WHO CAN OFFER NO ATTRACTIVE

ALTERNATIVE WITH THE TRACK RECORD OF SUCCESS ENJOYED BY THE MODERN NATIONAL AND INTERNATIONAL PATENT SYSTEMS.

PRESIDENT REAGAN, IN A SPEECH DELIVERED TO THE WORLD AFFAIRS COUNCIL IN PHILADELPHIA ON OCTOBER 16, 1981, JUST BEFORE THE CANCUN CONFERENCE ON GLOBAL ECONOMIC DEVELOPMENT, SET DOWN THREE PILLARS ON WHICH A COOPERATIVE STRATEGY FOR GLOBAL GROWTH TO BENEFIT BOTH DEVELOPED AND UNDERDEVELOPED COUNTRIES.

1. AN UNDERSTANDING OF THE REAL MEANING OF DEVELOPMENT BASED ON THE HISTORICAL EXPERIENCES OF THE SUCCESSFUL COUNTRIES;

2. A DEMONSTRATED RECORD OF ACHIEVEMENT IN PROMOTING GROWTH AND DEVELOPMENT THROUGH THE WORLD, AND

3. PRACTICAL PROPOSALS FOR COOPERATIVE ACTIONS IN TRADE, INVESTMENT AND THE LIKE.

THAT THE PATENT SYSTEM ALREADY SERVES AND CAN CONTINUE TO SERVE AS SUCH "PILLARS" FOR COOPERATIVE STRATEGY FOR GLOBAL GROWTH IS WELL DOCUMENTED.

FRIEDRICK-KARL BEIER, A PROFESSOR OF LAW AT THE UNIVERSITY OF MUNICH, IN A SPEECH IN OCTOBER 1978 AT THE WORLD CONGRESS OF THE FEDERATION INTERNATIONALE DES CONSEILS EN PROPRIETE INDUSTRIELLE (FICIPI) IN SANTIAGO DI COMPOSTELA, SPAIN, STATED:

"...THE PATENT SYSTEM, IN ITS HISTORICALLY DEVELOPED AND CURRENTLY PRACTICED FORM, CONSTITUTES A PROVEN, INDISPENSABLE INSTRUMENT FOR TECHNICAL, ECONOMIC AND SOCIAL PROGRESS. IT MUST CERTAINLY BE CONSTANTLY ADAPTED TO NEW DEVELOPMENTS AND THE CURRENT STATE OF THE KNOWLEDGE BUT THERE IS NO NEED FOR A BASIC REVISION, CHANGING THE FOUNDATIONS OF THE PATENT SYSTEM ITSELF."

I WOULD LIKE TO CLOSE WITH ANOTHER STATEMENT OF PROFESSOR BEIER's IN THE SAME SPEECH:

"TODAY MORE THAN BEFORE, ALL COUNTRIES, NOT ONLY THE COUNTRIES OF THE THIRD OR FOURTH WORLD ARE DEPENDENT

UPON THE TRANSFER OF TECHNOLOGY. NO COUNTRY, NOT EVEN THE UNITED STATES OR JAPAN OR WEST GERMANY, CAN HAVE THE LEAD IN ALL FIELDS OF TECHNOLOGY. WITHOUT AN INTERNATIONAL DIVISION OF LABOR AND COLLABORATION IN RESEARCH, DEVELOPMENT AND PRODUCTION, IT WILL NOT BE POSSIBLE TO GUARANTEE TECHNICAL, ECONOMIC AND SOCIAL PROGRESS IN OUR DIVIDED WORLD, AND FOR THIS PROGRESS, PATENT PROTECTION IS NEEDED TODAY AS MUCH AS IT WAS IN THE PAST."

THANK YOU FOR YOUR KIND ATTENTION.

ADDRESS BY: -AS-

HONORARY CHAIRMAN, MR. WARREN ANDERSON PIPA/NOV. 4, 1981

Biographical Data:

Mr. Anderson was graduated from Colgate University in 1942 with a Degree of AB in Chemistry. He also received an LLB Degree from Western Reserve University in 1956 and was admitted to the New York Bar in 1958. I look up to Mr. Anderson as the prime example of what lawyers can do at Union Carbide. Mr. Anderson joined Union Carbide in 1945 and he was elected a Vice President of the Corporation in 1969, an Executive Vice President in 1973, a Director in 1974, he became President and Chief Operating Officer of the Corporation in January of 1977 and he was recently elected Chairman of the Board and Chief Executive Officer effective January 1, 1982, Mr. Anderson...

It's really a delight to be with you this morning. My role is a simple one as you heard Tom say, "just a few words from Mr. Anderson".

We are in a changing world. There has been a tremendous explosion in technology. I can't think of a more truly exciting period in terms of scientific research and what's going on right now, and those of us who have the benefit of a law background, recognize the contribution that a Patent and Trademark Department can make to business strategies and the success of a business venture. In our company, this activity is very important in putting together industrial growth, both here in the United States and Abroad.

I wish you well in your program here for the next two days. Have a good time too while you're here in New York City. You're serving a purpose that's very important. Businesses don't interact, they don't compete, they don't serve each other and they're not customers and suppliers one of the other; people are, and it's the people in the business that're really important. What you do with your interactions here and what you've been doing for the last eleven years, develops a relationship, a personal friendship, a mutual respect and admiration, one for the other, so that some of the issues that develop can be resolved people-to-people. With that kind of interaction and that kind of mutual respect, I think we serve our countries and our companies very well.

I think Tom wanted me to come here just to see what your program and agenda look like. It's much too crowded. I understand from listening this morning that all of the preparation for this meeting is high quality work and is work well done. All the very best, thank you very much.

ADDRESS BY MR. S. SAOTOME (RECEIVER OF THE AWARD)

President, ladies and gentlemen

Today, I'm invited to the 12th Annual Conference of this glorious PIPA in New York, and have received the first commendation of this Association. For me, this is the greatest honor and pleasure in my life. And, I'm delighted to have an opportunity of visiting the familiar city of New York many times and being the recipient of warm and friendly American hospitality.

I wonder why I could receive the commendation of this Association this time, because, in the United States and Japan, there are many excellent members and many people who made great contributions to the progress of the Industrial Property System. Compared with their outstanding achievement, what I have done seems to be insignificant. In spite of that, I was elected a prize winner. I think this is a token of your warm friendship and kind consideration to the oldest person.

In my life, it was the greatest pleasure and luck to have been able to have the most many excellent and familiar friends in this country. And, at the same time, I'm extremely sorry that I lost two good friends, John Clark and John Shipman, who were devoting themselves to the activities of PIPA and the industrial property society.

It is owing to my American friends with whom I became familiar after the war that I became interested in the various matters on the Industrial Property System and could learn how to with regard thereto. Especially, when I spent six weeks in 1957 in the United States at invitation of the Department of States, I had experiences strong enough to decide the course of my life. There, I saw the people go on making efforts for the progress and the development of their country, and in them, I felt the existence of the pioneer spirit which the people have had consistently since the founding of the country. And, I was most impressed by the situation that the Industrial Property System was playing one of the most important roles to support the development of the United States.

Since I returned home, I have been devoting myself to giving the true information on the patent administration in the U. S. to the Japanese government and the industrial society, and at the same time, to improving the old system of the patent business having been carried out in Japanese enterprises, by means of the knowledge I learned from your country.

I don't say whether Japanese patent administration has been modernized and rationalized or not thereafter, because you know it very well. But, I think, supposing Japanese patent administration has made some progress, it is all owing to your guidance and instruction.

Today, the International Industrial Property System has showed marked progress in quantity. But, there exist many problems in quality. The biggest problem is that the patent system and the practical use thereof which have been maintained for some hundred years by the indefatigable assiduity among the advanced countries are now faced by the gravest difficulty in its history. Above all, if the basic proposal of the group of 77 countries requesting the revision of Article 5-A of the Paris Convention passes as drafted, it will surely bring down ruin on the patent system. Even if the countries in B Group yield to the halfway compromise proposal, it is quite probable that the compromise will become a small leak to sink a great ship. Therefore, I would like to say that we should not back down on this problem by any means.

I think that the United States and Japan have an equal understanding of the importance of the present patent system, and that we have common interests. So, I think PIPA has to promote the earnest activities in one united body, in order to surmount the gravest difficulty on this patent system.

I wish eagerly that the Association will be more prosperous, going through this hard period, and it will develop as the body to promote friendship and understanding between the United States and Japan.

I thank you again from the bottom of my heart for your kindness and friendship given to me.

Closing Address

Koichi Ono
President of Japanese Group

The end of this congress is coming. In these three days, we have learned much, and we have renewed our friendship. On behalf of the Japanese Group and, for myself, I should express our appreciation to our hosts and officers who made arrangement of this congress in a most dignified atmosphere. My feelings at this moment are too deep for me to find out adequate words. I hope that the activities of our association will continue to grow and that you will continue to give active cooperation to this association. And, I hope we are meeting again somewhere in Japan, sometime in next fall.

Thank you very much, all of you - good luck and good-bye!

Gerald J. Mossinghoff, Commissioner of Patents and Trademarks

Biographical Data:

Born in St. Louis, Missouri, Bachelor of Science Degree in Electrical Engineering, 1957 from St. Louis University and a Jurisdoctorate Degree with Honors in 1961 from George Washington University. From 1957 and 1961 he was a Patent Examiner in the U.S. Patent and Trademark Office. He entered private law practice in St. Louis in 1961 and returned to the Patent and Trademark Office in 1966 to serve as Director of Legislative Planning until he left again in 1967 to go to NASA. He was serving as NASA's Deputy General Counsel when he was named by President Reagan as Commissioner of Patents. He took the oath of that office on July 8, 1981. He has served as a member of the U.S. Delegation to the United Nations on the peaceful uses of outer space and he is a Founder and Chairman of the American Institute of Aeronautics and Astronautics Technical Committee on legal aspects of Aeronautics and Astronautics and he is the author of a monthly column entitled "A Lawyer's Space" in the Journal of Astronautics and Aeronautics. He has received NASA's Exceptional Service Medal awarded in 1972, its Distinguished Services Medal in 1980, and its Medal for Outstanding Leadership in 1981. In 1980 he was also accorded the Presidential rank of Meritorious Executive in the Senior Executive Service.

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I am delighted to be your pre-luncheon speaker today at this Congress. I hope this trip is more successful than the trip I just returned from. Following a luncheon speech to the American Patent Law Association in Washington, D.C., I left with the Administrator of NASA, at his invitation, to go to Cape Canaveral and watch the non-launch of Shuttle II. At the American Patent Law Association meeting in Washington, I gave a speech which I have been working on over the last nine months. It is a speech that outlines the strong support of this Administration for the Patent and Trademark systems, and it has some very delightful parts in it for the Patent Bar and for industry. At the end of the speech I indicated what the projected new patent and trademark fees would be.

Because of the timing (I gave the speech, finished it about 2:30 in Washington, and left immediately for Cape Canaveral), some people accused me of giving the speech, announcing the new fees and getting out of town as fast as I could. As you can see, I am still out of town. I do not know what the reaction to the new fee structure is. I brought copies of that address with me. Since that address took me, in a real sense, nine months to prepare, I obviously did not have time to prepare another one between Tuesday and today. So I did bring that speech with me, and it will be available on the back table.

Let me briefly outline for you what this Administration is doing to revitalize the patent and trademark systems. First, and

perhaps as important as any other action, we have established a first rate team at the top levels of the Patent and Trademark Office. Don Quigg, who has had a distinguished career as Patent Counsel of Phillips Petroleum, was sworn in a week ago as the Deputy Commissioner. Rene Tegtmeyer, whom most of you know, has performed superbly as Assistant Commissioner for Patents. Margaret Laurence, Assistant Commissioner for Trademarks, is an absolutely delightful person. She is dynamic and delightful to work with and very effective in her job. We have recently appointed a very bright government executive, Brad Huther as Assistant Commissioner for Finance and Planning. In turn, Brad has appointed one of the best budget officers in government, Jim Lynch, as the Budget Officer of the Patent Office. Believe me, based on my experience in government, when you want to get something done, you get it done through the budget. If someone wants to keep you from getting something done, they accomplish that through the budget. So we have worked very hard to get a strong budget office in the Patent and Trademark Office. We have Dick Shakman, who is our Assistant Commissioner for Administration. Let me say a word about Mike Kirk, whom most of you know. Mike has been an anchor around which international policy in the area of patents and trademarks has revolved over the past several years. I am very delighted that the President recently accorded Mike the same honor that I was delighted to get two years ago, the Presidential Rank of Meritorious Executive. Mike is one of three Department of Commerce officials so honored; we are very proud of him.

When I was considered for appointment as Commissioner of Patents, I had a law clerk at the National Aeronautics and Space Administration do a search of all the recent articles that have been written on the trademark and patent systems. You are probably familiar with those articles. They culminated in a 20 minute show put on by NBC Magazine, a mass media show which was entitled either appropriately or inappropriately, "The Great Patent Rip Off". It decried the state of the Patent and Trademark Office itself and its lack of personnel and resources to handle incoming work. It critized the uncertainties that patent owners and their competitors face in lengthy and costly patent litigation. It criticized the patchwork of laws and regulations throughout the 26 agencies of government that apply to Federal patent policy and to the allocation of rights to inventions resulting from the vast expenditures of the United States Government in research and development.

In response to those criticisms, we are now actively pursuing a four-point plan to improve the Patent and Trademark Office and the patent and trademark systems. The most significant part from our point of view (those of us involved in running the Patent and Trademark Office), concerns improvements in the Office itself. Last year we received more than 107,000 patent applications, but were able to dispose of about 20,000 fewer applications. So last year the 207,000 backlog of pending patent applications in the Office increased by 20,000. That is perhaps the most disturbing part of the backlog. 207,000 pending applications is manageable,

but not when it is increasing. It is manageable only if it is decreasing. On the trademarks side, last year we received 55,152 applications, an increase of about 6% over the previous year. Again we disposed of less than we received -- 48,000 trademark applications bringing our backlog in Margaret Laurence's area to 116,000 pending trademark registrations, a record high.

To begin to provide the resources to turn the situation around, the Patent and Trademark Office is perhaps the only agency on the civilian side of government that actually requested an increase in the Reagan Administration's budget that went to Congress on September 30. Every other agency suffered at least a 12% across-the-board cut. The Patent and Trademark Office received an increase of 4.8 million dollars to be able to hire 235 new patent examiners. With an attrition of 50 patent examiners, that will be a net increase this year of 185 patent examiners, which is about a 20% increase.

Since I first came to the Patent and Trademark Office in March, even prior to my confirmation by the Senate and appointment by the President, we began to define the goals we would pursue during this Administration. In the patent side we have a Secretarial commitment, and we just about have an Office of Management and Budget commitment, to pursue a goal which we are referring to as Plan 18/87. The plan is not only to stem the tide of the increasing backlog, but to reduce the backlog so that

by 1987 the average time it takes to get a patent will be 18 months.

I had a somewhat difficult time convincing Secretary Baldrige, who I believe will be remembered as one of the most effective Secretaries of Commerce, that 18/87 was a good plan. He wanted to know why it couldn't be 18/84, to decrease that time of pendency three years earlier. I had to explain that there are a lot of built in delays in the system, and this was very painful for me, because I do not like delays.

I explained to him that when patent examiners are first hired, they are relatively inexperienced and they do not produce the way they do after they are in the Office three or four years. Examiners are on what you would refer to as a pretty steep learning curve their first year in the Office.

I also explained to him that the patent application backlog was not steady-state. It actually was increasing, so the first thing we had to do before we could decrease the time, would be to stop the momentum that is going in the wrong direction now. We must stem the tide of the 20,000 additional cases put into the backlog each year.

Finally, patent applications take a certain amount of time to process, depending on what your average time is. If your average time of processing is as it is now, 23 months, then when we get a

patent application it is going to take about that length of time to dispose of the application. So, after a very long meeting with the Secretary, probably my longest meeting, I convinced him that 18/84 was not a good plan. It was not a cost beneficial plan. It would require hiring something like 800 patent examiners in the next year and a half, and to do that is just not efficient management. Secretary Baldrige agreed with us and committed to Plan 18/87.

On the trademark side, we are committed to what we are referring to as Plan 3/13, that is, that by 1985 we will issue first actions in three months and register the application in an average of 13 months.

These efforts are being supported by aggressive steps to automate the Patent and Trademark Office. We now have a fairly sophisticated system supported by a Burroughs computer, though we have plans to replace that computer in two years because we will have saturated its capacity. By June, I hope that system, both on the patent and the trademark sides, will track the flow of almost 200,000 pieces of paper flowing through the Office.

On the patent side, the system is referred to as PALM, which stands for Patent Application Locator and Monitor, and on the trademark side, it is referred to as TRAM, which is Trademark Registration Application Monitoring System. Both of those systems should be up and on line by next spring.

Congress gave us a unique opportunity last December in enacting Public Law 96-517, which I believe you have heard about. Section 9 of Public Law 96-517 requires the Patent and Trademark Office to prepare a two year report to Congress on ways of automating the Patent and Trademark Office, together with a plan for action. The first draft of that plan, 13 months ahead of time I am proud to say, was distributed to the Information Retrieval Committee of the American Patent Law Association. The plan is available to anyone who wants it, either by writing to me or by writing to Brad Huther in the Office. It is a very good first draft. Clearly, it will require some refinement, some new thinking, some changes, but I think we are very much ahead of time on the draft. Our plan, which I have announced previously, is to depend on those people in the private and international sectors who are interested in the Patent and Trademark Office to help us perfect the plan. The automation plan is available, and we do want your comments. We solicit your comments individually and also those of your corporation or your association.

This September we awarded a $575,000 contract to put 30 terminals in the hands of the Patent Examiners. Those terminals will be connected to all of the commercially available data bases in the patent field, including the Pergamon Videopatsearch, the IFI/Plenum system called Claims, and the Derwent World Patent Index. The idea here is to involve the examiners in moves toward automation. It is absolutely clear to me that if we were to devise a system off-line from the examiners, when we decided that

the system was perfect and handed it to the examiners, it would be a total failure. What we must do is get the examiners involved in using this equipment, perhaps experimenting with separating search from examination, and begin to get a reaction from the people that are going to be using this system.

On July 31, I signed an agreement with Mead Data Central, which will enable patent examiners to use the Lexis terminal. I do not know how many of you in this room are familiar with the Lexis system. It is a very sophisticated legal search system comprised of the legal data bases in the United States and some foreign ones. Under our cooperative agreement, Mead Data will put into Lexis 50,000 patents in six areas, provide terminals in those areas, and conduct a one year full text search to see what the relationship is between the paper search that the examiners now conduct and the Lexis search.

A very interesting element of this experiment is that Mead Data is interested in loading these U.S. patents into its system to be able to create a capability which it can then market to the patent profession both inside and outside the U.S. Patent and Trademark Office. Secondly, Mead Data views this as a step towards electronic publishing of scientific and technical information generally. One of the critisims of the U.S. patent system, and I imagine it is probably a criticism of all other patent systems, is that the system is designed for the people in the profession and not to serve technologists, scientists and

engineers. This move of the Mead Data people using patents in Lexis as a first step towards electronic publishing is clearly a step in the right direction and could have very dramatic results.

In September, we also awarded a $350,000 contract to a small business concern in Arlington, Virginia, called ABA Incorporated. Under that system terminals at the 37 U.S. Patent Depository Libraries that are established in 25 states, will be connected with the classification data base at the Patent and Trademark Office. With that free on-line 24 hours a day, the public in those 25 states will be able to acquire lists of all patents in a given subclass, to search keywords from the Manual of Classification, to view subclasses of the U.S. patents in their hierarchical relationship, and, in general, to use all the automated tools available to find out where U.S. patents are located. That is not significant to someone who wants to search a given subclass; it is a very cumbersome way to do it. But at least it is a first step towards our getting the data that we have in the U.S. Patent and Trademark Office out to the public through our established network of Patent Depository Libraries.

The ultimate goal, if one wants to look to the distant future, is to have completely automated patent searching capability in the U.S. Patent and Trademark Office and to connect that capability to the Patent Depository Libraries. I am convinced that once they find out the capability is there, libraries will not only be established in 25 states; they will be established in virtually

every state and in every metropolitan area, so as to be able to get patent information. That is the first part of the four-point plan. The Patent and Trademark Office will carry out Plan 18/87 in patents and Plan 3/13 in trademark and will take realistic steps towards an automated Patent and Trademark Office by the 1990's.

The second part of the four-point plan concerns reexamination of patents which was instituted under Public Law 96-517, mentioned above. I was pleased when I was with the National Aeronautics and Space Administration to serve on President Carter's Domestic Policy Review for Industrial Innovation. The reexamination recommendation is one of the very positive things that came out of the previous administration's work to improve the patent system for industry.

We have now received almost 100 cases for reexamination; we have considered 60 of those and, of those 60, 54 will be reexamined and six cases have been denied reexamination. I think there are two significant statistics with respect to the almost 100 that we received; about one-third of those (34), are involved in litigation now in one stage or another in Federal District Court. In four cases, the reexamination was actually ordered by the District Court Judge. He ordered the people to suspend action in District Court and go back to the Patent and Trademark Office for reexamination.

Because of the existence of reexamination, we are repealing what is referred to as the "protest reissue practice" or the "Dann Amendments", after one of my predecessors, Commissioner Marshall Dann. Under the protested reissue practice, patents, after they are issued, can be tested in the Patent and Trademark Office. We are repealing those amendments and a notice of proposed rulemaking will be published very shortly in the Federal Register. We handed copies of the draft out at the American Patent Law Association and copies of those new regulations are available from my office. If anybody is interested they can either write to me or write to Rene Tegtmeyer.

Another thing that we did at the time of our proposed repeal of the Dann Amendments was to change the duty-of-disclosure practice in the Patent and Trademark Office under Rule 56. We did that in two significant ways. First, we changed it from what is referred to as an "inter partes practice", where there can be protests and counter rebuttals, to a pure, ex parte protest. If someone alleges a duty-of-disclosure problem, we will consider the protest, but that is the last the protester will hear from us. We will then correspond exclusively with the applicant through ex parte practices. The second thing we did was to change the previous practice where we would strike an application for duty-of-disclosure. We are now going to reject claims based on Rule 56 violations. That, we think, is beneficial to industry and to applicants. It lets them appeal our decision to the Board of Appeals, and it lets them appeal from the Board of Appeals to

either the District Court in Washington or the Court of Customs and Patent Appeals. Prior to that, the appeal was under a rather tough standard of the Administrative Procedures Act, and we thought that it was much more appropriate to use existing appeal mechanisms, giving applicants a chance to review our duty-of-disclosure decisions. Rule 56 duty-of-disclosure decisions will continue to be made at a very high level in the Patent and Trademark Office. I personally regard allegations of fraud as very, very, serious. We want to make sure that if there are any decisions made which allege fraud, those decisions are made by an Assistant Commissioner and not by someone below the Assistant Commissioner.

Under the third part of the four-point plan, we are vigorously supporting in the Administration, the creation of a new Federal Court, a Court of Appeals for the Federal Circuit. This court would be formed by the merger of what is now the U.S. Court of Claims with the U.S. Court of Customs and Patent Appeals to form a single court in the District of Columbia. It would ride circuit; that is, it would physically move from place to place. Its home office would be in the Washington, D.C. area. That Court, in addition to the jurisdiction now handled by the U.S. Court of Claims, would handle all appeals from the Patent and Trademark Office. In addition, it would handle all appeals from District Courts nation-wide in cases where a patent litigation formed a basis of jurisdiction. One of the most significant sections of the patent statute, as you all know, is the section

that talks about whether an invention is obvious over earlier work which has been done (35USC103). The Circuit Courts currently vary widely in their interpretation of that key provision of the patent statute. Half of them regard it as a question of fact, and the other half regard it as a question of law. Some require synergism; some do not require synergism. Some courts strike down virtually every patent that comes before them. A court sitting in the mid-west, for example, in my home town, the A Circuit, is a very tough court on patent owners. I believe over a 20 year period a report showed that the A Circuit Court of Appeals had struck down 82% of the patents that came before it. Other Circuit Courts of Appeal, the Fifth Court, for example, are a lot less demanding of patentees.

It has been my experience in my career working with industry, both when I was in private practice and most recently at NASA, that business executives are extremely flexible people. They can live with adversity; what they cannot live with in uncertainty. The must know which way it is going to come out. So we believe that by establishing this new court, there will be a single standard of invention which will be understandable to businessmen and their attorneys. It will be a great step toward putting certainty into the patent system.

We are pleased the bill (H.R. 4482) was reported favorably by the House Judiciary Committee on October 14th and its Senate counterpart (S. 1700) was reported by the Senate Judiciary

Committee on October 20th. I met yesterday, after I got back from the Cape, with Senator Mathias. He tells me we may be facing a donnybrook in the Senate. The Bar is somewhat split on the bill. The American Patent Law Association supports it, and the Patent, Trademark and Copyright Law Section of the ABA supports it. But the Litigation Section of the American Bar Association opposes it, and, probably because they are better litigators, they got the House of Delegates to oppose it. So the ABA is institutionally opposed to the bill although the patent side of the ABA is in favor of it. The Administration strongly supports the bill, and we are just going to have to watch to see how it goes. I have a commitment from Secretary Baldrige to help on behalf of the Administration, and we have a White House commitment to help. If there is going to be a Senate fight (and we do not know if there is) then we are prepared to gear up for that fight. In the House we are very optimistic that the bill will be placed on what is called the Consent Calendar and will not be involved in a major floor fight.

Finally, in the area of Federal patent policy, the fourth area of the four-point plan we are pursuing, we strongly support the bill written by Senator Jack Schmitt of New Mexico (S.11657) and on the House side, by Congressman Ertel of Pennsylvania (H.R. 4564). Those bills, in summary, would extend the rights and privileges contained in Public Law 96-517 in the Federal patent policy area not only to small businesses and non-profit institutions, but to all government contractors, large businesses, small businesses,

and non-profit making companies for all grants, contracts, and cooperative agreements.

The data that exists on the utilization of inventions made under Federal sponsorship is, in my view, totally supportive of our efforts in enact that greater breadth to the Federal patent policy coverage of Public Law 96-517. While I was at NASA, we did a detailed study of the patents that NASA owns and how those patents were being commercialized. We came out with what I thought was a very discouraging report, which showed that, for NASA, where the government takes title and attempts to license others either exclusively or non-exclusively, the rate of commercialization of contractor-developed, government-owned patents is about 1%. At the time we did the study, we owned 1,134 patents on contractor-developed inventions, and we could document only 13 cases of commercialization out of those 1,134. That is simply not acceptable in my view. On the other hand, where NASA left title to inventions with a contractor, under the still applicable NASA waiver regulations, we documented very consistent commercialization rates of about 20%, though the range was between 19% and 22%.

So the NASA data points to the fact that if you are interested in commercialization of inventions, the way to achieve that is to let the contractor, the person who knows what he is doing, have title to the invention. While I was testifying on Federal patent policy a couple of years ago, Senator Schmitt asked me why I

thought that was so. There are a lot of reasons, I think, and they include the fact that corporations have the marketing the production mechanisms, and they have the ability to make judgments about what is able to be commercialized. But I think there is one other point that is significant. That is, everyone in this room works with inventors and knows that there is no more enthusiastic supporter of an invention than the inventor. Inventors sometimes become fanatical about trying to get their invention through the corporate system and into the marketplace. As they say, everyone wants to leave a footprint, and I think inventors like to leave their footprint in the form of a commercialized invention. When the government takes title to a contractor-developed invention, the government takes title away from the person most interested in its development, namely the inventor. You would not expect it to work, and, with regard to the NASA data, it does not work.

Finally, let me outline briefly the fees that we are proposing. As I have indicated, the Patent and Trademark Office was not only spared the deep cuts that are being felt throughout government as part of President Reagan's economic recovery program; we actually increased our request for fiscal year 1982. But it did become clear to Secretary Baldrige, to Deputy Secretary Joe Wright and to me, that this was not something we were going to be spared through the next three years. There is a lot of pressure, by the President, as you know from everything you have read, pressure which we totally support at the Patent and Trademark Office, to

lower government outlays to stem inflation and to lead towards a balancing of the budget in 1984. That requires deep cuts. My own former agency, NASA, is going through some very serious analyses now to find out what programs have to be phased out. We are faced in the Patent and Trademark Office with a critical choice: we could either absorb the cuts, reduce the existing staff (which is inadequate at its current level), and limp along with overpowering backlogs, resulting in something like a 300,000 application backlog in the next several years, or we could promise industry and inventors a first class Patent and Trademark Office and raise fees substantially. For us the choice is apparent, we chose to commit to a first class Patent and Trademark Office, and to recommend to the Congress greatly increased patent and trademark fees.

Let me just read some of the fees that we are proposing. I should say ahead of time that we have asked for an independent audit by the Department of Commerce Inspector General's Office. When we begin to discuss (that they advance) these fees, I want any argument to be totally on policy and not on any idea that the books are not correct. So we have asked for the independent audit and we propose to publish it along with everything else we have showing how we arrived at the final agreement with the Office of Management and Budget on the budget projections for 1984 and 1985. So there is still a little caution necessary regarding these fees. One of the delightful things about this Administration is its commitment to work with industry and with

business, and we have worked very hard to get the fee schedule formulated so that we could publish it at the very earliest date to provide industry an opportunity to discuss the fees. The fees obviously are going to stir up some controversy, but I think it is appropriate to bring the private groups, both international and national, into the debate that is going to ensue on these new fees.

With all those caveats, we are projecting a base filing fee of $300. This is in my prepared speech, so you need not take notes. A base issue fee will be $500, appeals filing $115, a brief $115, and a hearing $100. Petitions for extensions of time will be automatic, and we are no longer going to examine these, nor are you going to have to submit justifications for them. Extensions of time will entail fees of $50 for the first one, $100 for the second, and $200 for the third.

In the trademark area a filing fee will be $200. That gives you registration and 20 years of Lanham Act protection, and for a $300 renewal fee, you receive an additional 20 years of Lanham Act protection. The Section 8 and Section 15 Affidavits will be $100 if filed separately, and $150 if filed at the same time. Oppositions and cancellations will be $300, and hearings in connection either with oppositions, cancellations or appeals will be $100. U.S. patent copies will cost $1.00, trademark copies $.40, design copies $.40, and recording an assignment, $20.

As I pointed out to you, beyond a doubt these new fees are going to be controversial. I believe there are good reasons to support them, and we are asking industry to look carefully at them. We also are asking industry to wait until we can show the budget projections on which the fees are based. One of the dangers of publishing the fees now is that we are not in a position to announce presidential decisions on the budget. So we have given you the bad news now, and it will take a month or two before we can give you the good news. We are asking for people to wait until we are able to tell the good news before they form positions on the new fees.

The only alternative to higher fees is a significantly reduced PTO budget. Given the reduced appropriation request which the OMB is projecting for us for 1984 and 1985, given that it is 25 to 30% below 1982 appropriations, and given the fee recovery rates that exist in the current Public Law 96-517, we would simply have to reduce our staff. The service we could provide to business and industry would totally deteriorate. Average pendency times would increase by more than two months each year and reach three years by 1986 or 1987, when we would have a backlog of 300,000 cases in the office. Given excessive delays in examination, we would be forced to withdraw from the Patent Cooperation Treaty to avoid giving favored treatment to those using the Treaty over those who chose not to use the Treaty. Patent reclassification projects would be sharply curtailed if not eliminated altogether. The trademark pendency goal which I

have descibed as Plan 3/13 by 1985 would become 18 by 30 by 1987. It would take 18 months to a first examiner's action and 30 months to registration or abandonment. And despite benefits from automation described in our draft Section 9 plan, no steps would be taken to further automate the Patent and Trademark Office. We could not buy the new computer and would be stuck with the same computer we now have for the PALM and TRAM systems and that computer is very quickly becoming overworked and saturated. We demand it to perform over 20,000 things a day and the system is just about to be saturated. We would not be able to replace that main frame computer.

The deterioration of services which I have outlined would, in my view, be totally unacceptable both to international practitioners and to U.S. industry. In most areas, the new fees will not even keep pace with inflation, the average filing fee under the Congressional schedule established in 1965, is $85, counting the additional claims. That $85, if merely projected through the U.S. Consumer Price Index to the mid-point of the three year fee period, which I place in 1984 because the fees will go into effect in fiscal year 1983 which begins October 1, 1982, would be higher than the $300 fee or $330 average fee we are projecting. Similarly, the $145 issue fee average now paid under the 1965 schedule would now be higher than our $500 fee if inflated by the Consumer Price Index since 1965.

On the trademark side, the filing fee of $200 is slightly more than that necessary to keep pace with inflation from 1965, but given the 20 year Lanham Act protection that a registration affords, we do not believe that $200 should prove prohibitive to protect a mark which by definition is already being used in United States commerce. Similarly, the renewal fee of $300 amounts to $15 a year to maintain that mark under the Lanham Act, and we do not believe that should be prohibitive to a business.

In the aggregate, given the ratios we are recommending, the Office will be 58% self-supporting for the three year cycle beginning in fiscal year 1983. That's significantly below the 84% that Congress sought to achieve when it enacted the statutory fees in 1965. We will have maintenance fees which will be applicable at the old rate for three and a half years after the first patent is issued on an application filed after December of last year, so it will be some time until we receive any substantial amount of money from maintenance fees. That will greatly increase that 58%, but still, even in 15 years the Office will not be projected as being self-sufficient. There will be things such as the search room, my salary, other items which will not be paid for through fees but will continue to be paid for through the appropriation process.

The fees we are planning will generally be in line with those charged by other industrialized countries. I do not want to run through the list of fees, and you are probably more familiar with

those fees than I am, but in many cases the fees in the European patent systems are substantially higher than those we are projecting, given the very high maintenance fees that apply. For example, in West Germany, I understand the maintenance fees can total as much as $10,000 over the life of a patent. Our fees are considerably less than the fees charged by the European Patent Office to which we are often unfavorably compared. It will cost an applicant in the United States about one-third of what it costs an applicant in the European Patent Office, so we do not believe we are out of line with international practice. Prior to my speech last Tuesday, I had already discussed the need for higher fees informally with members of the Patent Bar, and I received mixed reactions as you would expect. The reaction I appreciated most was, "What kind of a Patent and Trademark Office can we expect for the higher fees?" I believe that the answer to that question must and will be, "A first class operation in all respects." That is what this country and the international community requires and is what we are dedicated to providing.

Thank you very much.

Committee Presentations
Committee No.1

Speaker: William F. Thornton
The Bendix Corporation

THE ORGANIZATION AND FUNCTION OF U.S. CORPORATE PATENT DEPARTMENTS

This paper was initially titled "The Organization and Function of a Typical U.S. Corporate Patent Department". Since in a business community as diverse as that of the United States nothing is "typical", I promptly asked that "Typical" be removed from the title.

ORGANIZATION

However, having made this point, I must confirm that there are more similarities than differences in any two such departments, and that most U.S. corporations having patent departments have organized them by choosing from the following alternative forms:

either centralized or decentralized;

serve all company units in either a region or a product group;

report to the general counsel or other officer of the corporation;

have or not have an intermediate counsel between their U.S. patent attorneys and foreign patent agents;

assist either line management or a licensing staff to grant patent and technology licenses;

charge their expenses to the company unit using their services or pay these expenses from a corporate account;

make extensive use of non-employee patent attorneys or not;

either their patent attorneys or their management take the lead in deciding what inventions to protect;

use paralegals or not;

be responsible or not for trademarks and copyright matters.

I shall now elaborate on each of these alternative forms of organization.

Centralized or Decentralized. Physically centralized departments perform their patent and other intellectual property activities at a central location which employs most or all of the corporation's patent-legal personnel, but which may have several layers of supervision and either a regional or product group responsibility.

Physically decentralized departments locate patent attorneys at operating divisions or installations wherever they may be and they usually work alone or in small groups with only a small supervisory or coordinating staff in a headquarters patent group. It is probably fair to say that the larger the department the more likely it will be structured along decentralized lines and that this form of organization is growing. For example, the Bendix Patent Department with twenty-three professionals is physically decentralized, performing services for groups of divisions of the corporation from six different locations, California, Indiana, Michigan, Ohio, New Jersey and Maryland - one in the West, three in the Midwest and two in the East. Each of these locations is headed by a patent counsel responsible for all intellectual property advice and service to a number of Bendix divisions near the counsel's office. One of these locations, Michigan, not only serves divisions but also serves the executive offices and management of the Corporation. It is here that I have my office.

Organizationally, however, as distinguished from physically, corporate patent departments tend strongly toward being centralized, i.e., under the supervision of a corporate staff executive, often titled Chief Patent Counsel.

Region or Group. Most U.S. patent departments whether centralized or decentralized, are organized to serve either all company units in a particular region of the country or particular product group units regardless of their location in the country. The latter is probably the more common. The centralized departments tend to be organized along product lines while the decentralized departments are more often organized along regional lines. There is, of course, often a mixture of these two, as is the case with the Bendix patent department which has three major product groups -- aerospace-electronics, automotive and industrial. Because our automotive and industrial activities are centered in the American Midwest and our aerospace activities in the Eastern and Southeastern areas of the United States, we are both regional and group organized. Thus we benefit from reduced travel expenses typical of regional organizations as well as the professional efficiencies that accompany serving related product units.

General Counsel or Other Officer. The current trend favors the general counsel as the supervisory authority for patent departments in the United States. Things were not always so. Years ago when Bendix was a much smaller company, our president, Vincent Bendix, had as his almost constant companion and close advisor his patent attorney, Montgomery W. McConkey, who often traveled with Mr. Bendix. Mr. McConkey received oral invention disclosures from Mr. Bendix and often prepared patent applications "on the spot" while

the inventor was occupied with other business. Following Mr. Bendix' departure from the corporation, the patent matters were handled in a decentralized manner by in-house or out-of-house patent counsel for the various divisions needing the assistance of a patent attorney. Then in the '40's my predecessor, Thomas J. Plante, centralized the supervision of patent services to Bendix, changing the reporting responsibility of each Bendix patent attorney from the division general manager to himself as chief patent counsel. During this period, however, which lasted until into the 1970's, the patent department reported to a series of non-lawyer vice presidents. In some cases, the engineering vice president and in other cases, someone else. Then early in 1970 the patent department was placed under the supervision of Bendix' vice president, secretary and general counsel where it has been ever since.

Although there are a number of exceptions, I believe the tendency today is to provide centralized supervision for corporate patent departments under a chief patent counsel and to have that counsel report to the general counsel of the corporation, despite the fact that the patent department primarily serves the engineering department with minor, though important, support to management and the technology licensing department. Recent Court decisions regarding privilege and the growth in importance of legal departments to corporations has encouraged this trend. The desire to insure a coordinated effort and to maximize use of the entire law staff increases this encouragement.

Intermediate Foreign Patent Counsel. The trend today is, particularly with the growing uniformity in patent application form and substance encouraged by the PCT and major changes in European patent laws, for U.S. patent departments to eliminate foreign intermediate counsel between the U.S. attorney and the foreign agents. This has been made easier by the increased number of agents throughout the industralized world who communicate well in English, and the adoption of English as an accepted language before the European Patent Office. Further, it was not long ago that it was necessary to prepare 10 different revisions of a U.S. application to file it in the 10 major industrialized countries of the world. Such is not the case today and hence the intermediate expert at preparing and prosecuting these applications is of lessening importance. Furthermore, when the preparing U.S. patent attorney dialogs directly with foreign agents regarding the invention and its proper description and claims, a stronger patent is obtained without the inefficiency, confusion and misunderstanding which often arise when an intermediary is used.

Nevertheless, there are still departments organized to use a foreign intermediary counsel, either on staff or retained. These counsel unquestionably have a familiarity

with foreign patent laws and have long experience in communicating with foreign agents. My own preference, however, is for the U.S. attorney to deal directly with the foreign agent. I do not consider, particularly with the previously mentioned movement toward rationalization of the patent laws and procedures of the world, that a foreign patent legal expert is as important in obtaining strong foreign patents as is the preparing attorney who has an expertise in the invention and the products it is desired to protect and who is increasingly acquiring a knowledge of foreign patent law. We in the United States are not as parochial as we once were.

Notwithstanding the above, Bendix presently has a hybrid system with a foreign patent department in Paris which intermediates between the corporation's patent attorneys in the United States and the foreign agents. However, with the advent of the European Patent Convention, we are training our U.S. attorneys to prepare the U.S. cases as close to EPC requirements as in our judgment is safe and also to thereafter modify the U.S. applications themselves for filing without foreign agent modification in the European Patent Office.

As an aside, you may be interested to know that in a recent survey of corporate patent counsel it was reported that the mean percentage of U.S. patent applications filed abroad was 45%.

Line or Staff Licensing Management. Selection from these alternatives for the organization of corporate patent and technology licensing activity is almost solely a function of management's view of the relative importance to corporate long term profits of a program to license others to use the corporation's technology. Some managements eschew this approach and meet world demands for their products solely by corporate sales. Bendix very early opted for the combined sales and worldwide technology licensing approach, which was encouraged because the corporation was founded on licenses which Vincent Bendix himself took under M. Perrot's French brake patents. Bendix has over the more than 50 years of its existence continued the pattern established by Mr. Bendix by both taking licenses and granting them, so that today royalty income and licensed product sales provide a significant portion of our corporate profits. Nevertheless, we never lose sight of the fact that our licensing program is a by-product of our product development, sales, and patenting program which is Bendix' major activity.

Unit or Corporate Paid Expenses. For over 15 years the Bendix patent department has billed its services at an hourly rate to the units of the organization which request its services. The rate when I joined Bendix in 1968 was $18.75 an hour. For the forthcoming fiscal year our rate will be $60.00 an hour. Booked income from this charge will

cover all the staff expenses of the patent department with the exception of a small amount carried by the corporate offices for the services we perform for our officers and executive office personnel. Bills for outside services performed such as patent drawings, patent office fees, litigation expense and so forth are billed directly to the unit for whom the services are performed and are not part of establishing the overhead rate. In other words, we bill our units as private firms bill their clients separately for time and disbursements.

Although this form of supporting patent department expenses is growing, it is my understanding that still the more common method of supporting patent services is to make them available to all units of the corporation without direct charge. The preference for the latter system is both historic (the billing type system only having been recently initiated) and philosophic (some believe it is a stronger encouragement to protect inventions if the unit's management does not bear the expense). It is my experience, however, that the unit billing system encourages management participation in patent matters and thus provides a sounder more business oriented portfolio, particularly when there is provision made, as we have, for obtaining corporate funds to invest in valuable inventions of a unit whose current profit and loss statement does not encourage its management to file patent applications on its current inventions. Also, the larger the department, the greater the trend toward billing for services.

We use a computer to prepare our time and disbursement bills to our divisional units. From this computer stored information our program also permits us to obtain statistics useful in administering the department. For example, we generate reports showing the hours spent by each patent attorney preparing and prosecuting applications, drafting licenses, studying infringements, working on litigation, protecting trademarks and so forth. While I have never been one to judge the value of a patent attorney by the number of applications he or she files annually, I do feel that collection and dissemination of this type of statistical information creates a peer and supervisory pressure that is conducive to keeping the importance of efficient patent application filing foremost in our patent attorneys' minds. Since management's pressure for work is often most strongly directed toward licensing, infringements and litigation, it is important to remind personnel at least in this way that without a continued strong patent portfolio, licensing, infringements and litigation activities would ultimately deteriorate into nothing but defensive action.

In-House or Outside Patent Attorneys. Probably most medium and large U.S. corporations have their intellectual property legal work, except for litigation work,

performed by in-house or employee patent attorneys. Bendix uses this form of organization with the modification that we try to place a small percentage (up to 15%) of our patent application filings with outside (non-employee) attorneys. This provides us with some loyal and educated counsel to whom we can turn in periods of overload. I have found that many corporations follow this practice. However, few corporations trust their licensing work to outside counsel. Approximately 50% of the time spent by the "typical" U.S. corporate patent department is spent on U.S. and foreign patent obtaining activity. In over half of these companies I estimate their patent attorneys spend 2 weeks or less to prepare a U.S. application, but technical support takes an additional week.

Attorneys or Management Decide on Patent Applications. While most corporations involve their management some way in deciding whether or not to file patent applications on inventions made by their employees, these decisions may be made either by patent attorneys who management keeps generally informed about the importance of various products or projects to corporate business goals; or by a committee composed of mostly line division personnel which reviews and records the fate of each submitted invention disclosure.

Bendix follows the latter procedure. Each of our division general managers, with the advice of the director of engineering and patent counsel, establishes an invention and patent committee whose purpose it is to make decisions regarding the protection and assertion of the division's patent, trademark and trade secret rights. This committee preferably includes engineering, planning and marketing personnel, as well as a patent attorney and the general manager or his designated representative. The committee meets as often as the volume of its work dictates (this is sometimes once a month, sometimes once every six months or less often). Phone conference meetings (now made much easier by PBX equipment) are encouraged. In the larger divisions there may be separate committees for important product lines. Such a committee provides an ideal vehicle for maintaining good communication between the patent legal staff and the division as well as providing the collective expertise necessary to make decisions regarding for example: (1) the filing of patent applications and the continuation of patents; (2) the maintaining of ideas as trade secrets; (3) the conducting of patent infringement, validity, novelty and state of the art searches; and (4) the making of decisions regarding corporate action on infringement and licensing matters -- indeed, anything which needs the coordinated attention of division management and its patent counsel. We feel that such division committees make the most cost effective decisions regarding expenditure of money to protect proprietary information (remember, Bendix divisions are billed for their patent work). Also, they restrain any

tendency of patent attorneys to empire build. Moreover, they keep management involved in their intellectual property protection and assertion problems thus maximizing the strength and enforceability of our patents and trade secrets.

Paralegals or Not. Paralegals (persons specially trained in the law but not lawyers) have become very popular the past ten years in the United States as an outgrowth of lawyers' attempt to keep legal costs within bounds. However, their use has been of much longer duration in the patent law field where they have been called "patent liaison" personnel. Where such personnel are used, they are often resident in the engineering departments of the Corporation's divisions and are responsible for obtaining patent disclosures from engineers, for training engineers how to write disclosures and how to preserve the evidence of invention, for obtaining document signatures, and sometimes for rewriting disclosures in a form very close to that of a finished patent application. Companies who do not use patent liaison personnel must give more attention to training their engineering staffs in these matters and making patent attorneys more easily available to engineers, particularly the most recently hired members of the engineering department, to assure that they are encouraged to identify problems they have solved and to present to the patent department invention disclosures. Bendix uses the latter system. However, since we have invention and patent committees within each division you might say we also use the former system, for the members of our invention and patent committees perform many patent liaison functions.

Trademarks and Copyright Matters or Not. About the only similarity between trademark and patent law in the United States is that they both deal with monopolies recognized by the United States Government Commerce Department. Nevertheless, many patent attorneys also practice trademark law and hence many corporate patent departments are responsible for trademarks and another branch of intellectual property law involving a monopoly recognized by the United States Government -- copyrights. More often, particularly in corporations where the patent department is closely allied to or reports to engineering management, trademark and copyright attorneys are not in the patent department but report directly to the general counsel or another corporate officer. This tends to be also the more likely form of organization in corporations who market consumer products and, therefore, whose trademarks are of very great importance to them in maintaining their sales. Regardless of this organization, in over three quarters of the U.S. corporations having foreign affiliates, the U.S. parent handles trademark matters for the foreign affiliates. This is not the case at Bendix.

FUNCTION

In closing I would like to mention the function of a U.S. corporate patent department. It is, in my opinion, the responsibility for maximizing the proprietary aspects of the corporation's intellectual property and for conducting all legal activity of the corporation relating to intellectual property rights -- namely, patents, trade secrets, trademarks and copyrights. These matters include the securing and maintaining of United States and foreign patent, trademark, copyright and trade secret rights, taking an advocate's role in enforcing these intellectual property rights against infringers; and drafting and participation in negotiating licenses to infringers and others desiring to use the corporation intellectual property. Also included is provision of a "preventive law service." By this I mean: (1) educating company personnel at all levels about the importance and proper treatment of intellectual property; (2) advising on patent and data clauses in contracts of all kinds; (3) administering an outside ideas program; and (4) opposing (where laws permit) the granting of patent and trademark rights to others.

Of course the patent department also takes an advocate's role where the corporation finds itself in the position of an infringer of or wanting to use the intellectual property rights of others.

In performing these tasks it is often necessary to counsel with other legal experts, either inside or outside the corporation such as antitrust and trade regulation counsel, trial counsel, general attorneys, as well as international legal experts and corporate organization lawyers. Predominently, the experienced patent attorney in these departments has responsibilities beyond application preparation and prosecution, infringement studies and novelty opinions. Nevertheless, these counsel are, on the average, expected to file about 15 U.S. patent applications annually.

In meeting these responsibilities, I consider the chief patent counsel's role to be: (1) maintaining a suitable organization with adequate manpower; (2) administering the department to keep it efficient and well serving the corporation; (3) coaching the department by planning a strategy to maximize the value of the corporation proprietary protection and guiding the professionals in the decision-making required by their work; (4) leading the department by participation in major negotiations and making basic decisions in key situations, as well as (5) being a spokesman for the department both with the corporation's management and outside the corporation.

PIPA Japanese Group
Committee No.1
Group No.4
Chairman: Katsuhiko Takahashi
Speaker: Katsuhiko Takahashi
Toshiharu Kawase
Hiroshi Sato
Mineo Takenaka
Susumu Yanagihara
Atsushi Matsushita

DESCRIPTION IN THE SPECIFICATION

SUMMARY:

A specification is of great importance to obtain a patent for an invention resulting from the efforts in research and development and to secure a patent protection for the products of the invention.

We have studied Japanese laws and court decisions concerning the specifications, particularly the detailed description part thereof. We have also compared them with their counterparts in the United States.

Firstly, it is essential to clearly describe in the detailed description part in the specification what the invention is, i.e., the object, construction and effect (specific advantage) of the invention by clarifying the technical relationship thereof with consistency. Secondly, it is necessary to definitely describe the object, construction and effect of the modes of practice which represent intermediate conception between general concept of the invention and specific concept of the embodiment thereof so as to cover the entire scope of the invention. Lastly, it is necessary to describe a wide variety of embodiments specifically in detail so as to cover the entire scope of the invention effectively.

What is important in the preparation of such specification is how effectively one in charge of a patent application can grasp an invention resulted from research and development and how the invention is described in the specification. The preparation of such specification needs not only the efforts of one in charge of a patent application, but also the cooperation of an engineer or researcher. Furthermore, the quality of the specification also depends on the strategic planning or policy, as well as the selected theme, of research and development.

Especially in Japan, the specification is required to describe the effect (specific advantage) of the invention as compared with that of the prior art. According to the U.S. patent law and the U.S. practice, the specification is not required to describe the effect of the invention, and the superiority of the invention to the prior art not referred to in the specification is admitted if appropriate affidavit is filed. These differences between Japan and the United States call for special attention.

In the United States, the specification is required to describe the best mode. In Japan, this requirement is only found in the provisions for the form accompanying the Rules of Practice, and failure to describe the best mode does not directly result in the rejection of the application. This is a great difference which also calls for special attention.

Description in the Specification

A. INTRODUCTION

It is my great pleasure to give a speech as a representative of our six-member study group. I wish to express my gratitude to the other members of our group for their cooperation in preparing this report despite their busy life.

The subject matter of our study is the "description in a specification". A specification is an important document which forms a basis for a patent application. We read and write specifications every day, but still find it difficult to write a satisfactory specification.

We have, therefore, decided to study the specification, particularly the detailed description part thereof, basically, and find out what a good description is like. In this connection, we have studied the Japanese laws and court decisions concerning the specifications. We have also compared them with their counterparts in the United States.

B. FUNCTIONS OF A SPECIFICATION

A specification is of great importance to a company which desires to obtain a patent for an invention resulting from its efforts in research and development, and secure a patent protection for the products of its invention. I would like to talk about the functions of a specification under the Patent Law.

I. Technical Literature

It is an object of the Patent Law to urge an inventor to disclose his novel technology as an invention to the public, and give technological stimulation to the industrial world to promote

its technological progress, thereby realizing industrial development. The Patent Law grants a patent in compensation for the public disclosure of the new technology as an invention.

The Patent Law calls upon the applicant for a patent to prepare a specification describing the invention sought to be patented, and causes the specification to be published in the Official Gazette in order to attain its object. Accordingly, the specification functions as a piece of technical literature by which the novel technology as an invention is disclosed to the public.

If the description in the specification is abstract or indefinite, it fails to function as the technical literature which discloses to the public the novel technology as an invention specifically. Therefore, the Patent Law requires a specification, particularly the detailed description part thereof, to set forth the object, construction and effect of an invention specifically.

II. Certificate of Right

The Patent Law grants an exclusive right called a patent for a definite period of time in compensation for the disclosure of an invention to the public. The Patent Law calls upon the specification to contain a claim or claims which specify the scope of a patent. Pursuant to Article 70 of the Patent Law, it is required that the technical scope of a patented invention is determined on the basis of the description of claim or claims contained in the specification. Accordingly, the specification, particularly the claim portion thereof, functions as a certificate of right showing the technical scope of a patent.

Pursuant to Article 2 of the Patent Law, an invention is

defined as a creation of a technical concept based on the laws of nature. As it is immaterial, it is difficult to express by words. Therefore, the contents of the detailed description part of the specification are sometimes taken into consideration in the determination of the technical scope of a patent based on the contents of the claim or claims.

III. Object of Examination

The Patent Law adopts the principle of documentary examination, and calls for examination of an application both in form and substance. Examination is made to ascertain, for example, if the invention described in the specification possesses the patentable features which render it worthy of a patent which is an exclusive right, and if the specification functions effectively as the technical literature which discloses the invention to the public.

Accordingly, the specification functions as an object of examination. The applicant is required to accompany his patent application with a specification which describes a patentable invention specifically in a prescribed form, and which satisfies the requirements for an object of examination.

C. Description in a Specification for Filing in Japan

I. Specification According to the Patent Law

EXHIBIT I tabulates the provisions which the Patent Law, the Rules of Practice in Patent Cases, the Standards for Examination, and the Manual of Examining Procedure contain with respect to the specification having the functions hereinabove pointed out, and particularly the detailed description part thereof.

A specification, with a drawing if required, is a document accompanying an application form, and should include the following four parts (Article 36, Section 2 of the Patent Law):

-Title of the Invention (Rule 24, Form 16, Remark 11);

-Claim or Claims (Article 36, Sections 5 and 6 of the Law; Rule 24 bis, Form 16, Remark 12);

-Detailed Description of the Invention (Article 36, Section 4 of the Law; Rule 24, Form 16, Remark 13); and

-Brief Description of the Drawings (Rule 24, Form 16, Remark 15).

Let's now see what the Patent Law, Rules of Practice, Standards for Examination and Manual of Examining Procedure require of the Detailed Description of an invention in a specification.

The Detailed Description of an invention is required to set forth the object, construction and effect of the invention to the extent that anybody having a usual level of knowledge in the technical field to which the invention belongs can easily work the invention.

According to the definition in Article 2 of the Patent Law, an invention means a high level of creation of a technical concept based on the laws of nature. It may be an abstract and ideal product of conception which has not yet matured into what can be called technology.

1. Sufficiency of Description

It is necessary to set forth the object, construction and effect of an invention clearly in relation to the prior art to the extent that any person skilled in the art can understand

the invention correctly, and work it easily (Manual of Examining Procedure 22.01A).

The term "any person skilled in the art" means any person having an ordinary power of understanding technology in the field to which the invention belongs (Standards for Examination 4.3.2). The term "work the invention easily" indicates that any person skilled in the art can understand and reproduce the invention (follow experiments) correctly in the light of the technical standard existing at the time of filing of the application (Standards for Examination 4.3.3).

2. Object of Invention

When setting forth the object of an invention, it is necessary to describe the following [Rule 24, Form 16, Remark 13(a); Standards for Examination 5.1; Manual of Examining Procedure 25.01A 1(1) & (2)]:

(1) Technical field, or the field of industry in which the invention is utilized. This description is necessary for an understanding of the technical subjects which the invention seeks to deal with.

(2) Prior art, and the problems involved therein.

(3) Object of the invention, i.e., the technical subjects arising from the analysis of the problems in the prior art.

3. Construction of Invention

When setting forth the construction of an invention, it is necessary to include the following descriptions [Rule 24, Form 16, Remark 13(b); Standards for Examination 5.2; Manual of Examining Procedure 25.01A 1(3) & (4)]:

(1) Description of the technical means contemplated to

solve the technical subjects of the invention, and how they work [Form 16, Remark 13(b)];

(2) Detailed description of any such technical means with basic data, modes of practice (aspects of invention), embodiments (examples), comparative examples, etc. if required [Manual of Examining Procedure 25.01A 1(4)]; and

(3) Factual description of embodiments considered to bring about the best results of the invention as many kinds as possible, with specific figures as required [Form 16, Remark 13(b)]. It is necessary to give a wide variety of embodiments for representing the entire scope of the invention.

4. Effect of Invention

When setting forth the effect of an invention, it is necessary to include the following descriptions:

(1) Description of the effects(s) produced by the features indispensable to the invention, i.e., the technical effect(s) obtained exclusively by the invention [Rule 24, Form 16, Remark 13(c); Standards for Examination 5.3(i); Manual of Examining Procedure 25.01A 6].

The effects mean the specific advantages of the invention over the prior art.

(2) Specific description which provides an objective understanding of the results obtained by solution of the technical subjects of the invention [Rule 24, Form 16, Remark 13(c); Standards for Examination 5.3 (ii); Manual of Examining Procedure 25.01A 1(5)].

5. Mutual Relationship of the Object, Construction and Effect of Invention

The description of the object, construction and effect of an invention should be consistent with one another (Standards for Examination 5.4).

II. Disadvantages of an Incomplete Specification

(1) The application is rejected if the specification is incomplete, and fails to satisfy the requirements of Section 4 of Article 36 of the Patent Law that the specification should describe the object, construction and effect of the invention to the extent that any person skilled in the art can easily work the invention (Article 49, Section 3 of the Patent Law). Even if the application has matured into a patent, the patent can be invalidated by trial proceedings (Article 123, Section 1 of the Patent Law). These provisions are intended for preventing the grant of a patent to an application accompanied by a specification which is incomplete and of low quality as a piece of technical literature or a certificate of right for its insufficient disclosure, or incomplete description (Standards for Examination 3.2). Moreover, an incomplete specification is often likely to present difficulty in the examination of the application on the merits.

(2) If the specification fails to state the object of the invention clearly and sufficiently, and if the applicant fails to show any substantial difference between the object of the invention and those appearing in the prior art or the references cited, the application may be rejected as lacking novelty (Article 29, Section 1 of the Patent Law) or unobviousness(Article 29, Section 2 of the Patent Law). Moreover, it is likely that the scope of the patent may have to be unduly narrowed in a case of infringement.

(3) If the specification fails to state the construction of

the invention clearly and sufficiently, and if the applicant fails to show that the invention can be distinguished in construction from the prior art or the references cited, the application may be rejected as lacking novelty, or being identical to a prior application. Even if any such application has matured into a patent, the patent may easily be infringed, since the scope of the right is indefinite, and it may not be easy to enforce the right against the infringer.

(4) If the specification fails to state the effect of the invention clearly and sufficiently, and if the applicant fails to show that the invention can be distinguished in effect from the prior art, or the references cited, the application may be rejected as being obvious. Even if any such application has matured into a patent, it may be invalidated by trial proceedings as an invalid patent for an obvious invention.

III. Court Decisions Concerning Description in a Specification

We have at random picked up 45 cases in which the description in a specification was at issue. EXHIBIT II tabulates the descriptions at issue. If they are roughly classified, they consist of 31 mechanical and electrical cases, and 14 chemical cases including those concerning materials. It appears that the descriptions in specifications are more controversial in mechanical and electrical fields.

In as many as about 75% of the cases, the point at issue related to the description concerning the "construction of the invention". In nearly 20% of the cases, the description concerning the "effect of the invention" was at issue.

Referring only to the mechanical and electrical cases, it was in about 60% of the cases that the description concerning the

"construction of the invention" was at issue, while in about 17% of the cases, the description concerning the "effect of the invention" was at issue. As regards the chemical cases (including those concerning materials), the description of the "construction of the invention" was at issue in about 75% of the cases, while in slightly more than 20% of the cases, the description concerning the "effect of the invention" was at issue.

In the cases involving the Commissioner of Patents as one of the parties, the description concerning the "construction of the invention" was the most controversial issue, followed by the description concerning the "effect of the invention", the sufficiency of description (general matter)", and the "object of the invention". In cases of infringement, the description concerning the "construction of the invention" was at issue in almost all of the cases. There are a lot of cases in which it was held that there was no infringement as a result of the limitation of the invention to the scope set forth in the embodiment for the reason that the specification contained only one embodiment, or failed to define or explain fully the terms used in the claim.

1. Examples of Court Decisions Classified by Points at Issue

(1) Sufficiency of Description

(a) It is impossible to determine what the invention is, since the specification fails to describe the invention specifically to the extent that any person skilled in the art can easily work it, and fails to set forth the object, construction and effect of the invention clearly (Trial No. 41-9285, Decision No. 51(Gyo-ke)95 of Tokyo High Court, Decision No. 53(wa)9231 of Tokyo District Court).

(b) The Detailed Description of the invention is not sufficiently detailed to enable any person skilled in the art to work it easily (Decision No. 50(Gyo-ke) 38 of Tokyo High Court).

(2) Object of Invention

(a) The object, construction and effect of the invention are indefinite, since the specification fails to contain a sufficient description of the prior art forming the background of the invention (Trial No. 41-945, and 49-950).

(3) Construction of Invention

A. Mechanical and Electrical

(a) As the specification contains only one, or a few embodiments, and fails to describe any specific modification that can be substituted for the embodiment or embodiments, the scope of the patent is limited to what is described in the embodiment or embodiments, and the defendant's product does not infringe the patent (Decision No. 46(wa)9630 of Tokyo District Court, 48(wa)6031 of Tokyo District Court, 48(wa)8637 of Tokyo District Court, 50(wa)1209 of Osaka District Court, and 54(wa)2557 of Tokyo District Court).

(b) As the specification describes the construction of the invention only in functional and abstract terms, the scope of the patent is limited to what is specifically set forth by way of example (Decision No. 50(wa)2564 of Tokyo District Court, and 51(ne)783 of Tokyo High Court).

(c) The construction of the invention is indefinite, since it is described by the terms which are not usually used, or which are used in different meanings than usual (Decision No. 43(wa)2506 of Tokyo District Court, 46(Gyo-ke)91 of Tokyo High Court, and 52(Gyo-ke)27 of Tokyo High Court).

(d) As the terms used to describe the construction of the invention cannot be interpreted in their literal meanings, the scope of the patent must be limited to what is described by way of example (Decision No. 40(wa)2018 of Tokyo District Court).

(e) The construction of the invention is indefinite, since the specification fails to describe any mode of its operation (Trials Nos. 45-1678 and 47-653, and Decision No. 49(Gyo-ke)55 of Tokyo High Court).

(f) The relative position of the elements constituting the invention is indefinite (Decisions Nos. 54(Gyo-ke)172 and 51(Gyo-ke)143 of Tokyo High Court).

(g) The scope of the invention is limited after its object and effect have been taken into consideration in the interpretation of its construction (Decisions Nos. 44(wa)214 of Tokyo District Court, and 50(ne)1477 of Tokyo High Court).

(h) The construction of the invention is indefinite, since the specification fails to describe the features of the prior art which are pertinent to the gist of the invention (Decision No. 45(Gyo-ke)50 of Tokyo High Court, and Trial No. 49-9681).

(i) The scope of the invention is limited to what is shown in the embodiment, since its object is old in the art (Decision No. 47(wa)4133).

B. Chemical and Materials

(a) The defendant's product does not infringe the patent, since the specification fails to disclose any modification that can be substituted for the form shown specifically by way of example (Decisions Nos. 47(wa)10333, and 49(wa)8647 of Tokyo District Court).

(b) Invention relating to a process for manufacturing a

compound: It is necessary to show temperature, pressure, and other conditions specifically (Decision No. 45(Gyo-ke) 75 of Tokyo High Court, and Trial No. 47-532).

(c) Invention relating to a composition: The specification fails to show any data (physical constants) identifying the compound shown by the general formula (Trial No. 47-2657).

(d) Invention relating to a composition: The relation between the essential components according to the invention and the other components is indefinite (Decision No. 51(Gyo-ke)111).

(e) Invention relating to a process for manufacturing a polymer composition: Although the quantities of the components in the polymer are limited to specific ranges, the specification fails to mention a method of determining the quantities; therefore, it is interpreted that the quantities were determined by an ordinary method, and the defendant's product does not infringe the patent (Decision No. 47(7)4205 of Tokyo District Court).

(f) The construction of the invention is indefinite, since the specification fails to describe the prior art pertinent to the gist of the invention (Decision No. 55(Gyo-ke)199).

(4) Effect of Invention

(a) Although the invention is numerically restricted, the critical significance of the numerical values and the effect of the numerical restriction are indefinite (Decisions Nos. 46(Gyo-ke)48, 47(Gyo-ke)26, 50(Gyo-ke)73, and 52(Gyo-ke)39 of Tokyo High Court).

(b) The superiority of the invention over the prior art cannot be objectively recognized, since the specification fails to show the effect of the invention quantitatively (Decisions

Nos. 47(Gyo-ke)18 and 49(Gyo-ke)74 of Tokyo High Court).

(c) Invention relating to a composition: The specification contains so small a number of examples that it is not clear whether all of the compounds of the general formula shown in the claim can produce the alleged results of the invention (Trial No. 52-14077, and Decision No. 54(Gyo-ke)151 of Tokyo High Court).

2. Requirements for a Good Specification Derived from Court Decisions

The trial and court decisions which we have picked up and studied teach the following:

(1) Sufficiency of Description

(a) It is necessary to write a specification from which any person skilled in the art can understand the invention.

(b) It is necessary to describe the invention so fully and specifically that any person skilled in the art can work it easily.

(2) Object of Invention

(a) It is necessary to describe specifically the prior art forming the background of the invention, point out the problems of the prior art, and set forth clearly the technical subjects to be solved by the invention (object of the invention).

(3) Construction of Invention

(a) It is necessary to describe the prior art pertinent to the invention and its gist.

(b) It is advisable to show as many different embodiments (examples) as possible to show how the invention can be embodied.

(c) When describing the construction of the invention, it

is necessary to use the terms having clearly established meanings in the technical field to which the invention pertains, and define the technical meanings of the terms clearly.

(d) It is necessary to describe the mode of operation of the invention clearly in addition to the construction of the invention.

(e) When a compound is shown by a general formula in a specification for an invention relating to chemistry and materials, it is necessary to describe data identifying the compound.

(4) Effect of Invention

(a) It is necessary to describe the effect of the invention as specifically and quantitatively as possible.

(b) When restricting the invention numerically, it is necessary to state specifically the critical significance of the numerical values, and the effect of the numerical restriction.

(c) In an invention relating to chemistry or material, it is necessary to show a lot of examples demonstrating that the compound or material according to the invention produces the effect of the invention.

IV. Requisites to an Ideal Specification

I would now like to draw your attention to EXHIBITS III-1 to III-3 proposing the form and contents of an ideal specification which we have worked out by summarizing the requirements for a specification by laws and court decisions. I will explain them item by item. EXHIBIT III-4 showing the conventional pattern of a specification (in mechanical and electrical field) will be attached for comparison.

1. Sufficiency of Description

[1] It is necessary to write a specification which any person skilled in the art can understand.

[2] It is necessary to describe the invention so fully and specifically as to enable any person skilled in the art to work it easily.

2. Object of Invention

When setting forth the object of the invention, the following should be described in this order:

a. Technical Field

State the field to which the invention pertains, by using, for example, a sentence reading: "This invention relates to ..... ."

b. Prior Art

(1) Description of the Prior Art

Describe specifically the prior art which is most pertinent to the invention.

(2) Listing and Analysis of Problems of Prior Art

Point out the problems (drawbacks) of the prior art, analyze them from various angles, and describe the results of analysis. In this case, it is necessary to analyze not only the problems of the prior art from a phenomenal and functional viewpoint but also the problems in the construction of the prior art disclosed as a result of such analysis. In other words, it is advisable to describe the part of the construction of the prior art from which the problem arises.

c. Object of Invention

Describe as the object of the invention a solution or solutions to the technical subject derived from the analysis

of the problems of the prior art. In case the invention pertains to a field having no prior art, describe as the object of the invention the technical subject which the invention seeks to solve.

3. Construction of Invention (EXHIBIT III-1, Paragraph d)

Clearly describe the technical means indispensable to the solution of the technical subject of the invention, or the gist thereof, along with their operation. Namely, state the technical means contemplated to solve the problems of the prior art, and more specifically, the construction contemplated to overcome the problems involved in the construction of the prior art. Describe the construction of the invention so definitely as to understand it without taking the description of embodiments into consideration.

Here, describe the invention in terms of general conception, or in comprehensive terms, and continue to describe it in further detail in paragraphs f, g and h to be described later by way of modes of practice (aspects of invention), embodiments (examples), modifications, etc. Avoid the expedient of describing the invention only by way of example by omitting a general description thereof, as shown in EXHIBIT III-4.

4. Effect of Invention (EXHIBIT III-1, Paragraph e)

State specifically the technical results produced exclusively by the features indispensable to the invention. Describe the advantages of the invention over the prior art. When the specification contains embodiments, it is not permissible to describe the effects specific to only the embodiments as the effect of the invention, except for the case that the operation and effect of the invention are recognized to be

equivalent to those of the embodiments. The effect of the invention must be common to all the embodiments.

5. Construction and Effect of Invention

f. Description of Modes of Practice (Aspects of Invention)

(1) Description of Construction and Operation of Modes of Practice

The mode of practice means a set of technical means employed for achieving the object of the invention and which are more specific than the features recited as being indispensable for the constitution of the invention (Standards for Examination 4.2.2). If an invention is considered as a general conception and an embodiment as a specific conception, a mode of practice can be interpreted as an intermediate conception. A mode of practice is covered by an invention, and covers a plurality of embodiments. The description of the modes of practice contributes to the effective disclosure of the invention.

Describe the modes of practice having the construction (i.e. technical means) more specific than that of the invention as many as are required to cover the whole scope of the invention, along with the operation of each mode of practice.

(2) Description of Effect of Modes of Practice

Describe specifically the effect produced by each mode of practice, i.e., the effect of the invention combined with the effect produced exclusively by the mode of practice.

g. Description of Embodiments (Examples)

(1) Description of Construction and Operation of Embodiments

An embodiment is more specific and detailed than the mode of practice. Describe a lot of different embodiments so that they may cover the whole scopes of the mode of practice and the invention. Describe the technical means and their operation

specifically. Choose the embodiments considered to produce the best results. An embodiment is a specific representation of the invention which enables any person skilled in the art to easily work the invention which is a technical concept of the more abstract nature.

(2) Description of Effect of Embodiments

Describe specifically the effect produced by each embodiment, i.e., the combined effect of the invention, the mode of practice to which the embodiment pertains, and the embodiment itself.

h. Description of Other Matters as Required

(1) Describe specifically the construction, operation and effect of as many modifications or substitutions as possible in order to clarify the boundary limits of the invention.

(2) Add comparative and referential examples if they are required for the description of the invention and the embodiments thereof.

V. Merits of Our Proposed Specification

1. Merits of the Specification as a Certificate of Right

If a plurality of modes of practice and a plurality of embodiments are properly set forth in a specification, they provide a double and stepwise support for the whole technical scope of the patented invention, and set a clear boundary for the scope of the patent. It is, therefore, possible to prevent infringement, and should any infringement occur, it is possible to avoid narrow interpretation of the technical scope of the patented invention by limitation to the embodiments.

If the specification contains a lot of modes of practice and embodiments, it is certain that any use of the invention

disclosed in one of the modes of practice or embodiments will be considered to infringe the scope of the patent. If the specification indicates any possibility of modification, any use of the invention corresponding to any such modification will be considered to infringe the patent.

If the specification contains a lot of modes of practice and embodiments, it is possible to make the scope of the patent clearer, and prevent infringement. Should any infringement occur, it is possible to minimize the conflict, since it is easier to determine if and where the patent is infringed.

2. Merits of the Specification as an Object of Examination

Even if the claims are rejected for lack of novelty or unobviousness, or for the presence of a prior application, there will remain a number of modes of practice and embodiments to which the reasons of rejection will not be applicable, if the specification contains a proper and specific description of a lot of modes of practice and embodiments for which patent protection is sought. It will be possible to obtain a patent by restricting the claims to cover only those remaining modes of practice and embodiments. If the application contains a variety of modes of operation representing the intermediate conception between the invention and the embodiments, it will be possible to obtain a patent by leaving out the modes of practice conflicting with the prior art. If, on the other hand, the application fails to contain any such mode of practice or embodiment, it is impossible to restrict the claim and obtain a patent. The same is true of the case in which an issued patent is going to be invalidated by the trial proceedings based on the prior art, or the presence of a prior application.

If the description of the effect of the invention contains a clear and specific description of the advantages of the invention or the gist of the invention over the prior art, it is easy to distinguish the effect of the invention from that of the prior art. Therefore, it is often possible to avoid rejection of the application, or invalidation of any patent issuing therefrom. If the specification contains a clear description of the advantages of the modes of practice and embodiments, it will be easy to assert the unobviousness (Article 29, Section 2 of the Patent Law) of the invention defined by the narrowed claims, and obtain a patent which is strong, and will not easily be invalidated.

3. Merits of the Specification as Technical Literature

If the specification contains a lot of technical information to effectively disclose the whole scope of the invention, it functions as a very useful piece of technical literature when laid open.

D. DESCRIPTION IN A U.S. PATENT SPECIFICATION

I. Specification According to the Laws

EXHIBIT IV shows the provisions found in the United States Patent Law, Code of Federal Regulations (CFR), and Manual of Patent Examining Procedure (MPEP) in connection with the contents of a specification.

Article 112 of the U.S. Patent Law (35 U.S.C. 112) requires that the specification shall contain a description of the 'invention', the 'manner and process of making and using it' to enable any person skilled in the art to make and use the same, and the 'best mode' contemplated by the inventor of carrying out

his invention.

The Code of Federal Regulations and the Manual of Patent Examining Procedure specify the form of the specification, and the content of each of the items framing the specification. The following requisites of a U.S. patent specification can be derived from the U.S. Patent Law, Code of Federal Regulations, and Manual of Patent Examining Procedure:

1. Title of the Invntion

The title of the invention should be stated clearly and concisely to indicate the invention claimed.

2. Abstract of the Disclosure

This is a brief abstract of the technical disclosure in the specification (37 CFR 1.72(b) and MPEP 608.01(b)).

3. Brief Summary of the Invention

This portion of the specification should set forth the background of the invention (i.e., (a) Field of the Invention, and (b) Description of the Prior Art) and the objects and summary of the invention.

(1) Background of the Invention (MPEP 608.01(c))

a. Field of the Invention

The technical field to which the invention pertains should be stated.

b. Description of the Prior Art

This is a description of the prior art which is pertinent to the invention as claimed, and of which the applicant is aware. The problems of the prior art to be solved by the invention should also be set forth. Attention is also directed to the provisions of 37 CFR 1.97 to 1.99 concerning a prior art statement so that no fraud may be practiced in connection with the

application.

(2) Summary of the Invention

This is a more detailed, general, exact and comprehensive description of the invention than the abstract of the disclosure. The summary should be commensurate with the invention as claimed, and provide a sufficient support therefor. The summary may comprise an appropriate description of the features, nature, operation and object of the invention. If a plurality of objects are stated, it is advisable to start with the broadest and least specific one, and end with the narrowest and most specific one.

4. Brief Description of the Drawings

When there are drawings, the specification should include a brief description of the several views of the drawings.

5. Detailed Description of the Invention, or the Preferred Embodiments

The specification should include a description of the invention in such full, clear and exact terms as to enable any person skilled in the art to which the invention pertains, to carry out the invention without doing any special experiment. The description should set forth all the elements of the invention comprehensively, and also include a specific description supporting the comprehensive description, and a description of any equivalent. The important limitations to the individual elements of the invention, if any, should also be set forth specifically.

The best mode contemplated by the inventor of carrying out his invention must be set forth.

II. Court Decisions Concerning Description in a Specification

35 U.S.C. 112 provides for three requirements in con-

nection with the disclosure of the invention in a patent specification, i.e., a description requirement, an enablement requirement, and a best mode requirement. These requirements are of great importance in a U.S. patent application, and there are a lot of court decisions concerning these requirements. I would now like to discuss the points at issue in court decisions. EXHIBIT V shows a table of the court decisions which we have studied.

1. Description Requirement

The issues involving the description requirement take a number of different forms. For example, they arise when the applicant wishes to broaden or narrow the scope of the invention in the event the specifications lacks a full description of the elements indispensable to the invention. This requirement is also of great significance in interference proceedings. I will summarize the major court decisions in which the description requirement was at issue.

(1) Insufficient description of the invention.

(2) Inability to broaden the scope of the invention.

The scope of the invention was limited to the description in the specification as originally filed.

(3) Inability to narrow the scope of the invention.

The lack of an appropriate description in the application as originally filed turned out to be a fatal defect for even the applicant who tried to narrow the scope of the invention.

(4) In interference:

It was held in interference proceedings that the specification of each party to the interference should contain a full description of the matter defined by each count of the inter-

ference.

2. Enablement Requirement

The requirement of 35 U.S.C. 112 that the specification should include such a full disclosure of the invention as to enable any person skilled in the art to make and use it is essentially identical to what is required by the patent laws in almost all the other countries in the world. Accordingly, the majority of the court decisions deal with the manner or process of making and using the invention, though there are some other special issues.

(1) Disclosure of the Process for Making

The issues concerning the disclosure of the process for making the invention relate to a disagreement between the scope of the invention as claimed, and the scope of the invention which can actually be carried out. They mainly arise from chemical cases.

(2) Disclosure of the Manner of Using

In the case of an invention relating to a chemical substance or a medicine, the enablement requirement is not satisfied, even if the specification simply states that a certain synthetic product has pharmacological properties, or is useful as a medicine. A disclosure of the quantity and the method is required.

(3) Extent of Enablement

In order to ascertain whether the enablement requirement is satisfied, it is generally useful to see if the scope of the invention which can actually be carried out as described in the specification is identical to the scope of the invention as claimed. For the court decisions concerning this aspect, see

EXHIBIT V.

(4) Any person Skilled in the Art

By whom should the specification be written to be practiced? For the court decisions handling this issue, see EXHIBIT V, too.

3. Best Mode Requirement

This requirement has recently become very important as a result of the appearance of the rule concerning the fraud on the Patent and Trademark Office in inter parte cases. There have been many cases brought before the court as shown in EXHIBIT V.

4. Court Decisions Classified by Fields of Industry

We have picked up as many as 58 court decisions concerning 35 U.S.C. 112. We have classified them by fields of industry, and found that 67% of them, or 39 cases are chemical, while 33% of them, or 19 cases are mechanical or electrical. The majority of the cases are chemical. This apparently suggests the necessity for special care in the preparation of specifications for chemical inventions.

E. OUR COMMENTS

We have studied the nature of Japanese and U.S. patent specifications, particularly the detailed description of the invention therein. I would like to summarize what we have found out.

I. Japanese Specification

1. In Japan, it is usual to understand an invention based on its object, construction and effect. According to the Patent Law, the important thing is not what invention the inventor has actually made, but objectively, what the invention described in the

specification is. Therefore, it is necessary to describe the object, construction and effect of the invention definitely by clarifying the technical relationship of the object, construction and effect with consistency. Further, the specification is required to describe the object, construction and effect of an invention in contrast to those of the prior art.

2. In mechanical and electrical cases, it is common practice to omit a description of the construction of an invention, and substitute a description of an embodiment therefor. (see EXHIBIT III-4) It is, however, necessary to describe the features indispensable to the invention, or at least the construction of the gist of the invention, clearly along with their operation, apart from the embodiment, since in a case of infringement, the invention is likely to be interpreted with a narrower scope. The specification should be prepared to provide a full understanding of the object, construction and effect of the invention even if a description of the embodiment is not taken into consideration.

3. It is necessary to include a wide variety of modes of practice which represent an intermediate conception, and a wide variety of embodiments which represent a specific conception, so that they may provide a double support for the entire scope of the invention. It is necessary to include an infinite number of embodiments in order to completely support the entire scope of the invention. However, if the specification includes modes of practice as intermediate conception, the entire scope of the invention can be efficiently supported so that an enforceable and extensive patent right can be obtained without unnecessary efforts.

4. It is essential to describe in the specification any em-

bodiment that the applicant intends to carry out on a commercial basis, and the best mode contemplated by the inventor of carrying out the invention.

5. A description of the effect of the invention should contain only the effect derived exclusively from the features indispensable to the invention or the gist of the invention.

6. It is advisable to describe the effects of the modes of operation and embodiments by reviewing the invention from various angles, since such description is likely to turn out useful for the evaluation of the invention for unobviousness pursuant to Section 2 of Article 29 of the Japanese Patent Law.

7. In some cases, Japanese applications corresponding to U.S. application are rejected as failing to describe, or failing to contain a full description of, the effect of the invention in accordance with the provisions of Section 4 of Article 36 of the Japanese Patent Law. This is due to the fact that the basic U.S. applications do not contain such description, since the U.S. Patent Law does not necessarily require such description. In Japan, the specification is required to describe the effect of the invention as compared with that of the prior art. According to the U.S. practice, the superiority of the invention to the prior art not referred to in the specification is admitted if an appropriate affidavit is filed (142 USPQ 101). These differences between Japan and the United States call for special attention.

II. U.S. Specification

1. In the United States, the specification is required to include a description of the invention, the manner and process of making and using it, and the best mode of carrying it out.

2. This disclosure requirement calls for the due attention of Japanese companies which prepare specification in accordance with the Japanese Patent Law. The Japanese Patent Law defines as an invention a creation of a technical concept based on the laws of nature, including a concept which has not yet matured into what may be called technology. The U.S. Patent Law looks at an invention differently. Although the U.S. Patent Law does not contain any definition for the term "invention", it considers that an invention must be what can be called technology.

3. In the United States, the best mode requirement is often at issue in connection with the problem of fraud in recent cases of infringement. In Japan, this requirement is only found in the provisions for the forms accompanying the Rules of Practice, and failure to describe the best mode does not directly result in the rejection of the application. This is a great difference which calls for special attention.

4. We must keep it in mind that the prior art statement required in the United States is a very stringent requirement to ensure that no fraud be practiced on the Patent and Trademark Office.

5. The U.S. Code of Federal Regulations (CFR), and Manual of Patent Examining Procedure (MPEP) include certain different requirements for specifications from those in Japan. For example, the U.S. regulations require the specification to include an abstract of the disclosure, and a summary of the invention which we do not have in Japan.

III. Conclusion

1. It is our earnest desire to obtain an enforceable and ex-

tensive patent right with a minimum effort. In order to realize this desire, the specification is required to give an efficient disclosure of the wide scope of the invention to the public, and to be sufficient enough to overcome the Examiner's rejections and to serve as a certificate of right securing the extensive scope of a patent.

In preparing such specification, it is firstly essential to clearly describe in the detailed description part of the specification what the invention is, i.e., the object, construction and effect of the invention by clarifying the technical relationship thereof with consistency. Secondly, it is necessary to definitely describe the the object, construction and effect of the modes of practice which represent intermediate conception so as to cover the entire scope of the invention. Lastly, it is necessary to describe a wide variety of embodiments specifically in detail so as to cover the entire scope of the invention effectively.

What is important in the preparation of such specification is how effectively one in charge of a patent application can grasp an invention resulted from research and development and how the invention is described in the specification.

The preparation of such specification needs not only the efforts of one in charge of a patent application, but also the cooperation of an engineer or researcher who is an inventor. Furthermore, the quality of the specification also depends on the strategic planning or policy, as well as the selected theme, of research and development.

2. I have pointed out a number of differences in the requirements for description between Japanese and U.S. specifications. It is necessary to take these differences into due consideration when preparing a specification.

3. All of us will be very glad if my speech will be of any help to you in your work, or when you prepare a specification.

Thank you very much for your attention.

S P E C I F I C A T I O N

EXHIBIT I

Patent Law	Rules of Practice
1. In general (1) A specification, with a drawing if necessary, attached to an application form should set forth the following (A36(2)): 1) Title of Invention 2) Claim or Claims 3) Detailed Description of Invention 4) Brief Description of Drawings (2) Detailed Description of Invention should include the following to the extent that any person having ordinary knowledge in the technical field to which the invention belongs can easily carry out the invention (A36(4)): Object of Invention Construction of Invention Effect of Invention	1. In general (1) A specification to be attached to an application form should be prepared according to Form 16 (R24). (2) The object, construction and effect of the invention should be stated according to Form 16 (R24).
2. Object of Invention	2. Object of Invention (1) Description of problems which the invention is intended to solve and the field in which the invention is utilized in industry in relation to the prior art (Form 16, Remark 13(a))
3. Construction of Invention	3. Construction of Invention (1) Description of means contemplated to solve the problems together with its operation. (2) If necessary, description of embodiments to show how the construction of the invention practically works. (3) Factual description of embodiments considered to bring about the best results of the invention as many kinds as possible, if necessary, with specific figures. (Form 16, Remark 13(b))
4. Effect of Invention	4. Effect of Invention (1) Concrete description of specific advantages brought out by the invention (Form 16, Remark 13(c))

S P E C I F I C A T I O N

EXHIBIT I

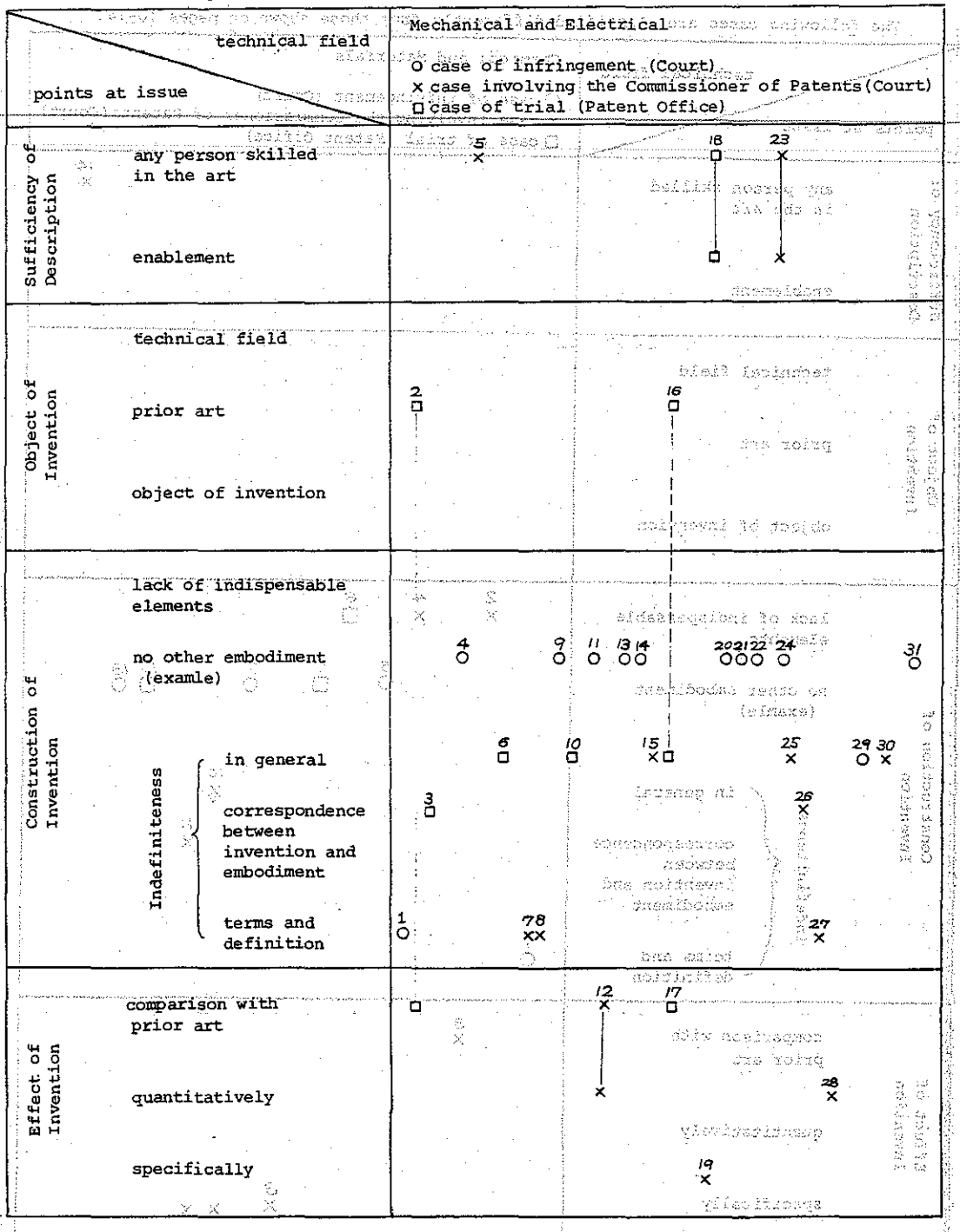
Standards for Examination	Manual of Examining Procedure
1. In general	1. In general
	(1) A specification should include the following in the order below (22.02P):
	1) Title of Invention 2) Claim or Claims 3) Detailed Description of Invention 4) Relationship between Additional and Original Applications, if applicable 5) Brief description of Drawings, if necessary
(2) 1) "the technical field to which the invention belongs": the technical field to which the invention belongs in view of the object, construction and effect of the invention (4.3.1)	(2) The object, construction and effect of the invention should be clearly described in relation to the prior art to the extent that any person skilled in the art can precisely understand and easily carry out the invention (22.01A)
2) "any person skilled in the art": any person having an ordinary power of understanding technology in the field to which the invention belongs (4.3.2)	
3) "to the extent that any person skilled in the art can easily carry out the invention": to the extent that any person skilled in the art can understand and reproduce the invention (follow experiments) precisely in light of the technical level attained at the time of filing the application (4.3.3)	
2. Object of Invention	2. Object of Invention
(1) Description of the field in which the invention is utilized in industry for understanding the technical subjects of the invention (5.1 (ii))	(1) Description of the field to which the invention belongs (25.01A 1(1))
(2) Description of problems which the invention is intended to solve in relation to the prior art (5.1 (i))	(2) Description of the technical subjects arising from the analysis of problems involved in the prior art of the technical field to which the invention belongs (25.01A I(2))

3. Construction of Invention (1) Description of technical means contemplated to solve the technical subjects of the invention together with its operation (5.2.(i)) (2) Description of embodiments(s) in case the description of Construction of Invention is not made as specifically as that of the embodiment(s) (5.2.(ii))	3. Construction of Invention (1) Description of the technical means for solving the technical subjects of the invention in a manner to support Claim(s) (25.01A 1(3)) (2) Detailed description of the technical means for solving the technical subjects with basic data, modes of practice (aspects of invention), embodiments (examples),comparative examples and so on (25.01A 1(4)) (3) If a starting material which is not easily available is used in the embodiment and the like, description of the method for its manufacture and the source from which it is obtained. (25.01A 4)
4. Effect of Invention (1) Description of effect(s) brought out by the elements indispensable to the invention (specific; technical advantages brought out exclusively by the invention) (5.3 (i)). (2) Description of the results obtained by solving the technical subjects of the invention concretely enough to understand them objectively (5.3 (ii)).	4. Effect of Invention (1) Except for the case where the operation and effect of the invention are considered to be substantially equivalent to those of the embodiment, it is not permissible to substitute the description of the effect specific to the embodiment for that of the operation and effect of the invention (25.01A 6) (2) Concrete description of the effect(s) of the invention (25.01A 1(5)) (3) Description of grounds for the numerical restriction if included in Claim(s) (25.01A 3)
5. Mutual Relationship of the Object, Construction and Effect of Invention (1) Consistent description of the object, construction and effect with one another (5.4)	

EXHIBIT II

TREND IN COURT DECISIONS

The following cases are classified differently from those shown on pages 10-14.



TREND IN COURT DECISIONS

EXHIBIT II

The following cases are classified differently from those shown on pages 10-14.

points at issue \ technical field		Chemical and Materials ○ case of infringement (Court) × case involving the Commissioner of Patents (Court) □ case of trial (Patent Office)
Sufficiency of Description	any person skilled in the art	14 ×
	enablement	
Object of Invention	technical field	
	prior art	
	object of invention	
Construction of Invention	lack of indispensable elements	2 × 4 × 6 □
	no other embodiment (examle)	5 ○ 7 □ 9 ○ 12 □ 13 ○
	Indefiniteness: in general	
	Indefiniteness: correspondence between invention and embodiment	10 × 11 ×
	Indefiniteness: terms and definition	1 ○
Effect of Invention	comparison with prior art	3 ×
	quantitatively	
	specifically	8 × × ×

EXHIBIT II

List of Cases Picked Up

Mechanical and Electrical	Chemical and Materials
1. 40(wa)2018 of Tokyo District Court	1. 43(wa)2506 of Tokyo District Court
2. Trial No.41-945	2. 45(Gyo-ke)75 of Tokyo High Court
3. Trial No.41-9285	3. 47(Gyo-ke) 26 of Tokyo High Court
4. 44(wa)214 of Tokyo District Court	4. 47(wa)4205 of Tokyo District Court
5. 45(Gyo-ke)50 of Tokyo High Court	5. 47(wa)10333 of Tokyo District Court
6. Trial No.45-1678	6. Trial No.47-532
7. 46(Gyo-ke)48 of Tokyo High Court	7. Trial No.47-2657
8. 46(Gyo-ke)91 of Tokyo High Court	8. 49(Gyo-ke)74 of Tokyo High Court
9. 46(wa)9630 of Tokyo District Court	9. 49(wa)8647 of Tokyo District Court
10. Trial No.47-653	10. 50(wa)103 of Osaka District Court
11. 47(wa)4133 of Tokyo District Court	11. 52(Gyo-ke)129 of Tokyo High Court
12. 47(Gyo-ke)18 of Tokyo High Court	12. Trial No.52-14077
13. 48(wa)6031 of Tokyo District Court	13. 54(Gyo-ke)151 of Tokyo High Court
14. 48(wa)8637 of Tokyo District Court	14. 55(Gyo-ke)199 of Tokyo High Court
15. 49(Gyo-ke)55 of Tokyo High Court	
16. Trial No.49-9681	
17. Trial No.49-950	
18. 50(Gyo-ke)38 of Tokyo High Court	
19. 50(Gyo-ke)73 of Tokyo High Court	
20. 50(wa)1209 of Osaka District Court	
21. 50(wa)2564 of Tokyo District Court	
22. 50(ne)1477 of Tokyo High Court	
23. 51(Gyo-ke)95 of Tokyo High Court	
24. 51(ne)783 of Tokyo High Court	
25. 51(Gyo-ke)143 of Tokyo High Court	
26. 51(Gyo-ke)111 of Tokyo High Court	
27. 52(Gyo-ke)27 of Tokyo High Court	
28. 52(Gyo-ke)39 of Tokyo High Court	
29. 53(wa)9231 of Tokyo District Court	
30. 54(Gyo-ke)172 of Tokyo High Court	
31. 54(wa)2557 of Tokyo District Court	

EXHIBIT III-1

PROPOSED PATTERN OF SPECIFICATION (Mechnical Field)

	Pattern of Specification
Object of Invention	a. Technical Field "This invention relates to ..... ." b. Prior Art (1) Description of prior art (2) Problems in prior art and analysis thereof c. Object of Invention solution of problems in construction and function of prior art
Construction of Invention	d. Construction of Invention (X + Y + Z, gist = Y) Description of the elements (X + Y + Z) indispensable to the construction of invention stated in claim or description of construction of the gist (Y) of invention stated in claim and operation thereof
Effect of Invention	e. Effect of Invention Description of specific advantages resulting from the construction and operation of the elements indispensable to the invention stated in claim
Construction and Effect of Invention	f. Description of Aspects (Intermediate Conception of Invention) (1) Description of construction and operation of aspects (2) Description of effect of aspects (effect of invention and effect specific to aspects) X+A+Z X+B+Z . X+Y+Z+E X+Y+Z+E+F g. Description of Embodiments G1 Description of the first embodiment construction $x_1+a_1+z_1$ effect and operation (those of invention and those specific to embodiment) G2 Description of the second embodiment construction $x_2+b_1+z_2$ effect and operation (the same as above) G3 Description of the third embodiment construction $x_3+c_1+z_3+e_1$ effect and operation (the same as above) . . . $x_4+d_1+z_4+e_2+f_1$ as many embodiments as possible, including the embodiment considered to produce the best results h. Description of Other Matters as Required H1 Description of modification (construction, operation and effect thereof) H2 Description of substitution of element (construction, operation and effect thereof)

EXHIBIT III-1

	Points of Description
Object of Invention	a. The technical field to which the invention shall be described. b(1). The prior art which is the most relevant to the invention shall be clearly described. b(2). The problems in the prior art shall be pointed out and the analysis of the problems shall be described. c. The problems which the invention is intended to solve and the objects of the invention in industrial utilization shall be described in relation to the prior art.
Construction of Invention	d. The technical means indispensable to the object of the invention (solution of the technical problems) shall be concretely described with its construction or structure, and operation, function or motion. If the invention relates to a mechanical apparatus, the configuration and construction of each element and the interrelation and interreaction between elements shall be described comprehensively (i.e., in general conception).
Effect of Invention	e. The specific advantages resulting from the elements indispensable to the invention only shall be described. The effects peculiar to modes of practice or embodiments shall not be described. The results from the solution of the technical problems shall be described in an objectively comprehensible manner. The effects viewed from various points shall be described. The grounds for numerical restriction, if any, shall be stated. The effects of the invention shall be described in contrast with those of the prior art. The effects shall be described in an easily comprehensible and persuasive manner, since the description of the effects is significantly related to the judgement of nonobviousness and the allowability of the application.
Construction and Effect of Invention	f. The intermediate conception of the invention shall be determined so as to cover the whole scope of the invention by dividing the scope of the invention (general conception) into several parts and including a plurality of embodiments (specific conception). The intermediate conception shall be specifically described with its construction, operation and effects. Both the effects of the invention and the effects peculiar to the intermediate conception shall be described. g. A variety of embodiments to cover the whole scope of the invention shall be stated specifically and detailedly with its construction, operation and effects. The description shall be made specifically so that any person skilled in the art can easily carry out the invention. The mode intended to be commercialized or the best mode shall be included as the embodiment. In the case of a mechanical apparatus, the configuration and construction of each element, and the interrelation and interreaction between elements shall be specifically described. Description based on the drawings is preferred. The description of the effects in the embodiment shall include the effects of the invention, modes of practice and embodiments. h. Modifications not described in embodiments and the substitution of each element shall be described with the construction, operation and effects thereof so as to define the scope of the invention and the boundary thereof.

EXHIBIT III-2

PROPOSED PATTERN OF SPECIFICATION (Electrical Field)

	Pattern of Specification
Object of Invention	a. Technical Field "This invention relates to ..... ." b. Prior Art (1) Description of prior art · Problems in prior art (2) Analysis of problems in prior art c. Object of Invention The object of invention · Technical subjects
Construction of Invention	d. Construction of Invention (X + Y + Z, gist = Y) Description of construction of the gist (Y) of invention stated in claim and operation thereof
Effect of Invention	e. Effect of Invention Description of effects resulting from construction and operation of the elements indispensable to the invention stated in claim
Construction and Effect of Invention	f. Description of Aspects (Intermediate Conception of Invention) (1) Description of construction and operation of aspects (2) Description of effect of aspects (effect of invention and effect specific to aspects) X+A+Z X+B+Z · · X+Y+Z+E X+Y+Z+E+F g. Description of Embodiments g_1 Description of the first embodiment (1)construction $x_1+a_1+z_1$ (2)effect and operation (those of invention and those specific to embodiment) g_2 Description of the second embodiment (1)construction $x_2+a_2+z_2$ (2)effect and operation (the same as above) g_3 Description of the third embodiment (1)construction $x_3+c_3+z_3$ (2)effect and operation (the same as above) · · ·
	h. Description of Other Matters as Required h_1 Description of modification h_2 Description of substitution of element

EXHIBIT III-2

	Points of Description
Object of Invention	a. The technical field to which the invention pertains shall be described. b(1). The prior art the most relevant to the invention shall be described. b(2). The problems (disadvantages) in the prior art shall be described sufficiently and comprehensibly, which serves to show the superiority of the invention over the prior art. c. The fact that the invention has solved the technical subject of the invention (i.e., the technical problems in the prior art) shall be stated.
Construction of Invention	d. The construction of the gist of the invention stated in claim shall be described with the operation thereof so that the technical means for solving the problems and the technical subject are clearly shown. In paragraph d for understanding the invention as a whole, the invention shall be described in general conception or in a comprehensive expression. On the other hand, in paragraph f, g and h, the technical means shall be described in detail by giving modes of practice, embodiments and modifications.
Effect of Invention	e. The effects peculiar to the elements indispensable to the invention shall be described, and the effects peculiar to each mode of practice and embodiment shall not be described. The effects shall be described in an easily understandable and persuasive manner, since the description of the effects is directly related to the judgement of nonobviousness and the allowability of the application. The results obtained by solving the technical subject of of the invention shall be specifically described in an objectively comprehensible manner. The grounds for the numerical restriction, if included in a claim, shall be stated.
Construction and Effect of Invention	f.& g. The specification shall contain the modes of practice and embodiments as many as possible to cover the whole scope of the invention and particularly those which are considered to exhibit good effects by taking into account the breadth of conception of the invention and the possible combinations of the elements. The importance should be attached to the embodying and modifying of the gist of the invention. The description of each mode of practice and embodiment shall contain the effects peculiar to the same. Then, even if part of the claims are rejected for lack of novelty or for the presence of a prior application, such claims are likely to be allowed with the result that the broad scope of claim can be obtained.

	Points Of Description
Construction and Effect of Invention (cont'd)	In the case of the invention relating to an electrical circuit which is illustrated by a block diagram, the disclosure of the invention is regarded as insufficient, unless the apparatus or circuit having the function of such block is known. If the block includes a novel construction, such novel construction shall be illustrated by a specific circuit diagram. If the invention relates to software, it is required to disclose the program list. In this case, the flow chart alone, if it is disclosed to the extent that any person skilled in the art can easily formulate the program, will be sufficient.
	h. It is desirable that as many modifications and substitutions as possible of the invention shall be described to enrich the description of the invention. The examples applied to other uses shall also be described.

EXHIBIT III-3

PROPOSED PATTERN OF SPECIFICATION (Chemical Field)

	Pattern of Specification
Object of Invention	a. Technical Field "The invention relates to ....." b. Description of Prior Art c. Object of Invention
Construction of Invention	d. Construction of Invention e. General conception Intermediate conception Specific conception f. Examples (Embodiments)
Effect of Invention	g. Effect

EXHIBIT III-3

Points of the Description

a. It is usual to describe the brief technical content of the invention at the beginning of the specification. This shall give more detailed explanation than "title of invention" so that the characteristics of the invention will be apparent to some extent.

b.&c. The problems which the invention is intended to solve and the objects of the invention in industrial utilization shall be described in relation to the prior art to define the principal object of the invention.

In the case of a pioneer invention without any prior art and if so mentioned, the description of the industrial utilization of the invention alone shall be sufficient.

If the invention is an improved method, what is improved over the prior art shall be definitely stated.

In the case of a chemically similar method to known methods, since the characteristics of the resultant product are the most important, it is necessary to describe in detail what are the specific characteristics of the novel chemical compound obtained by the invention as compared with the known chemical compound having similar structure.

d. The technical means devised to attain the object of the invention, i.e., the technical subject in industry which the invention is intended to solve shall be described specifically to define the construction of the invention.

e. If the invention is described as general conception or in a comprehensive manner (for example, as shown in Markush type), operation means common to the whole of the invention shall be generally described at first, followed by the description of the specific cases.

The construction of the invention shall be specifically described with the mention of reagents, reaction conditions, solvents, catalysts, etc., to the extent that any person skilled in the art can easily carry out the invention. In the invention of new use or of the composition of a product, the proportion of each component, the kind and quantity of additives, etc. should be described in many examples with definite values or numerals, if necessary, because they are often varied in actual use to meet the object.

If the particular chemical compound is used as the starting material of the invention, the method of its manufacture and its physical properties (fixing means) shall be described in detail.

f. Next, it is necessary to describe the invention by giving a plurality of examples in sufficient detail so that third parties can practically reproduce the invention (follow the experiments). The embodiments considered to give best results shall be stated as many/as possible with specific values, if necessary. kinds

Points of the Description (Cont'd)

In chemical cases, the embodiments in the specification are important not only as the teachings in carrying out the invention, but also as the materials in Examiner's recognizing the effects of the invention during examination. Therefore, a great care shall be taken of the description of the embodiments. If the invention of a chemical process similar to the known process is exclusively characterized by obtaining a novel chemical product, the features of the claimed chemical product shall be definitely described.

g. After the detailed description of the construction of the invention, the specific advantages resulting from the invention shall be described as the effect of the invention in a form as concrete as possible.

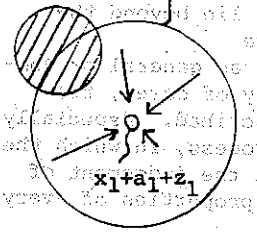
Although the effect of the invention may be described together with the description of the object or the construction of the invention, it is preferable to describe the effect of the invention separately because it is important for evaluation of the invention.

The specific advantages are meant by the effects which have not been obtained by the prior art until the invention has been made. The content of the specific advantages depends on that of the invention. For example, in the invention of an improvement, the improved points which result from the differences in construction between the invention and the prior art are regarded as the specific advantages. In the invention of a chemical process similar to the known process, the specific properties of a novel chemical compound, i.e., the properties not obtainable in the chemical compound of the prior art are regarded as specific advantages.

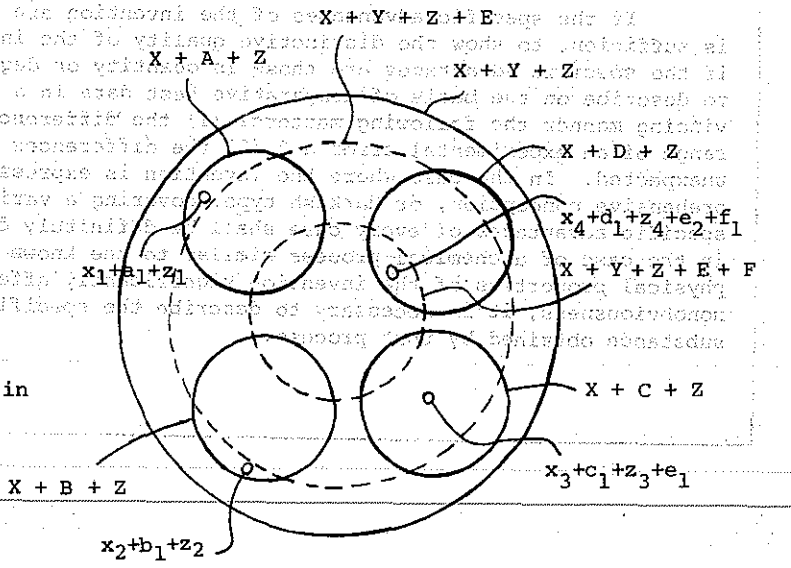
If the specific advantages of the invention are those in quality, it is sufficient to show the distinctive quality of the invention. However, if the specific advantages are those in quantity or degree, it is necessary to describe on the basis of comparative test data in a sufficiently convincing manner the following matters: (1) the differences lie beyond the range of an experimental error and (2) the differences are unexpected. In the case where the invention is expressed as general or comprehensive conception, or Markush type, covering a variety of cases, the specific advantages of every case shall be definitely described. Especially in the case of a chemical process similar to the known process, in which the physical properties of the invention significantly affect the judgement of nonobviousness, it is necessary to describe the specific properties of every substance obtained by that process.

EXHIBIT III-4

	Conventional Pattern of Specification (Mechanical and Electrical Field)
Object of Invention	a. Technical Field " The present invention relates to --- ." b. Description of Prior Art The prior art is briefly described and the problems are pointed out without a deep analysis thereof. c. Object of Invention It is the object of the invention to solve the problems involved in the prior art apparatus.
Construction of Invention	The invention will be described in detail with reference to the embodiment herein below. d. Description of the Embodiment (usually one embodiment) Description of construction of embodiment $x_1 + a_1 + z_1$ Description of operation of embodiment
Effect of Invention	e. Effect of Invention Description of effect of embodiment No specific description of the invention (X+A+Z) as set forth in Claim is given anywhere in the specification.



Scope of disclosure in Specification as shown in EXHIBIT III-4



Scope of disclosure in Specification as shown in EXHIBIT III-1~3

EXHIBIT IV

Patent Law

112 The specification shall contain
- a written description of the invention
- the manner and process of making and using it
- the best mode

in such full, clear, concise, and exact terms as to enable any person skilled in the art to make and use the same.

Code of Fedral Regulations

71 Detailed description and specification of the invention
- (a) description of invention, discovery, manner and process of making and using it
- (b) specific embodiment, mode of operation, principle
- (c) specific improvement

72 Title and abstract
- (a) title of the invention
- (b) brief abstract of the technical disclosure

73 Summary of the invention
nature, substance, statement of object

74 Reference to Drawings

75 Claim(s)

77 Arrangement of application
- (a) title of the invention
- (b) abstract of the disclosure
- (c) cross-references to related applications
- (d) brief summary of the invention
- (e) brief description of the several views of drawing
- (f) detailed description
- (g) claim or claims
- (h) signature

78 Cross-references to other applications

79 Reservation clauses not permitted

608 Disclosure

608.01 Specification

608.01(a) Arrangement of Application

(a) title of the invention
(b) cross-references to related application
(c) background of the invention
1. field of the invention
2. description of the prior art
(d) summary of the invention
(e) brief description of the drawing
(f) description of the preferred embodiment(s)
(g) claim(s)
(h) abstract of the disclosure

608.01(b) Abstract of the Disclosure

608.01(c) Background of the Invention

608.01(d) Brief Summary of Invention

608.01(f) Brief Description of Drawings

608.01(g) Detailed Description of Invention

608.01(h) Mode of Operation of Invention

608.01(i) Claims

EXHIBIT V

Points at Issue & Court Decisions				
1. Description Requirement				
(1) Insufficiency of description of invention				
In re Rushig	154	USPQ	118	(CCPA 1967)
In re Ahlbrecht	168	USPQ	293	(CCPA 1971)
In re Barker	194	USPQ	470	(CCPA 1977)
In re Cook	169	USPQ	298	(CCPA 1971)
In re Gardner	177	USPQ	396	(CCPA 1973)
(2) Inability to broaden the Scope of Invention				
In re Smith	178	USPQ	620	(CCPA 1973)
In re Smythe	178	USPQ	279	(CCPA 1973)
(3) Inability to narrow the Scope of Invention				
In re Ruschetta	118	USPQ	101	(CCPA 1958)
In re Smith	173	USPQ	679	(CCPA 1972)
In re Lukach	169	USPQ	795	(CCPA 1971)
(4) Description Requirement in interference				
Fields V. Conover	170	USPQ	276	(CCPA 1971)
2. Enablement Requirement				
(1) Disclosure of method for manufacturing				
Ex parte Schwarze	151	USPQ	426	(P.O.Bd.App.1966)
Herr V. Wettstein	140	USPQ	190	(P.O.Bd.App. 1964)
(2) Disclosure of method for using				
In re Schmidt	153	USPQ	640	(CCPA 1967)
Ex parte Hageman	179	USPQ	747	(P.O.Bd.App. 1973)
In re Johnson	127	USPQ	216	(CCPA 1960)
In re Gardner	166	USPQ	138	(CCPA 1970)
Ex parte Proctor	158	USPQ	677	(P.O.Bd.App. 1968)
Parker V. Biel	159	USPQ	613	(P.O.Bd.Int. 1968)
Carter - Wallace, Inc. V. Daris - Edwards Phamacal Corp.	173	USPQ	65	(E.D.N.Y. 1972)
In re Diedrich	138	USPQ	128	(CCPA 1963)
Lafon V. Zirm	141	USPQ	442	(P.O.Bd.Int. 1964)
In re Hitchings	144	USPQ	637	(CCPA 1965)
In re Folkers	145	USPQ	390	(CCPA 1965)
In re Ghiron	169	USPQ	723	(CCPA 1971)
Ex parte Gottzein	168	USPQ	176	(P.O.Bd.App. 1971)

Points at Issue & Court Decisions				
2. Enablement Requirement (Cont'd)				
(3) Extent of Enablement				
In re Cescon	177	USPQ	264	(CCPA 1973)
In re Robins	166	USPQ	552	(CCPA 1970)
In re Marocchi	169	USPQ	367	(CCPA 1967)
In re Fouche	169	USPQ	429	(CCPA 1971)
(4) Any person skilled in the art				
In re Fisher	166	USPQ	18	(CCPA 1970)
In re Miller	169	USPQ	597	(CCPA 1971)
Ansul Company V. Uniroyal, Inc	169	USPQ	759	(2nd Cir. 1971)
Caldwell V. The United States	159	USPQ	44	(U.S.Ct.Cls. 1972)
In re Brandstadter	179	USPQ	286	(CCPA 1973)
3. Best Mode Requirement				
In re Gay	135	USPQ	311	(CCPA 1962)
In re Brebner	173	USPQ	169	(CCPA 1972)
Carter - Wallace Inc. V. Riverton Labs. Inc.	167	USPQ	656	(2nd Cir. 1970)
Monsanto V. Rohm & Hass Co.	174	USPQ	129	(3rd Cir. 1972)
International Nickel Co. Inc V. United States	175	USPQ	209	(U.S.Ct.Cls.1972)
Sylgab Steel and Wire Corp. V. Imoco - Gateway Corp.	178	USPQ	22	(N.D.III. 1973)
Indiana General Corp. V. Krystinel Corp.	161	USPQ	82	(S.D.N.Y.)
	164	USPQ	321	(2nd Cir.1970)
Bewger Labs Ltd. V. R.K. Laros Company	135	USPQ	11	(E.D.Pa 1962)
	137	USPQ	693	(3rd Cir. 1963)
Dale Electric, Inc. V. R.C.L. Electronics Inc.	180	USPQ	225	(1st Cir. 1973)
Union Carbide Corp.V. Borg Warner Corp.	193	USPQ	1	(6th Cir. 1977)

Speaker: Donald M. Sell
3M Company

COMMITTEE NO. 1

FRAUD ON THE PATENT OFFICE; THE FUTURE ROLE OF REISSUE PROCEEDINGS BEFORE THE PATENT AND TRADEMARK OFFICE IN ITS RESOLUTION

Donald M. Sell

PIPA Meeting

Nov. 4, 1981

In 1977 the United States Patent and Trademark Office (PTO) adopted a series of rule changes designed, hopefully, to "improve the quality and reliability" of issued U.S. patents. These rule changes and the Patent Office procedures for coping with the changes are set forth in Chapter 2000, "Duty of Disclosure; Striking of Applications" of the Manual of Patent Examining Procedure (MPEP), the latest revision of which is January 1981.

Foremost among these changes were a spelling out of prior art disclosure requirements and the duty of candor with respect thereto of applicants and their attorneys, 37 CFR §1.56, and the so-called Dann Amendments comprising (1) a change in the reissue rule, specifically the addition of part (4) to 37 CFR §1.175(a) to allow a patentee aware of prior art or other information relevant to patentability not previously considered by the Patent Office, but "which might cause the examiner to deem the original patent wholly or partially inoperative or invalid" to bring such information before the examiner by filing a reissue application unchanged from the original patent to have the examiner determine the significance of the new prior art and permit the applicant to amend the patent by reissue if necessary, and (2) a change in 37 CFR §1.291 to allow the Patent Office examiner to consider protests by the public against pending applications.

The 37 CFR §1.175(a)(4) reissue rule change added a new dimension to reissue practice by permitting a patentee to file

for reissue without change from the patent as granted to bring uncited prior art to the attention of the examiner. This rule change goes beyond the literal language of the reissue statutes, 35 USC §251, which permits reissue only of patents "deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent." The change was nevertheless considered a desirable change to allow patentees faced with uncited pertinent prior art in infringement actions to have the pertinency of such art considered by the PTO in the first instance rather than by the courts and thereby strengthen the patent. An inevitable side effect of this change was the right of an accused infringer to protest the granting of the reissue based on such prior art; thus, charges of "Fraud on the Patent Office" leveled against patentees by accused infringer in infringement actions for the patentee's failure to earlier cite such prior art could now be considered, by petition of the accused infringer, in the reissue proceedings before the Patent Office.

To assist the examining corps in handling anticipated fraud accusations in reissue proceedings, much of Chapter 2000 is devoted to a discussion of the case law the PTO examiners are to consider in determining what constitutes "clear and convincing" evidence in the determination of what is "material" and how "deceptive intent" can be recognized in ascertaining whether "fraud" has been committed. I commend this chapter

to the reader as it is well done and informative, but caution the reader to satisfy himself with respect to the validity of the PTO interpretations of the case law.

Four years have passed since the PTO rule changes were made and events which occurred in 1981 have brought into question the future continuance of the changed reissue procedures."

In December 1980, Congress passed Public Law 96-517, amending Title 35 of the United States Code by the addition thereto of "Chapter 30 - Prior Art Citations to Office and Reexamination of Patents" comprising 35 USC §§301-307. This Act, which became effective July 1, 1981, allows any person to request reexamination of any patent on the basis of any prior art that person believes to have a bearing on any claim of a particular patent.

In June 1981, the Court of Appeals for the First Circuit, in Digital Equipment Corporation v. Diamond et al, 210 USPQ 521, overturned In re Stockebrand, 197 USPQ 857 (1973), which was a decision of the Patent and Trademark Office (PTO) striking the Digital Equipment Corp.-owned Stockebrand application for reissue on the ground of fraud on the Patent Office in the procurement of the patent after protest by an accused infringer. While the Stockebrand reissue application was filed in February 1975 and the protest was filed in December 1975, both events occurring prior to the 1977 rule changes, in its ruling to strike the application, the Patent Office followed

the 1977 reissue procedures in its decision striking the application on the grounds of fraud on the Patent Office. The BNA, in its report of the First Circuit's decision overturning In re Stockebrand [PTC Journal, 6/18/81 (No. 534) A-1] referred to the Stockebrand decision as a "landmark ruling by the PTO striking a reissue application on the grounds of fraud."

The Stockebrand reissue proceedings had their genesis in the year 1973 when Digital Equipment Corporation (DEC) accused Computer Operations, Inc. (COI) of marketing a bidirectional searching, reading and writing tape system covered by DEC's Stockebrand patent, issued June 4, 1968. On July 2, 1974, COI filed a declaratory judgment action of invalidity and non-infringement of the Stockebrand patent and raised issues relating to possible prior art and "on sale" bars to the patentability of the Stockebrand tape system. DEC counter-claimed for patent infringement.

To bolster its position in the infringement action, on February 3, 1975, DEC filed an application for reissue of the Stockebrand patent pursuant to 35 USC §251, seeking both to amend some claims which "might be subject to a construction which covers more than applicant is claiming as his invention" and to disclose to the Patent Office information relating to the "on sale" bar pleaded by COI in its declaratory judgment suit. On December 15, 1975 COI filed a petition to strike the reissue application on the ground of fraud on the Patent Office under the Patent Office Rule 56 then in effect.

The evidence relating to the "on sale" bar included advertisements of the Stockebrand tape system put out by DEC between March 1963 and May 1963, none of which apparently disclosed the system in sufficient detail to constitute a public use bar and all of which were apparently put out before the system had been completely developed. The evidence also showed that on May 15, 1963, DEC entered into an agreement to lease computer equipment to Kie Data Corp., the equipment to include the Stockebrand tape system, and that between June 1963 and August 1963 DEC accepted three other orders for DEC tape devices incorporating the Stockebrand tape system therein; the lease agreement and the three orders specified delivery dates of the Stockebrand tape systems between July 3, 1963 and November 1, 1963. None of the delivery dates was met and, while delivery had been made to the Kie Data Corp. of the Stockebrand tape system prior to November 1963, DEC memoranda of January 25 and 28, 1964 showed that deliveries were still overdue on the other three orders. The first of the three deliveries appears to have occurred on February 14, 1964. Further, the evidence showed that with respect to the pre-November 1963 Stockebrand tape system delivery to Kie Data, that system suffered various breakdowns and Stockebrand spent much of his time from November 1963 through January 1964 working on the system at Kie Data's plant.

The Stockebrand application for patent was filed on November 9, 1964 and, while Stockebrand was in touch with patent

counsel as early as February 1964, patent counsel was never informed of the delivery of the system to Kie Data or of the other orders for the Stockebrand tape systems noted hereinbefore. Patent counsel was informed, however, in a letter of February 14, 1964 from Stockebrand of the DEC prior tape system from which the Stockebrand tape system was developed and alluded to it in the patent application; however, there is some question as to whether the reference in the patent application as filed was complete enough. In any event, in filing the reissue application DEC proposed amendments to two of the claims to more precisely differentiate them from the prior tape system of DEC from which the Stockebrand system evolved.

The foregoing were the facts on which the Patent Office based its decision of April 4, 1978 to strike the application from the files, affirming COI's contention that DEC committed fraud on the Patent Office in failing to advise the Patent Office of the "on sale" bar and that the patent did not adequately describe in the body thereof the prior DEC tape system from which the Stockebrand system evolved.

Following this 1978 decision DEC sued the Commissioner of Patents to set aside the Patent and Trademark Office decision under 5 USC §706(2), which empowers the U.S. district court to review a government agency ruling to correct errors therein. The district court, in Digital Equipment Corporation v. Parker, Commissioner of Patents and Trademarks et al v. Computer Operations, Inc., 206 USPQ 428 (D.C. D.Mass., April 2, 1980), upheld the Patent Office Stockebrand decision and the appeal to the First Circuit Court of Appeals followed.

In overturning the PTO decision the First Circuit Court pointedly noted:

> "We fully recognize the limited scope of judicial review of agency action under 5 USC §706(2)(A), which provides for setting aside agency actions, findings and conclusions only if they are 'arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law'." (Digital Equipment v. Diamond, 210 USPQ 521 at 537)

and then voices its conviction that the PTO decision "was not based on an examination of the relevant factors..." and that "the finding of fraud on the grounds advanced by the PTO amounts to 'clear error' and lacks a rational basis", Digital Equipment v. Diamond, supra, at 537. Essentially, the court found with respect to the "on sale" bar that the PTO "consistently shied away from making any concrete findings concerning the significance the withheld information would have had to an examiner's consideration and allowance of the Stockebrand claims." (Digital Equipment v. Diamond, supra, at 538). Indeed, the fact that Stockebrand was still working to keep the system leased to Kie Data consistently operable as late as the end of January 1964 and that the first delivery of a Stockebrand system to any of the other three first ordering the system did not occur until February 14, 1964 is more consistent with a reduction to practice no earlier than January 1964 than that the system was "on sale" at an earlier time. "Culpability" and "materiality" were thus not shown in the opinion of the court.

As to the prior art problem occasioned by Stockebrand's failure to completely characterize the predecessor tape in his

patent, the court pointed out that the PTO failed to directly confront Stockebrand's assertion that the elements of the predecessor tape would affect the patentability of his claims -- thus "materiality" was not shown.

The Digital Equipment v. Diamond, supra, decision has to be a disappointment to the PTO. But, it will not, in my opinion, have any long term effect on the PTO's well intentioned and carefully crafted, detailed procedures for handling protests to strike pending applications for fraud on the PTO, whether the protest arises under 37 CFR §1.175(a)(4) or otherwise and whether the fraud involves failure to cite prior art known to the applicant, public use or "on sale" bars, false affidavits or fraudulently named inventors. 35 USC §251 requires the PTO to enquire into accusations of fraud presented against any pending reissue application regardless of how the fraud arose and the Digital Equipment decision lays out the potential pitfalls in fraud cases before the PTO very well.

What will have a profund effect on 37 CFR §1.175(a)(4) is the passage of the reexamination statute which went into effect on July 1, 1981. Under this statute, which as mentioned earlier comprises §§301-307 of Title 35, any person may file a request for reexamination by the Patent and Trademark Office of any claim in a U.S. patent on the basis of prior art patents or printed publications which that person believes to have a bearing on the patentability of any claim of a particular patent

(35 USC §301). Such person may obviously be the owner of the patent of which reexamination is desired. The request must be in writing and must be accompanied by payment of the reexamination fee, the amount of which has been established as $1,500.00 (37 CFR §1.510), and the request must include a detailed explanation of the pertinency and manner of applying the cited art to every claim for which reexamination is requested. Copies of all the newly cited prior art (that which was not included in the examination of the patent) must be included (35 USC §303).

Should the examiner determine that a substantial new question of patentability affecting any claim of the patent is raised, the determination will include an order for reexamination of the patent for resolution of the question. The patentee, in response to the order for reexamination, may file a statement on the question to be resolved, including any amendment to his patent or any new claim on claims he may wish to propose, for consideration in the reexamination. If someone other than the patent owner has filed the request for reexamination, the patent owner shall promptly serve a copy of his response on the person who has requested reexamination and that person may file and have considered in the reexamination a reply to any statement by the patent owner. Thereafter the reexamination will be conducted according to procedures established for initial examination under the provisions of §§132 and 133 of Title 35. No proposed amended or new claim enlarging the scope of a claim

of the patent will be permitted in a reexamination proceeding under this chapter (§305).

The appeal procedures under the new reexamination statute are the same as those for appeal from any other pending application examination under the provisions of §134 of Title 35 and court review may be sought under the already existing §§141 to 145 of Title 35. When the time for appeal has expired or any appeal proceeding has been terminated, the Commissioner will issue and publish a certificate setting forth what has been done, i.e., cancelling any claim of the patent, determination of unpatentability of any claim, confirmation of any claim determined to be patentable, and incorporating into the patent any proposed amended or new claim allowed. The effect of any amended or new claim will be the same as that specified in §252 for reissue patents.

As is apparent, this new reexamination statute is far reaching in its effect. It not only renders 37 CFR §1.175(a)(4) unnecessary but it may well reduce the number of reissue applications filed under most circumstances when filing is based on the discovery of pertinent but uncited prior art. Recognizing this, the Patent, Trademark and Copyright Law Section of the American Bar Association passed a resolution at the August 1981 meeting favoring in principle the abolishment of the present reissue procedures under the revision of the Rules of Practice in Patent Cases promulgated January 18, 1977 and a return to

the reissue practice as existing prior to January 18, 1977, the resolution specifically approving the deletion of 37 CFR §1.175(a)(4).

Whether abolished or not as proposed by the resolution, I can see no real reason for anyone to file reissue applications under 37 CFR §1.175(a)(4) and it would appear that even if reissue practice is returned to the position it was prior to 1977, reissue applications may very well be limited to those seeking broadened reissues or correcting defects in the specification.

PIPA Japanese Group
Committee #1
Group #1

Chairman Michiyasu Aikawa
Speaker Satoi Kojima
Kazunari Okuda
Hiroshi Kataoka
Shigeo Nagase
Yukiji Kobayashi
Masaya Yura
Kensaku Matsumura

Japanese Utility Model Registration System

Summary

Utility model right in Japan has features in that it is easy to get but less to lose because of different standard for technical advance from the patent right and this system has been broadly used, as well as the patent system, by Japanese people, but not by foreign people.

The Japanese utility model registration system is explained from the viewpoint of a user of this system, about the following six points in comparison with the Japanese patent system and the West Germany's utility model registration system, as taking account of the latest statistical data: (1) Object of protection, (2) Technical advance, (3) Examination, (4) Term of protection and Period of request for examination, (5) Application fee, Examination fee and Annuity and (6) Scope of protection.

Then the following two points are suggested as advantageous use of the Japanese utility model registration system:

(1) Use as a vessel for protecting a relatively short-life invention.

(2) Use of conversion from a patent application to an utility model application, similar to a U.S. continuation application.

Japanese Utility Model Registration System

Contents

1. Introduction and Background

According to the Japanese Patent Office Annual Report of 1980, the number of utility model applications and that of patent applications in Japan in 1980 were 191,785 and 191,020 respectively. Within these applications, the numbers and proportions of applications by foreigners were 1,397 and 0.7% for the former and 25,290 and 13.2% for the latter, respectively.

On the other hand in West Germany adopting patent and utility model registration system like Japan, the number of utility model applications including

subsidiary applications and that of patent applications in 1979 were 36,865 and 55,184 respectively. Within these applications, the numbers and proportions of applications by foreigners were 9,493 and 25.6% for the former and 24,305 and 44%, respectively.

The comparison of the above statistical data of the two countries reveals that while the utility model registration system in Japan is being very positively utilized by Japanese people, it is seldom utilized by foreign people. This fact is considered to be attributable to the fact that the Japanese utility model registration system has not been broadly introduced to foreign countries.

The utility model registration system was introduced to Japan, as taking account of the German utility model registration law, in 1905 which was 20 years after the patent system was introduced. This utility model registration system was introduced for the purpose of protecting small inventions, particularly made by Japanese, which could not be protected by either the patent system or the design system.

The utility model registration system has since then been positively utilized by the industries from time to time, and has changed substantially from its original system based on the German utility model registration law after several revisions. Finally, it has developed into a unique system which provides strong protection for a small invention called "device" analogous to the patent right for a big invention.

The utility model registration system in Japan will now be explained below in comparison with the Japanese patent system and the West Germany's utility model registration system. I hope this presentation will assist your U.S. members when you have to decide whether an application should be filed in Japan as that for a patent or for utility model registration.

2. Utility Model Registration Law vs. Patent Law and West Germany Utility Model Registration Law

The utility model registration law in Japan is quite consistent with the Patent Law in that the object to be protected is a creation of technical idea. Accordingly, most of the principles of the utility model registration law are introduced from the principles of the patent law. In other words, the first-file first-patent system, the earlier publication system, the examination system, the after-examination publication system, the opposition system and the appeal system are all common to the utility model registration law and the patent law, as seen from the fact that many articles of the patent law are applied to the utility model registration law.

(1) Object of Protection : The utility model registration law states in Article 1 that a device relating to the shape, structure or combination of articles is an object of protection and defines, in Article 2, a device as a creation of technical idea utilizing the rules of nature.

On the other hand, the Patent Law defines, in Article 1, the object of protection, which is also an invention but not limited as described above, and in Article 2 defines an invention as a high quality of creation of technical idea utilizing the rules of nature.

In summary, the utility model registration law protects a technical idea which is embodied in a definite configuration. In other words, this law excludes, from protection, process, composition of matter and material which can be protected by the Patent Law.

The West Germany Utility Model Registration Law provides for the definition of the object as utility model relating to the configuration, arrangement or device of implements or articles of everyday use.

Although there exists some difference in the expressions for defining the object of protection between the Japanese utility model registration law and the West Germany utility model registration law, the former is based on the

latter and therefore there is no essential difference in the object of protection between these two laws, except that the West Germany utility model registration law excludes electrical circuits, industrial plants and utilities relating to real estates from the object of protection, which are all protected by the Japanese utility model registration law with broad interpretation of the term "articles" in the practice.

Since both systems protect technical ideas embodied in a configuration, it is an essential requirement to submit an application together with a drawing showing the configuration.

(2) Technical advance: While an invention under patent law has to be a creation of technical idea of high quality, a device under the utility model law is enough to be only a creation of a technical idea and needs not necessarily be high quality.

The difference of the object of protection is reflected in the provisions of technical advance which is one of the requirements for patentability as follows,

Article 29 of the Patent Law states that an application for a patent shall not be patented when the invention of the application can be easily made based on a prior art.

On the other hand, Article 3 of the Utility Model Registration Law states that an application for utility model registration shall not be registered when the device of the application can be very easily made based on a prior art.

It is impossible to quantitatively define the difference between "easily" and "very easily". The decision may be different depending on the technical field to which an invention or a device relates and it may often change depending on an examiner in charge.

It may be qualitatively mentioned that an arm extended from a prior art is longer under the patent law than that under the utility model registration law. Therefore, a prior art may be found which is citable to a patent applica-

tion but is non-citable to a utility model registration application. It has been often experienced in the practice that an invention applied for a patent is rejected but is allowed when the application has been converted from a patent application to a utility model application.

(3) Examination : The application for a utility model registration in Japan is subjected to a very strict examination, in the same manner as a patent application, on merits, that is, novelty, technical advance and industrial utilization, and thereafter to publication of an application to provide a chance for opposition before the utility model is finally registered. Thus the reliability in its validity is high.

On the other hand, since a utility model in West Germany is registered without examination, the reliability in its validity is extremely low.

It is only in Korea and Taiwan, other than Japan, that employ strict examination in the utility model registration. The utility model registration laws of these countries are based on the Japanese law.

(4) Term of Protection and Period of Request for Examination: The utility model registration law provides that the term of utility model right shall not exceed 10 years from the date of the publication of application and 15 years from the date of the application, and the patent law provides that the term of patent right shall not exceed 15 years from the date of the publication of application and 20 years from the date of application.

The fact that the term of protection is 5 years shorter for utility model registration than that for a patent will be one, but only, reason why the protection of a utility model is regarded as being weaker than that of a patent. The difference between 10 years and 15 years may have an important meaning for an invention which usually has a long life and whose commercial feasibility is hardly predicted but it is not considered to be a significant difference for the inventions or devices of relatively short life.

According to the West Germany utility model registration, the term of

protection is only 6 years from the date of application even if including a 3-year possible extension period.

The period of request for examination is 4 years for a utility model and 7 years for a patent from the date of application.

According to the Japanese utility model registration law, subsidiary application (Hilfsgebrachsmuster), which is allowed to be filed simultaneously with patent application in the West Germany Utility Model Registration Law, is not admitted.

(5) Application Fee, Examination Fee and Annuity :

The application fees for a patent and a utility model registration are ¥6,300 and ¥4,700 respectively. The examination fees are ¥25,500 and ¥14,000 respectively. The total amount of annuities to be paid over 10 years is ¥104,500 for a patent and ¥75,000 for a utility model registration.

Roughly speaking, the total amount of fees for a utility model registration to be paid to the Government is approximately 3/4 of that for a patent. The lower amount of fee does never mean that a utility model gives less protection.

Reflecting the above difference of application fees, the standard amount of patent attorney's fee is ¥80,000 for filing a patent application and ¥70,000 for filing a utility model application.

(6) Scope of Protection: It is provided both in the Patent Law and the Utility Model Registration Law that the scope or coverage of a patent and a utility model has to be construed based on the claimed language. Accordingly, when a patent and a utility model existed with identical claimed language, the coverages of the both would be identical.

According to the 1921 year law which was in force before the current utility model registration law (1959) was introduced, the object of protection was not a technical idea embodied in a configuration but was the configuration itself, so that the precedents at that time generally construe the claims of utility models narrower. The influence of these precedents is considered to

still remain to some extent.

When an applicant makes an application for a utility model registration, there is always a possibility that it is regarded that the applicant admits that his utility model is not a pioneer invention and that there must be a relevant prior art on which the subject of utility model would be rejected if it were applied for a patent. It is not certain that the above problem does not give an influence to the claim construction in the court.

3. Advantageous Use of the Utility Model Registation System

(1) The utility model registration system as a vessel for protecting a relatively short-life invention:

Of those inventions that fall under the categories of protection by the Utility Model Registration Law, it is reasonable that relatively short-life inventions are applied for a utility model registration from the viewpoint of expense in proceddings and period for proceedings.

As described before, the length of the arm stretched from a prior art is different between the Patent Law and the Utility Model Registration Law. Accordingly, it often happens that a prior art which would be cited and not be overcome if it were applied for a patent is not cited or can be overcome even if cited when it is applied for a utility model registration so that the right is obtained relatively easily. The same thing applies after the utility model right has been registered. To be more specific, a prior art which would be effective to invalidate a patent, if it were a patent, is not necessarily effective to invalidate the utility model because of a shorter arm stretched from the prior art.

In the practice, there is a tendency not to use several prior arts in combination for rejecting a utility model application or invalidating a utility model registration.

The proportions of oppositions against publications after examination of patent and utility model applications are approximately 10% and 5%, respectively. Thus, utility model applications receive less oppositions by third parties, in proportion, than patent applications.

These facts show that the utility model right is, in general, easy to get but less to lose.

The ratios in utilization of the utility model system, i.e. the ratio of the number of utility model applications to the total number of patent applications and utility model applications in % are calculated from the numbers of patent and utility model applications classified in fields of art in 1979, as shown in the Patent Office Annual Report of 1980, as follows,

Articles of Everyday use (A): 72%, Processing, Operation, Transportation (B): 55%, Chemical, Metallurgy, Textile (C, D): 15%, Construction (E): 74%, Mechanical engineering (F): 65%, Physics (G): 40%, Electricity (H): 47%, Total: 51%

(2) Conversion from patent application to utility model application similar to a U.S. continuation application:

Within 191,785 utility model applications in 1980, 4115 applications or 2.1% are those converted from patent applications. After rejection of patent applications in that year, approximately 20% of them were appealed and approximately 10% were converted to utility model applications. It may be understood from this fact that the conversion of patent application to utility model application in Japan is utilized in the same manner as the continuation application in the U.S..

The difference between the conversion to utility model application and the U.S. continuation application is that the device of the converted utility model application is rejected only when it is "very easily" thought of from a prior art. Therefore, a prior art which was cited but not overcome during the prosecution of its parent patent application may be overcome in examination

of the converted utility model application.

4. Conclusion

Since a few decades ago there have been strong opinions such that the utility model registration system is merely effective to protect small inventions which give essentially little contribution to the development of industries and causes explosive increase which again increases fruitless and meaningless patent disputes and therefore this system should be abolished or combined with the patent system with modifications. However, it is considered that the utility model registration system has been used as a vessel or system for protecting intermediate inventions that are not protected by either the patent system or the design system and has been greatly contributing to the encouragement of creativity in the industires as a whole and enhancement of the industries.

I consider what we should do at present is to fully understand and sufficiently utilize the advantages of the utility model registration system over the patent system, so long as it is in force.

Hoping that what I have discussed so far will help you understand the advantages of the Japanese utility model registration system and that you would make advantage of this system for the benefit of your companies, I will conclude my speech.

Speaker: Irving N. Stein
Merck & Co., Inc.

COMMITTEE NO. 1

THE COPYING OF DRUG PRODUCT COLOR, SIZE AND SHAPE AS TRADEMARK INFRINGEMENT AND UNFAIR COMPETITION

Irving N. Stein

To be presented at the PIPA Twelfth International Congress
November 1981

THE COPYING OF DRUG PRODUCT COLOR, SIZE AND SHAPE AS TRADEMARK INFRINGEMENT AND UNFAIR COMPETITION

Irving N. Stein

During the past few years, the drug industry has been a prolific source of trade dress litigation. Research-oriented companies have increased their opposition to the copying of the color, shape and size of their established brand name prescription drugs developed by them at great expense. Whether or not such copying should be permitted is a complex issue. The following will present some of the background, rationale and views involved in this controversy.

The prescription drug industry is unique in that the purchasers who pay for the drugs have little control in choosing the drugs they purchase. When a patient visits his doctor, the doctor writes a prescription based on his medical evaluation of the patient's needs. A doctor may prescribe by a generic name or by a brand name. The "generic" name is the established or common chemical name of the active drug ingredient in a drug product. The "brand name" is the privately owned name or trademark used by a manufacturer or distributor to identify its particular drug product and, if there are competing products containing the same active drug ingredient, to differentiate his product from those of the competitors. The patient then takes the prescription to a pharmacy to be filled. If the doctor uses only the generic name in the prescription, the pharmacist selects the specific drug product to be dispensed. If the doctor identifies a brand name product in the prescription, the pharmacist, until recently, had been required by most State pharmacy laws to dispense the precise

product specified by the doctor. Between the early 1950's and 1972 virtually every state had laws forbidding pharmacists from filling prescriptions with brands other than those specified on the prescription unless the doctor gave his approval. These so-called "anti-substitution" laws were intended to inhibit the unapproved interchange of "brands" and generics and insure that the patient would receive the specific medication that his personal doctor deemed to be the most effective for the particular condition being treated.

In recent years, however, as Federal standards were adopted to assure therapeutic equivalents of many drug products available from more than one manufacturer, states enacted new laws which remove the restrictions on pharmacists in filling prescriptions identifying drug products by brand names. In the last decade, 49 states, the District of Columbia and Puerto Rico adopted so-called "generic substitution" laws which permit or direct the pharmacist to substitute a lower priced drug product that is therapeutically equivalent to the brand name product prescribed. Most of these laws also prohibit substitution if the doctor directs that the prescription be filled and dispensed as written. These laws evidence a public interest in providing lower cost prescription drugs to consumers by making readily available less expensive generic equivalents. They are based on the proposition that "anti-substitution" laws impose substantial unwarranted costs on consumers by restricting price competition in the multisource drug market. Generic producers generally can charge lower prices because of economic advantage gained by merely duplicating existing drug

products without having to incur the increasingly heavy cost of research and development incurred by the innovator-manufacturer.

The increase in drug look-alike products and in drug look-alike litigation has coincided with the "generic drug movement" as reflected in these state substitution laws, and with the expiration of patent protection on numerous important and successful prescription drugs. During the period in which their patent is in effect, brand name manufacturers through extensive marketing in a particular color, size and shape, frequently establish the trade dress as a means by which dispensers and patients identify the drug and its therapeutic action. After the manufacturer's patent expires and generic competitors acquire the legal right to manufacture and sell the drug, the introduction of a generic equivalent dressed differently is often met with substantial resistance, which according to generic manufacturers, forecloses the generic competitor from a considerable part of the market. Generic producers find that the more their product looks like the original product, the easier it is to compete since the generic house appears to offer the "same" product at a lower price. They maintain that the public policy reflected in "generic substitution" laws requires that the appearance of branded prescription drugs be copied as closely as possible so that the patient to whom a generic equivalent may be given will benefit from the lower price said to be typical of generic equivalents.[1] Innovator firms claim that the reason for such copying is to cause doctor and consumer confusion and thus facilitate the diversion of sales away from the manufacturer whose research efforts developed the drug and whose marketing program established its acceptability to doctors and

its recognition by doctors and patients. They claim that by supplying the imitation product, the generic producer knowingly places in the hands of pharmacists the means by which pharmacists are able to fill or re-fill a brand name prescription with a product similar in dress to the prescribed product which the patient has come to know by appearance and to charge about the same price as the brand prescribed.

Drug manufacturers seeking to prevent imitation of their products usually claim that such practice infringes their trademark rights and constitutes acts of unfair competition under state law and Federal law. Whether such practice constitutes trademark infringement or unfair competition is determined by the courts on a case-by-case basis. This paper will not review these cases but will discuss a few of the common principles and themes that underlie and run through most of them.

Whether protection is claimed as a "trademark" or under the law of unfair competition, the courts distinguish between the product's functional and non-functional features, and between those which have acquired secondary meaning and those which have not. According to the Restatement of Torts, "A feature of goods is functional . . . . if it affects their purpose, action or performance, or the facility or economy of processing, handling or using them; it is non-functional if it does not have any of such effects."[2] While most courts adhere to the definition of "functionality" in this utilitarian sense, some have adopted a broader definition which expands the concept of functionality to include an aesthetic feature of an article which

appeals to buyers, controls their choice and enhances the saleability of the product.[3] The other critical element that courts distinguish in considering protection of trade dress as "trademarks" or under the law of unfair competition, "secondary meaning", has at its core that the appearance of the product identifies and distinguishes its source.[4] For our purposes, "secondary meaning" means that through use, promotion and advertising the trade dress had become associated with the identity of the producer of the product and is generally used by consumers to distinguish that producer's product from others. The courts, in protecting drug product trade dress comprising of color, size and shape, as a trademark, and the United States Patent and Trademark Office, in granting trademark registration status to such trade dress, require that the "mark" (the configuration) not be primarily functional and be either arbitrary and inherently distinctive or have acquired a secondary meaning as an indicator of origin of goods with a single source. The courts, however, appear to have less difficulty in finding "nonfunctionality", than does the Patent and Trademark Office.[5]

Section 23 of the Lanham Federal Trademark Act of 1946[6] provides for the registration on the Supplemental Register of (non-functional) "configuration of goods" which are "capable of distinguishing" that is capable of acquiring a secondary meaning. It is possible, however, to obtain registration for such configuration on the Principal Register if the registrant can establish that the features of the article are fanciful, arbitrary and inherently distinctive or that they have acquired a secondary meaning.[7] Although trademark registrations on the Principal Register have occassionally been granted for the particular

"get up" of a capsule or tablet, these have been fairly well limited to rather unique appearing arrangements. Registrations have been granted for color bands around the middle of capsules, for the truncated conical ends of capsules, for bullet-shaped capsules and for the color-specked tablets. Nevertheless, Federal trademark registration of a physical characteristic of a drug product such as its color, shape and size is difficult to obtain. No Federal trademark registration has been granted for a drug capsule or tablet simply on the basis of a singular color, nor solely on the basis of having a half section colored one color and the other half section colored another color. Similarly, mere common geometrical shapes such as circles and ovals are not regarded as inherently distinctive for Federal trademark registration purposes, and unless capsule and tablet shapes contain some element of inventiveness beyond conventional design so as to be regarded as distinctive, they are not eligible for Federal trademark protection. It is apparent that protection against copying of color, size and shape has not been a major consideration in pharmaceutical product design. Pioneer manufacturers now consider approaching capsule and tablet design with a view to Federal trademark registration on the Principal Register. If they succeed, a trademark infringement action under Section 32 of the Federal Trademark Act[8] based on the trademark registration, is an effective weapon against an imitator.

In addition to trademark infringement, a manufacturer may try to prevent imitation by asserting more broadly that the copying constitutes unfair competition. Under state common law principles,

the copying of non-functional features which acquired secondary meaning, with a resulting confusion as to source of origin, constitutes unfair competition and will be generally enjoined.[9] The basic issue that courts initially face is whether the imitated features are functional or non-functional. If they are functional, they are within the public domain and may generally be copied in every detail; if they are non-functional, the issue is whether the first comer established a secondary meaning so that the second comer created a likelihood of confusion as to the source of the imitated article.

Efforts to protect trade dress under state unfair competition laws were, however, set back by two 1964 United States Supreme Court decisions. In the companion cases of Sears, Roebuck & Co. v. Stiffel Co.[10] and Compco Corp. v. Day-Brite Lighting Inc.[11], the Court ruled that the copying of the appearance of products that are not entitled to patent or some other Federal statutory protection may not be protected by state unfair competition laws, since such use of state laws conflicts with the exclusive power of the Federal government to grant patent protection, and that such products can be copied at will.

While the Sears and Compco cases dealt a blow to plaintiffs by exonerating some activities previously considered to fall within the scope of state unfair competition law, these cases did not invalidate the law of unfair competition. In the decisions, the Court pointed out that a state still has power to impose liability for palming-off,[12] still may "protect businesses in the use of their trademarks, labels or distinctive dress in the packaging of goods,"[13] and still can require a copier to take "other precautionary steps"[14]

to prevent customer confusion as to the source of the product. This delimitation of the area wherein a state may act, has, fortunately, not been generally accepted at face value by other courts and protection has been granted to prevent, in addition to palming-off, "other deceptive trade practices".[15] Pharmaceutical copying cases, both before and after Sears and Compco, demonstrate that most courts are willing to protect a color, shape or trade dress under a claim of unfair competition but only if additional facts indicate some degree of deceit or palming-off by the copier.[16] The defendant's involvement in marketing tactics that were regarded as deceptive is a common theme in drug cases.

The Sears and Compco cases ruled the design fair game for copiers only "if the design is not entitled to a design patent or other federal statutory protection", suggesting that the doctrine may not be available to a copier when a right to protection is based on the Lanham Trademark Act.[17] Section 43(a) of this law declares that certain kinds of unfair competition are torts under Federal law and provides a civil action against any person who uses a false designation of origin, or any false description or representation in connection with the sale or advertising of goods in commerce. Recent decisions have extended this section to cover "unregistered" or "common law" trademarks. These are trademarks which have not been registered in the United States Patent and Trademark Office, but which nevertheless have acquired a sufficient association in the public mind with a particular source of goods so as to justify the conclusion that use by another of the "common law" mark is an implied representation

that the goods sold under that mark came from the prior user of the mark. The unauthorized use of such "common law" trademark will thus be considered under Section 43(a) as a false designation of origin. Recent decisions have given fairly broad treatment to this section holding that trade dress of a product or its entire overall appearance may be regarded as such type of unregistered trademark. This doctrine has been applied to the appearance of a parking meter,[18] a truck trailer,[19] an automobile grill[20] and the uniform of the cheerleaders of a football team.[21] In drug look-alike cases, plaintiffs have sought protection for capsules allegedly sold in unique color, or color and shape combinations, on the theory that the trade dress amounted to a trademark for the purposes of Section 43(a). The courts have held that the colors of drug capsules could be regarded as trademarks for the purposes of this section provided that they were not functional and that they had acquired secondary meaning so that the copying had the effect of communicating a "false designation of origin".[22]

Since functionality of copied features is a critical question in look-alike litigation under both state and Federal unfair competition law, it is not surprising that in most cases imitators argue that the color, size and shape of a drug product is functional and so may be freely copied regardless of secondary meaning.

When a color is an attribute of the active ingredient of a drug and is inherent in the drug itself, the color is not subject to appropriation by any one manufacturer. For example, the bright red of mercuric iodine and the yellow of sulphur are attributes of the active ingredient of these medicinals. Color, per se, is not

regarded as being inherently distinctive, but in certain circumstances, courts are willing to consider color arbitrarily selected by a manufacturer from other numerous available colors as non-functional and capable of distinguishing. Courts seem unimpressed by arguments that there are other drug products of similar color when it is shown that the color of the imitated product is unique in its therapeutic category. While color coding, per se, has a functional aspect and anyone may adopt a system of color coding, in the absence of a general standard specifying which colors are to be used for different dosage strengths, the selection by a manufacturer of an arbitrary group of colors to designate particular dosage strengths of the same drug has been held to be not functional and the particular series of colors may be distinctive of that manufacturer's product.[23] The color of a drug product may be functional if it is the color of a flavorant used to mask the harsh taste of the product.[24] Color also may be regarded as a functional feature if it was chosen for its psychological impact on purchasers. This was so in a case involving an over-the-counter antacid preparation marketed by the innovator as a pink colored liquid. The court felt that the pink color was designed to present a pleasing appearance to the sufferer and that this psychological effect, having therapeutic value in the treatment of upset stomachs, might lend "functionability" to the color pink because that color would enhance overall relief.[25]

With regard to shape, the following features of drug tablets were found to be functional: roundness for production economy, a beviled edge to prevent crumbling, double scoring for easier division into smaller doses, and a concave shape to make breaking easier for smaller dosage.[26]

Generic drug firms claim that the color of a long-established prescription drug is functional because patients associate the appearance of the drug with its therapeutic effect and will refuse to accept an equivalent because of a difference in color. They claim that the same color is needed so that patients will not become anxious and confused and will not react adversly if their prescription is filled with a medication that looked different than the one they are used to, even though the medication is identical; and that this could hamper the therapeutic effectiveness of the generic medication and the effectiveness of the generic substitution laws.

The courts are unsympathetic to these arguments. They reason that to reduce patient anxiety or confusion in taking medication, a pharmacist must conceal from the patient the fact that the drug has been switched and to aid in the concealment often charge about the same price for the generic as for the established drug. Only because the patient does not know that he got something other than what he expected, is anxiety eliminated, and this was accomplished by deceit or fraud. Generic substitution laws never intended that the substitution should be accomplished by deceiving the patient and most of these laws require that the patient be notified when substitution is made. Imitating an established brand name drug to hide from the patient the fact that he is receiving a generic drug would violate such substitution laws even if the purpose of the imitation is to prevent patient anxiety. One New Jersey District Court categorized the motives for imitating rather harshly: ". . . generic substitutors are not charitable organizations . .

they are in business for profit. Since their marketing style is to claim the same product at a lower price, profit can only be realized by avoiding one or another cost and riding someone else's coattails and copying the trade dress. An enterprise with profit making motives of this kind is clearly not acting in the public interest. It is more like the wolf in sheep's clothing."[27]

The courts are recognizing that the public interest is served by lawful substitution only when the patient can question the substitution and in most instances the only opportunity the patient will have to do this is when the trade dress of the generic is distinctively different from that of the brand name drug. They recognize that it is one thing to compete by lawfully offering under a substitution law a generic drug having the same active ingredients as the established brand name drug, and it is quite another thing to offer a generic equivalent whose appearance so imitates the brand name drug that it can be, and often is, sold on prescription as being the brand name drug.

It has been argued in several cases that a prohibition of copying of a particular color and shape for a drug after its patent has expired would tend to perpetuate the market power conferred by the expired patent and create an artificial and unnecessary barrier to entry and successful competition in the sale of drugs. Innovative firms maintain that product differentiation is essential to competition, that there can be no competition among sellers unless purchasers can

distinguish among competing goods, and since the product design is the prime feature which makes the choice possible, differentiating is vital to competition. The Third Circuit addressed itself to this argument as follows: "The public policy . . . favors free and open competition. But . . . certain kinds of business activity, while promoting competition in the short run, are in the long run apt to be destructive of competition. The adoption of a distinctive trade dress as a means of identifying a product with its source is a legitimate means for the promotion of the user's business, and permitting piracy of that identifying trade dress can only discourage other manufacturers from making a similar individual promotional effort. Moreover allowing a manufacturer to be able to acquire and maintain a reputation for consistent good quality is certainly pro-competitive. Permitting a business climate in which substitutions of products over which the first manufacturer has no quality control in the long run can only discourage the effort to compete on the basis of reputation for quality."[28]

CONCLUSION

The recent cases show a trend favoring protection of the appearance of the innovative product when the non-functionality and secondary meaning tests are met. Although each case has been decided on more or less different grounds, success invariably accompanies the innovator's ability to demonstrate that consumers were deceived or misled, or were otherwise adversly affected by the imitation product. The limitation of the "functionality" doctrine as enunciated in unfair competition cases remains, but courts are willing to treat drug color, size and shape as non-functional and capable of distinguishing the manufacturer if secondary meaning can be established. The possibility of trademark registration for drug color and shape should be pursued by manufacturers. Courts consider the extent to which product imitation contributes to the likelihood of confusion or deceit when determining whether protection may be had under unfair competition laws. Look-alike manufacturers, even if they do not openly urge druggists to covertly substitute for the prescribed brand name drug, are vulnerable to the charge that they put into the hands of druggists the instruments and means for deceiving purchasers. Although the controversy is primarily between innovator manufacturers and generic producers, it is the consumer who stands to gain or lose the most by the outcome, and it is the protection of the consumer that ultimately decides the issue.

FOOTNOTES

1. See, e.g., Ives Laboratories, Inc. v. Darby Drug Co., Inc., motion for preliminary inj, 455 F.Supp. 939 (1978), aff'd 601 F.2d 631 (1979), trial 488 F.Supp. 394 (1980), rev'd 638 F.2d 538 (1981); SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., motion for preliminary inj. 481 F.Supp. 1184 (1979), aff'd 625 F.2d 1055 (1980).

2. 3, Restatement, Torts, Section 742.

3. See, e.g., Pagliero v. Wallace China Co., 198 F.2d 339 (1952); J.C. Penney Co. v. H.D. Lee Merchantile Co., 120 F.2d 949 (1941); also see Comment (a) on Section 742, Restatement, Torts, Id.

4. 3, Restatement, Torts, Comment (b) on Section 716.

5. Most trademark applications for Principal Registration of product configurations have been refused on the authority of Application of Deister Concentrator Co., 289 F.2d 496 (1961), having been found to be primarily functional in nature. See, e.g., Mine Safety Appliance Co. v. Electric Storage Battery Co., 405 F.2d 901 (1969) and Re Honeywell, Inc., 187 USPQ 576 (1975), aff'd 532 F.2d 180; Application of Shenango Ceramics, Inc., 362 F.2d 287 (1966).

6. 15 U.S.C. 1091.

7. Section 2(f) of the Lanham Federal Trademark Act (15 U.S.C. 1052(f)).

8. 15 U.S.C. 1114(1).

9. This has emerged as a majority rule over the years. See, e.g., Crescent Tool Co. v. Kilborn & Bishop Co., 247 F.299 (1917); Sinko v. Snow-Craggs Corp., 105 F.2d 450 (1939); Rathbone, Sard & Co. v. Champion Steel Range Co., 189 F.26 (1911); West Point Mfg. Co. v. Detroit Stamping Co., 222 F.2d 581 (1955).

10. 376 U.S. 255 (1964).

11. 376 U.S. 234 (1964).

12. 376 U.S. at 238.

13. 376 U.S. at 232.

14. 376 U.S. at 238.

15. See, e.g., Amco Engineering Co. v. Bud Radio, Inc., 145 USPQ 609 (1965); Edgar Rice Burroughs, Inc. v. Charlton Publications, Inc., 243 F.Supp. 731 (1965); American Broadcasting Co. Merchandising Inc. v. Button World Mfg., Inc., 151 USPQ 361 (1966); Eastman Kodak Co. v. Fotomat Corp., 317 F.Supp. 304 (1969), app. dismd 441 F.2d 1079. See, also, Dannay, The Sears-Compco Doctrine Today: Trademarks and Unfair Competition, 67 Trade Mark Reporter 132 (1977).

16. Pertinent drug "color/shape/size" cases decided within this framework:
Smith, Kline & French Laboratories v. Clark & Clark, 157 F.2d 725 (1946);
Ross-Whitney Corp. v. Smith, Kline & French Laboratories, 207 F.2d 190 (1953);
Marion Laboratories v. Michigan Pharmacal Corp., 338 F.Supp. 762 (1972);
E.R. Squibb & Sons, Inc. v. Premo Pharmaceutical Labs, Inc., 195 USPQ 545 (1977);
Merrell-National Laboratories, Inc. v. Zenith Laboratories, Inc., 579 F.2d 786 (1978);
Pennwalt v. Zenith, 472 F.Supp. 413 (1979);
SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., supra footnote 1;
A.H. Robins Co. v. Medicine Chest Corp., 206 USPQ 1015 (1980);
Hoffmann-La Roche, Inc. v. Premo Pharmaceutical Laboratories, Inc. 210 USPQ 374 (1980);
Boehringer-Ingelheim G.m.b.H. v. Premo Pharmaceutical Laboratories, Inc., (D.N.J. Docket No. 79-0358, Sept. 24, 1980);
Biocraft Laboratories, Inc. v. Merck & Co., Inc., (D.N.J. No. 77-693, Oct. 2, 1980);
Ives Laboratories Inc. v. Darby Drug Co., Inc., supra footnote 1.

17. 15 U.S.C. 1125(a).

18. Time Mechanisms, Inc. v. Qonaar Corp., 422 F.Supp. 905 (1976).

19. Truck Equipment Service Co. v. Freuhauf Corp., 536 F.2d 1210 (1976).

20. Rolls-Royce Motors Ltd. v. Custom Cloud Motors, Inc., 190 USPQ 80 (1976); Rolls-Royce Motors Ltd. v. A.&A. Fiberglass, Inc., 428 F. Supp. 689 (1977).

21. Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd., 604 F.2d 200 (1979).

22. See, e.g., Ives Laboratories, Inc. v. Darby Drug Co., Inc., supra footnote 1, and SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., supra footnote 1.

23. Biocraft Laboratories, Inc. v. Merck & Co., Inc., supra footnote 16.

24. William R. Warner & Co. v. Eli Lilly & Co., 265 U.S. 526 (1924).

25. Norwich Pharmacal Co. v. Sterling Drug Inc., 271 F.2d 569 (1959).

26. Smith, Kline & French Laboratories v. Clark & Clark, supra footnote 1.

27. Hon. Vincent P. Biunno, U.S. District Court Judge, in SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., motion for preliminary injunction, 481 F.Supp. 1184, at 1190 (1979).

28. SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., 625 F.2d 1055, at 1067 (1980).

Speaker: Roy H. Massengill
Allied Corporation

COMMITTEE NO. 1

SPEECH TO TWELFTH INTERNATIONAL CONGRESS
OF
PACIFIC INDUSTRIAL PROPERTY ASSOCIATION
NOVEMBER 4-6, 1981

BY
ROY H. MASSENGILL
ALLIED CORPORATION

REEXAMINATION AND REISSUE RULES

TODAY, I'M GOING TO GIVE YOU A BRIEF OUTLINE OF THE NEW REEXAMINATION STATUTE AND RULES. IT WILL BE BRIEF BECAUSE THE RULES JUST RECENTLY CAME INTO EFFECT AND OUR EXPERIENCE WITH THEM AT THIS POINT IS QUITE LIMITED. MY REMARKS ABOUT REISSUE UNDER THE DANN AMENDMENTS WILL BE LIMITED BECAUSE OF EXPECTED CHANGES RESULTING FROM ADOPTING REEXAMINATION.

BASICALLY, THE NEW REEXAMINATION RULES AMOUNT TO A REOPENING OF THE EX-PARTE EXAMINATION OF A PATENT WHICH LED TO THE ORIGINAL ISSUANCE OF THE PATENT. REEXAMINATION CAN BE PROVOKED EITHER BY THE PATENTEE OR ANY THIRD PARTY UPON PAYMENT OF A $1,500 FEE AND THE FILING OF A PROPER REQUEST FOR REEXAMINATION. THE PROCEEDINGS ARE EX-PARTE IN NATURE AND ARE STRICTLY LIMITED TO CONSIDERATION OF PATENTS AND PRINTED PUBLICATIONS WHICH RAISE A SUBSTANTIAL NEW ISSUE OF PATENTABILITY.

ON THE OTHER HAND, REISSUE PROCEEDINGS ARE OPEN TO THIRD PARTIES IN THE SENSE THAT THOSE PARTIES HAVE ACCESS TO, AND CAN PARTICIPATE IN, ORAL HEARINGS, SUBMIT BRIEFS AND OTHER RELEVANT DOCUMENTS. ALSO, OTHER ISSUES, SUCH AS PUBLIC USE OR SALE OR FRAUD, CAN BE CONSIDERED IN A REISSUE PROCEEDING.

THE REEXAMINATION RULES ARE BUILT ON THE PREMISE THAT THE PATENT OFFICE GENERALLY DOES A GOOD JOB OF EXAMINATION WHEN THE EXAMINER HAS THE ART AS REFLECTED IN PRINTED PUBLICATIONS AND PATENTS BEFORE HIM. THEY WERE DESIGNED TO PROVIDE A RELATIVELY CHEAP PROCEDURE TO ENABLE THE PATENT OFFICE TO CONSIDER REFERENCES DISCOVERED AFTER THE ISSUANCE OF A PATENT AND PRIOR TO EXPENSIVE LITIGATION. IT HAS BEEN NOTED THAT WHERE THE PATENT OFFICE HAS THE BEST ART BEFORE IT, THE AFFIRMATION RATE IS APPROXIMATELY 75% AT THE COURT OF APPEALS LEVEL.

SO WE SEE THAT THE REEXAMINATION RULES ARE BASICALLY DESIGNED TO ENABLE A PATENTEE, OR ANYONE FOR THAT MATTER, TO GET ANOTHER CHANCE AT AN EXAMINATION IN THE PATENT OFFICE ON THE BASIS OF NEW PATENTS OR PUBLICATIONS PRESENTING A SUBSTANTIAL NEW ISSUE OF PATENTABILITY AND WHICH WERE NOT BEFORE THE EXAMINER IN THE COURSE OF THE ORIGINAL EXAMINATION.

NOW -- WHAT ARE THE RULES ABOUT AND WHAT IS THE PROCEDURE OF REEXAMINATION AND WHAT IS THE RELATIONSHIP TO THE CURRENT REISSUE/PROTEST PROCEEDINGS?

THE BASIC REEXAMINATION STATUTE, PUBLIC LAW NO. 96-157, ENACTED DECEMBER 12, 1980, MANDATED THAT IT BECOME EFFECTIVE JULY 1, 1981. THE RULES WERE PROMULGATED AND A HEARING WAS HELD EARLY IN 1981. AS A RESULT, REEXAMINATION RULES WERE IN PLACE ON JULY 1, 1981. THEY DO NOT SUPERSEDE THE CURRENT REISSUE/PROTEST RULES WHICH REMAIN IN EFFECT; HOWEVER, THE PATENT OFFICE IS EXPECTED TO MODIFY THESE RULES TO ELIMINATE REISSUANCE OF A PATENT SOLELY ON CITATION OF PRIOR ART, AND TO CURTAIL PROTEST PROCEEDINGS BY ELIMINATING INTER-PARTES PRACTICE.

WHAT ARE SOME OF THE FEATURES OF THE NEW RULES? THE PATENT OFFICE DOES NOT CONTEMPLATE A CADRE OF REEXAMINATION EXAMINERS; RATHER, IT ENVISIONS THAT THE REEXAMINATION WILL BE HANDLED BY THE EXAMINER WHO'S RESPONSIBLE FOR THAT ART AT THE TIME THE REEXAMINATION REQUEST IS MADE. THE PATENT OFFICE ALSO CONTEMPLATES THAT THE REISSUE REEXAMINATION WILL BE ESSENTIALLY EX-PARTE IN NATURE, ALTHOUGH I WILL HAVE MORE TO SAY ON THAT LATER. OTHER GENERAL OBSERVATIONS REGARDING THE REEXAMINATION PROCEEDINGS INCLUDE:

1. THE EXAMINER WHO NORMALLY HANDLES THE ART WHERE THE APPLICATION IS CLASSIFIED INITIALLY DETERMINES WHETHER A SUBSTANTIAL NEW QUESTION OF PATENTABILITY EXISTS. THIS COULD WELL BE THE EXAMINER WHO INITIALLY ALLOWED THE CASE.

2. THE REEXAMINATION FILE IS OPEN FOR INSPECTION AT ALL TIMES.

3. NO CLAIMS MAY BE BROADENED.

4. ALL CLAIMS WILL BE SUBJECT TO REEXAMINATION AND THE EXAMINER MAY SEARCH FOR OTHER RELEVANT PRIOR ART IN ADDITION TO THAT CITED BY THE REQUESTOR.

5. ONCE INITIATED, THE REEXAMINATION MUST GO TO COMPLETION UNLESS THE PROCEEDINGS ARE STOPPED BY ABANDONMENT OF THE PATENT. THERE ARE NO CONTINUATIONS, C I P'S OR OTHER CONTINUING APPLICATION DEVICES FOR EXTENDING THE PROCEEDINGS. THEREFORE, THE PATENTEE MUST BE SURE TO GET ALL OF THE ISSUES FRAMED PROMPTLY. THUS, ONCE INITIATED, THE REEXAMINATION PROCEDURE CANNOT BE WITHDRAWN - AS OPPOSED TO A REISSUE PROCEEDING, WHICH CAN BE WITHDRAWN.

6. THE PATENT OFFICE CONTEMPLATES THE NORMAL NUMBER OF ACTIONS TO GET TO A FINAL FRAMING OF THE ISSUES.

7. CITATIONS IN THE PATENT FILE SUBMITTED PRIOR TO AN ORDER OF REEXAMINATION WILL BE CONSIDERED. CITATIONS INCLUDING ITEMS OTHER THAN PATENTS AND PRINTED PUBLICATIONS WILL NOT BE ENTERED IN THE PATENT FILE. IN ORDER TO BE CONSIDERED, "CITED REFERENCES" MUST BE FILED BY THE DATE OF THE REEXAMINATION ORDER. HOWEVER, REEXAMINATION REQUESTS WILL BE CONSIDERED AT ANY TIME BY ADDITIONAL PARTIES; AND SEVERAL REEXAMINATION REQUESTS MAY BE CONSOLIDATED WITH OTHERS. CO-PENDING REEXAMINATION REQUESTS WILL NORMALLY BE COMBINED.

8. THE INITIAL DETERMINATION IS EXPECTED TO BE MADE WITHIN THREE MONTHS OF REQUEST, AND REEXAMINATION IS EXPECTED TO BE RELATIVELY CONDENSED.

9. WHILE THE PATENTEE NEED NOT ALLEGE THAT THE CLAIMS ARE INVALID, THE REQUESTOR MUST STATE PERTINENCY AND APPLICABILITY TO THE PATENT AND THE BEARING THAT THE CITED PRIOR ART HAS ON THE PATENTABILITY OF AT LEAST ONE CLAIM.

10. CITATIONS MAY BE SUBMITTED WITHOUT ANY IDENTIFICATION OF THE PERSON MAKING THE SUBMISSION, BUT A COPY MUST BE SERVED ON THE PATENT OWNER. AN ENGLISH LANGUAGE TRANSLATION OF ANY NON-ENGLISH LANGUAGE PATENT OR PUBLICATION CITED MUST BE PROVIDED.

11. THE ATTORNEY OR AGENT HAVING POWER OF ATTORNEY OR ACTING IN A REPRESENTATIVE CAPACITY MAY FILE THE REQUEST FOR REEXAMINATION IF HE IDENTIFIES THE PARTY ON WHOSE BEHALF THE REQUEST IS FILED.

GENERALLY SPEAKING, THE FLOW OF THE REEXAMINATION PROCEEDINGS WILL BE AS FOLLOWS:

1. ANY PERSON MAY FILE CITATIONS OF REFERENCES IN THE FILE OF A PATENT. HOWEVER, SUCH CITATIONS WOULD NOT NORMALLY BE CONSIDERED BY THE PATENT OFFICE UNLESS A REQUEST FOR REEXAMINATION ACCOMPANIED BY THE PROPER FEE IS MADE.

2. ANY PERSON MAY FILE A REQUEST FOR REEXAMINATION, INCLUDING CITATION OF REFERENCES, UPON PAYMENT OF $1,500. IF THE REQUESTOR IS NOT THE PATENT OWNER, HE MUST SERVE A COPY OF THE REQUEST ON THE PATENT OWNER.

3. THE NOTICE OF THE REQUEST IS PUBLISHED IN THE OFFICIAL GAZETTE (O.G.) PRIOR TO DETERMINATION BY THE PATENT OFFICE AS TO WHETHER THERE IS A SUBSTANTIAL NEW QUESTION OF PATENTABILITY.

4. THEREAFTER, THE PATENT OFFICE MAKES THE DETERMINATION OF WHETHER THERE IS "A SUBSTANTIAL NEW QUESTION OF PATENTABILITY". IF THE ANSWER IS "NO", A PORTION OF THE $1,500 FEE IS RETURNED TO THE REQUESTOR. IF THE ANSWER IS "YES", THE NOTICE OF THE ORDER IS PUBLISHED IN THE O.G.

5. FOLLOWING THE ORDER, THE PATENTEE MAY SUBMIT A STATEMENT AND AMEND THE CLAIMS IF HE CHOOSES.

6. IF THE PATENTEE IS NOT THE REQUESTOR AND THE PATENTEE SUBMITS A STATEMENT, THE REQUESTOR HAS A TWO MONTH PERIOD TO REPLY TO SAID STATEMENT.

7. THE PATENT OFFICE THEN CONSIDERS THE STATEMENT AND RESPONSES AND PROCEEDS WITH AN EX-PARTE REEXAMINATION PROCEEDING.

THEORETICALLY, IF THE REQUESTOR IS NOT THE PATENTEE, HE HAS NO FURTHER PARTICIPATION IN THE PROCEEDINGS, WHICH ARE CONDUCTED ESSENTIALLY BETWEEN THE EXAMINER AND THE PATENTEE.

THE PROCEEDINGS THEREAFTER WILL BE GENERALLY THE SAME AS IN THE CASE OF AN ORIGINAL APPLICATION, INCLUDING APPEALS. IF THE REQUESTOR IS SOMEONE OTHER THAN THE PATENTEE, HOWEVER, THAT PARTY WILL BE SENT COPIES OF THE OFFICE ACTIONS AND RESPONSES THERETO. INTERVIEWS WILL BE ALLOWED, BUT A COMPLETE WRITTEN STATEMENT OF THE REASONS PRESENTED AT THE INTERVIEW MUST BE FILED BY THE PATENTEE.

IF THE PATENT OFFICE, NAMELY THE EXAMINER, REFUSES REEXAMINATION ON THE BASIS THAT THERE IS NO SUBSTANTIAL NEW QUESTION OF PATENTABILITY, THE REQUESTOR'S ONLY RECOURSE IS TO PETITION THE COMMISSIONER WITHIN ONE MONTH.

8. ALTHOUGH THE COMMISSIONER IS EMPOWERED TO INITIATE REEXAMINATION WITHOUT A REQUEST, THE PATENT OFFICE DOES NOT CONTEMPLATE THAT THIS WILL BE DONE, EXCEPT IN RARE CASES. IN ANY EVENT, THE COMMISSIONER, AS A GENERAL PROPOSITION, WILL NOT ACT ON REFERENCES MERELY CITED WITHOUT A REQUEST FOR REEXAMINATION. IN FACT, THE EXAMINER WILL GENERALLY NOT HAVE THE REFERENCES BROUGHT TO HIS ATTENTION.

9. IF REEXAMINATION IS ORDERED BY DECISION ON PETITION, A DIFFERENT EXAMINER WILL ORDINARILY CONDUCT THE REEXAMINATION.

10. IF THE PATENT IS FINALLY REJECTED OR IS THE SUBJECT OF ADVERSE DECISION ON APPEAL AFTER REEXAMINATION ON THE MERITS, IT BECOMES ABANDONED. IF THE PATENT OFFICE CONCLUDES THAT SOME OR ALL OF THE CLAIMS ARE ALLOWABLE, A CERTIFICATE TO THAT EFFECT WILL BE ISSUED.

THE PATENT OFFICE HAS INDICATED A NUMBER OF CONSIDERATIONS THAT WILL BE TAKEN INTO ACCOUNT IN ITS DETERMINATION OF WHETHER A SUBSTANTIAL NEW QUESTION OF PATENTABILITY IS RAISED. AT THE OUTSET, THEY NOTE THAT THE SCOPE OF THE PHRASE "SUBSTANTIAL NEW QUESTION OF PATENTABILITY" HAS NOT BEEN DEFINED AND WILL BE DEVELOPED ON A CASE-BY-CASE BASIS. HOWEVER, SOME OF THE CONSIDERATIONS INCLUDE:

1. A REVIEW OF THE RELEVANCE OF THE CITED PATENTS AND PUBLICATIONS TO THE PATENTABILITY OF AT LEAST ONE CLAIM.

2. THE SIMILARITIES AND DIFFERENCES BETWEEN THE CITED PRIOR ART AND PRIOR ART PREVIOUSLY OF RECORD.

3. DETERMINATION AS TO WHETHER A FOREIGN PATENT OFFICE HAS USED THE SAME PRIOR ART TO REJECT THE SAME OR SIMILAR CLAIMS.

4. CONSIDERATION OF WHETHER A U.S. OR FOREIGN COURT HAS INVALIDATED THE PATENT CLAIMS ON THE SAME OR SIMILAR PRIOR ART.

5. CONSIDERATION OF WHETHER THE PATENT OFFICE HAS USED THE SAME PRIOR ART TO REJECT THE SAME OR SIMILAR CLAIMS IN A SIMILAR APPLICATION.

6. CONSIDERATION OF WHETHER MATERIAL NEW ARGUMENTS OR INTERPRETATIONS ARE RAISED AS TO PATENTS OR PUBLICATIONS PREVIOUSLY CONSIDERED BY THE PATENT OFFICE.

REGARDING OTHER CONCURRENT PROCEEDINGS, THE RULES REQUIRE THAT THE PATENT OWNER IN A REEXAMINATION SHALL CALL TO THE ATTENTION OF THE PATENT OFFICE ANY PRIOR OR CONCURRENT

PROCEEDINGS INVOLVING THE PATENT. IF THE PATENT IS OR BECOMES INVOLVED IN AN INTERFERENCE PROCEEDING, A REISSUE PROCEEDING OR A LITIGATION, THE COMMISSIONER WILL DECIDE WHICH OFFICE PROCEEDING TO STAY. IF THERE ARE MORE THAN ONE REEXAMINATION PROCEEDINGS CONCERNING THE SAME PATENT, THEY WILL GENERALLY BE COMBINED.

OKAY. NOW THAT YOU ARE ALL EXPERTS IN THE REEXAMINATION PROCEEDINGS, I WOULD LIKE TO GIVE YOU SOME FOOD FOR THOUGHT TO TAKE HOME WITH YOU. WHEN ONE STARTS TO THINK ABOUT TACTICS, BE HE A PATENTEE OR A POTENTIAL INFRINGER OR LICENSEE, A NUMBER OF INTRIGUING POSSIBILITIES ARISE:

1. IF I AM A PATENTEE BEING SUBJECTED TO A REEXAMINATION REQUESTED BY A THIRD PARTY, DO I IGNORE HIM OR DRAG HIM INTO THE PROCEEDINGS? ON THE ONE HAND, THE TIMING IS TIGHT AND THE PROCEEDINGS DO NOT LEND THEMSELVES TO OPPOSING ARGUMENTS. ON THE OTHER HAND, IF I CAN SET HIS ARGUMENTS UP AND THEN DISPATCH THEM, I AM PROBABLY BETTER OFF IN A SUBSEQUENT LITIGATION, SINCE HE'S HAD AS MUCH OF HIS DAY IN COURT AS I WAS ABLE TO GIVE HIM.

2. AS A PATENTEE, IF I FIND BETTER ART, DO I MERELY CITE IT, KNOWING THE PATENT OFFICE WILL NOT ACT ON IT, OR REQUEST REEXAMINATION? IF I DON'T REQUEST REEXAMINATION, I RUN THE RISK THAT A POTENTIAL DEFENDANT WHO ORDERS UP THE FILE HISTORY WILL FIND THESE CITATIONS AND BE REINFORCED IN HIS BELIEF THAT MY PATENT IS INVALID.

3. As a potential defendant, if I come across better art, do I request reexamination, or do I merely sit on the references and an opinion that they render the relevant claims invalid? If the patentee finds out about my infringement, I will force my hand and I will probably be stuck with reexamination anyway.

4. As a potential defendant, am I better off to stay away from the Patent Office on the basis that I can't get a fair shake in an ex-parte proceeding in a system biased in favor of allowance? Also, how do I flush out other potential defenses, such as prior public use, commercial sale, fraud, etc., in a reexamination proceeding that only considers patents and publications?

5. As a patentee, do I go for reexamination or reissue? Reexamination is generally easier than reissue, particularly with protestors, but reissue allows me to broaden the claims if I get back to the Patent Office within two years.

6. As the patentee, am I guilty of fraud if I request reexamination knowing of other bars to patentability, such as public use or sale, which could be considered in a reissue proceeding, but not in a reexamination proceeding?

7. As a potential defendant, do I ask the patentee to request reissue or reexamination, in lieu of my requesting reexamination?

8. As a potential defendant, how do I get the Patent Office's attention regarding the scope of the claims versus my device, since the Patent Office does not ordinarily consider this?

9. If a license is available from the patentee, should I get a license and then request reexamination? Conversely, as the patentee, can I ask for a representation by the licensee that he is not aware of any prior art, etc., which could provide the basis for a reexamination or reissue?

10. If my patent was held invalid in a federal court, can I get it revived by the Patent Office via a reexamination proceeding with amendments to narrow the claims?

11. As a potential defendant, how do I deal with an invitation by a patentee to participate in a reissue or reexamination proceeding?

12. If the Patent Office finds a substantial new question of patentability, should I, as the patentee, file a response before I see the rejection and run the risk of making concessions and admissions not really necessary, or do I say nothing pending receipt of the first action?

13. Is the Doctrine of Muncie Gear regarding new matter applicable to reexamined patents?

THE JAPANESE COUNTERPART SYSTEMS OF THE UNITED STATES REEXAMINATION AND REISSUE

PIPA 12th International Congress

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BY: PIPA Japanese Group, Committee No.1, Working Group No.2;

M. Shimokoshi(Chairman), I.Kimata(Speaker), S. Horigome,

Y. Nishimura, H. Inose, K. Norichika and M. Abe.

Contents

SUMMARY

A survey is made on the Japanese counterpart systems of the United States reexamination and reissue. The Japanese systems are introduced in some detail, and some problems and solutions concerning the Japanese post-grant systems, i.e. trials for invalidation of patent and for correction are discussed.

It is concluded that the Japanese counterpart systems, especially the pre-grant opposition system, are useful to give an inventor a proper protection on his invention and to relieve a third party from an undue restraint resulting from a partly or totally invalid patent.

I. INTRODUCTION

In connection with the new Unites States statute for re-examination, which came into force on July 1, 1981, one said "The primary purpose of reexamination procedure is to offer a viable, practical procedure to upgrade the quality and reliability of Unites States patents without unduly burdening inventors with complicated and expensive procedures such as the opposition proceeding used in other countries. The procedure is designed to focus the reexamination on only those patents having demonstrated commercial importance -----.".

The United States Patent Laws and Rules also provide as the systems for upgrading the quality of the patents, Reissue (35 USC 251 and 252), Protests by Public (37 CFR 1.291) and Public Use Proceedings (37 CFR 1.292) in addition to the

Reexamination (35 USC 301 to 307) above referred to.

In this presentation, a discussion will be made on the Japanese counterpart systems of the United States reexamination and reissue especially with respect to Trial For Invalidation of Patent and Trial For Correction, the main Japanese counterpart systems. The former is used to invalidate an issued patent and the latter is used to correct an issued patent. These are handled solely within the Japanese patent office. The operation of both systems and some notable problems involved will also be discussed with some resolutions to the problems.

II. THE JAPANESE COUNTERPART SYSTEMS

We in Japan have, prior to patent-grant, Oppositions To Grant of Patetns (Section 55) in combination with Publication of Applications (Section 51) to upgrade the quality of patents. After the patent-grant, we have trial systems to invalidate or correct the patents so issued. Therefore the Japanese systems will be easily understood if they are divided into two groups, pre-grant systems and post-grant systems.

a) Pre-grant systems

When a patent application is published and there have been found some reasons for refusal (Section 49) ovelooked by an examiner, opposition to the grant of a patent may be filed within two months from the publication of the applicaiton to prevent it from issuing as a patent (Section 55) or let the applicant amend it.

First, it should be noted and evident from the comparison between Section 49 and Subsection (1) of Section 55 that one can not file an opposition on some formal grounds such as that a claim is not written in a required formula and that the application contains more than one invention. Second, oppositions may be filed by any person, compared with a demandant of a trial for invalidation of a patent who has to be an interested party. The opposition procedure is basicaly an ex parte procedure, though the opponent and applicant exchange their views and arguments via the patent office. The examiner, an ordinary examiner, may reject the published application based on a prior art the opponent filed combined with the one he found.

Pre-grant opposition procedure is more useful than trials for invalidatin of patents, one of the post-grant procedures, in that it can prevent inexpensively at an early stage an invalid patent from being granted, and this sometimes brings about an earlier legal stability of patents. The current law of 1959 prescribes a time limit to amend the reasons and/or indication of evidence set forth in the opposition (Section 56). After this time limit, the opponent can not officialy submit new evidences, although it is worthwhile to notify the evidence to the examiner in other means. This provision facilitates opposition proceedings to prevent patent grantings from being unduly delayed.

The request for examination program (Sections 48-2 and 48-3) introduced by the 1970 amendment together with the system of laying-open of applications (Section 65-2) contributes to an

early grant of commercially important inventions. This is because the patent office may concentrate thier examinaiton on those inventions.

There are two more systems introduced by the same amendment, that is the preferential or accelerated examination system (Section 48-6) and the system of pre-examination by an original examiner in case of a trial against examiner's final decision of refusal (Section 161-2). These systems may faciliate the proceedings of patent applications for commercially important inventions and permit an early utilization of patent rights on such inventions.

The program of presentation of information was also introduced by the 1970 rule amendment for the same purpose (Rule 13-2).

Table 1 shows statistics concerning numbers of patent and utility model applications, Tables 2 and 3 oppositions, and Table 4 requests for examination.

b) Post-grant systems

We in Japan have, as post-grant systems, Trial For Invalidation of Patent, Trial For Correction, the latter being usually demamded as a defense against a trial for invalidation of patent, and Trial For Invalidation of Correction. The last-mentioned trial is demanded when the correction has been made violative of the statutory requirements.

In addition to the above trials, there are two other trials, that is Trial Against Examiner's Final Decision of Refusal and Trial Against Ruling To Decline Amendment, these being pre-grant trials. All kinds of trials are conducted by

trial examiners or "examiners-in-chief", not by ordinary examiners (Section 136), although the original ordinary examiner examines the application in case the applicant filed an amendment in the trial against examiner's final decision of refusal. There were 226 trial examiners in 1980 which forms a kind of "Board of Appeals" in the patent office. The trials are conducted by a panel of three trial examiners. A trial decision may be appealed to the Tokyo High Court (Section 178), and further from the court to the Supreme Court.

The Tokyo High Court is one of the eight high courts located in major cities of Japan and has an exclusive jurisdiction over decisions rendered by the trial examiners or "Board of Appeals" of the patent office, but does not look at new evidences which were not presented before the trial examiners. The case are usually heard by three judges.

In the United States, the validity of a patent is considered in federal courts and also sometimes in ITC. As a result, courts' judgements may vary from one court to another, i.e. some courts may render a decision that the patent is invalid, while other courts may come to a decision to the contraty.

In Japan, the validity of a patent is judged administratively, not judicially as in the United States, in the patent office. So a patent if once judged to be invalid in the patent office, it will be treated as being invalid in all courts handling infringement actions. It may be said that the Japanese system of Trial For Invalidation of Patent is a better system than the ones other countries have in some respect, because first the repetition of judgement on the validity of a patent

in plural courts is avoided, this means savings in time and money for the parties involved, so-called process economy from the national point of view, and second the validity judgement is made by trial examiners, i.e. experts in the art to which the invention pertains, therefore reliable accordingly.

Trial For Correction (Sections 126 and 128), which may be referred to hereinafter as Section 126 trial, is a trial where a patentee requests the patent office to correct the specification or drawings of the patent. It may be used, first, to correct some errors in the description and/or clarify ambiguous statements therein. The patent after such correction may prevent filings of otherwise possible infringement suits. It will also expedite license negotiations under the patent. These are called "positive trials for correction". The second is to put the specification or drawings ready for an offense by an adversary party when a trial has been filed to invalidate the patent by that opponent or when a decision of a trial to invalidate the patent has been rendered but has not become conclusive yet. In this case a trial for correction is demanded to remove some defects in the specification or drawings to wipe out a fear that the patent is partly or totally invalidated. These are called "defensive trials for correction". It should be kept in mind that a claim or claims can not be substantially enlarged or modified in the trial, and further that a Section 126 trial may be demanded even after the extinguishment of the patent, but not after the patent has been invalidated in a trial for invalidation of the patent (Section 126). If there is a licensee on the patent, he has to obtain

an assent of the licensee before he files the Section 126 trial (Section 127). When the Section 126 trial has been filed, it is disseminated in the official gazette (Section 193).

Trial For Invalidation of Correction (Sections 129 and 130), which is referred to hereinafter as Section 129 trial, is used to invalidate the corection permitted in the previous Section 126 trial as not complying with the statutory requirements which are provided in Subsections 1 to 3 of Section 126.

Trial For Invalidation of a Patent (Sections 123 to 125) which is referred to hereinafter as Section 123 trial is initiated by a third party or parties who want to invalidate the patent because of some grounds or reasons they have found, or when a new ground of invalidation has occured after the grant of the patent (Section 123).

The grounds for invalidation that may be used are as follows (See Section 123 for details):

1. When the invention is anticipated or obvious from a prior art publication or publications inclusive prior use and prior knowledge;
2. When the invention is a statutory unpatentable;
3. When joint inventors or co-applicants did not file the application jontly when it was the case;
4. When the invention is the same as the invention claimed in an earlier filed application;
5. When the invention is disclosed in an earlier filed application, provided the inventive entities and applicants are differenct from each other;

6. When the invention is not properly disclosed and claimed;

7. When the invention was patented by a person who is not the inventor nor the assignee, or a corporation which is not the assignee; and

8. Others

It should be noted that Section 123 trial can not be demanded after five years from the grant of the patent if the prior art to be used is a foreign printed publication (Section 124), and that one can not demand a Section 123 trial or Section 129 trial based on the same facts and same evidence preciously relied upon (Section 167). The Section 123 trial is conducted under inter partes procedure.

Therefore both parties can exchange their views with each other. But the trial have a fundamental ex parte nature, therefore the trial examiners or "examiners-in-chief" are allowed to invalidate the patent in question based on the prior art the examiners have found too.

In this case they have to notify it to the parties for argument. In any event, the trial examiners take the initiative, therefore they can keep processing the case even if the party or parties do not respond or appear before the board when so requested. (Section 152 and 153).

When a decision of the trial for invalidation has become conclusive, the patent right is retroactively revoked (Section 125). Section 123 and Section 129 trials basically include hearings so the statute states (Section 145), however the hearing is not usually had. The hearing is open to the public,

and when had, a record is made by a person designated by the commissioner and signed by the chief of the trial examiners and the person who made it. It is the loser's responsivility to pay the cost needed in the Section 123 and 129 trials (Section 169). These trials when filed are disseminated in the official gazette (Section 193).

Table 5 shows the numbers of cases decided to be invalid or valid by the trial examiners in each year. It also shows that the average invalid percentages in recent years are 51% in patent cases and 44% in utility model cases, which means that utility models are more difficult to invalidate than patents.

The graph under tabel 5 shows the tendency and change of the invalid percentages during a long period of time. It indicates that they are again pulled up or almost reaching to the 50-50% level.

Table 6 shows the tendency of the Tokyo High Court in the disposal of the cases from the patent office with respect to the validity of patents. It can be said that the court affirms the position of the patent office more often in the utility model cases than in patent cases.

Section 123 trial is an inter partes procedure as just mentioned, while Section 126 trial is an ex parte procedure. Both trials are considered to be separate from one another and therefore examinations of both trials may not be combined. Section 154 which deals with consolidation of trials is interpreted by some people as not being applicable even if both kinds of trials are concerned with the same patent.

In an actual patent controversy however, there is a factual and substantial relationship between both kinds of trials in case the same patent is involved, because as has been mentioned earlier, a Section 126 trial is usually demanded as a defense against a demand for a Section 123 trial.

The Patnet Law provides an adjustment provision to allow for example a trial proceeding to be suspended until another trial or court proceeding has become conclusive (Section 168).

Despite of such adjustment and consolidation provisions, there have been pointed out some problems resulting from the coexistence of both kinds of trials, which will be discussed below.

III. SOME PROBLEMS AND SOLUTIONS CONCERNING TRIAL FOR INVALIDATION OF PATENT AND TRIAL FOR CORRECTION

The Japanese systems have been found to be useful to give an inventor a proper protection on his invention, and at the same time to relieve a third party from an undue restraint resulting from a partly or totally invalid patent, but still there seems to be much to improve.

Hereinafter, we will take up some problems recognized through actual usages of Section 123 and 126 trials and discuss some solutions to the problems.

a) Delay in trial proceedings and court proceedings concerning trial decisions

According to some recent statistics, trial proceedings in the Patent Office take about 4 to 6 years to get to the decisions, and court proceedings in the Tokyo High Court derived from trial decisions (Section 178) take about 4 to 5 years.

Prologation of these proceedings is of course undesirable to inventors, applicants and third parties. Additionally, such prolongation will result in a very serious increase in expense including attorney's fees.

Under the priciple of separation of three powers, i.e. administration, legislation, and judicature, the patent office, an administrative agency, has an exclusive power to grant patents, while civil courts, judicial agencies, do not have such powers although they do have powers to judge infringement actions. The system based on such principle would make it difficult to handle a patent controversy smoothly. Under the Japanese rules, civil courts usually treat an invalid patent involved in an infringement action as being valid unless it has been invalidated by the patent office, and accordingly the Japanese rules often function advantageously to the patentee's side.

It is said that, in order to solve the problem of such unfairness, every court where an infringement action is pending does uniformly suspend the proceedings when a trial decision that the patent is invalid has been made even when it has been appealed. So if we are an alleged infringer in an infringement action, we had better inform the court about the trial decision as soon as the patent office issues it so that it could be

taken into consideration in the court.

Another Solution that can be employed in actual infringement actions is to allege based on the following. Some courts made a decision denying an enforcement of patent on an invention in the public domain, saying for example;

(i) The technical scope of a patented invention containing prior art should be interpreted to be limited to the examples given in the patent specification, and as a result the alleged infringing act is considered to be outside the narrowly interpreted scope of the invention,

(ii) Since a patent is to be granted on a new and unobvious invention and a patent originally should not have been granted on the prior art, the patentee is not permitted to enforce his right against the practice of the prior art, and

(iii) An abuse of a right generally is not permitted and the enforcement of the patent right against the practice of the prior art constitutes such an abuse, accordingly not permitted.

The solution of this kind means that the courts judged substantially the validity of a patent. It may be suspected that they are beyond their authorities given under the Japanese rules. It is however heard that some courts justified themselves in certain cases, saying in effect that they are authorized to act as the above as they have a power to interpret the scope of protection for example by applying the doctrine of equivalents. Anyway in consideration of the current courts' practice, if we are an alleged infringer in an infringement action, we should point out strongly before the court the partial or total invalidity of the patent if this is the case,

demanding at the same time a Section 123 trial in the Patent Office. We would lose nothing even if such contention is not taken up by the court.

The third solution is to increase the number of trial examiners. Such increase of trial examinres will greatly contribute to facilitate all kinds of trials, including Section 123, Section 126 and Section 129 trials. Though the patent office is trying year after year to increse trial examiners as well as ordinary examiners, trial examiners are still insufficient in number.

Some relevent statistics are shown in Table 7 in connection with trial examiners.

We think that the statutory basis of the second solution is rather weak. Therefore we would like to propose the fourth solution, that is, the revision of the current statute which shall expressly permit an alleged infringer to claim as a defense the invalidity of the patent in an infringement action thereby to authorize the court to judge the validity of the patent. In other words, the fourth solution is a modification and codification of the second solution. The proposed revision will avoid the repetition of judgement on the validity of a patent in infringement actions.

Even if the fourth solution is enacted, both Section 123 and Section 126 trials may be kept in force.

The fifth solution is to establish a so-called patent court like the Federal Patent Court in West Germany by combining the patent office's trial board and the Tokyo High Court's industial property rights division. The trial

proceedings in the Patent Office and the proceedings in the Tokyo High Court against a trial decision shall be conducted in the same instance before the proposed patent court. Under such system a patent controversy will be settled earlier.

However many things have to be carefully considered before the enactment of the last two solutions.

b) Repetition of examinations and prolongation of the proceedings resulting from co-existence of Trials For Invalidation Of Patent and For Correction

As has been said earlier, Section 126 trial is often demanded as a defense against a demand for Section 123 trial in an actual patent infringement action. Both kinds of trials are however quite different from one another in statutory character, and therefore their examinations may not be combined even if both are concerned with the same patent.

As a result, if an alleged infringer against whom the patentee has brought an action for patent infringement demands a Section 123 trial to circumvent the undue restraint resulting from the patent, the patentee may demand a Section 126 trial if he thinks that his patent may be prevented from being invalidated by the correction of the specification or drawings. On the other hand, if the patentee thinks that his patent may not be invalidated on the grounds alleged by the alleged infringer, he will not demand a Section 126 trial

simply because a Section 123 trial has been demanded, in other words, he will not demand a Section 126 trial until a Section 123 trial decision that his patent is invalid has actually been rendered. In an extreme case, the patentee may demand a Section 126 trial for the first time when the Tokyo High Court has rendered a decision affirming the trial decision, or after he has appealed the Tokyo High Court's decision to the Supreme Court.

In the above cases, if a Section 126 trial decision that the specification or drawings should be corrected has been rendered, the Section 123 trial proceedings have to be conducted anew to make a new Section 123 trial decision with respect to the corrected specification or drawings. This means that all concered including the demandant, the demandee, the trial examiners and the court(s) have made vain efforts after all in connection with the old Section 123 trial decision. Further, when both trials are concerned with the same patent, the repetition of substantially the same consideration and examination occurrs in both trial proceedings since some common grounds and evidences such as prior art publications are often presented during the proceedings of those trials. Such repetition is of course undesirable from the point of process economy. Furthermore, the Section 123 trial will take a prolonged period of time to get to the final decision, and accordingly the patent controversy will also take a long period of time to be resolved. This in turn means proportionally increaseing expenses including expensive attorneys' fees.

There is an example of prolonged proceedings resulting

from the co-existence of the both trials. Although the example is concerned with a utility model case (Case No. 1978 (gyo tsu) 47, Supreme Court, decided April 13, 1979), the same way of thinking applies to a patent case.

In this case, a Section 126 trial was demanded during the proceeding of an action before the Tokyo High Court against a Section 123 trial decision and it resulted in the grant of the demand after the conclusion of the oral pleadings before the court. Then the Supreme Court annulled the Tokyo High Court's decision, which was made after the Section 126 trial decision, having denied the patentee's seeking of cancellation of the Section 123 trial decision, saying that the ground for retrial provided in Subsection 1 (iiiv) of Section 420 of the Code of Civil Procedure exists in connection with the Tokyo High Court's decision, and remanded the case to the Tokyo High Court. The Tokyo High Court would render a second decision contrary to its first decision. As a result, the case would further be remanded to the patent office to conduct the second Section 123 trial examination in connection with the corrected claim.

Courts are trying to prevent the prolongation of patent disputes involving concurrent Section 123 and Section 126 trials by adopting a somewhat liberal interpretation of the relevant statute.

There is also an example of such a liberal interpretation (Case No. 1970 (gyo tsu) 32, Supreme Court, decided May 6, 1976 affirming the Tokyo High Court Case No. 1967 (gyo ke) 83 decided September 26, 1969).

In this case, a Section 126 trial demand was granted during a Section 123 trial on the same patent which was pending before the Patent Office without giving the demandant of the Section 123 trial an opportunity to present some additional grounds and evidences for the invalidation of the patent in connection with the corrected claim.

The issue in this case was whether such an opportunity should have been given to the demandant of the Section 123 trial. The Tokyo High Court rendered a decision that such opportunity should have been given and that was affirmed by the Supreme Court.

It is to be noted that, in the second case the patentee is a foreign corporation, and this fact might be partly accountable for the prolongation of the cae, since a period additional to the invariable period for taking actions may be given (Subsection 5 of Section 178) and a designated time limit or date may also be extended or changed (Section 5).

Though there are both pros and cons in connection with the two Supreme Court decisions, we prefer to be for them from the point of early resolution of the patent controversy.

It is said that, in order to slove the above-mentioned problems, arrangements are made under the discretion of the Patent Office for having the same body of trial examiners conduct the two examinations for Section 123 and Section 126 trials when they are concurrently pending before the Patent Office. In connection with the Tokyo High Court practices, it is said that for the same purpose court proceedings are often suspended until the Section 126 trial decision has been made in

case the Patentee demanded the Section 126 trial.

Problems such as the repetition of examinations and Prolongation of the proceedings in the co-existing trials cannot be completely removed only by the adjustment provision between trial proceedings and that between trial proceedings and court proceedings (Section 168), because the application of the provision is at the discretion of the trial examiners and courts concerned.

A solution of the problems would be an amendment of the current Patent Law. By that amendment Section 123, Section 126 and Section 129 trial examinations should be combined when they appear in any combination. The 1978 amendment has already introduced into the current law a provision that, when a trial for invalidation of a patent for reasons proper to an international patent application has been demanded and a Section 126 trial has also been demanded within a statutory time limit, a trial decision in respect of such invalidation trial shall not be made until after the Section 126 trial decision has been made (Subsection 2 of Section 184-15).

It will be apparent from the above that the proposed amendment is on the extension of the 1978 amendment.

It should be noted that the solutions proposed under III above are those of our working group and do not necessarily reflect the views of the PIPA Japanee group.

IV. CONCLUSION

We think that the Japanese counterpart systems of the United States reexamination and reissue are useful, though there seems to be much yet to be improved, to give an inventor a proper protection on his invention and relieve a third party from an undue restraint resulting from a partly or totally invalid patent, since patent disputes are resolved under those systems relatively inexpensively through simple procedures.

Out of the two main Japanese systems for that purpose, the opposiiton system usually is more preferable to use than the trial for invalidation mainly because the former can be utilized inexpensively to prevent at an early stage an invalid patent from being granted. The trials for invalidation and correction are also useful, since there is much time within which we can take an action and they are centrally conducted in the Japanese patent office.

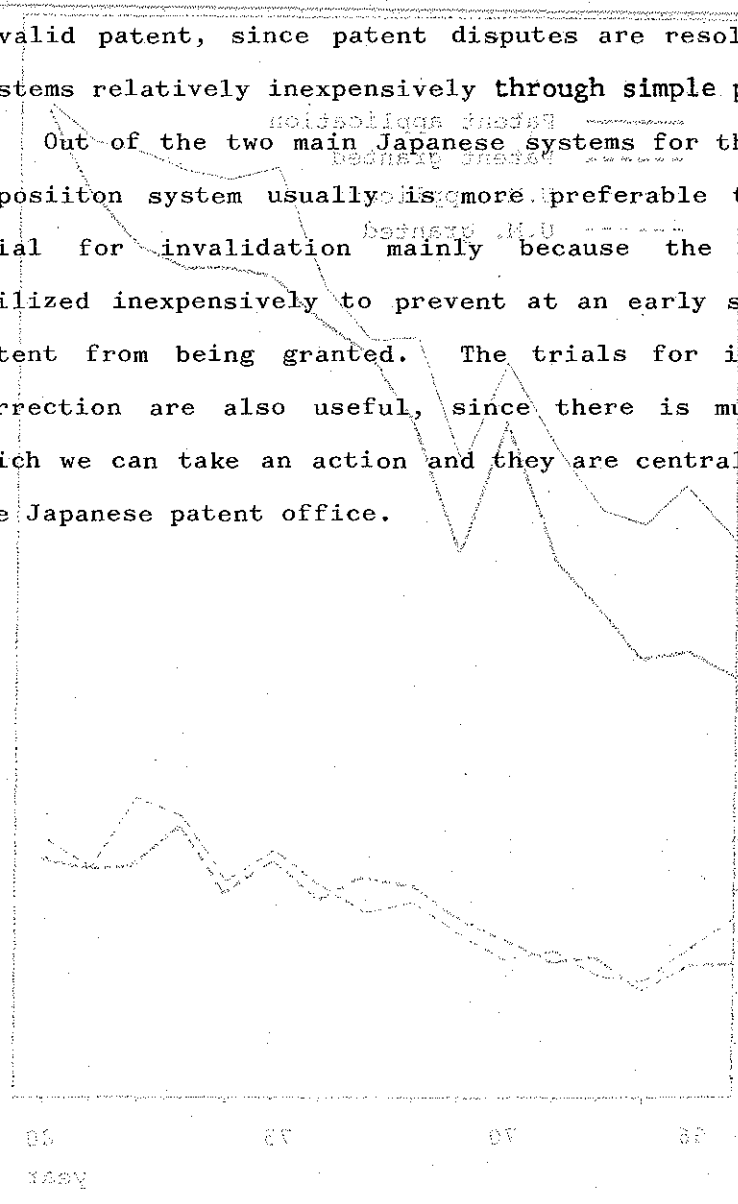


TABLE 1

NUMBER OF APPLICATIONS AND PATENTS

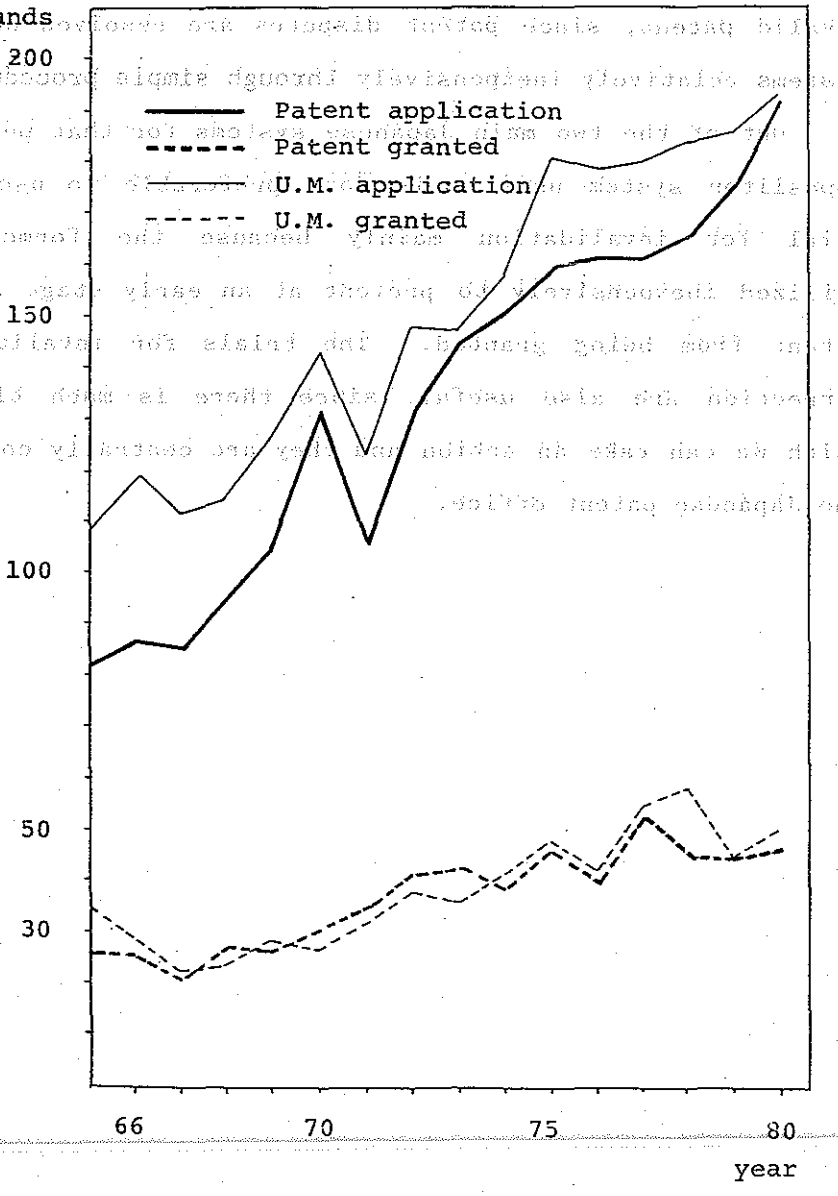


TABLE 2

OPPOSITION: FILINGS

	Cases 2nd Published		Cases Opposed		Percentage of Opposition	
	P	U	P	U	P	U
1976	49,600	54,560	4,192 (7,734)	3,133 (5,174)	8.5	5.7
1977	50,800	57,600	4,923 (8,413)	3,175 (5,318)	9.7	6.2
1978	48,240	54,560	4,874 (8,714)	3,370 (5,452)	5.0	6.2
1979	44,800	45,680	4,493 (6,759)	3,009 (4,289)	10.0	6.6
1980	51,880	56,240	5,030 (7,947)	3,154 (5,133)	9.7	5.6

( ) ------- Number of Oppositions

TABLE 3

OPPOSITION: DISPOSALS

	Applications Wholly Rejected		No Change or Narrow Claim Left		Percentage of Complete Success	
	P	U	P	U	P	U
1976	2,456	1,613	3,355	2,218	42	42
1977	2,376	1,625	3,305	1,918	42	46
1978	1,817	1,323	2,321	1,705	44	44
1979	2,222	1,404	2,695	1,624	45	46
1980	2,202	1,434	2,756	1,760	44	45

TABLE 4

REQUEST FOR EXAMINATION

	P			U		
	Applns. Filed	Requests	%	Applns. Filed	Requests	%
1971	105,785	74,454	70.4	122,843	84,890	69.1
1972	130,400	91,945	70.5	148,610	102,703	69.1
1973	144,814	99,898	69.0	147,914	99,482	67.3
1974				157,591	104,144	66.1
1975				180,660	121,185	67.1
1976				178,842	117,434	65.7

TABLE 5

TRIAL FOR INVALIDATION

	Filed		P		U		Average Invalid Percentage of Last 4 Years	
	P	U	Invalid	Valid	Invalid	Valid	P	U
1966	232	258	47 (51)	46	38 (45)	47		
67	167	186	38 (58)	27	44 (49)	46		
68	138	174	31 (50)	31	74 (55)	60		
69	121	157	37 (48)	40	53 (52)	48		
70	148	170	76 (62)	46	97 (63)	57		
71	172	164	53 (53)	47	44 (52)	40		
72	126	142	55 (51)	52	61 (51)	59	51	44
73	133	85	57 (53)	50	58 (47)	66		
74	115	91	45 (46)	53	77 (52)	72		
75	101	122	28 (32)	59	58 (47)	65		
76	134	129	34 (37)	58	55 (45)	68		
77	160	117	74 (51)	70	43 (38)	70		
78	133	164	48 (48)	52	42 (47)	48		
79	142	151	55 (53)	49	45 (43)	48		
80	161	116	78 (51)	76	69 (47)	77		

( ) ..... Invalid Percentage

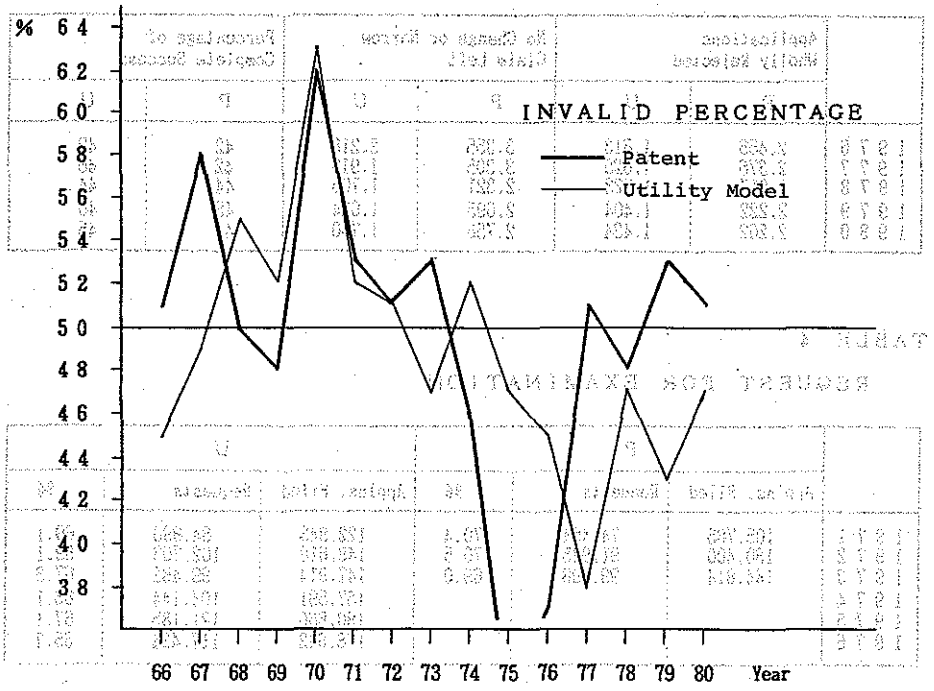


TABLE 6

TOKYO HIGH COURT (Review of Decisions of Invalidity Trials)

	Filed		P		U		Average Percentage of Cases Affirmed	
	P	U	Afrmd.	Rvrsd.	Afrmd.	Rvrsd.	P	U
1976	13	16	6 (40)	9	6 (67)	3		
1977	19	16	11 (69)	5	11 (73)	4		
1978	24	11	10 (56)	8	4 (80)	1	50	64
1979	16	17	2 (18)	9	5 (56)	4		
1980	45	40	4 (67)	2	6 (46)	7		

( ) ····· Percentage of Cases Affirmed

TABLE 7

NUMBER OF TRIAL EXAMINERS

	Trial Examiners
1975	184
1976	195
1977	206
1978	213
1979	220
1980	226

PIPA JAPANESE GROUP

Committee No. 1

Group No. 3

Chairman: S. Nakajima

Speaker : M. Hase

S. Ando

N. Fukabori

K. Hara

H. Masumori

RECENT COURT DECISIONS ON PATENTS IN JAPAN

1. Application of Article 29bis of the Patent Law
2. Division of Application after Examiner's Decision for Publication

S U M M A R Y

In this report, there will be introduced two recent important court decisions in Japan relating to patents.

One of them is a Tokyo High Court decision which is concerned with the application of Article 29bis of the Patent Law. In this decision, the Tokyo High Court has indicated that in the determination of the same inventions under said Article, it is permissible to take into account the general common knowledge of the art prevalent before the filing date of the prior application, as well as the description in the specification of the prior application. This Tokyo High Court decision is the first court decision since the enactment of said Article in 1971, and therefore, it will be a leading case for the determination of the same inventions under said Article. Further, we shall report on our investigation of numerous trial decisions in which said Article was applied, and shall attempt to clarify the actual state of the Patent Office practice concerning said Article.

The other one is a Supreme Court decision concerning the division of an application after the Examiner's decision for its publication. In this decision, the Supreme Court upheld the Tokyo High Court decision denying the Patent Office practice, and has indicated that a divisional application may be filed for a subject

matter disclosed but not claimed in the original specification even after the Examiner's decision for the publication of the original application. Consequently, the Patent Office is now obliged to change its practice for divisional applications. In this report, we shall discuss, in addition to the court decision, the important points which the applicant should take into account when filing divisional applications.

RECENT COURT DECISIONS ON PATENTS IN JAPAN

C O N T E N T

I. Court decision concerning the application of "Article 29bis of the Patent Law"

1. Introduction

Article 29bis of the Patent Law provides for a requirement for patentability which was introduced anew by the amendment in 1970 of the Patent Law, and which is referred to as "an expansion of the standing of a prior application (i.e. a whole content approach)". Namely, it provides that a later application claiming the same invention as an invention disclosed in the specification or drawings as initially filed with a prior application published or laid open after the filing of the later application should be refused in principle, irrespective of whether or not the invention of the later application is claimed in the prior application. (The Utility Model Law has similar provisions in Article 3bis thereof, and unless otherwise specified in this report, the reference to "Article 29bis of the Patent Law" is also applicable to Article 3bis of the Utility Model Law.)

The purport of the legislation of, the requirements for the application of and the problems of said Article, were reported by Mr. Shimokoshi at the Tokyo Congress of 1980.

In April this year upon expiration of more than 10 years since the enactment of said Article, the Tokyo High Court made a decision concerning the application of said Article for the first time. We shall introduce this decision and at the same time report on our investigation of the actual Patent Office practice for the determination of the same inventions under said Article, which investigation was made into more than one hundred trial decisions in which Article 29bis of the Patent Law or Article 3bis of the Utility Model Law was applied.

2. Decision Gyo-Ke No. 43 (1979) (Tokyo High Court)

2.1 Summary of the case

2.1.1 The gist of the invention of the application in question

The invention of the present application (i.e. Japanese Patent Application No. 9734/71 filed on February 26, 1971) relates to "a process for producing a killed steel ingot", and the gist of the invention as set forth in the claim is as follows:

i) Pouring a molten steel into an elongated mold,

ii) blowing a compressed air or water to its head portion to have a solidified film formed,

iii) a few minutes later, rotationally moving the mold and holding it in a longitudinally horizontal state for a predetermined period of time, and thereafter

iv) bringing the mold in an up-site-down state, and completing the solidification.

In short, it is indended by the invention to minimize the cavities (pipes) within the steel ingot, resulting from the shrinkage upon solidification, by carrying out the solidification of the molten steel by firstly holding the mold containing the molten steel in a horizontal state and then rotationally moving it to a vertical position.

2.1.2 Grounds for the Trial Decision

In the trial decision, the Trial Board, referring to a prior application (Japanese Patent Publication No. 43707/71 filed on September 3, 1969 and published on December 24, 1971), determined that the specification and drawings as initially filed with the prior application disclosed an invention (hereinafter referred to as "cited invention") for "a process for producing a steel ingot comprising

i) pouring a molten steel in a mold,

ii) after solidification of its top surface to constitute a cover,

iii) rotationally moving the mold and holding it in a longitudinally horizontal state for a predetermined period of time, and thereafter

iv) bringing it in an up-side-down state for solidification" with the same purpose as that of the present invention. The Trial Board further determined that in view of the disclosures in publications available prior to the filing of the prior application and the conventional state of art well known to those skilled in the art, the expression "solidification of the top portion to constitute a cover" includes a forcible cooling by blowing water. Thus, the Trial Board rendered a decision that the invention of the present application is substantially identical to the invention of the prior application and accordingly the present application is unpatentable pursuant to the provisions of Article 29bis of the Patent Law.

2.2 Assertions of the plaintiff

Contesting the above mentioned trial decision, the plaintiff (the applicant) asserted the following two points as grounds for cancellation of said trial decision.

First point of the plaintiff's assertion

In the cited invention, the movement of the mold is continuously carried out by the rotation of a turn table, and is not carried out intermittently as in the process of the present application. Accordingly, the essential feature A of the invention of the present application, i.e. "holding the mold in a longitudinally horizontal state for a predetermined period of time" and the

essential feature B i.e. "thereafter, bringing the mold in an up-side-down state for solidification" are not disclosed in the cited invention.

Second point of the plaintiff's assertion

The expression "solidification of the top surface to constitute a cover" in the cited invention is meant for the formation of a solidified layer by natural cooling after the molten metal was poured, and it does not include a method of forcible cooling by blowing water.

2.3 Judgement by the court

With respect to the first point of the plaintiff's assertion

The court has determined that taking the disclosures of the specification of the prior application reading "... it is necessary to temporarily stop the rotational movement of the mold either at an angle of 95° or 110° during the rotation of the mold ..." and "the mold is firstly rotated to a substantially horizontal position or to a position slightly ahead of the position, and stopped at that position ..." and the drawings together, it is reasonable to say that the specification of the prior application discloses the above mentioned essential feature A. The court has further determined that taking the disclosures of the specification of the prior application reading "upon the rotation of the turn table, the mold is slowly rotated in accordance with a program imparted by the fixed guide attached thereto. This movement is done with mold trunnions as points of support. When the mold has reached the substantially vertical position, the ingot falls down onto the stopper from the mold, for a distance corresponding to about 10% of the length thereof." and the drawings together, it is reasonable to say that the above mentioned essential feature B is also disclosed

in the specification of the prior application.

With respect to the second point of the plaintiff's assertion

With respect to the solidification of molten steel by means of forcible cooling, there is no direct disclosure in the specification of the prior application. Nevertheless, taking into account a common knowledge in the art that it would be impossible to form a solidified layer at the top surface of the mold by natural cooling for a few minutes or slightly longer period of time, and the disclosures in prior art publications that the top surface of the mold is solidified by applying water immediately after the molten steel was poured in the mold, it is reasonable to understand that a certain forcible cooling is used to solidify the top surface of the mold in a form of a cover in the process of the cited invention. Thus, the court has determined that the expression in the cited invention reading "solidification of the top surface to constitute a cover" does not exclude a forcible cooling method by applying water. The court has accordingly judged that the invention of the present application is substantially identical with the cited invention and the court has thus dismissed the demand by the plaintiff. (This case has been made final and conclusive without being appealed.)

2.4 Comments on the court decision

The judgement of the court on the second point of the plaintiff's assertion is noteworthy. Namely, the court decision indicates that in the determination of the same inventions under Article 29bis of the Patent Law, a common general knowledge in the art as disclosed in publications available prior to the filing of the prior application is taken into account as well as the disclosure in the specification and drawings of the prior application.

In contrast with the provisions of Article 39 of the Patent Law (i.e. first-to-file rule), Article 29bis provides that "the invention of a later application is not patentable when it is the same as the invention disclosed in the specification of the prior application". Accordingly, it may be said that if the provisions of this Article are narrowly or strictly interpreted, the later application can not be rejected unless the invention of the later application is specifically (i.e. in direct expressed wordings) disclosed in the specification of the prior application. From this standpoint, there is a certain doubt in the justification of the court decision.

However, in the Examination Standard for the Determination of the Same Inventions, it is stated that the determination of the invention disclosed in the specification of the prior application should be made on the basis of the technical matters explicitly described in said specification, and the interpretation of the technical matters should, however, be made taking into account equivalents to those disclosed in the specification. In the present court decision, it may be said that the court has determined the technical matter represented by the "forcible cooling" to be a common general knowledge in the art, on the basis of the disclosures of the publications available prior to the filing of the prior application, and thus applied Article 29bis on the basis of the judgement that said technical matter is equivalent to the one disclosed in the specification of the prior application. Thus, from the standpoint of the Examination Standard, the present court decision is reasonable.

3. Patent Office practice concerning Article 29bis of the Patent Law as observed from trial decisions

In the foregoing, we have presented the first court decision concerning the application of Article 29bis of the Patent Law. In order to investigate how the Patent Office actually enforces said Article, we have studied trial decisions finalized during a period of from 1979 and March 1981, and we shall now report the results obtained by the studies.

3.1 Categories and statistics of trial decisions (see Tables 1 and 2)

A total of 116 trial decisions during the last two years (48 cases for patents and 68 cases for utility models) were extracted in which Article 29bis of the Patent Law and Article 3bis of the Utility Model Law were applied, and the success rate in the demands of the trial cases was firstly investigated.

There are only 14 cases (8 cases for patents and 6 cases for utility models) in which the Examiner's decision was cancelled by the trial decision (i.e. cases in which the Trial Board decided that the provisions of Article 29bis of the Patent Law or Article 3bis of the Utility Model Law were not applicable and a patent should be granted or a utility model should be registered.) The success rate is 12.1% (16.7% for patents and 8.8% for utility models).

We have classified the 102 cases in which the demand for trial was dismissed, into the following categories.

Category A: Cases in which the specification of the prior application explicitly describes the invention of the later application.

Category B: Cases in which the specification of the prior application fails to disclose a certain part of the construction of the invention of the later application, but could be amended to

include such a part to fully describe the construction of the invention of the later application.

Category C: Cases in which the specification of the prior application fails to disclose a certain part of the construction of the invention of the later application, and could not be amended to include such a part as failing to have a basis for such an amendment. Nevertheless, it was determined that the invention of the later application is substantially the same as the invention of the prior application.

From one aspect of the purport of the legislation of Article 29bis, it is considered that the scope of the prior application denying or negating the invention of the later application is "a scope in which the claim can be expanded or narrowed or changed by way of an amendment on the basis of the description in the specification". Accordingly, whether or not the specification of the prior application may be amended to bring the invention to be the same as the invention (i.e. the claim) of the later application, may give a certain guide or criterion for the determination of the scope of the invention of the prior application under Article 29bis. This is the reason for the classification into the above three categories.

As shown in Table 1, the results obtained by classifying the 102 cases in which the demand for trial was dismissed, in accordance with the above definitions, are as follows:

Category A	25 cases
Category B	25 cases
Category C	52 cases

It is noted that there are a considerable number of cases which belong to Category C.

3.2 Patent Office practice

It is noticeable from the data in the attached Table that the success rate in the trial cases is very low i.e. only 12.1%. (As compared with the success rate in the trial cases against Examiner's decisions for rejection, which is about 60% as an average for the last 5 years.)

These data indicate that once a determination has been made at the Examination stage to the effect that the inventions are the same under Article 29bis, it is very difficult to have it overruled by a trial. In many of the successful trial cases, a distinction over the invention of the prior application was made clear in the construction as well as in the technical merits thereby obtainable and as the result, a determination was made to the effect that the invention of the later application was not identical with the invention of the prior application. In other words, unless a clear distinction in the technical merits of the invention of the later application is established, a mere partial difference in the construction is not sufficient to reverse the Examiner's determination that the invention is the same under the provisions of Article 29bis.

It is also noticeable that there are many cases which belong to Category C among the unsuccessful trial cases. In many of these cases, a difference in the construction is recognized, and nevertheless, on the basis that no substantial distinction in the technical effects is observed, such a difference in the construction is regarded as a "mere modification of the construction" (for instance, as a "mere conversion, addition or deletion of a common means", "mere change of material or substitution with an equivalent", "mere limitation or change of the shape, number or arrangement" or "mere

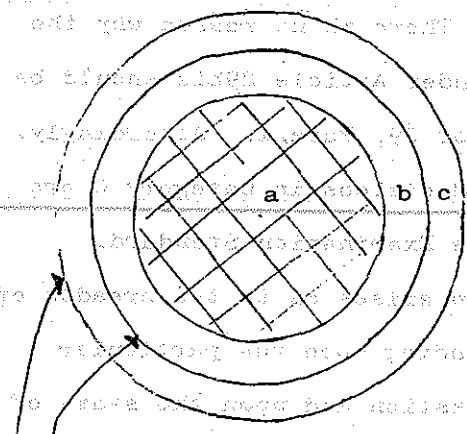
limitation or change of values" (as to these terms, see the Examination Standard for the Determination of the Same Inventions)), and the invention of the later application is determined to be the same as the invention disclosed in the specification of the prior application.

The basis for such a judgement seems to be based upon the Examination Standard for the Determination of the Same Inventions. Namely, according to the Examination Standard, "the determination of the invention disclosed in the specification should be made on the basis of the technical matters explicitly described in the specification, and the interpretation of the technical matters should, however, be made taking into account equivalents to those disclosed in the specification." The Examination Standard does not give any further definition or explanation as to what is meant by the "equivalents to those disclosed in the specification." However, one may assume that the equivalents are technical matters which may be supplemented to the specification by way of an amendment. From this standpoint, the provisions of Article 29bis are applicable to the above mentioned Categories A and B, but the same provisions should not apply to Category C.

However, as mentioned above, there are many trial cases which belong to Category C and to which the provisions of Article 29bis were found applicable by the Trial Board, and the number of such cases amounts to more than a half of the total number of unsuccessful trial cases. From the study of the Trial Board decisions, it appears that the Patent Office determines the invention disclosed in the specification of the prior application and judges the identity of the inventions of the prior and later applications, in the following manner. Namely, the determination of the invention

disclosed in the specification of the prior application is primarily made on the basis of the technical matters explicitly described in the specification, but at the same time, technical matters which may be regarded as equivalent to those described in the specification are also taken into account. Then, the invention of the prior application thus determined is compared with the invention of the later application to see the similarity or difference in their constructions and technical merits, and even when a difference in a part of the construction is recognized, the invention of the later application will be judged to be the same as the invention of the prior application if said part is common or obvious in the particular art and if there is no distinct technical merits thereby obtained in the invention of the later application.

This may be illustrated by the following figure.



(a) Technical matters explicitly described in the specification of the prior application

(b) Technical matters equivalent to those described in the specification of the prior application

(c) Technical matters neither identical nor equivalent to those described in the specification of the prior application, but there is no substantial difference in the technical merits

The area in which the invention of the later application is regarded as being described in the specification of the prior application.

The scope of the invention of the prior application capable of negating the later application.

It will be seen that the scope of the invention of the prior application capable of negating the later application is considerably wider than the scope (a) of the invention explicitly described in the specification of the prior application. Especially, an invention which belongs to the area (c) is neither identical nor equivalent, in its construction, to the invention explicitly described in the specification of the prior application. Accordingly, there is a criticism that the Patent Office goes to far in rejecting the application belonging to the area (c) under the provisions of Article 29bis.

However, according to the present Patent Office practice, the Examination Standard for the Determination of the Same Inventions is applicable commonly to Articles 29, para. 1, 39 and 29bis, and it has been a long established practice for the determination of the same inventions under Articles 39 and 29, para. 1 to take it for granted to include the area (c) in the scope of the invention

of the prior application which is capable of negating a later application falling within this area. There is no reason why the determination of the same inventions under Article 29bis should be distinguished from that of Article 39 or 29, Para.1. Accordingly, it is difficult to say that the trial decisions in Category C are unjustified as going too far beyond the Examination Standard.

In practice, however, a question arises as to the breadth of the area (c). The breadth varies depending upon the particular technical field of the invention in question and upon the state of the art at the filing date of the application, and it is quite difficult to accurately and objectively define it. Therefore, the breadth of the area (c) will usually become the main issue between the Patent Office and the applicant. From the results obtained by the investigation of the trial decisions, it is apparent that in the determination of the breadth of the area (c), the presence or absence of a difference in the technical merits between the inventions of the prior and later applications plays an important decisive role. Namely, if there is no substantial difference in the technical merits, the later application will be rejected, even when there is a difference in their constructions, on the ground that the difference in the construction is nothing more than a mere modification of the construction obvious to those skilled in the art, a mere substitution with an equivalent or a mere change of the material. In such practice, there is a tendency that too heavy a weight is placed on the "technical merits", and the "construction" tends to be neglected. Further, it is feared that the determination based on the "obviousness and equivalent" goes too far beyond the limit of Article 29bis to such an extent that it falls within an area where Article 29, Para. 2 (obviousness based on the prior art)

is applicable.

In order to avoid this, it is recommended that once an objection is raised under Article 29bis, the applicant should not only clearly distinguish the construction of the invention of his application over the invention described in the specification of the prior application, but also clearly distinguish the technical merits resulting from the difference in the construction and then, should argue against Examiner's determination that the construction of the present invention is wellknown or common in the art prior to the present application.

Table 1 Statistics of Trial Decisions under Article 29bis

	Patents	Utility Models	Total
Number of decisions	48	68	116
Successful	8	6	14
Unsuccessful	40	62	102
Success rate (%)	16.7	8.8	12.1
Breakdown of the unsuccessful cases			
Category A*	14	11	25
Category B**	9	16	25
Category C***	17	35	52

Notes:

* Cases in which the specification of the prior application explicitly describes the invention of the later application.

** Cases in which the specification of the prior application fails to disclose a certain part of the construction of the invention of the later application, but could be amended to include such a part to fully describe the construction of the invention of the later application.

*** Cases in which the specification of the prior application fails to disclose a certain part of the construction of the invention of the later application, and could not be amended to include such a part as failing to have a basis for such an amendment. Nevertheless, it was determined that the invention of the later application is substantially the same as the invention of the prior application.

Table 2 Statistics of Trial Decisions as Classified According to the Technical Fields

	Successful Cases	Unsuccessful Cases			
	Total (Success rate %)	Category A	Category B	Category C	Total
Mechanical	6 (12.5)	10	13	19	42
Patents	1	5	5	4	14
Utility Models	5	5	8	15	28
Electrical	0 (0)	2	4	18	24
Patents	0	1	1	6	8
Utility Models	0	1	3	12	16
Chemical	6 (33.3)	7	2	3	12
Patents	6	7	2	3	12
Utility Models	0	0	0	0	0
Building & Construction	1 (9.1)	1	3	6	10
Patents	1	1	0	1	2
Utility Models	0	0	3	5	8
Daily Commodities	1 (6.7)	5	3	6	14
Patents	0	0	1	3	4
Utility Models	1	5	2	3	10
T o t a l	14 (12.1)	25	25	52	102
Patents	8	14	9	17	40
Utility Models	6	11	16	35	62

II. Court decisions concerning the division of applications after the Examiner's decisions for their publications

1. Introduction

Concerning the division of an application after the transmittal of the Examiner's decision to publish the application (hereinafter referred to as the division of an application after the decision for its publication), it has long been an issue whether or not a new divisional application may be filed for an invention not claimed in the original or parent application. There were several decisions by the Tokyo High Court denying the Patent Office practice and allowing such a divisional application. The Tokyo High Court decisions were appealed to the Supreme Court for final judgement. The Supreme Court has recently rendered two consecutive decisions upholding the judgement of the Tokyo High Court that such a divisional application is permissible. Thus, a period has been put to this long disputed issue.

We shall introduce the decisions by the Supreme Court, and the statutory provisions, and the Patent Office practice relating to the divisional applications in Japan. We shall also point out important points which the applicant should take into account when filing a divisional application.

2. Introduction of the court decisions

There were the following four decisions by the Tokyo High Court during a period of from May 1978 to April 1979, which relate to the division of an application after the decision for its publication.

(1) Case of "Filming of a half size movie film and a method for the projection" (Case Gyo-Ke No. 89 [1972]), the decision

delivered on May 2, 1978

(2) Case of "Method for polymerizing a conjugated diene" (Case Gyo-Ke No. 54 [1976]), the decision delivered on June 28, 1978

(3) Case of "Process for producing a bundled glass fiber rod for the transmission of an optical image" (Case Gyo-Ke No. 168 [1977]), the decision delivered on April 10, 1979

(4) Case of "A needle-selecting cam device for a sewing machine" (Case Gyo-Ke No. 72 [1978]), the decision delivered on April 24, 1979

In each of these court decisions by the Tokyo High Court, a judgement was made affirming the applicant's contention that a divisional application after the decision for publication of the original or parent application (hereinafter referred to as original application), should not be restricted to the subject matter claimed in the original application, and may be made for the subject matter disclosed in the detailed description of the invention in the specification or in the drawings of the original application. Among the above identified cases, the cases (1) and (2) have been finally decided by the Supreme Court in the following cases:

(1) Case of "Filming of a half size movie film and a method for the projection" (Case Gyo-Tsu No. 101 [1978]), the decision delivered on December 18, 1980

(2) Case of "Method for polymerizing a conjugated diene" (Case Gyo-Tsu No. 140 [1978]), the decision delivered on March 13, 1981

In both cases, the points at issue and the subjects for judgements at the Supreme Court were substantially the same. Therefore, we should like to explain the point at issue and the subject

for judgement in the case of "Method for polymerizing a conjugated diene" as a representative example. We shall at the same time discuss the statutory provisions, the Patent Office practice and recommendations for the applicants, relating to the division of an application after the decision for its publication.

Case of "Method for polymerizing a conjugated diene" - Decision by the Supreme Court

The original application of the divisional patent application in question, was filed on July 19, 1961, to which the Law No. 121 of 1959 (hereinafter referred to as "Old Patent Law") was applied.

Said original application was filed with claim to a Convention date of July 25, 1960 based on a U. S. Patent Application, and published on May 27, 1963. The applicant filed a divisional application on October 3, 1963, i.e. after the decision for publication of the original application, and a final rejection by the Examiner was issued on August 15, 1967. The applicant filed a demand for a trial on December 12, 1967. On December 10, 1975, a trial decision was delivered to the effect that "the demand for the trial can not be sustained." Then, the applicant filed an action for cancellation of the trial decision with the Tokyo High Court. On June 28, 1978, the Tokyo High Court delivered a decision in Case Gyo-Ke No. 54 1976, i.e. the above identified case (2). The contents of this Tokyo High Court decision was introduced by Mr. Kataoka at the Nagoya Congress in 1978.

The present case is a case appealed from the decision of the Tokyo High Court.

2.1 Assertions of the plaintiff (i.e. the Patent Office)

Firstly, with respect to the significance of the invention for which a divisional application may be filed:

(1) The invention which may be made a subject matter for a divisional application under Article 44, Para. 1, is an invention of a patent application. In other words, it is an invention disclosed in the claim or claims of the specification which is attached to a petition of said patent application, and it does not include an invention which is merely disclosed in the "detailed description of the invention" of the specification or in the "drawings" attached to the petition (Article 36, Para. 2). The specified invention of an application has an important function for defining the scope of the patent examination and the outer periphery of the rights given to the applicant by the Law, such as the patent rights. Therefore, the invention must be explicitly specified at the time of filing the application. The intention of Article 36 of the Law which requires, in addition to the "detailed description of the invention", "the claim or claims" in the specification attached to the petition of the application, and which stipulates that "the claim or claims" must "state only the matters indispensable to the construction of the invention disclosed in the detailed description of the invention", is to have the invention of the application, specified by the statement of the claim or claims.

(2) The divisional application system is a system provided to give relief to the applicant in a case where more than one invention were stated in the claim or claims in violation of the one invention for one application rule (the main body of Article 38 of the Law), and is not a system intended to give relief to the applicant with respect to certain inventions which are disclosed in the detailed description of the invention in the specification or in the drawings, but which are not stated in the claim or claims.

Secondly, with respect to the duration in which a divisional

application may be filed:

(1) In a case where an invention which is not claimed, but which is merely disclosed in the detailed description of the invention in the specification or in the drawings, is to be made a subject matter for a new patent application in compliance with the formality requirements for the divisional application, it is necessary firstly to amend the specification to incorporate said invention in the claim or claims. Needless to say, however, this involves an amendment to expand the scope of the claim or claims, and the duration within which such an amendment may be made, is restricted to the period prior to the transmittal of a copy of the decision to publish the application (Articles 41 and 64, Para. 1 of the Law). Accordingly, it should be understood that a divisional application after the decision for publication can no longer be made.

(2) It is understood that the substantial reasons for limiting the period for amending the specification to add to a claim or claims an invention which is not stated in the claim or claims of the specification attached to the petition of the original application but which is merely disclosed in other portions of the specification or the drawings, and for restricting the period for filing a divisional application which makes said invention a subject matter of a new application, to a period prior to the transmittal of a copy of the decision to publish the application, are such that, on one hand, a third party's interest should not unfairly be prejudiced by the rights of the applicant since after the publication of his application, the applicant has exclusive rights to commercially work the invention claimed in the application (it is apparent also from the provisions of Article 70 of the Law that the

technical scope of the invention is restricted to the technical scope of the invention stated in the claim or claims), and, on the other hand, an undue delay in the patent prosecution should be prevented.

2.2 Decision

Judgement

It is reasonable to understand that the invention which may be divided out from the original application as a new application, is not limited to the one stated in the claim or claims of the specification attached to the petition of the original application, and it may be the one disclosed in the detailed description of the invention in the specification or the drawings so far as all technical matters constituting the invention are disclosed to such an extent that they are acurately understood and can readily be worked by a person having a general technical knowledge of the art to which the invention belongs. It is reasonable to understand that a divisional application may be filed before a decision or a trial decision becomes final and conclusive.

Grounds for the judgement

(1) The purpose of the patent system is to protect the inventor by granting to him rights to exclusively work the invention for a predetermined period as a compensation for the disclosure of the invention.

(2) The purpose for establishing the divisional application system is to open up a way, for an applicant who has filed a patent application for more than one invention, to grant a patent for each invention by giving him an opportunity of dividing the application to comply with the requirements for a one invention for one application rule employed by the Patent Law and by deeming that an

application for each invention was made retroactively on the date of filing of the original application.

(3) It is a common purpose of the patent system and the divisional application system to grant to an applicant who has disclosed his inventions, an opportunity of obtaining patent rights for these inventions as far as possible unless there is a possibility of unfairly giving an unexpected damage to a third party. In view of the foregoing purposes, it is reasonable to understand that a divisional application may be filed before a decision or a trial decision for the original application has been made final and conclusive. It is unthinkable that an unexpected damage will unfairly be given to a third party by such an understanding.

(4) So long as the purpose of the divisional application is as described above, it is reasonable to understand that an amendment of the specification or drawings necessary to merely meet the formality of a divisional application is permissible notwithstanding the provisions of the main body of Article 64, Para. 1 of the Patent Law.

3. The background of the issue in the court decision

In order to help understand the issue in the above court decision, we shall briefly explain the legal background under which the determination of whether or not the divisional application is lawful became a point at issue.

3.1 Statutory provisions for the division of an application

It is understood that the divisional application system is to permit a division of an application into one or more new applications, in a case where the first mentioned application contains more than one invention. The Japanese Patent Law has been revised

several times in the past, and the provisions of the respective Laws are as shown in the attached reference material. As to the period in which a divisional application may be filed, there has been made a certain revision.

The major Laws are the following three:

A. 1921 Law

Applicable to applications filed during the period of from January 1, 1922 to March 31, 1960

B. 1959 Law (hereinafter referred to as "Old Law")

Applicable to applications filed during the period of from April 1, 1960 to December 31, 1970

C. 1970 Amended Law (hereinafter referred to as "New Law")

Applicable to applications filed on or after January 1, 1971

Among the above mentioned Supreme Court decisions, the case of "Filming of a half size movie film and a method for the projection" was concerned with an application to which the 1921 Law was applicable, and the case of "Process for polymerizing a conjugated diene" was concerned with an application to which the Old Law was applicable.

These provisions had the same intention as the provisions of the Paris Convention, and, at a glance, there seems to be no problem involved in these provisions.

Article 4 G (2):

The applicant may also, on his own initiative, divide a patent application and preserve as the date of each divisional application the date of the initial application and the benefit of the right of priority, if any. Each country of the Union shall have the right to determine the conditions under which such division shall be authorized.

However, there have been different opinions in the

interpretation of the "inventions" in the "patent application which contains two or more inventions", which have cast great problems to the practice for the division of applications. Now, the interpretation of the "inventions" will be discussed.

3.2 The inventions which may be made the subject matters of divisional applications

There are two major theories for the interpretation of the "inventions", namely one in which the inventions are restricted to the inventions which are stated in the claim or claims of the original application (Claim theory), and the other theory in which the inventions include not only those stated in the claim or claims but also those which are disclosed in the detailed description of the invention in the specification or in the drawings (Disclosure theory).

For many years, the examination of the divisional applications was left to the Examiners for his own judgements, and the differences of the personal opinions of individual examiners were reflected to the determination of the permissibility of the divisional applications. There was a fear that no consistent examination was expected, and it was strongly desired to have an examination standard prepared. Under these circumstances, "Examination Standard for Divisional Applications" was prepared and published in 1977. The Examination Standard was reported by Mr. Nakajima at the Williamsburg Congress in 1977.

The details of this Examination Standard will be explained hereinafter. In the Examination Standard, the "Claim theory" is adopted whereby the invention which may be made the subject matter for a divisional application is restricted to the invention stated in the claim or claims.

The legal basis for this theory appears to be such that, as submitted by the plaintiff (the Patent Office) in the case of the above Supreme Court decisions, the specified invention of an application should be regarded, on the basis of various provisions of the Patent Law, as the one having an important function to define the subject matter for the patent examination and the periphery of the patent rights, and therefore the invention should be the one specified by the statement of the claim or claims particularly in view of the provisions of Article 36, Paras. 4 and 5, and Article 70 of the Patent Law.

Namely, according to the Claim theory, the intention of the provisions of Article 36, Paras. 4 and 5 requiring that only technical matters indispensable to the construction of the invention disclosed in the "detailed description of the invention" in the specification must be stated in the claim or claims, is to have the invention of the application specified by the statement of the claim or claims, and accordingly, the invention in the "detailed description of the invention" should always correspond to the invention stated in the claim or claims.

Thus, according to the same theory, the terms "patent application" and "invention of an patent application" used in, for example, Article 29bis (Patentability of inventions), Article 39 (First-to-file rule), Article 49 (Rejection), Article 51 (Publication of applications) and Article 52 (Effects of publication of applications) of the Patent Law, are meant for an invention stated in the claim or claims, and this is also apparent from the provisions of Article 70 of the Patent Law, as mentioned above. Thus, the "inventions" in the "two or more inventions" in Article 44, Para. 1 of the Patent Law which concerns the division of an

application, are interpreted to be the "inventions" stated in the claim or claims.

On the other hand, the Disclosure theory is based on a viewpoint that the "inventions" should be interpreted to include not only those stated in the claim or claims but also those disclosed in the detailed description of the invention in the specification or in the drawings.

3.3 Differences in the divisional practice between the divisions before and after the decision for publication.

(1) A divisional application filed prior to the transmittal of a copy of the Examiner's decision to publish the application (hereinafter referred to as "a divisional application before the decision for publication")

Article 41 of the New Law (the same is true in the Old Law) provides for an amendment and stipulates that an amendment enlarging, restricting and changing the claim or claims within the scope of the matters disclosed in the specification or drawings originally attached to the petition is permissible. Therefore, with respect to the invention which may be made the subject matter of a divisional application, there is no practical difference between the Claim theory and the Disclosure theory. Namely, before the decision for publication, the claim or claims can freely be amended or prepared on the basis of the description of the specification or drawings.

(2) A divisional application after the decision for publication

Under Article 64, Para. 1 of the New Law (the same is true also in the Old Law), an amendment after the decision for publication is limited to one intended for the "restriction of the claim or claims", the "correction of errors" or the "clarification of an

ambiguous description". Article 126, Para. 2 of the same Law, referred to in Para. 2 of Article 64, provides that the correction may not be such as to substantially enlarge or modify the claim or claims. It is said that the purpose of the provisions of Article 64 is to prevent an unexpected disadvantage given to a third party by an enlargement or change of the invention which was once made known by the publication of the application.

If the above mentioned Claim theory is taken, it naturally follows that since the amendment of the claim or claims after the decision for publication is strictly limited, the invention which may be made the subject matter of a divisional application, is likewise limited. Namely, an invention other than the invention claimed at the time of the decision for publication or the invention which may be added to the claim or claims by way of an amendment pursuant to the above mentioned provisions of Article 64, Para. 1, can not be made the subject matter of a divisional application.

However, by the Supreme Court decisions reported hereinabove, the Claim theory adopted in the Examination Standard has been denied and the Disclosure theory has been supported.

Referring to the United States Patent Law, Section 121 provides that "if two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions", and it is understood that the subject matters for division are the claimed inventions. However, a divisional application may be filed at any time before the issuance of a patent to the original application, and within the period, new claims may be prepared based upon the disclosure of the specification and the drawings. Under such U. S. practice, there will be no dispute such as the one between the

Claim theory and the Disclosure theory, with respect to the meaning of the inventions which may be the subject matters for divisional applications.

4. The impacts of the court decisions to the Examination Standard

4.1 The conventional Examination Standard

In the Examination Standard for the divisional applications, which was established and published in 1977, it is explained that the purpose of the divisional application is "to give an opportunity of filing a new patent application for a part of an original patent application which contains two or more inventions, to give an effect that the new patent application was filed at the same time as the original application, provided that the new patent application is lawful, and thereby to give relief to the patent application violating the one invention for one application rule".

The one invention for one application rule here is meant for the provisions of the preamble part of Article 38 of the Patent Law which stipulates that "a patent application shall be made for every invention".

Accordingly, the provisions of Article 44, Para. 1 of the Patent Law reading "a part of a patent application containing two or more inventions may be divided into one or more new patent applications" are considered to be intended for giving relief to a violation of the one invention for one application rule.

According to the conventional Examination Standard, the determination of whether or not the original application contains two or more inventions, is carried out on the basis of

(i) inventions specified by the matters stated in the claim or claims, or

(ii) in a case other than (i), inventions which may be stated in the claim or claims by way of an amendment at the time of filing divisional applications and which can thereby be specified. In the Examination Standard, the inventions falling under (i) and (2) are regarded as the inventions stated in the claim or claims.

The "inventions which may be stated in the claim or claims by way of an amendment" must comply with the requirements for an amendment, and they are subject to the provisions restricting the period for an amendment and the contents of an amendment. Therefore, according to the conventional practice, there was a substantial difference in practice depending upon whether a divisional application is filed before or after the decision for publication.

By the limitation of Article 64 of the Patent Law, an enlargement or change of the claim or claims is not permitted after the decision for publication. Accordingly, the divisional application falling under the above item (ii) constitutes either an enlargement or a change of the claim or claims, and thus such a divisional application is not permissible under the conventional practice (Claim theory).

4.2 The Examination Standard expected in future

By virtue of the above mentioned two Supreme Court decisions, the inventions belonging to the above item (ii) are now acceptable as the subject matters for division. Further, it has now become possible to file a divisional application for any subject matter which is disclosed in the detailed description of the invention or in the drawings, without being restricted to "inventions which may be stated in the claim or claims by way of an amendment" even after the decision for publication. Following the above mentioned Supreme

Court decisions, the Patent Office has revised its practice for the division of an application after the decision for publication, and now accepts a divisional application for an invention which is not claimed but which is disclosed in the specification or the drawings of the original application, as filed at the same time as the original application, provided that other requirements for division are satisfied.

The Patent Office is now reviewing the conventional Examination Standard. So far as recent trial decisions are concerned, the examination of the Patent Office appears to be conducted already following the Supreme Court decisions.

In the foregoing, we have discussed the divisional system with respect to patents, but the same is true also for utility models.

5. Important points for applicants

We shall briefly comment on important points which the applicants should take into account when filing divisional applications. There are following formal and substantive requirements for filing divisional applications.

A. Formal requirements

The following requirements are applicable to applications filed under the New Law (i.e. applications filed on or after January 1, 1971).

(1) At the time of filing a divisional application, its original application must be pending at the Patent Office.

A divisional application can not be filed, if the original application was withdrawn, abandoned or cancelled.

(2) The period for filing a divisional application is limited to a time or a period of time at or within which the specification

or drawings attached to the petition of the original application can be amended.

After the decision for publication of the original application, the filing of a divisional application is limited to the following periods.

(a) When an opposition to grant of patent has been filed, within a specified period for filing a response to the opposition.

(b) Within a specified period for filing a statement arguments against the Official Action by the Examiner or the Trial Examiner.

(c) When a demand for a trial for cancellation of the Examiner's final rejection is filed, within 30 days from the filing of the demand (applicable to the application filed on or after January 1, 1976.)

(3) The applicant for a divisional application must be the same as the applicant of the original application at the time of filing the divisional application.

(4) The inventor of the divisional application must be the same as the inventor of the original application.

In a case where a divisional application is to be filed before the decision for publication, the above formal requirements (1), (3) and (4) will apply. The time or period of time for filing a divisional application is as follows:

(i) One year and 3 months from the date of filing of the patent application (or from the date of the Convention priority, if claimed).

(ii) After the expiration of one year and 3 months from the date of filing (or the priority date) of the patent application, and prior to the decision for publication, a divisional application

may be filed

(1) when filing a request for examination of the patent application,

(2) within 30 days from the receipt of a notice that a third party has filed a request for examination,

(3) within a specified period for filing a statement or arguments when an Official Action has been issued by the Examiner or Trial Examiner, and

(4) within 30 days from the filing of a demand for a trial for cancellation of the final rejection by the Examiner (applicable to applications filed on or after January 1, 1976).

With respect to applications to which the Old Law is applicable (i.e. applications filed from April 1, 1960 to December 31, 1970), a divisional application may be filed at any time until the decision or trial decision becomes final and conclusive. However, if a divisional application is to be filed after the decision for publication and an amendment of the original application is necessary, the period for filing the divisional application and the contents of the amendment are restricted by the provisions of Article 64 of the Patent Law.

B. Substantive requirements

For a divisional application to be qualified to receive the same date of filing as the original application, it must comply with the following substantive requirements as well as the above mentioned formal requirements.

(1) The original application before the division contains two or more inventions.

(2) The invention for a divisional application must be one of the inventions contained in the original application before the

division.

(3) The invention of the divisional application must not be the same as the invention of the original application after the division.

(4) The divisional application must not conflict with a prior application provided for in Article 29bis of the Patent Law (or Article 3bis of the Utility Model Law).

6. How to deal with the Examiner's Notice

With respect to a divisional application filed under the New Law (i.e. after 1971) based on the original application filed under the Old Law, if the Examiner finds that "the divisional application does not comply with the requirements for division and the retroactive filing date can not be given", he issues a "Notice" as a means for notifying the applicant with his finding. There is no statutory basis in the Patent Law for such a Notice. Accordingly, there is a serious problem in practice as to how to deal with such a Notice. There has been a court decision (Decision by Tokyo District Court, Case Gyo-U No. 150 1976, delivered on November 30, 1977) in a case wherein the legal significance and the manner of dealing with such a Notice were at issue.

In a case where a divisional application was filed after January 1, 1971 (after promulgation of the New Law) based on the original application which was filed under the Old Law and the Examiner has found that the requirements for division are not met, the retroactive filing date will not be given, and the divisional application will be subject to the New Law. In most such cases, the original application is applicable as a prior art against the divisional application.

However, under the New Law, an application is not examined

unless a request for examination has been filed.

On the other hand, from the standpoint of the Examiner, there is no provisions in the Patent Law which enable him to inform the applicant of his finding with respect to the divisional application.

Under such circumstances, the Examiner used to send the applicant a Notice stating that "the retroactive filing date cannot be granted and the divisional application will therefore be treated as an application filed under the New Law". In the above mentioned court case, the points at issue were whether or not such a Notice constituted an administrative decision, and whether or not an action for cancellation of such a Notice was lawful.

The conclusion made by the court was such that "The Notice gives no effect whatsoever to the rights or duties of the applicant, and does not constitute a so-called administrative decision, and accordingly, the action for cancellation of the Notice is unlawful".

Under the circumstances, if the applicant believes that the retroactive filing date should be given to his divisional application, there is no other way than filing a request for examination with payment of the fee for the request and arguing for his case during the examination stage. Otherwise, upon expiration of 7 years (4 years in the case of a Utility Model), the application will be deemed to have been withdrawn, and then he will have no way of pursuing his case.

III. Conclusion

In the foregoing, we have reported on two important court decisions. The first court decision by the Tokyo High Court indicates that in the determination of the same inventions under Article 29bis of the Patent Law, it is permissible to take into account the general common knowledge of the art prevalent before the filing of the prior application, in addition to the description in the specification of the prior application.

Further, in the Patent Office practice for the application of Article 29bis of the Patent Law, an importance is placed on whether or not there is a substantial difference in the technical merits of the inventions of the prior and later applications. Namely, even when there is a difference in the construction of the two inventions, the invention of the later application is considered to be identical with the invention of the prior application unless the different construction of the invention of the later application is uncommon or unobvious in the particular art and unless the technical merits of the later application are distinct over those of the prior application.

The second decision by the Supreme Court indicates that the invention which can be divided out as a new application from the original application after the Examiner's decision for publication, is not limited to an invention claimed in the specification of the original application but may be an invention disclosed in the detailed description of the invention. By this Supreme Court decision, the current Patent Office practice has been denied, and accordingly, the examination at the Patent Office will be made along the line indicated by the court decision.

Finally, we shall be pleased if our report will serve for practical purposes in dealing with the rejection under Article 29bis or in filing a divisional application in future.

Reference Material

(1) The provisions of the Patent Law related to the court decision for the application of Article 29bis of the Patent Law

Article 29, Para. 1: Any person who has made an invention which is industrially applicable may obtain a patent therefor, except in the case of the following inventions:

(i) inventions which were publicly known in Japan prior to the filing of the patent application;

(ii) inventions which were publicly worked in Japan prior to the filing of the patent application;

(iii) inventions which were described in a publication distributed in Japan or elsewhere prior to the filing of the patent application.

Article 29, Para. 2: Where an invention could easily have been made, prior to the filing of the patent application, by a person with ordinary skill in the art to which the invention pertains, on the basis of an invention or inventions referred to in any of the preceding paragraph, a patent shall not be granted for such an invention notwithstanding said paragraph.

Article 29bis, Para. 1: Where an invention claimed in a patent application is identical with an invention or device (not being an invention or device made by the inventor of the invention claimed in the patent application) that has been described in the specification or drawings originally attached to the petition of another application for a patent or for a utility model registration and where such other application was filed earlier than the patent application concerned and underwent publication (Kokoku) or laying-open for public inspection (Kokai) after the filing of the patent application concerned, a patent shall not be granted for the first-mentioned invention notwithstanding Article 29, Para. 1. However, this provision shall not apply where, at the time of filing of the patent application concerned, the applicant in the case of such application and the applicant in the case of the other application for a patent or utility model registration are the same person.

Article 39, Para. 1: Where two or more patent applications relating to the same invention are filed on different dates, only the first applicant may obtain a patent for the invention.

(2) The provisions of the Patent Laws related to the court decisions for the division of an application after the Examiner's decision for publication of the application.

A. 1921 Law (Applicable to applications filed from January 1, 1922 to March 31, 1960)

Article 9, Para. 1: When a patent application containing two or more inventions is divided into two or more applications, each application shall be deemed to have been filed at the time when the first application was filed.

Rule 44, Para. 1: A person who intends to divide a patent application containing two or more inventions into two or more applications, shall amend the application with respect to one invention and at the same time, shall file a new application with respect to each of other inventions.
(There is no provisions for the period within which the divisional application may be filed.)

B. 1959 Law (Applicable to applications filed from April 1, 1960 to December 30, 1970)

Article 44, Para. 1: An applicant for a patent may divide a patent application containing two or more inventions into one or more new patent applications.

Article 44, Para. 2: The division of a patent application under the preceding paragraph, may not be made after a decision or trial decision on the patent application has become final and conclusive.

Rule 30: In a case where a new patent application is to be filed under the provisions of Article 44, Para. 1 of the Patent Law (Division of a Patent Application), if it is necessary to amend the specification or drawings attached to the petition of the original patent application, the amendment of the specification or drawings attached to the petition of the original application shall be made at the same time as the filing of the new patent application.
(The period within which a divisional application may be filed, has been specified.)

C. 1970 Amended Law (Applicable to applications filed on or after January 1, 1971)

Article 44, Para. 1: An applicant for a patent may divide a patent application containing two or more inventions into one or more new patent applications only at the time when or within the time limit during which the specification or drawings attached to the petition may be amended.

Rule 30: The same as Rule 30 of the above mentioned 1959 Law.
(By this Law, the period within which the specification may be amended, has been restricted, and the period within which a divisional application may be filed, has been restricted accordingly.)

Article 36, Para. 4: The detailed description of the invention under Para. 2 item (iii) shall state the purpose, construction and effect of the invention in such a manner that it may easily be carried out by a person with ordinary skill in the art to which the invention pertains.

Article 36, Para. 5: In the claim or claims under Para. 2, Item (iv) there shall be stated only the indispensable constituent features of the invention or inventions described in the detailed description of the invention. However, in addition, stating specific forms of the invention or inventions is not precluded.

Article 38: A patent application shall relate to a single invention. Provided, however, that even in the case of two or more inventions, the following inventions having the relationship indicated below with one such invention (hereinafter referred to as "the specified invention") may be the subject of a patent application in the same request as the specified invention:

(i) inventions which have, as a substantial part of their indispensable constituent features, the whole or a substantial part of the indispensable constituent features of the specified invention and which have the same purpose as the specified invention;

(ii) where the specified invention relates to a product, inventions of processes of manufacturing the product, inventions of processes of using the product, inventions of machines, instruments, equipment or other devices for manufacturing the product, or inventions of products solely utilizing the specific properties of the product.

(iii) where the specified invention relates to a process, inventions of machines, instruments, equipment or other devices used directly in the working of the specified invention.

Article 64, Para. 1: Where an applicant for a patent has received a notification under Section 50 after the transmittal of the ruling that the application is to be published or after opposition to the grant of a patent has been filed, he may amend the specification or drawings attached to the request with respect to the matters mentioned in the reasons for the refusal or in the grounds for the opposition but only within the time limit designated in accordance with Section 50 or 57, provided however that the amendment is limited to the following:

(i) the restriction of the claim or claims;

(ii) the correction of errors in the description;

(iii) the clarification of an ambiguous description.

Article 64, Para. 2: Art. 126, Para. 2 shall apply mutatis mutandis to the case under the proviso to the preceding subsection.

Article 70: The technical scope of a patented invention shall be decided on the basis of the statement of the claim in the specification attached to the petition.

Speaker: C. Harold Herr
E.I. duPont de Nemours
and Company

COMMITTEE NO. 1

RECENT DEVELOPMENTS IN THE PATENTING OF MICROORGANISMS

By

C. Harold Herr
Senior Patent Attorney
E. I. du Pont de Nemours and Company
Wilmington, Delaware

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No other patent case in this century has received more publicity, provoked more intense controversy and been the subject of more articles and symposia than the 1980 landmark U.S. Supreme case of Diamond v. Chakrabarty. It has been said that the Supreme Court's pronouncement in Chakrabarty ushered in a new age of microbiological patent protection in the United States and its effects have been felt worldwide. The object of my talk today is an attempt to summarize the scope of the worldwide protection now afforded the microbiologist and to look ahead to see what changes are likely to occur. While many questions as regards both procurement and enforcement of patents on microorganisms per se may remain unanswered for some period of time, it appears at least in the United States that the law on this subject continues to evolve largely on a case-by-case basis. The format of the claims now being issued covering microorganisms such as bacteria, fungi, viruses, plasmids, DNA fragments, and the like will be discussed later in this presentation.

Until recently, the United States Patent and Trademark Office had routinely rejected claims to living microorganisms on the basis that they were not within one of the statutory classes of subject matter as set forth in 35 U.S.C. §101 for which a United States patent could be granted. Since Chakrabarty the Patent Office, at least with respect to genetically engineered microorganisms, can no longer reject such as being non-statutory. In the words of the Court a non-naturally occurring microorganism is "a composition of matter" or a "manufacture", the relevant distinction in Chakrabarty being between products of nature, whether living or not, and human-made inventions and not between living and inanimate things.

Although it remained for Chakrabarty to clarify the "product of nature" issue, it should be pointed out that some U.S. patents containing claims effectively providing coverage for living microorganisms as such, in addition to processes utilizing living microorganisms, have been granted by the United States Patent Office well prior to 1980, the most notorious being U.S. Patent 141,072, which was granted to Louis Pasteur in 1873 and claimed yeast cells "free from organic germs". Patent claims have also issued in the first half of this century on food products, medicines, and insecticides comprising living bacterial cells. (U.S. 1,260,899, 1,540,951, 1,758,937, 3,642,982, 3,651,215, and 3,683,068.)

While it is true that inventions in the field of microbiology are not complete strangers to the world of patents, a sense of hostility towards patents for the "handiworks of nature" may be detected in a number of early decisions. Inventions in the inanimate areas of the natural sciences such as physics and chemistry have been readily absorbed along with those of mechanics and electricity into the sphere of patent law, with its emphasis on the effectiveness of the written description and the principle of operability and reproducibility of written instructions. In recent years the difficulty of fitting biological systems neatly into the same conceptual package has given rise first to tension and uncertainty, and then to the insertion of more explicit provisions in the law in order to deal with the peculiarities of living matter.

Microbiological processes and products of classical methods of fermentation of bacteria and fungi and the cultivation of viruses to produce clinically useful or nutritionally valuable materials have in the past been accommodated to the patent law straightforwardly following the practice established for chemical processes and products. The development of new strains of microorganism by selection, mutation or genetic manipulation has proved more controversial, and practice has varied nationally from the most liberal policy of the British patent law to the most exacting "unpatentable product of nature" viewpoint prevalent in the pre-Chakrabarty U.S. patent jurisdiction and in certain other jurisdictions including Ireland and Brazil.

In the 1978 Rank Hovis McDougall decision in Ireland a claim directed per se to specific strains of Fusarium graminearum was dismissed. In the United Kingdom, however, the same claim was granted without difficulty.

Following the narrow (5-4) but firm majority decision in the Chakrabarty case, the U.S. Patent Office has now included in its "Manual of Patent Examining Procedure" a section pertaining to practice in this field, from which it is clear that a genuine conversion of attitude has taken place. It is encouraging to note that a liberal attitude is now being shown to the patenting of microorganisms where the hand of man has been involved in their procurement, although the substantive issues of novelty, unobviousness and utility of course remain in full effect. In parallel with this development the United Kingdom and other European patent offices have also declared informally that a similar policy will apply in their own jurisdictions.

Along with Chakrabarty, a copending companion case in the U.S., In re Bergy et al, 596 F. 2d 952, 201 U.S.P.Q. 352, decided by the Court of Customs and Patent Appeals in 1979, has effected a substantial clarification of the law pertaining to patents on microorganisms per se. The Court held in this Bergy appeal that claims to a "biologically pure culture" of a known microorganism are allowable when such a "pure" culture does not exist in nature. This holding along with Chakrabarty is believed to be quite important in protecting the rapidly developing technology of genetic engineering.

Now that microorganisms and processes utilizing them cannot be rejected as non-statutory in the U.S., it is necessary to consider the disclosure needed in a patent application to support claims to a microorganism per se to maximize the chances of success in obtaining valid claims and to minimize prosecution difficulties when such claims are subjected to the examiner's scrutiny.

The disclosure requirements of the U.S. law (35 USC §112), i.e., a written description of the invention, is perceived to be the most troublesome area for both present and future patenting of man-made living microorganisms and higher life forms.

Before proceeding any further, it would be well to define here what patent lawyers mean by the term "microorganism". Microorganisms are life forms of microscopic size which by virtue of their special characteristics are widely (albeit not unanimously) regarded in scientific circles as forming a third category of living beings ("protista"). In light of general linguistic usage, it would be arbitrary to describe microorganisms as plants or animals, since they are not

visible to the eye as living beings and are only perceived as such on reflection. The term typically encompasses fungi (e.g., mushrooms, yeasts and molds), bacteria (including actinomycetes and blue green algae), viruses and protozoa. In some jurisdictions such as in Japan the term is expanded to include tissue cultures per se of animals and plants.

Estimates are that there are about 100,000 species of fungi, 1500 bacteria, 18,000 algae and 20,000 protozoa, making a total number of species of microorganisms of about 140,000 known to science. Because more species of microorganisms are being described every year, the number purportedly existing in nature is much larger. Consequently, the number of potential patent applications that could be filed directed to "pure" cultures of strains of a single species is enormous.

In drafting patent specifications, at least in the United States, applicants must comply with the "112" requirement that "the specification shall contain a written description of the invention, and of a manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains... to make and use the same...." In applying this requirement to applications claiming novel microorganisms, the description in the specification must be drawn with great particularity and must include as much detail as possible regarding taxonomy, where and how the microorganism was discovered or produced, the laboratory methods by which the microorganism was isolated, cultivation of the microorganism, and any special characteristics either of the strain or its cultivation. Some practitioners feel that since a given microorganism is ultimately defined by the sequence of base pairs in its DNA molecule or molecules, the best way to define the nature and the identity of a microorganism is by the set of genes that it contains. Particular care should be exercised to include as much detail as possible, particularly until patent offices around the world gain more experience in handling applications claiming microorganisms per se.

Even when the detailed written disclosure as suggested above is drafted, it may not completely suffice to place the invention in the hands of those skilled in the art once the application issues as a U.S. patent unless the microorganism in question was already known or otherwise readily available to the public. Consequently, prior to 1970, the U.S. Patent Office required applicants with claims involving microorganisms which were not known or available to the public first to deposit a culture of the microorganism in a depository to which the

public had free access as of the date of filing the application, citing the first paragraph of 35 U.S.C. §112 as statutory basis for this requirement. The Court of Customs and Patent Appeals changed this requirement in 1970 in In re Argoudelis, 434 F.2d 1390, 168 U.S.P.Q. 99, by stating that the law does not require that the microorganism culture deposited by an applicant with a public depository be available to the general public at the time of filing his or her U.S. patent application, and concluding that restrictions on access to the deposited culture by the public need be removed only upon the granting of a U.S. patent to the applicant. On the basis of this decision, the Office established a procedure for the deposition of microorganisms, set forth in 886 O.G. 638 (May 25, 1971) and at §608.01(p) of the Manual of Patent Examining Procedure.

The important features of the deposition procedure suggested by the U.S. Patent Office as being acceptable include the following:

(a) Applicant must deposit a sample of the microorganism in a public depository by the effective filing date of the U.S. patent application;

(b) Restrictions on access to the deposited sample must be irrevocably removed by the applicant upon granting of the U.S. patent;

(c) The name and address of the depository and the accession number identifying the applicant's culture in the depository should appear in the application as filed, along with as complete a taxonomic description of the microorganism as is possible; and

(d) In addition, the application should be accompanied by a declaration in which the applicant avers to having assured unlimited and permanent public availability of the deposited culture, subject to the granting of a patent on the application, during the life of the patent.

In August 1978 a Convention was signed in Budapest providing for the establishment of an international depository of microorganisms for patenting purposes. Two years later, on August 19, 1980, the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure entered into force with respect to the United States, Hungary, Bulgaria, France and Japan. Each

State adhering or acceding thereto is authorized to nominate depositories on its territory to serve as international depository authorities. Upon compliance with certain procedural steps set forth in the Treaty, each such depository is designated an international depository authority.

The depositories which have been designated to serve as international depository authorities include:

1a. Centraal Bureau voor Schimmelcultures (CBS), Baarn, Netherlands;

1b. CBS Yeast Division, Delft, Netherlands;

2. Deutsche Sammlung von Mikroorganismen (DSM), Göttingen, Germany;

3. American Type Culture Collection (ATCC), Rockville, USA;

4. Agricultural Research Culture Collection, Northern Regional Research Laboratory (NRRL), U.S. Dept. of Agriculture, Peoria, Ill. (USA);

5. Collection Nationale de Cultures de Micro-Organismes (CNCM), Paris, France;

6. Fermentation Research Institute, Japan;

7. Forschungsinstitut Borstel Institute für experimentelle Biologie und Medizin, Borstel, Germany.

Japan acceded on May 19, 1980 to the Budapest Treaty as the fifth country and since then Fermentation Research Institute, Agency of Industrial Science and Technology of 1-3, Higashi 1 chome Yatabemachi Tsukuba-gun Ibaraki-ken 305 Japan (hereafter FRI) has been preparing itself as an international depository authority. After the completion of the preparation, it began its business as an international depository authority based on Article 7 of Budapest Treaty on May 1, 1981. To illustrate the types of requirements which are promulgated an internationally recognized depository has let us look briefly at FRI's policies and regulations.

Types of microorganisms to be deposited in FRI include fungus, yeast, bacterium and Actinomycete, provided that microorganisms which damage health or environment, or have property of being likely to do so, and microorganisms required for handling physical enclosure of P_2, P_3 and P_4 levels under "Recombined DNA Experiment Guidelines" stipulated by the

government, are excluded. Microorganisms (genes) which can be handled at the P_1 level can be deposited. Microorganisms should be submitted in the state of being subjected to lyophilization treatment.

Microorganisms will be stored for at least 30 years. When any request for release of samples has been made close to the 30th year of storage, storage is to be continued another 5 years.

Deposit initially made is called the original deposit, and when release of samples has become impossible as by the death of the microorganisms, the international depository authority informs the depositor of the fact and the depositor can redeposit the same microorganisms 3 months within the receipt of the notice. The redeposit is presumed to have been at the date of filing of the original deposit.

Release of deposited microorganisms can be made to the following persons:

(a) Any intergovernmental industrial property organization,

(b) Depositor or a person who has obtained Depositor's consent and

(c) A person qualified under laws (See Rule 11.3 based on Budapest Treaty).

Besides describing his new microorganisms per se in his specification, an applicant via his attorney must next decide on how to claim his invention. Since the function of a patent claim is in most countries one of definition, a proper method of defining microbiological inventions in claim language has to be found. To date microbiologists and their attorneys have approached this claiming problem along lines traditionally to their science. They head immediately to generally accepted schemes of classification and taxonomy such as Bergey's Manual. Thus for defining purposes it is proper to use the name, morphology and biochemical characteristics of the new strain as the essential body structure of the claim. These alone may be sufficient to distinguish the strain from previously known and recorded strains. It has been customary, however, to rely on the accession number of the deposit of the strain in a culture collection, and indeed many practitioners have been content to rely almost entirely on culture collection number alone.

With regard to claims based solely on culture collection number, it should be noted that relatively little judicial consideration has yet been given to the limits to which such claims must be construed. One question for example might be whether claims drafted in terms of the deposited strain covers only the strain actually deposited and its direct descendants obtained by sub-culture of a sample of the deposited strain, or whether they should be construed as also extending to independently prepared isolates which are indistinguishable in essential respects from the deposited strain.

An interesting U.S. case in which a deposit proved unnecessary was Tabuchi et al v. Nubel et al, 194 USPQ 521, decided by the Court of Customs and Patent Appeals in 1977. Here the Court held that even though the description of the yeast strain, namely, Candida lipolytica No. 230, did not refer to a repository number in a public depository, undue experimentation was not required of one skilled in the art to determine which strains of the genus Candida would produce the desired product in accordance with the claimed process.

In drafting claims for a U.S. application it is advisable to follow, as closely as possible, the language of the claims which were allowed in Bergy and in Chakrabarty. For example, looking at claim 5 of the Bergy application, two points should be noted.

First, the Bergy claim included the language "A biologically pure culture of (the specific microorganism)..." This language enabled the court to find that the claimed subject matter was a "manufacture" and not a "product of nature" since a biologically pure culture of the microorganism cannot exist in nature. Accordingly, it is advisable to include this or substantially similar language in a claim in order to insure that the passage of the application through the Patent and Trademark Office is smooth. Precedent for this type of claim is available to overcome an Examiner's rejection because of the Bergy case. Even though a patent practitioner may be of the opinion that the term "biologically pure culture" is either unnecessary, excess verbiage, or mere semantics, it is still advisable to include it, since Examiners have been known to insist upon allowed formats, thus costing the patent practitioner undue time, effort, and expense.

The term "biologically pure culture" is not defined in the Bergy specification but appears to mean nothing more than an isolate obtained by conventional purification steps. When it is realized that every bacteria ever discovered

has been refined to isolate purity in the very process of discovery and identification, the addition of these three words does not appear to restrict in any way the effective scope of the patent. Furthermore, such logic should also be extended to the Chakrabarty situation in which the microorganism is novel per se, for example, where the applicant has produced a mutated microorganism by irradiation or chemical treatment.

Second, the claim in the Bergy application included the language "said culture being capable of producing the antibiotic lincomycin in a recoverable quantity upon fermentation in an aqueous nutrient medium containing assimilable sources of carbon, nitrogen, and inorganic substances." Such language is functional and has some appeal because it offers a neat solution to the problem of embracing everything that achieves the same result as the strains actually obtained by the inventor. Unfortunately such an easy solution is not always possible.

This "functional technique" of claim drafting is presumably valid where a number of strains have been isolated with a common property which gives a new result. It may not succeed, however, where the property or result to be obtained is an obvious desideratum for those skilled in the art. An illustration of the failure of the functional definition is the case involving U.K. Patent No. 952,820 which was decided in the U.K. High Court and reported in 1973. The patent claim specified use of "a strain of Streptomyces aureofaciens which produces tetracycline to the substantial exclusion of chlortetracycline", and these strains were characterized later in the claim by reference to a harvest mash reflectance curve and a numerically defined parameter. Much of the argument in court dealt with the question whether or not such strains had to be descendants of the type strain A-377, but apart from this difficulty of interpretation the Court also found that the other parameters used to define the strain were lacking in real substance or relevance. The Court found that to search for a high tetracycline-yielding strain derived from A-377 was simply to follow in the path of previous workers and amounted to an obvious desideratum. The patentee's method of framing his definition in this way went unjustifiably beyond the novel strains actually disclosed in his specification.

In addition to claims directed to the novel microorganism per se, it is usually appropriate to include claims directed to the process of making the product of the microorganism. Such claims have been held to be prima facie non-obvious. This is true even if the microorganism is a novel strain of a known organism which produces the product of the claimed process.

An applicant should also consider submitting product-by-process claims directed to the product, i.e., the antibiotic, enzyme, hormone, etc., produced by the novel microorganism. This is a particularly useful claim where there is a possibility that the product may be manufactured abroad by a competitor, using the microorganism, and then imported into the United States. In this situation, a patent claiming only the microorganism would be ineffective in preventing importation of the product made by the microorganism. Accordingly, to gain a fuller measure of protection to which the applicant is entitled, process and product-by-process claims should be included.

Special reasons for drafting claims on the process utilizing the microorganism are the relative ease with which one strain of microbe can be transformed into another and the ability to construct unrelated recombinant organisms to accomplish the same purpose. It has been suggested that examiners should allow process patents for synthesizing a product such as hormone from a particular genetic sequence or DNA insert without specifying the species or strain of the host or the type of plasmid.

> "If the host strain or plasmid type were specified, as it would have to be if the bacterium or plasmid were patented, then it would be relatively easy for competitors to use a similar gene in another host/vector system to accomplish the same goal, thus getting around the patent and rendering it, worthless to its holder." Zimmerman, 7 APLA Q.J. 278, 285 (1979).

Before leaving the subject of claim drafting, a brief look at the claims allowed by the Supreme Court on Chakrabarty is deemed worthwhile.

Claims literally read on any Pseudomonas bacterium containing a stable combination of two or more plasmids which provide different hydrocarbon degradative pathways, irrespective of the bacterium's source, or the manner in which it was made. Critics might argue that claims of such scope are overly broad in that they merely state a desired result. The Patent Office may come to insist, for example, that claims to novel bacteria produced by plasmid transfer should be required to recite (1) the particular bacterial species which the inventor used successfully as the plasmid recipients and (2) the specific plasmids he or she succeeded in transferring.

On the other hand, it is also conceivable that the Patent Office will take the view it is proper to use claim language as broad as Chakrabarty's whenever the bacterium claimed is the first to produce the results for which it was created, e.g., the first to produce a specific chemical or, say, the first to be capable of biodegrading a particular toxic waste. If it should develop that only such pioneer status enables one to obtain Chakrabarty type claim breadth for a human-made microorganism, then it will be doubly important to finish first in any race to develop a microorganism for a specific new use.

Up to this juncture we have been addressing ourselves primarily to procurement. Let us now in closing look briefly at the enforcement aspect. The consensus among patent practitioners is that patent rights for microorganisms per se cannot be enforced as easily as the patent rights for the chemical substances. Generally, in the case of product patents, a person who has purchased a product from the patentee or licensee can use and/or resell it freely, and use of the re-sold product is not considered an infringement of the patent. This is the so-called "theory of exhaustion of the patent right". Baker's yeast, for example, sold in the market is generally consumed by purchasers but can also be propagated by them. If the theory of exhaustion is applied to such cases, the patent covering the yeast may be very limited, and the patentee/seller must give appropriate notice to prohibit its propagation.

The production of another microorganism by mutation of the patented microorganism should be an infringement of the patent if the derived mutant is used commercially. However, enforcement of the right may actually be difficult because the patentee cannot stop the industrial or experimental use of the derived mutant, except where his patent covers the mutant.

The traditional patent law doctrines of infringement, contributory infringement and equivalents are being re-explored and reevaluated now that patentability of microorganisms around the world is becoming more acceptable. As the new technology of gene splicing continues to expand, factual situations will arise causing some adaptation of the traditional doctrine, although the principles which guided the formation of them should apply to the new biotechnology.

At the outset I mentioned how the law and practice on this subject is developing on a case-by-case basis. In view of the difficulty in making generalizations, the best way I know to exemplify formats found acceptable at least by the

United States Patent Office is to simply reproduce claims from four representative microorganism patents which have issued since the first of the year. They are as follows:

(1) Bradner, Bush & Nettleton, U.S. 4,248,970, issued February 7, 1981 and assigned to Bristol-Myers. Claim 1 of this patent, which incidentally was the first U.S. patent to issue for a microorganism since the Chakrabarty decision in June of 1980, reads as follows:

> 1. A biologically pure culture of the microorganism Streptosporangium sp. ATCC 31129, said culture being capable of producing the atinbiotic complex, figaroic acid complex, in a recoverable quantity upon cultivation in an aqueous nutrient medium containing assimilable sources of nitrogen and carbon.

(2) Steenbergen and Young, U.S. 4,259,451, issued March 31, 1981 and assigned to Merck. Claim 1 reads as follows:

> 1. A pure culture of a variant of Agrobacterium radiobacter, ATCC 31643, said culture being capable of producing heteropolysaccharide.

(3) Manis, U.S. 4,273,875, issued June 16, 1981 and assigned to Upjohn. Claims 1 and 2 read as follows:

> 1. Essentially pure plasmid pUC6 which is characterized by a molecular weight of approximately 6.0 megadaltons, and a restriction endonuclease cleavage map as shown in the drawing.
>
> 2. A biologically pure culture of Streptomyces espinosus biotype 23724a, having the deposit accession number NRRL 11439, and which also contains about 20 to about 40 copies of plasmid pUC6 per cell.

(4) Ljungdahl and Wiegel, U.S. 4,292,406, issued September 29, 1981, and assigned to the Department of Energy. Claim 1 reads as follows:

> 1. The mixed culture system comprising a biologically pure strain of the microorganism Thermoanaerobacter ethanolicus, having the identifying characteristics of ATCC 31550 and a biologically pure strain of the microorganism Clostridium thermocellum, having the identifying characteristics of ATCC 31549, said culture system having the ability to produce ethanol in recoverable quantities upon fermentation in an aqueous nutrient culture containing cellulose material.

An interesting European patent application filed about a year ago, Publ. No. 0,028,033 has claims directed to novel DNA, cloned DNA, recombinant plasmid containing the DNA, microorganism containing the recombinant plasmid and process for their production.

With the technological advances presently being made in microbiological technology, it is expected that worldwide activity in the microorganism area will continue to increase by leaps and bounds. To the patent practitioner this means more challenges and more opportunity to shape the patent systems of the world to better serve the microbiological industry and the public.

RECENT COURT DECISIONS ON TRADE MARK

- "TROY" case and "UNION" case -

PIPA Japanese Group, Committee No. 1

Akio Kobayashi

Goji Tasaki

Speaker:

Nobuyoshi Sakuragi

I. Introduction

I would like to discuss two examples of court cases on trade marks noted during the past one year in Japan. One is a case involving a trade mark "TROY" in which arguments were made as to ownership of Licensee's trade marks after cancellation of a license agreement. This is called the TROY case. The other one relates to lawfull effect of abandonment of some of designated goods after judgement in trial before the Board of Appeals. This is called the UNION case.

II. The TROY case (District Court for Osaka; Decided on November 28, 1980)

1. Question

An agreement was made by the parties concerning the licenses for designing men's shirts and sweaters and for

using trade marks, trade names, etc. However, the trade marks to be licensed were not specifically identified in the agreement. Then, arguments came out as to ownership of the trade marks made by and registered to Licensee. It was questioned if it reverts to Licensor after cancellation of the license agreement.

2. Outline of the case

a) License Agreement

Plaintiff is a U.S. corporation doing business concerning a production of textile products including sports wears. Plaintiff also had subcontractors in Japan and in other parts of the world to manufacture sports wears.

Defendant was one of such subcontractors who was granted a license by Licensor with intermediary assistance of Plaintiff's agent in Far East, and executed an agreement.

The license agreement provides licenses and ownership, more specifically:

i) — License for Licensee to use Licensor's trade marks, trade names, copyrights etc. by marking and notifying the license;

— Supply of Licensor's sales know-how to Licensee;

— Requirement of Licensor's consent to use of any trade marks by Licensee;

— Royalty payment by Licensee to Licensor in accordance with the amount of sales of the products using the licensed trade marks;

ii) — Liability of Licensee to register and manage licensed trade marks, etc. on behalf of Licensor in Japan;

— Termination of the license upon cancellation of the license agreement;

— Return of title as an owner to Licensor.

However, the agreement did not clearly indicate the trade marks of Licensor to be licensed. While the trade mark "TROY" was owned and used by Licensor in the U.S.A., a same trade mark was registered and owned by a third party in Japan. Licensee newly made a trade mark "TROY BROS" holding the word "TROY" in it and a mark showing a tobacco pipe. Licensee filed these two trade marks for registration in Japan with Licensor's consent and made them registered under Licensee's name.

b) Arguments and Cancellation

Licensee executed a sublicense agreement with a company "T" who is not a party of this case. However, differences came out in interpretation between Licensee and Licensor's agent who worked for the agreement, concerning the renewal of the sublicense agreement. As a result, the agreement was terminated. But Licensee (defendant) refused to return to

Licensor (plaintiff) trade marks filed and registered in Licensee's name under the agreement, namely, "TROY BROS", "SUNFAIR", "CASTAWAY" and the pipe mark. Licensor brought a suit claiming a return of the trade mark rights.

3. Outline of Decision

a) With respect to the trade mark of a tobacco pipe, the court holdsthat Licensee is not required to revert its ownership to plaintiff, taking overall circumstances into account. The court further says that no return of the trade mark is requested under the law.

This decision is landmarking since substantial appreciation is given to the designer of the trade mark like in the case of the inventor to patent and the ownership of copyright. Consequently, a prior user's position is lawfully considered to a certain extent.

On the other hand, with respect to the remaining 3 trade marks including "TROY BROS", the court favores plaintiff and ordered return of the trade marks to plaintiff.

b-i) First, the court decision refers to facts concerning background of the license agreement, history of the trade marks and outline of arguments involved. The court says that the license agreement should be taken into account in this case for determination of ownership.

Defendant asserts that the license agreement does not aim at a license for use of the trade marks as plaintiff

insists. Rather, a permission of marking "licensed by" is aims to provide the marked products with an image of foreign origin. Defendant further says that this was clear from the fact that the agreement does not identify the trade marks to be licensed but stipulates royalty payments for sample goods, designs, catalogues, etc. which shall be furnished by plaintiff. But this assertion by defendant is denied in decision by the court.

b-ii) The court states that key to determination of the licensed trade marks is to consider from every aspect of the circumstances including analysis of objectives of the license agreement and history of license negotiations with a special attention to statements and activities which has been taken by the parties. The court also points out that plaintiff is a corporation of the U.S.A. where use of a trade mark has significant effect and that defendant is not familiar with the law practice concerning trade marks in Japan. The court concluds that these must be taken into consideration for a possible settlement.

b-iii) On this stand point, the court defines that property of plaintiff includes:

- trade names, trade marks or partial incorporations thereof which have been used by plaintiff as its own belongings;
- trade names, trade marks or partial incorporations thereof which have been designed or modified by plaintiff on its initiative

To the contrary, the court adjudges that the pipe mark was made by defendant on its own initiative. This adjudgement based on consideration to business circumstance in Japan. It is held that this mark should come to ownership of defendant although its use was subject to the consent of plaintiff.

Accordingly, it is a court's interpretation that "TROY BROS" and other 2 letter marks should be reverted to plaintiff. The court states in this connection that registration of the trade marks in name of defendant was due under the license agreement. However, the court denies alleged ownership of the pipe mark by plaintiff.

[Note: Out of these, "SUNFAIR" was made by plaintiff and presented to defendant for use. Since "THE OUTLAW" from Licensor was questioned about its registrability in Japan, Licensee made a new trade mark "CASTAWAY" taking the "THE OUTLAW" into account.]

b-iv) Further, the court states that Japan has a principle to issue a trade mark registration to those who first filed, if it meets requirement, irrespective of its actual designer or user. Accordingly, assertion claiming ownership of a trade mark by its designer or user who made or used it prior to its filing may not be understood to comply with the trade mark system in Japan.

In this instant case, parties' will and intention indicate that they have considered the marks as a sort of properties even before the trade mark application. Based on a preposition that future trade marks to such marks should be reverted to the proprietor, the both parties agreed to stipulate a trust liability in the agreement and the agreement was executed.

As trade marks are required in nature to have an updating feeling and attractive expression just like in this case, designing trade marks must be with intelligence and originality. It is reasonable to hold that such designers shall be treated equally as the inventor of patents and the author of copyrights. This leads to a law interpretation that prior users should be appreciated to a certain extent in terms of ownership.

4. Remarks

a) As stated above, this is a case where the licensed trade marks were not indicated specifically in the license agreement. The court did not hold a claim by Licensor (plaintiff) for ownership of the trade marks made by Licensee (defendant) judging from overall facts collected.

It is noted that the designer of the trade marks was lawfully appreciated as the inventor to the patent right and that the decision appears reasonable.

b) In this case, ambiguous license provisions caused

arguments. As have been often pointed out, trade mark practitioners should be fully aware of differences in law. (ex. principle to prior use and principle to prior registration in this case)

In particular, when trade marks became famous through sales' efforts by Licensee, ownership of the trade marks may be found arguable. Both, Licensor and Licensee should be careful for determination of the licensed trade marks, duration period of the license, etc.

This case was appealed to Osaka High Court.

III. The UNION case (Tokyo High Court: Decided on February 24, 1981)

1. Question

The issue resides in a point whether abandonment of some of the designated goods, while a suit is pending at court, has lawful effect on judgement in trial or not.

The trade mark was refused in trial before the Board of Appeals and the case was appealed to the court against the refusal in trial.

2. Outline

Plaintiff filed an application for a trade mark "THE UNION" in which the word "THE" is smaller in appearance than the word "UNION". The applicant designated goods for its trade mark in Class 26 of the Trade Mark Classification.

More specifically, they are "Printed Articles, Paintings, Calligraphic Works, Engravings, Photo Pictures, and related items". During the prosecution before the Board of Appeals, the applicant amended its designated goods to limit to "Commercial Magazines, Printed Materials for advertisement, Paintings, Calligraphic Works, Engravings, Photo Pictures and related items" in Class 26.

There was a prior trade mark registration consisting of 3-tiered words "THE UNION READERS" in which "THE" comes top, "UNION" middle and "READERS" bottom. "UNION" appeared bigger than other two.

Citing this trade mark designating English readers in old Class 66, refusal was issued in trial by the appeal board. The applicant sued for its registration to the court and later amended its designated products to "Informatives and Magazines for mail-order sales on a credit basis", aiming at removing possible defects.

3. Decision

The court dismisses the plaintiff's complaint saying that partial abandonment of designated goods does not date back to the original application in terms of lawful effect and that it is not reasonable to revert the judgement in trial.

With respect to a point whether abandonment has a retroactive effect or not, the court says:

"Unless specifically provided, lawful effect takes place when the action was made. In case where such measure like abandonment, withdrawal, etc. is taken to a trade mark application, the application is considered null and void under the Trade Mark Law, Art. 8-3 to allow any application filed earlier or later than its application date for registration. In other words, such application is considered not to have existed from the begining. No retroactive effect can be acknowledged. No other interpretation than this could be held."

[Trade Mark Law, Art. 8-3]

"When an application for trademark registration has been abandoned, withdrawn or dealt with as invalid, or when the final decision or judgement in appeal with respect to the application for trademark registration has become finally binding, such application for trademark registration shall, with respect to the application of the provisions of the preceding two paragraphs, be deemed to have been non-existent from the begining" (Foster & Ono Translation, JLP)

With respect to basis for determining lawfulness of the trial's judgement, the court holdsas follows:

"The judgement issued in trial by the Board of Appeals of the Patent Office is an administrative decision. When one finds defects in the decision and claims a relief by law, lawfulness of the decision must be judged assuming the situation where the decision was made.

However, exception is a case where an appropriate decision under a certain situation is questioned later as being inappropriate under different situation. In such a case, reverse decision could be available.

For example, reference is made to the patent case. When judgement in trial is made to allow amendments to remedy the defects, by which a patent was refused in other trial, the refusal is retroactively applied to the patent although a suit is pending with respect to lawfulness of the refusal. (Patent Law, Art. 128) Then, the reasons for refusal are remedied and the judgement in trial based thereon may be reversed.

This is resulted from retroactive application of judgement in trial for amendment. However, this doctorine does not allow lawful determination of trial's judgement in general as of the day when the decision was made at the court. As is clear, accepted amendment would be held applicable dating back to the day when the application was filed."

4. Analysis

a) With respect to cases similar to the subject case, decisions may be classified into three groups. They are as follows:

Type	Retroactive	Basis for determination	Decision at Tokyo H.C.
A	Yes	Not decisive (could be read "trial's judgement")	Dec. 24, 1979
B	No	Trial's judgement	Feb. 22, 1968 Oct. 25, 1979 Feb. 24, 1981
C	No	Decision by court	June 21, 1978

These three types are cases in which retroactive effect of abandonment and lawfulness of judgement in trial were argued. Majority cases follow the decision of Type B above and the subject case is one of them. It should be noted that there are some arguments criticizing this decision.

b) Then, what decision shall be held in this type of cases? Let me discuss it more in detail.

b-i) Retroactive Effect

In my understanding, partial abandonment of designated goods shall be in effect after the abandonment is made. In other words, the retroactive effect shall not be justifiable. As the decision of this case pointed out, there is no specific provision as to manners to treat it. Thus, such effect is not subject to the law.

b-ii) Basis for Determination of Lawfulness

It is my opinion that effectiveness of judgement in trial should be determined at the time when the decision is made by court but not by the Board of Appeals. So far as the trade mark is concerned, it might be reasonable to determine its registrability in accordance with amendments of designated goods at the time when the decision is made for its registration. Judgement in trial, as stated above, is administrative in nature but it is not reasonable to put the basis for determination of lawfulness on the judgement in trial since the judgement in trial includes semi-jurisdictional effect.

Rather, it would be reasonable to rely on the decision by court. Because it will contribute to solve arguments and it will prevent later-filed trade marks, both identical or similar, from being registered.

On this stand point, I would like to support the interpretation as seen in Type C.

b-iii) In this line, let me show you other cases where the court held that the decision by court should not adversely affect the judgement in trial [Tokyo High Court; July 31, 1979 and December 24, 1979]. In the former case, registration of a cited trade mark was cancelled because of non-use, and in the latter case, a cited trade mark was assigned to plaintiff. In these cases, the cancellation and the assignment were made while suits were pending before the court.

c) Now turning to the subject, Tokyo High Court held two outstanding decisions which differ in law interpretation during the past one year. One is found in the case shown as Type A above and the other is found in this "UNION" case which represents the cases in Type B.

Despite such difference, however, what the UNION case teaches is that such measures like partial abandonment of the designated goods and, more extensively, assignment of trade marks should be taken before judgement in trial is made.

This case was appealed to ~~a higher~~ the Supreme court.

Speaker: Rudolph J. Anderson, Jr.
Merck & Co., Inc.

COMMITTEE NO. 1

PATENT TERM RESTORATION AND UPDATE

In our meeting in Tokyo last fall, we discussed the problem of the loss of effective patent life due to premarketing regulatory review of certain types of products, particularly pharmaceuticals, agricultural chemicals and medical devices. We provided to the group some statistics which outlined just how serious the problem has become and discussed a proposed solution to the problem which was then embodied in a bill introduced into the United States Senate by Senator Birch Bayh of Indiana and in the House of Representatives by Congressman Robert W. Kastenmeier of Wisconsin.

In our system of congressional action, legislation which is not enacted at the end of a particular Congress of two years duration expires and is not before subsequent Congresses for their consideration.

Fortunately the existence of the problem has been recognized by our legislators in the new Congress which commenced in January of this year and legislation was introduced in both Houses of Congress early in the congressional session. Senator Charles McC. Mathias, Jr. of Maryland introduced into the Senate of the United States S.255 entitled "Patent Term Restoration Act of 1981" and Congressman Robert W. Kastenmeier of Wisconsin introduced into the House of Representatives H.R. 1937 entitled "Patent Term Restoration Act of 1981". (Copies of the bills as introduced are attached.) Under our congressional systems, other legislators who favor the legislation may add their names to the

legislation as co-sponsors thereof and many have done so. (See Attach. A) It is particularly interesting to note from the list of co-sponsors that the legislation has the support of members of both Republicans and Democrats, giving bipartisan support. Of particular note is the significant positions in the Senate of the United States held by the co-sponsors.

Hearings were held on S.255 by the Senate Judiciary Committee in April and were chaired by Senator Mathias. At those hearings, a number of industry organizations and individual companies strongly supported the legislation. Both the American Patent Law Association and the Patent, Trademark and Copyright Law Section of the American Bar Association endorsed the legislation, and the Environmental Protection Agency and the Patent and Trademark Office both testified favorably at the legislation. Testimony in opposition was received from the association of generic drug manufacturers and the health resources group, a Ralph Nader organization.

The Senate Judiciary Committee favorably reported the legislation to the Senate of the United States and S.255 was enacted by the Senate substantially as introduced on July 9, 1981.

The Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Judiciary Committee is currently holding hearings chaired by Congressman Kastenmeier on H.R.1937. Testimony favoring the legislation has already been provided to the committee by represent-

atives of industry organizations, individual companies and universities. Written submissions and support of the legislation have been made to the subcommittee by the American Patent Law Association and the Patent, Trademark and Copyright Law Section of the American Bar Association. Testimony in opposition has again come from the generic drug manufacturers and the Nader group. Further hearings are planned in November for testimony from the Food and Drug Administration and the Commissioner of Patents. Their testimony is expected to strongly support the legislation as the Secretary, U.S. Department of Health and Human Services, Richard S. Schweiker; Commissioner of Food and Drugs, Arthur Hull Hayes, Jr. and Commissioner of Patents and Trademarks, Gerald J. Mossinghoff, have done in recent speeches.

The legislation has received editorial endorsement from a large number of newspapers here in the United States including the New York Times, Washington Post and the Chicago Tribune, These editorials are considered strong endorsement of a policy of patent term restoration and should have considerable influence on members of Congress.

We are, of course, very hopeful that the strong support patent term restoration legislation has received will result in its enactment into law by favorable action by the House of Representatives and President Reagan's assent.

There are several specific issues with respect to the legislation which are receiving serious consideration in the course of its consideration by the House of Representatives.

The legislation introduced in the last Congress contemplated extension of the patent term for products subject to premarketing regulatory review by the Food and Drug Administration and the Environmental Protection Agency. The legislation was thus limited to chemicals subject to the Federal Insecticide, Fungicide, and Rodenticide Act, 1947 ("FIFRA") and to the Toxic Substances Control Act, 1976, and to chemicals which were the active ingredients in pharmaceuticals, medical devices and other products subject to the Food and Drug Laws. S.255 and H.R.1937 added to the scope of products for which patent term restoration would be applicable to any other product subject to premarketing regulatory review. It is important to note, however, that in his introduction of such legislation, Congressman Kastenmeier made the following remarks:

> ...This year a new provision has been added at section 155(c)(4)(D) to cover other products subject to Federal premarketing review or notification requirements, because a number of people have expressed the concern that Federal premarketing requirements have eroded the patent life in less visible areas as well. Although I take no position on its merits, I have included the additional provision in the bill in order to draw attention to the issue when we have our hearings. Proponents of the broader coverage will be invited to make their case during our hearings, so that members of the subcommittee can make an informed decision on the issue. ...

To date there have been no examples of such "other products" brought forth to the Kastenmeier subcommittee and it is reasonable to contemplate the elimination of provision (c)(4)(D) on page 8 of H.R.1937 from the bill when it is enacted by the House of Representatives.

A second issue receiving consideration relates to the inclusion in the legislation of patents claiming processes for making products subject to premarketing regulatory review. Representatives from the recombinant DNA genetic engineering firms have testified to a need for the inclusion of their process patents. They have argued, with considerable merit, that a ruling by the United States Food and Drug Administration that a product even if heretofore approved for marketing is to be made using recombinant DNA techniques, the product so made will require a complete new drug application approval. Thus, the product will be subject to premarketing delays of the same nature as those now suffered by any new chemical entity found to have pharmaceutical utility.

A third issue under current discussion is the question of the applicability of the patent term restoration legislation to products already undergoing testing and evaluation for marketing and to products heretofore approved by the regulatory agency. One must recognize that the legislation is founded on the concept that the assurance of adequate patent term for products subject to premarketing regulatory review delay will provide an incentive to innovation in the affected fields. It is clear from the testimony received by the congressional committees that such a spur to innovation will occur. It is also clear, however, that the flow of funds to innovators from such patent term restoration will not occur

until the period of patent life actually restored. For pharmaceuticals, on the basis of average statistics in hand, the result will be cash flow from such extended patent life only in the 1990's at the earliest. A representative of a research intensive university in his testimony to Congressman Kastenmeier's subcommittee suggested that serious consideration be given to the extension of patents still pending which cover products approved in recent years by the FDA and EPA. He pointed out that such products have been shown to have suffered significant loss of patent life from regulatory delay prior to their approval. It is clear that one must consider the need to permit research planning for competition with a patented product on patent expiration. One may then conclude, perhaps, that patents expiring in the near future should not be subject to such extension. However, it makes sense to seriously consider this suggestion of applicability of the benefits to innovation in the legislation to products approved in recent years where the loss of patent life has been so forcefully demonstrated.

I am certain that you will hear more about these issues as the legislation progresses in the House of Representatives over the next months. I am equally certain that the competence of the members of the Kastenmeier subcommittee will permit them to resolve these issues in a manner which provides to the public the proper balance between incentives for innovation and appropriate competition on products where patent rights expire.

As I pointed out in the earlier paper, the problem of the loss of patent life due to regulatory review is a problem in both our countries. It is to be hoped that the example of the United States recognizing the deterrent to innovation that premarketing regulatory review causes may spur other governments to consider similar legislation. If you, our Japanese colleagues, have interest in such legislation, we are, of course, prepared to provide any help you may desire.

ATTACHMENT A

June 16, 1981

"The Patent Term Restoration Act of 1981"

Co-sponsors of S. 255

Senators:

**Mathias	(R-MD)	Nunn	(D-GA)	Bradley	(D-NJ)
**Thurmond	(R-SC)	Hatfield	(R-OR)	**Dole	(R-KS)
**R. Byrd	(D-WV)	Symms	(R-ID)	**Grassley	(R-IA)
**DeConcini	(D-AZ)	Danforth	(R-MO)	**East	(R-NC)
Percy	(R-IL)	Baker	(R-TN)	**Biden	(D-DE)
**Hatch	(R-UT)	Lugar	(R-IN)	Tsongas	(D-MA)
Hollings	(D-SC)	**Heflin	(D-AL)	Baucus	(D-MT)
**Simpson	(R-WY)	**Laxalt	(R-NV)		
Inouye	(D-HI)	**Denton	(R-AL)		
Williams	(D-NJ)	Randolph	(D-WV)		
Schmitt	(R-NM)	Huddleston	(D-KY)		

Co-sponsors of H.R. 1937

Representatives:

*Kastenmeier	(D-WI)	*Synar	(D-OK)	*Fish	(R-NY)
*Sawyer	(R-MI)	Rose	(D-NC)	Hiler	(R-IN)
*Brooks	(D-TX)	*McClory	(R-IL)	*Hughes	(D-NJ)
*Mazzoli	(D-KY)	La Falce	(D-NY)	Jenkins	(D-GA)
*Railsback	(R-IL)	†*Hyde	(R-IL)	Hillis	(R-IN)
*Butler	(R-VA)	† Fenwick	(R-NJ)	Johnston	(R-NC)
Florio	(D-NJ)	Rinaldo	(R-NJ)	Mollohan	(D-WV)
Scheuer	(D-NY)	Guarini	(D-NJ)		
Gramm	(D-TX)	Roukema	(R-NJ)		
Madigan	(R-IL)	Hollenbeck	(R-NJ)		
Luken	(D-OH)	*Glickman	(D-KS)		
†Levitas	(D-GA)	Nowak	(D-NY)		
*S. Hall	(D-TX)	Addabbo	(D-NY)		
*B. L. Evans	(D-GA)	Wolpe	(D-MI)		
Santini	(D-NV)	Peyser	(D-NY)		
†*Danielson	(D-CA)	Dwyer	(D-NJ)		

*House Judiciary Co-sponsors
**Senate Judiciary Co-sponsors
†Unoffcially on the bill

97TH CONGRESS
1ST SESSION

S. 255

To amend the patent law to restore the term of the patent grant for the period of time that nonpatent regulatory requirements prevent the marketing of a patented product.

IN THE SENATE OF THE UNITED STATES

JANUARY 27 (legislative day, JANUARY 5), 1981

Mr. MATHIAS (for himself, Mr. ROBERT C. BYRD, Mr. THURMOND, Mr. PERCY, and Mr. DECONCINI) introduced the following bill; which was read twice and referred to the Committee on the Judiciary

---

A BILL

To amend the patent law to restore the term of the patent grant for the period of time that nonpatent regulatory requirements prevent the marketing of a patented product.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Patent Term Restoration Act of 1981".

SECTION 1. Title 35 of the United States Code, entitled "Patents" is amended by adding the following new section immediately after section 154:

"§ 155. Restoration of patent term

"(a)(1) Except as provided in paragraph (2), the term of a patent which encompasses within its scope a product, or a method for using a product, subject to a regulatory review period shall be extended by the amount of time equal to the regulatory review period for such product or method if—

"(A) the owner of record of the patent gives notice to the Commission in compliance with the provisions of subsection (b)(1);

"(B) the product or method has been subjected to a regulatory review period pursuant to statute or regulation prior to its commercial marketing or use; and

"(C) the patent to be extended has not expired prior to notice to the Commissioner under subsection (b)(1).

The rights derived from any claim or claims of any patent so extended shall be limited in scope during the period of any extension to the product or method subject to the regulatory review period and to the statutory use for which regulatory review was required.

"(2) In no event shall the term of any patent be extended for more than seven years.

"(b)(1) Within ninety days after termination of a regulatory review period, the owner of record of the patent shall notify the Commissioner under oath that the regulatory

review period has ended. Such notification shall be in writing and shall:

"(A) identify the Federal statute or regulation under which regulatory review occurred;

"(B) state the dates on which the regulatory review period commenced and ended;

"(C) identify the product and the statutory use for which regulatory review was required;

"(D) state that the regulatory review referred to in subsection (a)(1)(B) has been satisfied; and

"(E) identify the claim or claims of the patent to which the extension is applicable and the length of time of the regulatory review period for which the term of such patent is to be extended.

"(2) Upon receipt of the notice required by paragraph (1), the Commissioner shall promptly (A) publish the information noticed in the Official Gazette of the Patent and Trademark Office, and (B) issue to the owner of record of the patent a certificate of extension, under seal, stating the fact and length of the extension and identifying the product and the statutory use and the claim or claims to which such extension is applicable. Such certificate shall be recorded in the official file of each patent extended and such certificate shall be considered as part of the original patent.

"(c) As used in this section:

"(1) The term 'product or a method for using a product' means any machine, manufacture, composition of matter or any specific method of use thereof for which United States Letters Patent can be granted and includes the following or any specific method of use thereof:

"(A) any new drug, antibiotic drug, new animal drug, device, food additive, or color additive subject to regulation under the Federal Food, Drug, and Cosmetic Act;

"(B) any human or veterinary biological product subject to regulation under section 351 of the Public Health Service Act or under the virus, serum, toxin, and analogous products provisions of the Act of Congress of March 4, 1913;

"(C) any pesticide subject to regulation under the Federal Insecticide, Fungicide, and Rodenticide Act; and

"(D) any chemical substance or mixture subject to regulation under the Toxic Substances Control Act.

"(2) The term 'major health or environmental effects test' means an experiment to determine or evaluate health or environmental effects which requires at

least six months to conduct, not including any period for analysis or conclusions.

"(3) The term 'statutory use' means all uses regulated under the statutes identified in sections (c)(4)(A)–(D) for which regulatory review occurred for the product involved.

"(4) The term 'regulatory review period' means—

"(A) with respect to a food additive, color additive, new animal drug, veterinary biological product, device, new drug, antibiotic drug, or human biological product, a period commencing on the earliest of the date the patentee, his assignee, or his licensee (i) initiated a major health or environmental effects test on such product or a method for using such product, (ii) claims an exemption for investigation or requests authority to prepare an experimental product with respect to such product or a method for using such product under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act, or the Act of Congress of March 4, 1913, or (iii) submits an application or petition with respect to such product or a method for using such product under such statutes, and ending on the date such application or petition with respect to such product or a method

for using such product is approved or licensed under such statutes or, if objections are filed to such approval or license, ending on the date such objections are resolved and commercial marketing is permitted or, if commercial marketing is initially permitted and later revoked pending further proceedings as a result of such objections, ending on the date such proceedings are finally resolved and commercial marketing is permitted;

"(B) with respect to a pesticide, a period commencing on the earliest of the date the patentee, his assignee, or his licensee (i) initiates a major health or environmental effects test on such pesticide, the data from which is submitted in a request for registration of such pesticide under section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act, (ii) requests the grant of an experimental use permit under section 5 of such Act, or (iii) submits an application for registration of such pesticide pursuant to section 3 of such Act, and ending on the date such pesticide is first registered, either conditionally or fully;

"(C) with respect to a chemical substance or mixture for which notification is required under

section 5(a) of the Toxic Substances Control Act—

"(i) which is subject to a rule requiring testing under section 4(a) of such Act, a period commencing on the date the patentee, his assignee, or his licensee has initiated the testing required in such rule and ending on the expiration of the premanufacture notification period for such chemical substance or mixture, or if an order or injunction is issued under section 5(e) or 5(f) of such Act, the date on which such order or injunction is dissolved or set aside;

"(ii) which is not subject to a testing rule under section 4 of such Act, a period commencing on the earlier of the date the patentee, his assignee, or his licensee—

"(I) submits a premanufacture notice, or

"(II) initiates a major health or environmental effects test on such substance, the data from which is included in the premanufacture notice for such substance,

and ending on the expiration of the premanufacture notification period for such substance or if an order or injunction is issued under section 5(e) or 5(f) of such Act, the date on which such order or such injunction is dissolved or set aside;

"(D) with respect to any other product or method of using a product that has been subjected to Federal premarketing regulatory review, a period commencing on the date when the patentee, his assignee, or his licensee initiates actions pursuant to a Federal statute or regulation to obtain such review prior to the initial commercial marketing in interstate commerce of such product and ending on the date when such review is completed,

except that the regulatory review period shall not be deemed to have commenced until a patent has been granted for the product or the method of use of such product subject to the regulatory review period. In the event the regulatory review period has commenced prior to the effective date of this section, then the period of patent extension for such product or a method of using such product shall be measured from the effective date of this section.".

O

ATTACHMENT C

97TH CONGRESS
1ST SESSION

H. R. 1937

To amend the patent law to restore the term of the patent grant for the period of time that nonpatent regulatory requirements prevent the marketing of a patented product.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 18, 1981

Mr. KASTENMEIER (for himself and Mr. SAWYER) introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To amend the patent law to restore the term of the patent grant for the period of time that nonpatent regulatory requirements prevent the marketing of a patented product.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Patent Term Restoration Act of 1981".

SECTION 1. Title 35 of the United States Code, entitled "Patents" is amended by adding the following new section immediately after section 154:

"§ 155. Restoration of patent term

"(a)(1) Except as provided in paragraph (2), the term of a patent which encompasses within its scope a product, or a method for using a product, subject to a regulatory review period shall be extended by the amount of time equal to the regulatory review period for such product or method if—

"(A) the owner of record of the patent gives notice to the Commissioner in compliance with the provisions of subsection (b)(1);

"(B) the product or method has been subjected to a regulatory review period pursuant to statute or regulation prior to its commercial marketing or use; and

"(C) the patent to be extended has not expired prior to notice to the Commissioner under subsection (b)(1).

The rights derived from any claim or claims of any patent so extended shall be limited in scope during the period of any extension to the product or method subject to the regulatory review period and to the statutory use for which regulatory review was required.

"(2) In no event shall the term of any patent be extended for more than seven years.

"(b)(1) Within ninety days after termination of a regulatory review period, the owner of record of the patent shall notify the Commissioner under oath that the regulatory

review period has ended. Such notification shall be in writing and shall:

"(A) identify the Federal statute or regulation under which regulatory review occurred;

"(B) state the dates on which the regulatory review period commenced and ended;

"(C) identify the product and the statutory use for which regulatory review was required;

"(D) state that the regulatory review referred to in subsection (a)(1)(B) has been satisfied; and

"(E) identify the claim or claims of the patent to which the extension is applicable and the length of time of the regulatory review period for which the term of such patent is to be extended.

"(2) Upon receipt of the notice required by paragraph (1), the Commissioner shall promptly (A) publish the information noticed in the Official Gazette of the Patent and Trademark Office, and (B) issue to the owner of record of the patent a certificate of extension, under seal, stating the fact and length of the extension and identifying the product and the statutory use and the claim or claims to which such extension is applicable. Such certificate shall be recorded in the official file of each patent extended and such certificate shall be considered as part of the original patent.

"(c) As used in this section:

"(1) The term 'product or a method for using a product' means any machine, manufacture, composition of matter or any specific method of use thereof for which United States Letters Patent can be granted and includes the following or any specific method of use thereof:

"(A) any new drug, antibiotic drug, new animal drug, device, food additive, or color additive subject to regulation under the Federal Food, Drug, and Cosmetic Act;

"(B) any human or veterinary biological product subject to regulation under section 351 of the Public Health Service Act or under the virus, serum, toxin, and analogous products provisions of the Act of Congress of March 4, 1913;

"(C) any pesticide subject to regulation under the Federal Insecticide, Fungicide, and Rodenticide Act; and

"(D) any chemical substance or mixture subject to regulation under the Toxic Substances Control Act.

"(2) The term 'major health or environmental effects test' means an experiment to determine or evaluate health or environmental effects which requires at

least six months to conduct, not including any period for analysis or conclusions.

"(3) The term 'statutory use' means all uses regulated under the statutes identified in sections (c)(4)(A)–(D) for which regulatory review occurred for the product involved.

"(4) The term 'regulatory review period' means—

"(A) with respect to a food additive, color additive, new animal drug, veterinary biological product, device, new drug, antibiotic drug, or human biological product, a period commencing on the earliest of the date the patentee, his assignee, or his licensee (i) initiated a major health or environmental effects test on such product or a method for using such product, (ii) claims an exemption for investigation or requests authority to prepare an experimental product with respect to such product or a method for using such product under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act, or the Act of Congress of March 4, 1913, or (iii) submits an application or petition with respect to such product or a method for using such product under such statutes, and ending on the date such application or petition with respect to such product or a method

for using such product is approved or licensed under such statutes or, if objections are filed to such approval or license, ending on the date such objections are resolved and commercial marketing is permitted or, if commercial marketing is initially permitted and later revoked pending further proceedings as a result of such objections, ending on the date such proceedings are finally resolved and commercial marketing is permitted;

"(B) with respect to a pesticide, a period commencing on the earliest of the date the patentee, his assignee, or his licensee (i) initiates a major health or environmental effects test on such pesticide, the data from which is submitted in a request for registration of such pesticide under section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act, (ii) requests the grant of an experimental use permit under section 5 of such Act, or (iii) submits an application for registration of such pesticide pursuant to section 3 of such Act, and ending on the date such pesticide is first registered, either conditionally or fully;

"(C) with respect to a chemical substance or mixture for which notification is required under

section 5(a) of the Toxic Substances Control Act—

"(i) which is subject to a rule requiring testing under section 4(a) of such Act, a period commencing on the date the patentee, his assignee, or his licensee has initiated the testing required in such rule and ending on the expiration of the premanufacture notification period for such chemical substance or mixture, or if an order or injunction is issued under section 5(e) or 5(f) of such Act, the date on which such order or injunction is dissolved or set aside;

"(ii) which is not subject to a testing rule under section 4 of such Act, a period commencing on the earlier of the date the patentee, his assignee, or his licensee—

"(I) submits a premanufacture notice, or

"(II) initiates a major health or environmental effects test on such substance, the data from which is included in the premanufacture notice for such substance,

and ending on the expiration of the premanufacture notification period for such substance or if an order or injunction is issued under section 5(e) or 5(f) of such Act, the date on which such order or such injunction is dissolved or set aside;

"(D) with respect to any other product or method of using a product that has been subjected to Federal premarketing regulatory review, a period commencing on the date when the patentee, his assignee, or his licensee initiates actions pursuant to a Federal statute or regulation to obtain such review prior to the initial commercial marketing in interstate commerce of such product and ending on the date when such review is completed,

except that the regulatory review period shall not be deemed to have commenced until a patent has been granted for the product or the method of use of such product subject to the regulatory review period. In the event the regulatory review period has commenced prior to the effective date of this section, then the period of patent extension for such product or a method of using such product shall be measured from the effective date of this section.".

○

Speaker: William T. McClain
Standard Oil Company

COMMITTEE NO. 1

DELAY IN FILING A U.S. PATENT APPLICATION -- HOW LONG IS TOO LONG?

BY

W. T. McCLAIN

STANDARD OIL COMPANY

PRESENTED

AT

THE PACIFIC INDUSTRIAL PROPERTY ASSOCIATION

TWELFTH CONGRESS

NOVEMBER 4-6, 1981

DELAY IN FILING A U.S. PATENT APPLICATION -- HOW LONG IS TOO LONG?

WHERE TWO INDEPENDENT INVENTORS FILE PATENT APPLICATIONS CLAIMING THE SAME INVENTION, WHICH ONE IS ENTITLED TO THE PATENT? THE UNITED STATES HAS RETAINED THE FIRST TO INVENT CONCEPT, WHILE ALL OTHER COUNTRIES, WITH THE EXCEPTION OF CANADA AND THE PHILLIPINES, EMPLOY THE FIRST TO FILE CONCEPT. IN THE UNITED STATES, SINCE THE 1836 PATENT ACT, IT HAS BEEN ESTABLISHED BY STATUTE THAT THE FIRST INVENTOR IS ENTITLED TO THE PATENT, WHILE IN MOST OTHER COUNTRIES, THE LAWS PROVIDE THAT THE FIRST APPLICANT TO FILE AN APPLICATION IN THE PATENT OFFICE IS ENTITLED TO THE PATENT. RECENT DECISIONS BY THE UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS AND THE PTO BOARD OF INTERFERENCES, RELYING UPON PUBLIC POLICY FAVORING EARLY PUBLIC DISCLOSURE, ARE EFFECTIVELY DIRECTING THE UNITED STATES TO A FIRST TO FILE SYSTEM, AND THE HISTORICAL FIRST TO INVENT SYSTEM MAY BE FADING.

BACKGROUND

35 USC SECTION 135 PROVIDES THAT THE PATENT AND TRADEMARK OFFICE (PTO) MAY DECLARE AN INTERFERENCE BETWEEN APPLICANTS, OR AN APPLICANT AND A PATENTEE, WHERE MORE THAN ONE INVENTOR IS CLAIMING THE SAME INVENTION. WHEN AN INTERFERENCE IS DECLARED THE PTO DETERMINES PRIORITY OF INVENTION AND AWARDS PRIORITY TO AN INVENTOR IN ACCORDANCE WITH ESTABLISHED PROCEDURES. THE PTO DECISION IS SUBJECT TO APPEAL TO THE UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS (CCPA) OR A UNITED STATES DISTRICT COURT PURSUANT TO 35 USC SECTIONS 141 AND 146.

THE 1836 PATENT ACT PROVIDED FOR INTERFERENCES BETWEEN PATENT APPLICANTS AND ESTABLISHED THAT PRIORITY OF INVENTION WAS TO BE AWARDED TO THE FIRST APPLICANT TO REDUCE THE INVENTION TO PRACTICE. DILIGENCE FROM THE TIME OF CONCEPTION UNTIL THE TIME OF REDUCTION TO PRACTICE WAS TO BE CONSIDERED IN DETERMINING PRIORITY OF INVENTION. THE REDUCTION TO PRACTICE COULD BE ACCOMPLISHED ACTUALLY, BY THE PERFECTION OF THE INVENTION, OR CONSTRUCTIVELY, BY FILING A PATENT APPLICATION IN THE PATENT OFFICE. SIMILAR STATUTORY PROVISIONS HAVE BEEN RETAINED IN THE UNITED STATES PATENT LAW TO THE PRESENT TIME, AND THERE HAVE BEEN MANY DECISIONS BY THE PTO AND THE COURTS INTERPRETING THE LAW WITH RESPECT TO WHO IS THE FIRST INVENTOR.

IN THE EARLY DAYS, THE COURTS GENERALLY CONSIDERED THAT THE FIRST INVENTOR TO CONCEIVE AND REDUCE THE INVENTION TO PRACTICE WAS ENTITLED TO THE PATENT. HOWEVER, IN MASON V. HEPBURN, 13 APP. D.C. 86 (D.C. CIR. 1898), THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA UPHELD AN AWARD OF PRIORITY IN AN INTERFERENCE TO HEPBURN DESPITE MASON'S (THE JUNIOR PARTY) SHOWING OF PRIORITY, AS TO BOTH CONCEPTION AND REDUCTION TO PRACTICE, APPROXIMATELY SEVEN YEARS BEFORE FILING HIS PATENT APPLICATION. EVIDENCE WAS PRESENTED ATTEMPTING TO SHOW THAT MASON HAD PURPOSELY CONCEALED THE INVENTION UNTIL HE WAS SPURRED INTO FILING BY THE ISSUANCE OF THE HEPBURN PATENT. THE RATIONALE FOR THIS HOLDING WAS THAT A SUBSEQUENT INVENTOR WHO DILIGENTLY PURSUED PROCUREMENT OF A PATENT IN GOOD FAITH SHOULD BE ENTITLED TO THE PATENT AS AGAINST ONE WHO DELIBERATELY CONCEALED KNOWLEDGE OF THE INVENTION FROM THE PUBLIC.

THE 1952 UNITED STATES PATENT ACT CODIFIED THE MASON V. HEPBURN DOCTRINE BY INCLUDING IN THE PATENT STATUTE 102(G) WHICH PRESENTLY PROVIDES:

> A PERSON SHALL BE ENTITLED TO A PATENT UNLESS --
>
> BEFORE THE APPLICANT'S INVENTION THEREOF THE INVENTION WAS MADE IN THIS COUNTRY BY ANOTHER WHO HAD NOT ABANDONED, SUPPRESSED, OR CONCEALED IT. IN DETERMINING PRIORITY OF INVENTION THERE SHALL BE CONSIDERED NOT ONLY THE RESPECTIVE DATES OF CONCEPTION AND REDUCTION TO PRACTICE OF THE INVENTION, BUT ALSO THE REASONABLE DILIGENCE OF ONE WHO WAS FIRST TO CONCEIVE AND LAST TO REDUCE TO PRACTICE, FROM A TIME PRIOR TO CONCEPTION BY THE OTHER.

EVOLUTION OF A NEW SYSTEM

FOR A TIME AFTER THE 1952 PATENT ACT THE COURTS REQUIRED A SHOWING OF A DELIBERATE CONCEALMENT, INCONSISTENT WITH AN INTENT ULTIMATELY TO FILE A PATENT APPLICATION WITHIN A REASONABLE TIME, IN ORDER FOR 35 USC 102(G) TO DEPRIVE AN ACTUAL PRIOR INVENTOR OF HIS RIGHT TO A PATENT. SEE DEWEY V. LAWTON, 347F. 2D 629, 146 USPQ 187 (CCPA 1965).

BEGINNING ABOUT 1966, THE CCPA CAME TO THE VIEW THAT, IN AN INTERFERENCE SITUATION, THERE CAN BE AN INFERENCE OF INTENT TO ABANDON, SUPPRESS OR CONCEAL WHERE THERE IS MERELY A SIGNIFICANT DELAY BETWEEN REDUCTION TO PRACTICE AND FILING WITH NO ACTIVITY

ON THE PART OF A FIRST INVENTOR. THEN IN YOUNG V. DWORKIN, 489 F. 1277, 180 USPQ 388 (CCPA 1974) THE CCPA CHARACTERIZED THE LAW AS FOLLOWS:

> "AS WE HAVE DONE BEFORE, WE EMPHASIZE HERE THAT EACH CASE INVOLVING THE ISSUE OF SUPPRESSION OR CONCEALMENT MUST BE CONSIDERED ON ITS OWN PARTICULAR SET OF FACTS. . .IN SUCH CONSIDERATION, TWO GUIDE-POSTS HAVE BEEN FIRMLY ESTABLISHED.
>
> FIRST THE LENGTH OF TIME FROM REDUCTION TO PRACTICE TO FILING AN APPLICATION FOR PATENT IS NOT DETERMINATIVE. . . MERE DELAY WITHOUT MORE IS NOT SUFFICIENT TO ESTABLISH SUPPRESSION OR CONCEALMENT. . . HOWEVER, THE WARNING HAS BEEN SOUNDED THAT ONE WHO DELAYS IN FILING HIS APPLICATION DOES SO AT THE PERIL OF A FINDING OF SUPPRESSION OR CONCEALMENT DUE TO CIRCUMSTANCES SURROUNDING THE DELAY. . .
>
> SECOND, SPURRING INTO FILING AN APPLICATION FOR PATENT BY KNOWLEDGE OF ANOTHER'S ENTRY INTO THE FIELD (E.G. BY ISSUANCE OF A PATENT) IS NOT ESSENTIAL TO A FINDING OF SUPPRESSION OR CONCEALMENT."

SUBSEQUENTLY, IN 1976 THE COURT, IN PEELER V. MILLER, 535 F. 2D 647, 190 USPQ 117 (CCPA 1976) HELD THAT THE JUNIOR PARTY, MILLER, WAS DEEMED TO HAVE SUPPRESSED HIS INVENTION UNDER 35 USC 102(G), DUE TO A FOUR YEAR DELAY FROM THE TIME HE HAD COMPLETED WORK ON HIS INVENTION UNTIL HIS ASSIGNEE - EMPLOYER FILED THE PATENT APPLICATION.

IN SHINDELAR V. HOLDEMAN, _____ F. 2D _____, 207 USPQ 112 (CCPA 1980) THE CCPA HELD THAT, WHILE THE JUNIOR PARTY SHINDELAR HAD ACTUALLY REDUCED THE INVENTION OF THE COUNT TO PRACTICE PRIOR TO THE EARLIEST DATE PROVEN BY HOLDEMAN ET AL., SHINDELAR HAD, DUE TO AN UNEXCUSED 29 MONTH DELAY IN FILING, SUPPRESSED OR CONCEALED THE INVENTION WITHIN THE MEANING OF 35 USC 102(G) AND THEREFORE LOST HIS RIGHT TO A PATENT AS AGAINST HOLDEMAN ET AL.

THE COURT FOUND THAT SHINDELAR ACTUALLY REDUCED THE INVENTION TO PRACTICE IN JANUARY 1973. HOWEVER, THE SHINDELAR APPLICATION WAS NOT FILED UNTIL JUNE 11, 1975, APPROXIMATELY TWO YEARS AND FIVE MONTHS LATER. HOLDEMAN ET AL. FILED THEIR APPLICATION ON JUNE 9, 1975 AND RELIED SOLELY ON THEIR FILING DATE FOR PRIORITY.

SHINDELAR MADE AN INVENTION DISCLOSURE TO HIS PATENT ATTORNEY IN JANUARY 1973 AND IT WAS DOCKETED IN ACCORDANCE WITH HIS EMPLOYER'S STANDARD PRACTICE. THERE WAS A DISCUSSION WITH THE PATENT ATTORNEY AND A PRIOR ART PATENT SEARCH IN JANUARY 1974. NO ADDITIONAL EVIDENCE WAS INTRODUCED TO SHOW ACTIVITY ON BEHALF OF SHINDELAR PRIOR TO HIS FILING DATE, NOR WAS THERE EVIDENCE OF ANY PATENT OR COMMERCIAL ACTIVITY KNOWN TO SHINDELAR OR HIS ATTORNEY TO SPUR THEM TO PROCEED

WITH THE APPLICATION PREPARATION AND FILING. HOWEVER, IT WAS SHOWN THAT SHINDELAR'S PATENT ATTORNEY WAS HEAVILY INVOLVED WITH HIS PROSECUTION DOCKET AND LITIGATION MATTERS AND THAT HE NORMALLY TOOK UP THE INVENTION DISCLOSURES FOR FILING IN THE ORDER IN WHICH THEY WERE RECEIVED. THUS, THE DELAY IN FILING THE SHINDELAR APPLICATION WAS DUE TO THE ATTORNEY'S HEAVY WORKLOAD.

IN SPITE OF EVIDENCE THAT, THROUGHOUT THE DELAY PERIOD, THERE WAS ALWAYS AN INTENT TO FILE THE PATENT APPLICATION BY SHINDELAR AND HIS ATTORNEY, THE COURT HELD, AS A MATTER OF LAW, SHINDELAR HAD SUPPRESSED OR CONCEALED THE INVENTION WITHIN THE MEANING OF 35 USC 102(G).

CITING HORWATH V. LEE, 564 F. 2D 948, 195 USPQ 701 (CCPA 1977) AND YOUNG V. DWORKIN, 489 F .2D 1277, 180 USPQ 388 (CCPA 1974), THE COURT EMPHASIZED THAT A SUPPRESSION OR CONCEALMENT ISSUE MUST BE CONSIDERED ON A CASE-BY-CASE BASIS AND THAT EACH SITUATION MUST BE CONSIDERED ON ITS OWN PARTICULAR SET OF FACTS.

REFERRING TO HORWATH V. LEE THE COURT STATED:

"SPEAKING FOR A UNANIMOUS COURT IN HORWATH V. LEE, CHIEF JUDGE MARKEY NOTED THAT 'THE LINCHPIN OF THE PATENT SYSTEM -- EARLY PUBLIC DISCLOSURE --* * * IS FOSTERED BY THE 35 USC 102(G) CODIFICATION OF EXISTING LAW' (564 F. 2D AT 950, 195 USPQ AT 703)" AND WENT ON TO STATE:

"WHEN AN INVENTOR ACTUALLY REDUCES TO PRACTICE AN INVENTION, PUBLIC POLICY DICTATES THAT IF HE WOULD HAVE THE BENEFITS OF THE PATENT SYSTEM VIS-A-VIS

> RIVAL INDEPENDENT INVENTORS HE MUST FILE HIS APPLICATION FOR PATENT PROMPTLY * * *, THE THEORY IS NOT FORFEITURE, ESTOPPEL, OR OTHER LEGAL RULE BY WHICH ONE IS DEPRIVED OF A PROPERTY RIGHT; IT IS THE SIMPLE RULE THAT THE PROPERTY RIGHT SHALL RESIDE IN THE SECOND INVENTOR WHO DISCLOSED AND NOT IN THE FIRST INVENTOR WHO CONCEALED, I.E., THE LAW PREFERS AND WILL REWARD EARLIER DISCLOSURE OVER EARLIER INVENTION. SEE RICH, J., CONCURRING IN YOUNG V. DWORKIN, SUPRA, (564 F. 2D AT 950, 195 USPQ AT 704, EMPHASIS ADDED.)"

IN SHINDELAR THE COURT FURTHER STATED:

"AS THIS COURT HAS STATED REPEATEDLY, THOUGH THERE IS NO LAW REQUIRING AN INVENTOR TO APPLY FOR A PATENT OR TO APPLY WITHIN ANY PARTICULAR TIME, 'ONE WHO DELAYS FILING HIS APPLICATION DOES SO AT THE PERIL OF A FINDING OF SUPPRESSION OR CONCEALMENT DUE TO THE CIRCUMSTANCES SURROUNDING THE DELAY.' SEE, FOR EXAMPLE, YOUNG V. DWORKIN, 489 F. 2D AT 1281, 180 USPQ AT 391, AND CASES CITED THEREIN.

AS IS STATED IN PEELER V. MILLER, SUPRA NOTE 8:

> A DELAY (BETWEEN REDUCTION TO PRACTICE AND FILING OF AN APPLICATION) MAY BE OF NO LEGAL CONSEQUENCE (UNDER 35 USC 102(G)) BECAUSE IT IS NOT LONG ENOUGH. OR THE DELAY MAY BE EXCUSED BY ACTIVITIES

OF THE INVENTOR OR HIS ASSIGNEE DURING THE DELAY PERIOD. * * * THERE MAY BE OTHER FACTORS, BUT * * * THE UNREASONABLE LENGTH OF A DELAY MAY (EMPHASIS IN ORIGINAL) BE AMPLE CIRCUMSTANCE IN ITSELF (EMPHASIS ADDED) TO FIND SUPPRESSION. (535 F. 2D AT 655, 190 USPQ AT 123.)"

THE COURT REMARKED AS FOLLOWS IN SHINDELAR:

"THUS, IN INTERFERENCE SITUATIONS INVOLVING ANOTHER PARTY WHO WAS FIRST TO FILE AN APPLICATION WITH THE PTO, SUPPRESSION OR CONCEALMENT MAY BE FOUND WHEN ONE IS NOT DISCLOSING OR ACTING TO DISCLOSE THE INVENTION TO THE PUBLIC OR TO THE PTO IN A PATENT APPLICATION WHERE THE FAILURE TO DISCLOSE IS UNEXCUSED.

IN OUR OPINION, THE TWO YEAR AND FIVE MONTH DELAY FROM THE TIME THE INVENTION WAS ACTUALLY REDUCED TO PRACTICE AND AN INVENTION DISCLOSURE RECEIVED BY DEERE'S PATENT ATTORNEY AND THE TIME DEERE FILED THE PATENT APPLICATION IS UNREASONABLY LONG IN AN INTERFERENCE WITH A PARTY WHO FILED FIRST."

THUS, THE COURT IN SHINDELAR HELD THAT THE PATENT ATTORNEY'S WORKLOAD WILL NOT PRECLUDE A HOLDING OF UNREASONABLE DELAY, NOR WILL A SHOWING OF INTENT TO FILE -- SOMEDAY -- NEGATIVE A HOLDING OF SUPPRESSION.

THE COURT DID STATE THAT A PERIOD OF APPROXIMATELY THREE MONTHS COULD BE EXCUSED - SINCE THIS SEEMED A REASONABLE TIME REQUIRED TO PREPARE A PATENT APPLICATION. HOWEVER, THE COURT CAUTIONED THAT ANY ATTEMPT TO ESTABLISH A RULE THAT A CERTAIN SPECIFIED LENGTH OF TIME IS PER SE UNREASONABLE IS CONTRARY TO THE PREVIOUS HOLDINGS OF THE COURT.

SUBSEQUENT TO THE SHINDELAR V. HOLDEMAN ET AL. DECISION, THE PTO BOARD OF PATENT INTERFERENCES HELD IN KLUG V. WOOD (2/13/81) THAT A 26 MONTH DELAY FROM REDUCTION TO PRACTICE TO FILING WAS PRIMA FACIE UNREASONABLE AND RAISED AN INFERENCE OF INTENT TO SUPPRESS THE INVENTION. EVIDENCE OFFERED BY THE JUNIOR PARTY TO OVERCOME THE INFERENCE WAS NOT CONVINCING, PARTICULARLY IN THAT THERE WAS NO SUPPORT FOR THE CONTENTION THAT IT TOOK 16 1/2 MONTHS FOR HIS ATTORNEY TO PREPARE THE PATENT APPLICATION.

FROM THE ABOVE IT IS CLEAR THAT THE CCPA IS DEMANDING QUICKER ACTION ON THE PART OF INVENTORS AND PATENT ATTORNEYS IN ORDER TO AVOID OR OVERCOME AN INFERENCE OF SUPPRESSION OR CONCEALMENT UNDER 35 USC 102(G) IN AN INTERFERENCE SITUATION. AN UNEXPLAINED 26 MONTH DELAY IN FILING WAS HELD TO BE UNREASONABLE IN KLUG, AND THE CCPA, BY WAY OF DICTUM, HAS STATED THAT THREE MONTHS IS ADEQUATE TIME FOR A PATENT ATTORNEY TO PREPARE A PATENT APPLICATION AFTER RECEIVING AN INVENTION DISCLOSURE.

AS NOTED ABOVE, 35 USC 102(G) BANS A PATENT WHERE "BEFORE THE APPLICANT'S INVENTION THEREOF THE INVENTION WAS MADE IN THIS COUNTRY BY ANOTHER WHO HAD NOT ABANDONED, SUPPRESSED OR CONCEALED IT."

35 USC 119 PROVIDES THAT CERTAIN APPLICATIONS FIRST FILED IN A FOREIGN COUNTRY ARE ENTITLED TO THE BENEFIT OF THE EARLIER FILING DATE IN THE FOREIGN COUNTRY. HOWEVER, 35 USC 104 PROVIDES THAT AN APPLICANT FOR A PATENT MAY NOT ESTABLISH A DATE OF INVENTION IN PTO PROCEEDINGS BY REFERENCE TO ACTIVITIES IN A FOREIGN COUNTRY, EXCEPT AS PROVIDED IN SECTION 119. THEREFORE, WHEN AN INVENTION IS MADE ABROAD, WORK PERFORMED OUTSIDE THE UNITED STATES GENERALLY CANNOT BE USED FOR INTERFERENCE PURPOSES TO ESTABLISH A DATE OF INVENTION EARLIER THAN THE FOREIGN FILING DATE UNDER SECTION 119. THEREFORE, OUR JAPANESE FRIENDS, FOR THE MOST PART, WILL RELY UPON THEIR PRIORITY DATE UNDER THE PARIS CONVENTION. WHILE IT IS MAINLY UNITED STATES INVENTORS WHO ARE AFFECTED BY THE ABOVE EVOLUTION IN THE LAW OF INTERFERENCES, ATTORNEYS FOR JAPANESE COMPANIES MAY BECOME MORE CONCERNED WITH THIS CHANGE IN THE LAW OF INTERFERENCES DUE TO THE GROWING JAPANESE INVESTMENT IN THE UNITED STATES.

IN 1966 THE PRESIDENT'S COMMISSION ON THE PATENT SYSTEM RECOMMENDED THAT THE UNITED STATES PATENT LAW BE CHANGED TO INSTITUTE A FIRST TO FILE SYSTEM AND TO ABOLISH THE PRESENT ONE YEAR GRACE PERIOD. THE COMMISSION'S RECOMMENDATION HAS YET TO BE ENACTED INTO LAW BY CHANGING THE STATUTE, BUT THE COURTS HAVE BEEN ACCOMPLISHING THE SAME THING BY INTERPRETATION OF THE PRESENT STATUTE. A NUMBER OF UNITED STATES PATENT PRACTIONERS HAVE CRITICIZED BOTH THE COMMISSION'S RECOMMENDATION AND THE RECENT COURT DECISIONS ON THE BASIS THAT THERE WILL BE LESS DEVELOPED INVENTIONS AND LESS WELL PREPARED PATENT APPLICATIONS. HOWEVER IT MAY BE ACCOMPLISHED, IT APPEARS THE UNITED STATES IS INDEED TRENDING TOWARD A FIRST TO FILE SYSTEM.

BASED UPON THE DICTA IN SHINDELAR V. HOLDEMAN, THE UNITED STATES MAY BE ONLY THREE MONTHS AWAY FROM A FIRST TO FILE SYSTEM: HOW LONG A PERIOD FROM REDUCTION TO PRACTICE TO FILING IS TOO LONG? OBVIOUSLY, IF THE COURTS MOVE TO THE THREE MONTH GUIDELINE SET FORTH BY THE CCPA IN SHINDELAR, OR IF SUCH AN EXCUSABLE DELAY PERIOD IS FURTHER SHORTENED, THERE WILL BE MANY PRACTICAL PROBLEMS WHICH WILL ARISE FOR INVENTORS AND PATENT ATTORNEYS AND EXTENSIVE REVISIONS WILL BE REQUIRED IN UNITED STATES PATENT PRACTICE. ADDITIONALLY, SUCH A RULING MIGHT WELL BE CONSIDERED INCONSISTENT WITH THE ONE YEAR GRACE PERIOD PRESENTLY PERMITTED BY 35 USC 102(B).

ADDENDUM

FOLLOWING THE PREPARATION OF THIS PAPER, I CAME ACROSS A RECENT DECISION BY THE DISTRICT COURT FOR THE NORTHERN DISTRICT OF INDIANA WHICH AFFIRMED A DECISION OF THE BOARD OF PATENT INTERFERENCES HOLDING THAT

> " TO AMOUNT TO A LOSS OF RIGHT TO A PATENT IN FAVOR OF A LATTER INVENTOR, SUPPRESSION OR CONCEALMENT MUST BE DELIBERATE OR INTENTIONAL. HOWEVER, EXCESSIVE OR UNREASONABLE DELAY GIVES RISE TO AN INFERENCE OF INTENT TO SUPPRESS OR CONCEAL, AND THE BURDEN SHIFTS TO THE FIRST INVENTOR TO EXPLAIN THE DELAY BY SHOWING THAT THERE WAS NO INTENT TO SUPPRESS OR CONCEAL. DELAY MAY BE EXCUSED BY ACTIVITIES OF THE INVENTOR OR HIS ASSIGNEE DURING THE DELAY PERIOD. ACTIVITY DIRECTED TOWARD PERFECTING AN INVENTION JUSTIFIES DELAY IN FILING A PATENT APPLICATION." PIHER S.A. V. CTS CORP., 210 USPQ 806.

IN THE ABOVE INTERFERENCE IT WAS ARGUED THAT A TWENTY-TWO MONTH DELAY FROM ACTUAL REDUCTION TO PRACTICE BY THE JUNIOR PARTY UNTIL HIS FILING DATE CONSTITUTED SUPPRESSION OR CONCEALMENT OF THE INVENTION. THE BOARD FOUND NO EVIDENCE TO INDICATE

ANY SPECIFIC INTENT BY THE JUNIOR PARTY TO SUPPRESS OR CONCEAL THE INVENTION AND HELD THAT THE TWENTY-TWO MONTH DELAY WAS SUFFICIENTLY JUSTIFIED BY EVIDENCE ESTABLISHING ACTIVITY DIRECTED TO FURTHER PERFECTING THE INVENTION AND PREPARING HIS PATENT APPLICATION. INTERESTINGLY, IN CONTRAST TO THE STATEMENT IN SHINDELAR, THE COURT DID NOT FIND SIX MONTHS TO BE AN UNJUSTIFIED TIME FOR AN ATTORNEY TO PREPARE THE PATENT APPLICATION.

Actual conditions of Organization and Function of Patent Division in Japanese Companies

PIPA Japanese Group
Committee No. 1
Katsuhiko Takahashi

This paper roughly guides the actual conditions of organization and function of patent division in Japanese companies.

The annual number of applications is large in Japan. These large number of applications are supported by the organization and function of patent division.

This paper reports the data of patent work by such organization and function of patent division.

Actual Conditions of Organization and Function of Patent Division in Japanese Companies

As is apparent from the annual number of applications shown in Table 1, a large number of applications have been filed in Japan. Since 1974, the number of patent and utility model applications has exceeded 300,000 annually and is currently approaching 400,000. Thus, Japan is Number One in the world in the number of applications being filed annually in one nation.

Therefore, we cannot discuss the organization and function of patent division in Japanese companies without taking such a suprisingly large number of applications into consideration.

I. Organization of Patent Division

A. Position of Patent Division in Organization of Japanese Company

Table 2 shows a position of patent division in the organization of a company classified by industry.

In metal and machinery group* , the number of the companies in which patent division belongs to engineering division, development division or administrative division is approximately equal to that of the companies in which patent division is independent of other divisions. (* This group consists of transportation·power machine, machinery·tool, iron and steel·metal, and construction.)

In electrical group* , the largest number of companies have patent division independent of other divisions, followed by the companies where patent division belongs to engineering division or to administrative division. (* This group consists of heavy electric, light electric, and electric wire.)

In chemical group* , most of the companies have either patent division which belongs to development division or patent division independent of other divisions, followed by the companies in which patent division belongs to engineering division, planning division or administrative division.(* This group consists of general chemistry, organic chemistry, rubber·plastics·paint·ink, oil·petrochemistry, etc., fiber, pharmacy, and food·cosmetic.)

In Japan at present, there are few companies in which patent division belongs to legal division or general affais division.

B. Disposition of Patent Staff

Table 2 shows the disposition of the staff of patent division in each company.

In any industrial group, most of the companies centralize the staff of patent division at the head office, followed by the companies in which part of the staff of patent division is centralized and part of the staff is decentralized. There are few companies in which all of the staff are decentralized to various divisions.

C. Numbers of Patent Staff and Inventors

The companies of electrical group have the largest average number of 23.3 patent staff members, followed by the average number of 14.8 staff members in metal and machinery group. The smallest average number of the staff is 11.4 in chemical group. The average number of inventors is 1,212 in electrical group,828 in metal and machinery group and 361 in chemical group.

Thus, the number of inventors per patent staff member is 32 in chemical group, which is the smallest number, followed by 52 in electrical group. The largest number is 56 in metal and

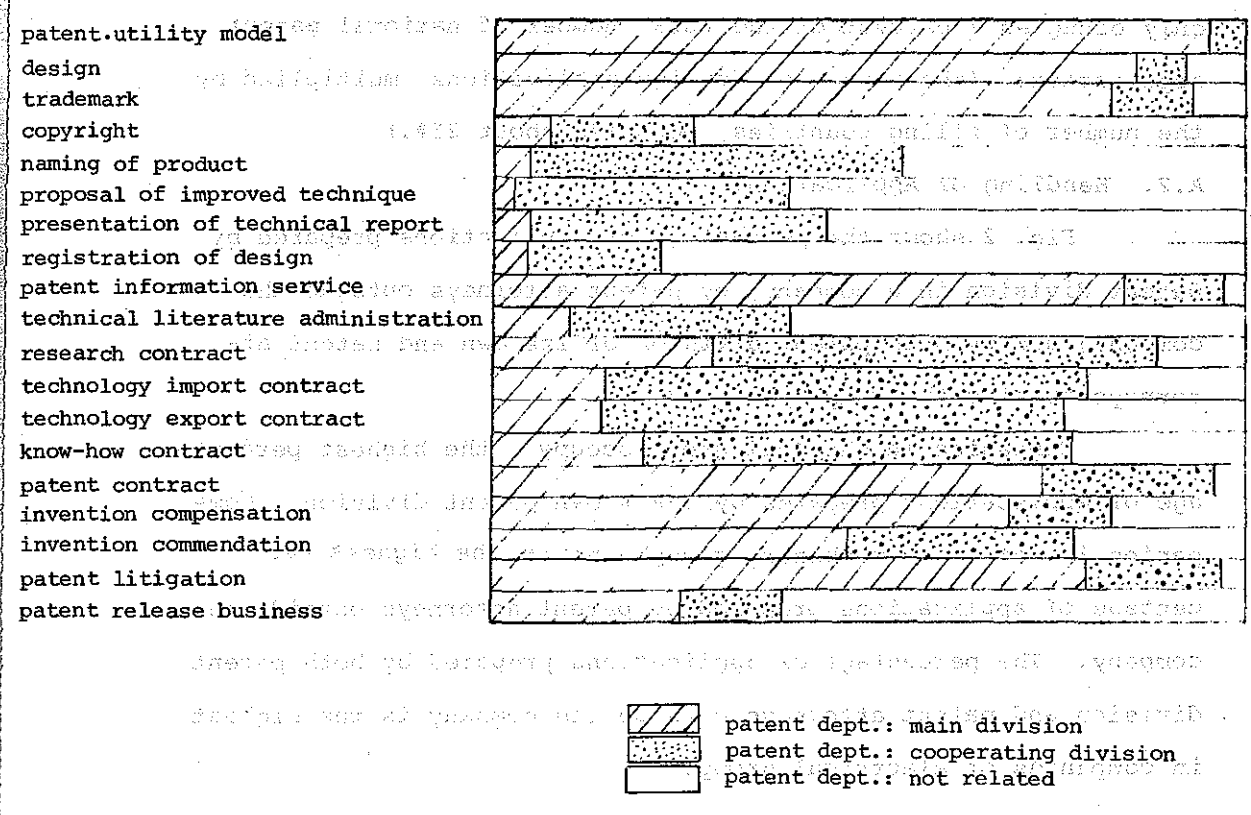
machinery group.

The number of patent and utility model applications per patent staff member is 15.9 in chemical group, which is the smallest of all, followed by 78.7 in electrical group. The largest number is 88 in metal and machinery group.

II. Function of Patent Division in Japanese Companies

Fig. 1 shows the results of investigation concerning to what degree patent division takes part in each of 19 kinds of work in patent division. The answer was selected from among patent division functioning as main division, patent division functioning as cooperating division and patent division taking no participation. Since there is no significant differences among industries and industrial groups, the results are shown based on the total of companies over the whole industry.

Fig. 1 Work of Patent Division and Its Share



Referring to Fig. 1, in more than 50% of the companies, patent division functions as main division for the following seven items: patent·utility model; design; trademark; patent information service; patent contract; invention compensation and patent litigation.

A. Management of Applications

A.1. The annual number of patent and utility model applications

Table 3 shows the average number of applications for a year of 1976 per company in each industry in Japan.

The electrical group is at the top of all the industrial groups in the average numbers of both patent and utility model applications, followed by metal and machinery group and then by chemical group.

The same is true for foreign applications, but the number of foreign applications is quite small as compared with that of national applications. The number of foreign patent applications only occupies 7 percent of the total number of national patent applications. (The number of foreign applications, multiplied by the number of filing countries, occupies about 25%.)

A.2. Handling of Applications

Fig. 2 shows the percentage of applications prepared by patent division in a company, by patent attorneys outside the company, and by both patent division of its own and patent attorneys outside the company.

Companies in chemical group occupy the highest percentage of applications prepared by their own patent division. Companies in metal and machinery group exhibit the highest percentage of applications prepared by patent attorneys outside the company. The percentage of applications prepared by both patent division and patent attorneys outside the company is the highest in companies of electrical group.

Fig. 2

Percentage of Preparation between Inside and Outside the Company

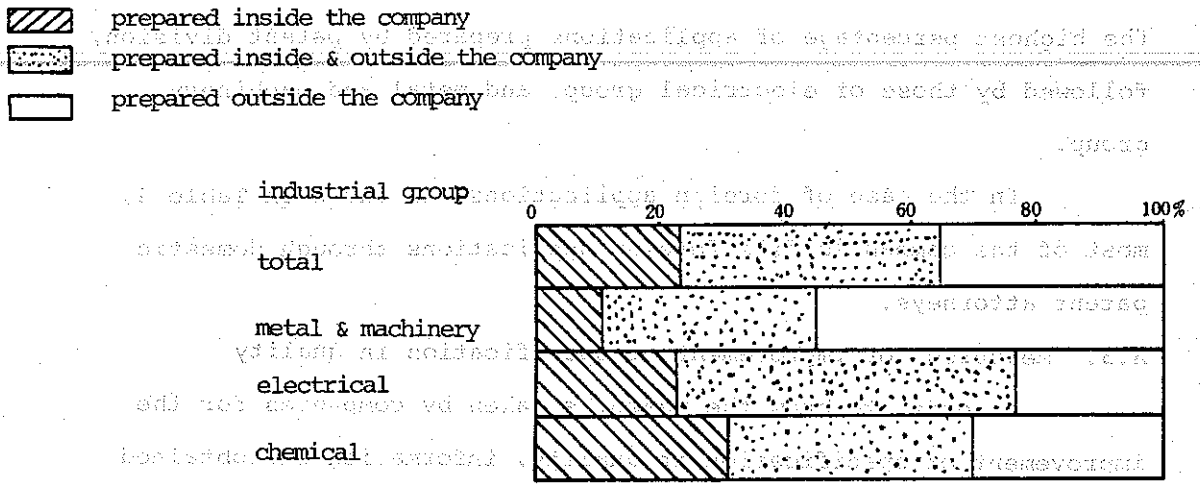


Fig. 3

Percentage of Preparation by Patent Attorneys Outside the Company

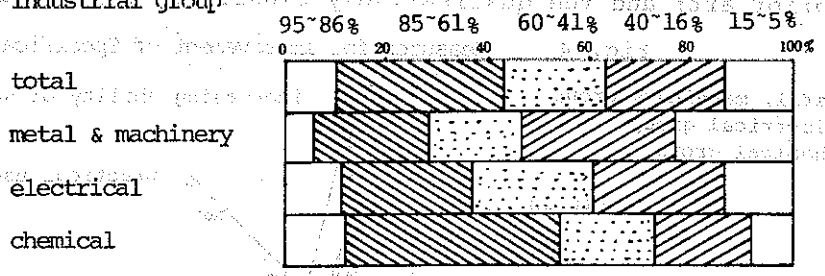


Fig. 3 shows the rate of dependence on patent attorneys outside the company concerning the companies where applications are prepared by their own patent division as well as patent attorneys outside the company. Companies of chemical group exhibit the highest percentage of applications prepared by patent division, followed by those of electrical group, and metal and machinery group.

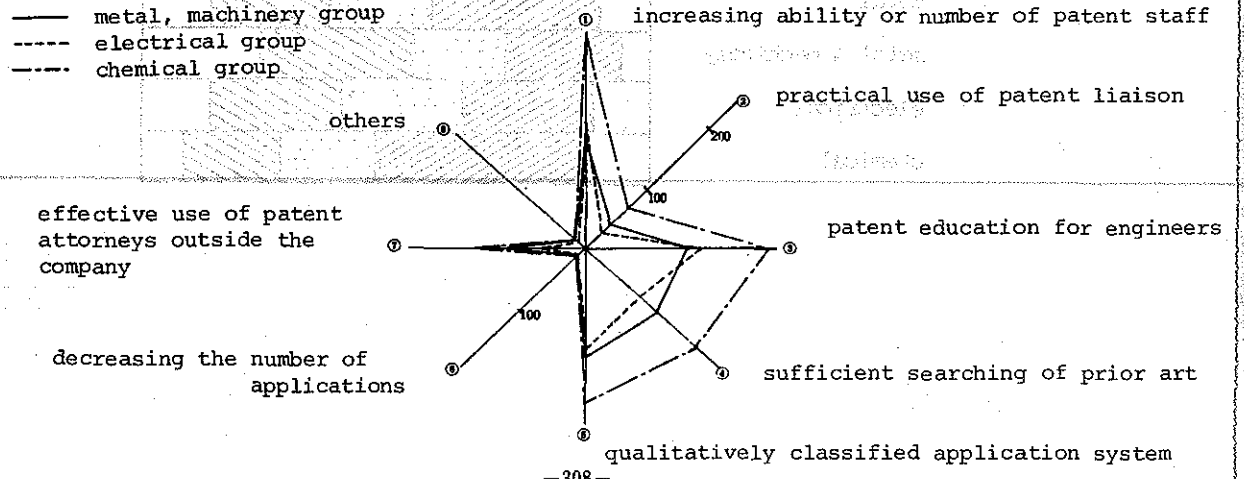
In the case of foreign applications, as shown in Table 4, most of the companies file foreign applications through domestic patent attorneys.

A.3. Measures for improvement of specification in quality

In order to know the measures taken by companies for the improvement of specification in quality, information was obtained through questionnaire in which three main measures were selected by each company from among several items. In totaling, the first, second and third measures selected were given three, two and one points, respectively.

As shown in Fig.4, the companies in any industrial group take the following measures for the improvement of specification in quality: increasing in ability and number of patent staff members; patent education for engineers; sufficient searching of the prior art; and the qualitatively classified application system.

Fig. 4 Measures for Improvement of Specification



B. Preservation of Patent Right

B.1. Rate of abandonment

Table 5 shows the percentage of the number of patent rights abandoned in 5 years from 1972 to 1976 to the whole number of patent rights. Most of the companies irrespective of the industrial group have the percentage of abandonment of less than 5% for either national or foreign patent rights. Unexpectedly, there are a number of companies in chemical group that have the percentage of abandonment of more than 20%.

B.2. Checking of payment of annuities

As shown in Table 6, a file or ledger is the most popular tool in checking annuities, which is employed in as much as 64% of the whole companies. The next popular tool is a card which is adopted in 19% of the companies. In electrical group, a computer is adopted in 15% of the companies, which is a higher percentage than in other industrial groups.

C. Evaluation of Invention and Patent Right

An invention is evaluated during the period from filing of an application to the grant of a patent right, while a patent is evaluated in preserving the patent right or in giving a reward for the practice of the patent right.

As shown in Table 7, about 70% of companies in metal and machinery group possess a standard of evaluation. Subsequently, 65% of companies in electrical group and 48% of companies in chemical group have a standard of evaluation, the latter showing a lower percentage as compared with those in other industrial groups.

The quantitatively classified application system based on the evaluation of invention is adopted by only about 20% of the companies in any industrial group, as shown in Table 7.

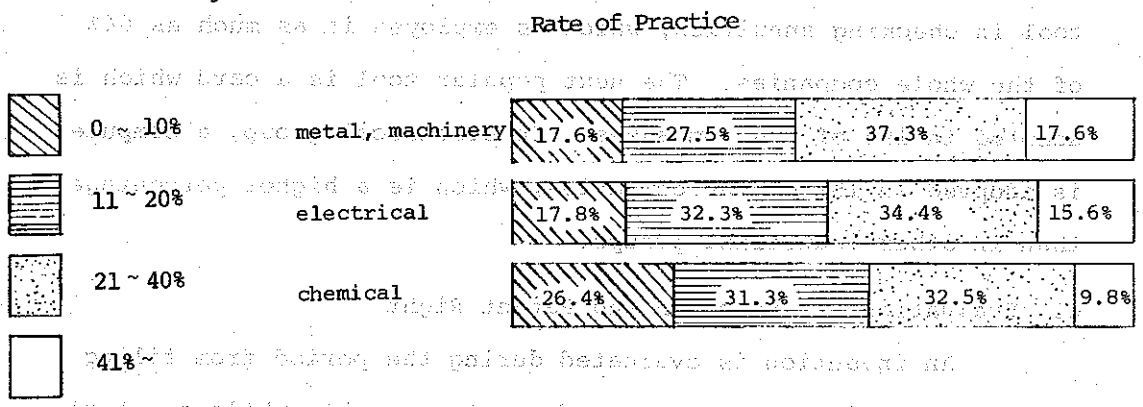
D. Practice of Patent Right

D.1. Practice of patent right and rate of practice

It is desirable to effectively practice patent right in each company and sufficiently utilize them from the standpoint of patent business. Fig. 5 shows the rate of practice in each industrial group based on the classification of 0-10%, 11-20%, 21-40% and more than 41%.

Metal and machinery group indicates the highest rate, followed by electrical group. Chemical group shows the lowest rate.

Fig. 5

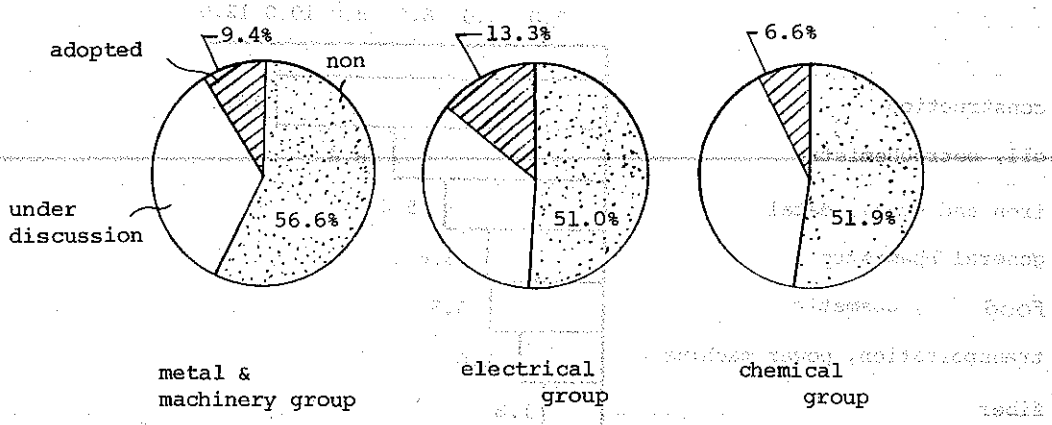


D.2. Patent Business

Fig. 6 shows the percentage of companies possessing a positive policy of patent business and companies considering such policy in each industrial group.

In electrical group, the percentage of the companies possessing a positive policy occupies 13.3%, which is the highest one, followed by 9.4% in metal and machinery group. Chemical group shows the lowest percentage of 6.6%. As a whole, the percentage of companies possessing the positive policy is low and such companies seem to be limited to big enterprises.

Fig. 6 Positive Policy on Patent Business



D.3. Licensing

Fig.7 shows the percentage of the number of licenses with royalties to the whole number of the preserved patent rights per company in Japan in each industry. According to Fig. 7, construction is ranked at the highest percentage, followed by oil·petrochemistry, iron and steel·metal, general chemistry, food·cosmetic, and transportation·power machine in this order. However, the average percentage is as low as 1.7%.

E. Patent Liaison System

Fig.8 shows the results obtained through questionnaire to all companies as to whether patent liaison system is established or not and whether patent liaison activity, even if the system is not established, is taken or not.

30% of companies have a patent liaison system and take a liaison activity, and 37% of companies take a liaison activity although they do not have the established liaison system. As a whole, 67% of companies substantially take a patent liaison activity.

The percentage is doubled over what it was in the previous year (1973).

Fig. 7 Rate of Licensing

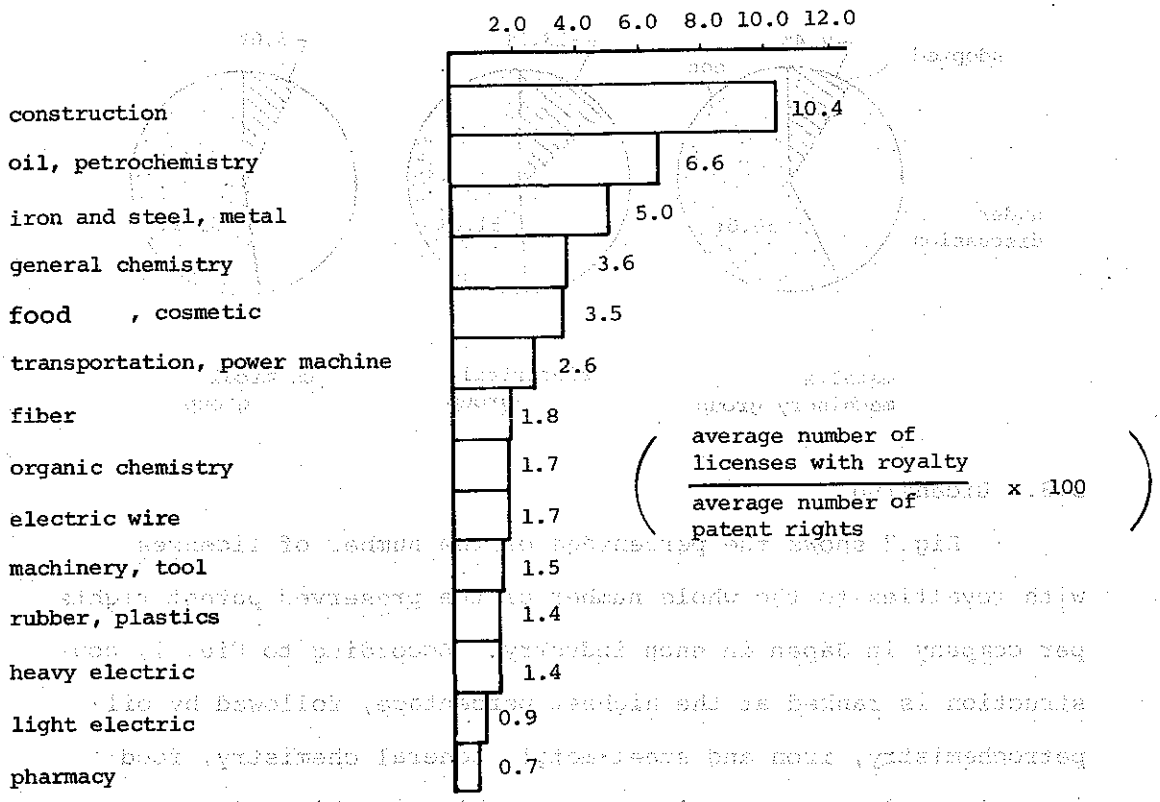
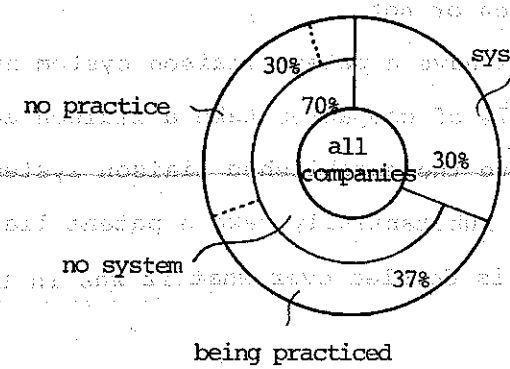


Fig. 8 Patent Liaison System



F. License Management

F.1. Participation of patent division in patent contract

Fig. 9 shows the degree (in percentage) of participation of patent division in giving and obtaining licenses for patent and know-how to and from Japanese and foreign companies. The percentage is shown as to patent division functioning as main division, patent division functioning as cooperating division and patent division taking no participation.

As is apparent from Fig.9, patent division in 50 to 60% of companies functions as main division in giving and obtaining licenses for patent to and from the Japanese companies. However, the percentage is reduced to about 30% as to licenses for patent to and from foreign companies. With regard to know-how, the percentage is further decreased.

F.2. Current trends in payment and income of royalties

Fig. 10 illustrates the trends in payment and income of royalties to and from Japanese companies, foreign companies and the total thereof. The percentage is shown as to decrease, no substantial change and increase from the zero payment or income in each industrial group.

G. Compensation for Invention

Compensation for inventions is effective in encouragement of inventions and promotion of inventive activity. The actual conditions as to how a company deals with compensation for inventions will be described below.

Fig. 9

Participation in Patent Contract (Percentage)

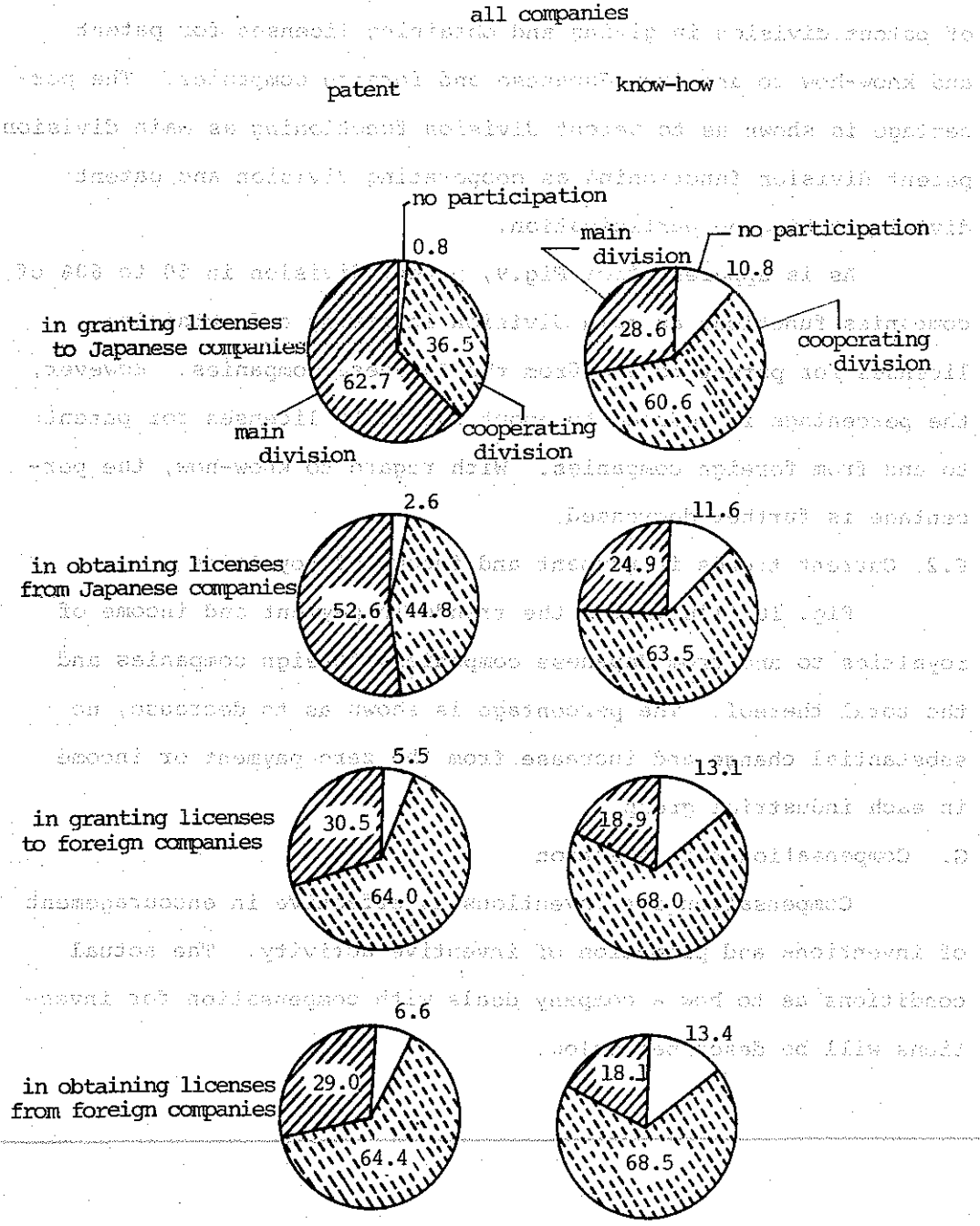
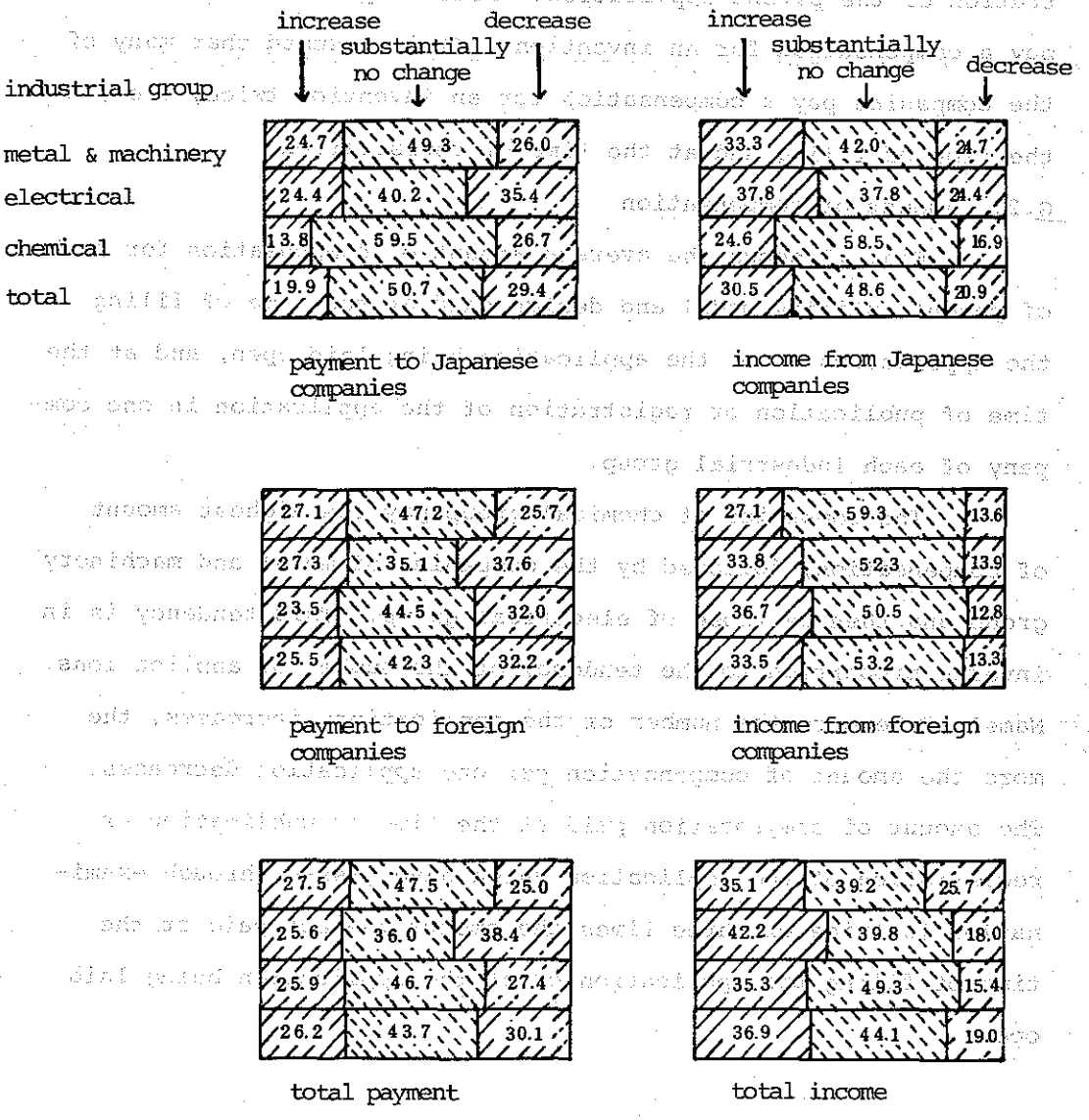


Fig. 10

Royalties (Percentage)



G.1. Time of compensation

Table 8 shows the time of compensation for inventions.

78.5% of the companies pay a compensation for an invention at the time of filing the patent application or at the time of the patent application being laid open to the public, and 77.9% of the companies pay a compensation at the time of publication or registration of the patent application. Four companies out of five pay a compensation for an invention. It is assumed that many of the companies pay a compensation for an invention twice, i.e., at the time of filing and at the time of registration.

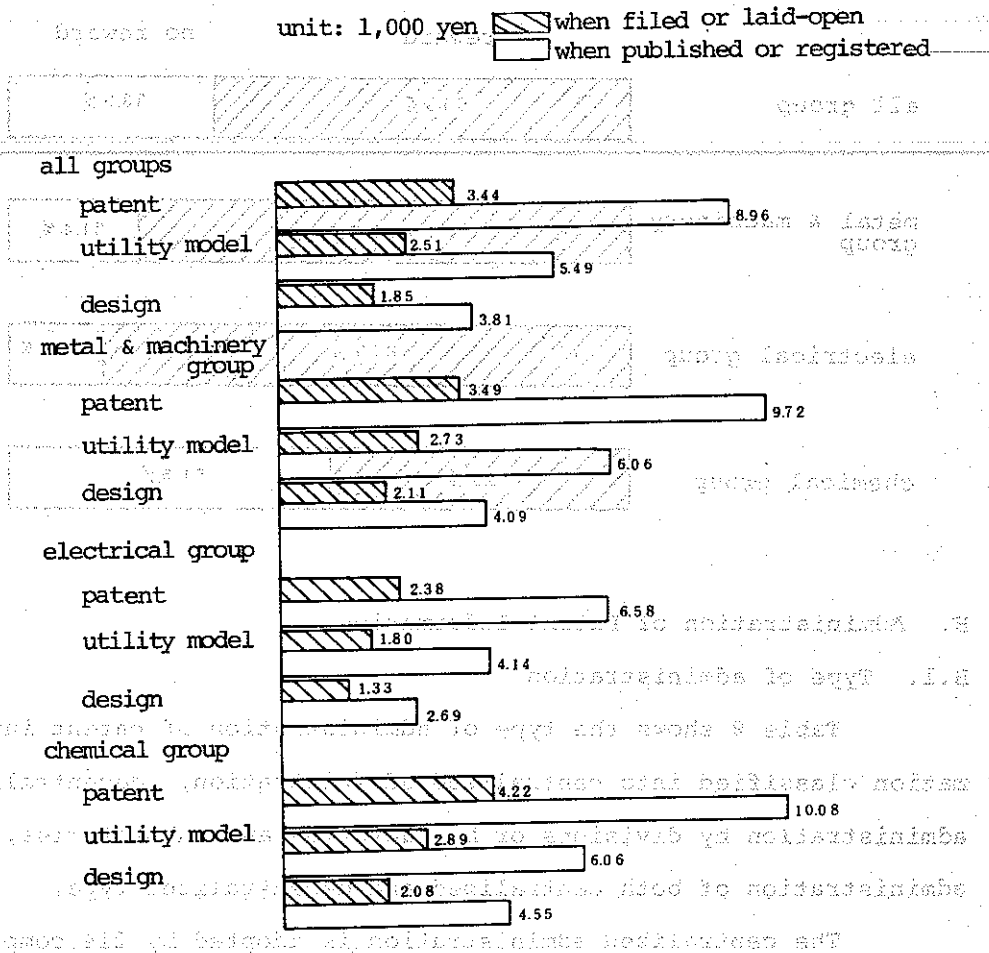
G.2. Amount of compensation

Fig. 11 shows the average amount of compensation for each of patent, utility model and design paid at the time of filing the application or of the application being laid open, and at the time of publication or registration of the application in one company of each industrial group.

The companies of chemical group pay the highest amount of compensation, followed by the companies of metal and machinery group and then by those of electrical group. This tendency is in inverse proportion to the tendency of the number of applications. Namely, the more the number of the applications increases, the more the amount of compensation per one application decreases. The amount of compensation paid at the time of publication or registration of the application which have passed through examination is twice or three times the amount thereof paid at the time of filing the application or of the application being laid open.

Fig. 11

Compensation for Invention

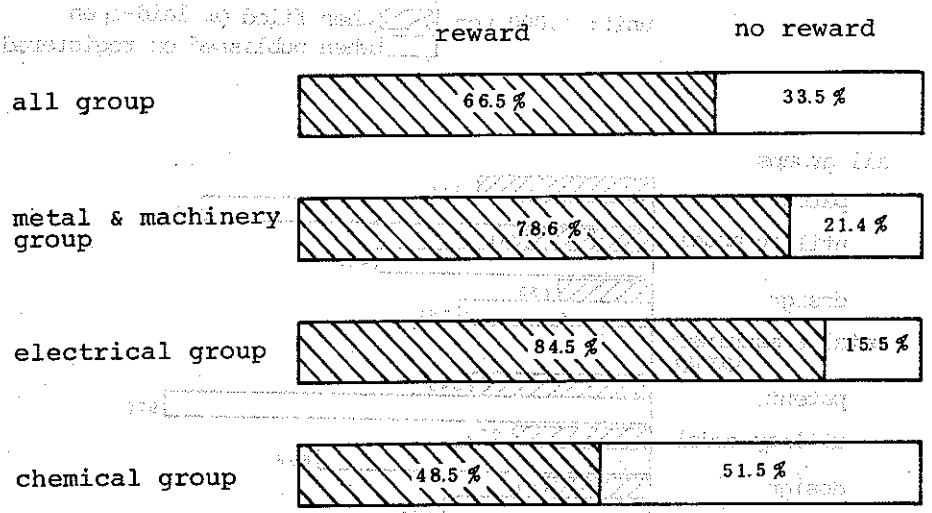


G.3. Reward for practice

Fig. 12 shows the results obtained through questionnaire as to reward for practice.

About two thirds of the companies give a reward for the practice of the patented invention. 80% or more of the companies of metal and machinery group and electrical group give a reward, while only 50% or less of the companies of chemical group give a reward.

Fig. 12
Reward for Practice



H. Administration of Patent Information

H.1. Type of administration

Table 9 shows the type of administration of patent information classified into centralized administration, decentralized administration by divisions or by factories and laboratories, and administration of both centralized and decentralized type.

The centralized administration is adopted by 214 companies which occupy 54%, and the decentralized administration by 38 companies which occupy 9.6% of the whole companies. The combined administration is adopted by 143 companies which occupy 36.1%.

H.2. Watching of patent information

Table 9 shows the result of investigation as to whether patent division watches the newest patent information (e.g. unexamined and examined published patent applications.)

The patent information is watched by patent division of 379 companies which occupy 96.7% of the whole. The companies

which do not watch the patent information amount to 13 companies which are only 3.3% of the whole.

H.3. Delivery service of patent information

Table 10 shows the type of service of delivering unexamined and examined published applications.

Most of the companies deliver such information by way of separate official gazettes. As to the unexamined published applications, there are a lot of companies which offer a service of providing their own processed material. As to the examined published applications, many companies provide both the commercial processed material and their own processed material. These processed materials will serve to reduce the volume of information to be delivered.

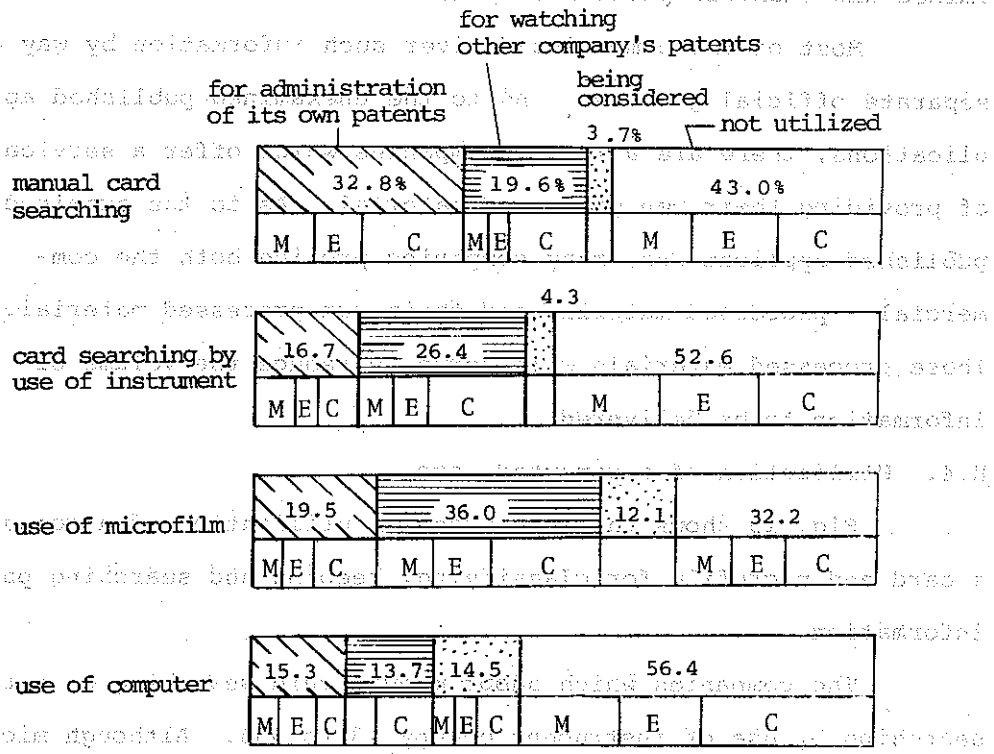
H.4. Utilization of a computer, etc.

Fig. 13 shows the percentage of utilization of a computer, a card and microfilm for classifying, keeping and searching patent information.

The companies which adopt manual card searching or card searching by use of instrument occupy 43 to 53%. Although microfilm is widely utilized, a computer is not yet widely used.

Fig. 13

Utilization of Computer, etc.



M; metal and machinery group

E; electrical group

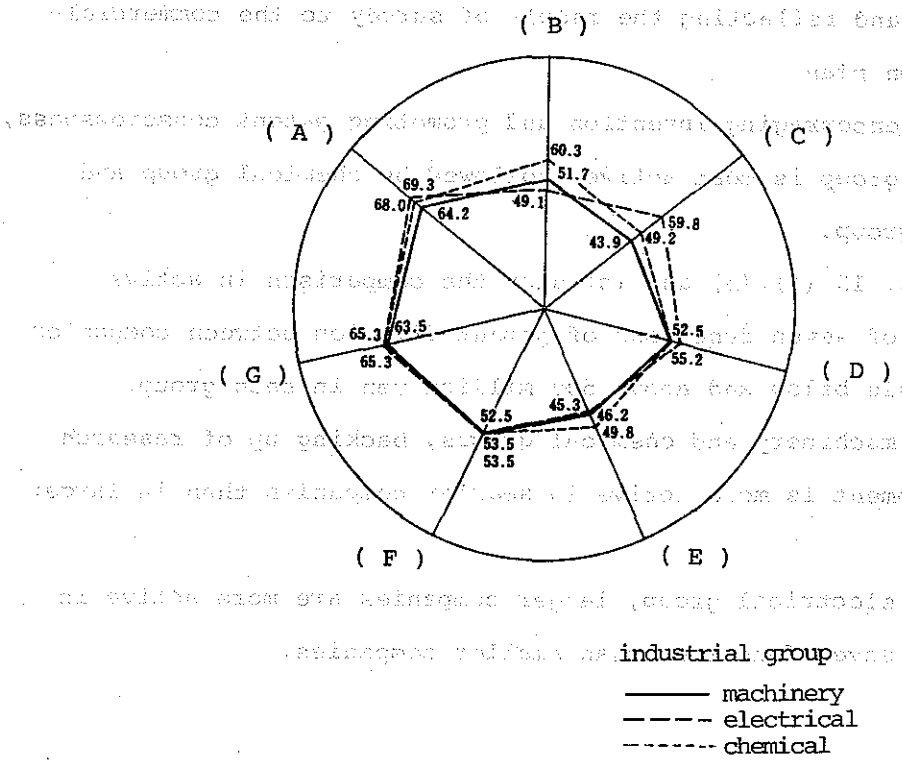
C; chemical group

III. Backing up of Research and Development

One of the important functions of patent division is to back up research and development. The work of patent division can be divided into the following seven functions: (A) searching and practical use of patent information; (B) backing up of research and development; (C) encouraging of invention and promotion of patent consciousness; (D) patent procurement; (E) preservation and practical use of patent rights; (F) handling of matters related to other companies; and (G) patent litigation and contract. (In Figs. 14 and 15, these items are denoted by (A) to (G).)

Fig. 14 shows the active conditions of seven functions of patent division in each of machinery group, electrical group and chemical group.

Fig. 14 Active Conditions of Functions of Patent Division



In backing up research and development, chemical group is most active, followed by machinery group and electrical group. The active condition of the function of backing up research and development has been decided based on the answers to the following questions.

(1) Grasp of trends of other companies and technology

a) searching the prior art and drawing up the patent map before research and development

b) searching trends of technology of own and other companies

c) forecasting the change of goods

(2) Promotion of research and development

a) supporting the establishment of targets of research and development

b) evaluating process and fruits of research and development from the patent side

c) surveying patent problems on deciding commercialization of goods and reflecting the result of survey to the commercialization plan

In encouraging invention and promoting patent consciousness, electrical group is most active, followed by chemical group and machinery group.

Fig. 15 (a),(b) and (c) show the comparison in active conditions of seven functions of patent division between companies with capitals below and above 500 million yen in each group.

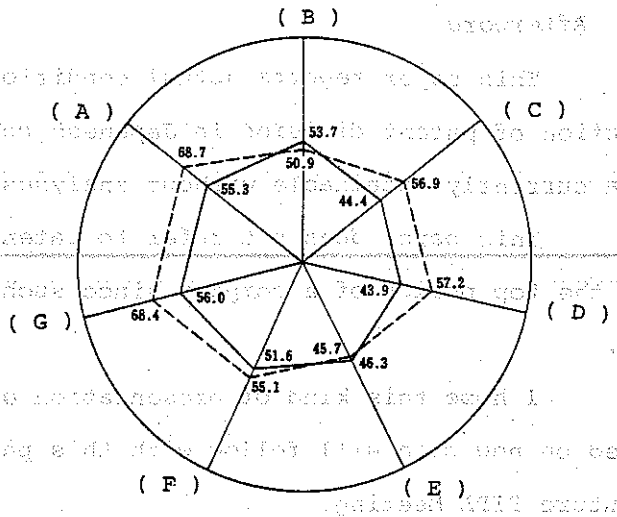
In machinery and chemical groups, backing up of research and development is more active in smaller companies than in larger companies.

In electrical group, larger companies are more active in all of the seven functions than smaller companies.

Fig. 15

Comparison of Active Conditions between Companies Classified by Capital

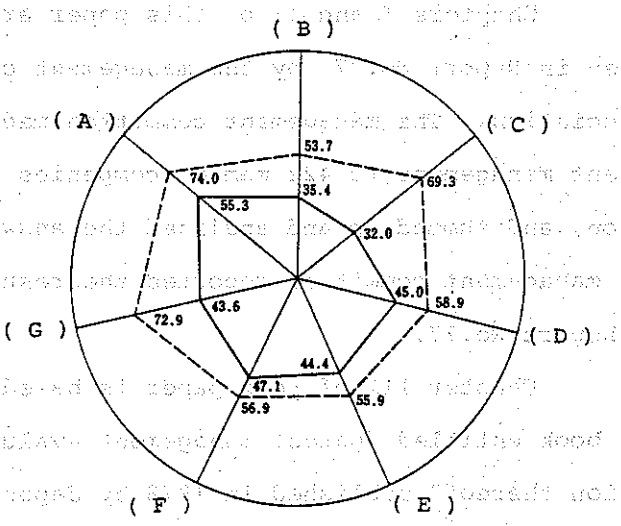
(a)



——— companies with capital below 500 million yen

- - - - companies with capital above 500 million yen (machinery group)

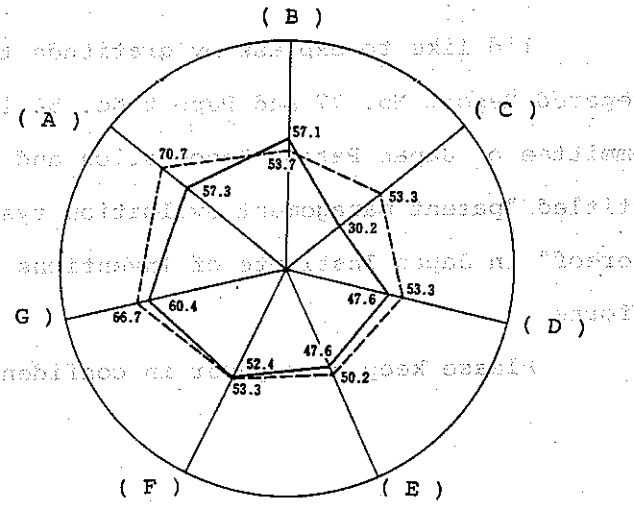
(b)



——— companies with capital below 500 million yen

- - - - companies with capital above 500 million yen (electrical group)

(c)



——— companies with capital below 500 million yen

- - - - companies with capital above 500 million yen (chemical group)

IV. Afterword

This paper reports actual conditions of organization and function of patent division in Japanese companies based on the data currently obtainable without analyses and comments.

This paper does not refer to patent functions as a whole nor the top policy of a company since such data are not obtainable now.

I hope this kind of presentation on patent management based on new data will follow with this paper as a first step in a future PIPA Meeting.

Chapters I and II of this paper are based on the data given in Report No.77 by the management committee of Japan Patent Association. The management committee made inquiries in 1977 about patent management to 422 member companies of Japan Patent Association, and summed up and analized the answers of 397 companies. The management committee reported the results of inquiries in 1978 as Report No.77.

Chapter III of this paper is based on the data given in the book entitled "patent management evaluation system and utilization thereof" published in 1978 by Japan Institute of Inventions and Innovations.

I'd like to express my gratitude to the members who prepared Report No. 77 and Report No. 54 in the management committee of Japan Patent Association and who editted the book entitled "patent management evaluation system and utilization thereof" in Japan Institute of Inventions and Innovations for their efforts.

Please keep this paper in confidence with care.

V. References

1. Report No.77 reported by the management committee of Japan Patent Association, 1978
2. Report No.54 reported by the management committee of Japan Patent Association, 1973
3. Patent Management Evaluation System and Utilization Thereof, Japan Institute of Inventions and Innovations, 1978
4. Annual Reports by Japanese Patent Office, 1974 and 1980

Table 1. Number of Applications in Japan

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
patent applications	105785 (27360)	130400 (29072)	144814 (29593)	149319 (27810)	159821 (24703)	161016 (25254)	161006 (25015)	166092 (24575)	174569 (23946)	191020 (25290)
utility model applications	122843 (1942)	148610 (1975)	147914 (1978)	157591 (1910)	180660 (1668)	178842 (1456)	179702 (1495)	183731 (1453)	185455 (1133)	191785 (1397)

( ) applications by foreigners

Table 2. Organization of Patent Division

	industry	position of patent division								disposition of patent staff			Average number of Members in Patent Dept.	Number of Inventors	Number of Patent and Utility Model Applications
		Research Division	Development Division	Engineering Division	Administrative Division	Planning Division	Legal Division	General Affairs Division	Independent of other Divisions Directly belong to Top Managers	Centralized	Decentralized	Centralized & Decentralized			
metal, machinery group	transportation power machine	3	8	6	13	2			6	17	5	5	18.5	989	561
	machinery tool	4	7	6	6	3		2	12	38	2	6	11.3	427	473
	iron and steel metal	2	3	9	1		1		2	4	2	13	20.1	1615	535
	construction		3	3	4								5.5	417	105
	total	9	21	24	24	5	1	2	20	59	9	24	14.8	828	484
electrical group	heavy electric		3	2	4	2		1	6	10	1	7	42.4	3187	2731
	light electric	5	7	19	11	6	1	3	24	48	4	13	19.7	867	783
	electric wire	1		1	2	1			3	6	1	1	14.1	591	494
	total	6	10	22	17	9	1	4	33	64	6	21	23.3	1212	1110
chemical group	general chemistry	2	7	4	4	7		1	7	76	4	27	7.5	253	84
	organic chemistry	2	6	2	2	3			11				13.0	441	152
	rubber, plastics, paint, ink		9	7	5	2			9				12.2	377	179
	oil, petro-chemistry, etc.	2	5	2	5	2		2	6				10.4	493	97
	fiber		8	7	1	1		3	2	16		8	16.4	447	133
	pharmacy	2	7		1	4	5	1	6	13	3	4	13.4	326	57
	food cosmetic	4	4	2	1	1	1	6	3	14		7	7.6	231	44
	total	12	46	24	19	20	6	13	44	119	7	46	11.4	361	121
	trading		1					1		4			6.5		25
	total	27	77	70	60	34	8	19	97	246	22	91	15.4	717	479

1973

Table 3. Average Number of Applications per Company in Japan in 1976

	industry	number of national applications		number of foreign applications (before multiplied by number of countries)		total number of foreign applications (after multiplied by number of countries)	
		patent	utility model	patent	utility model	patent	utility model
metal, machinery group	transportation power machine	219	342	27.8	0.2	77.3	0.7
	machinery tool	167	342	17.2	2.2	53.1	2.4
	iron and steel metal	325	210	14.5	0.9	66.7	2.9
	construction	61	44	2.6	0.0	6.1	0
	average	203.7	280.3	19.3	1.1	60.6	1.6
electrical group	heavy electric	146.5	1267	68.9	1.1	148.0	1.2
	light electric	346	437	16.4	1.6	67.4	2.2
	electric wire	281	213	6.3	0.0	20.9	0.0
	average	542.0	568.3	24.7	1.4	77.6	1.9
chemical group	general chemistry	67	18	5.3	0.1	21.8	0.3
	organic chemistry	138.1	14	18.4	0.0	103.2	0.0
	rubber, plastics, paint, ink	111	68	8.9	0.3	31.9	1.0
	oil, petro-chemistry, etc.	71	26	6.9	0.2	26.8	0.2
	fiber	78	55	10.9	0.1	46.8	0.1
	pharmacy	53	4	9.6	0.2	70.4	0.2
	food cosmetic	35	9	7.3	0.1	31.1	0.2
	average	92.4	28.3	9.5	0.2	47.1	0.3
	trading	25	0	0.5	0.0	0.5	0.0
	average	239.0	239.5	16.1	0.7	58.6	1.1

Table 4. Number of Applications Handled by Patent Attorneys Outside the Company

	industry	national applications				foreign applications			
		inside the company	mainly outside the company	both inside and outside	total	foreign attorney (directly)	domestic attorney	foreign and domestic attorneys	total
metal, machinery group	transportation power machine	1	22	15	38	0	30	4	34
	machinery tool	8	21	13	42	3	30	5	38
	iron and steel metal	2	9	7	18	1	17	0	18
	construction	0	8	2	10	0	9	0	9
	total	11	60	37	108	4	86	9	99
electrical group	heavy electric	3	5	10	18	0	12	5	17
	light electric	19	18	38	75	10	47	11	68
	electric wire	1	1	6	8	0	7	1	8
	total	23	24	54	101	10	66	17	93
chemical group	general chemistry	12	10	10	32	1	31	0	32
	organic chemistry	11	6	9	26	1	18	5	24
	rubber, plastics, paint, ink	7	11	14	32	1	24	3	28
	oil, petro-chemistry, etc.	3	10	11	24	2	21	0	23
	fiber	8	4	10	22	1	17	3	21
	pharmacy	12	8	5	25	4	15	6	25
	food cosmetic	3	7	12	22	2	17	2	21
	total	56	56	71	183	12	143	19	174
	trading	0	1	0	1	0	1	0	1
	total	90	141	162	393	26	296	45	367

Table 5. Percentage of Patent Right Abandonment

	industry	National				Foreign			
		below 5%	5 ~ 10 %	10 ~ 20 %	over 20 %	below 5 %	5 ~ 10 %	10 ~ 20 %	over 20 %
metal, machinery group	transportation power machine	19	4	3	3	12	6	3	0
	machinery tool	15	9	4	6	20	4	1	4
	iron and steel metal	10	2	3	0	5	3	4	1
	construction	5	0	1	0	2	0	1	0
	total	49	15	11	9	39	13	9	5
electrical group	heavy electric	5	4	6	2	3	6	1	2
	light electric	25	21	8	12	27	11	5	6
	electric wire	4	2	0	1	2	2	1	0
	total	34	27	14	15	32	19	7	8
chemical group	general chemistry	14	7	1	4	9	4	2	7
	organic chemistry	11	5	3	3	10	3	2	6
	rubber, plastics, paint, ink	17	6	3	3	15	2	1	3
	oil, petro-chemistry, etc.	14	8	0	0	13	3	1	1
	fiber	5	4	7	5	5	10	1	5
	pharmacy	8	4	7	5	10	6	1	6
	food cosmetic	12	2	1	0	7	1	1	1
	total	81	36	22	20	69	29	9	29
	trading	1	0	0	0	0	0	0	0
	total	165	78	47	44	140	61	25	42

Table 6. Tool of Annuity Administration

	industry	ledger	card			computer	others	mixed				organization outside the company
				manual selection	selection by instrument			ledger & card	ledger & card (manual)	ledger & card (instrument)	ledger & computer	
metal, machinery group	transportation power machine	23	5	2	0	4	0	0	1	1	1	1
	machinery tool	28	3	6	1	1	1	0	0	1	0	1
	iron and steel metal	15	0	3	0	0	0	0	0	0	0	0
	construction	9	0	1	0	0	0	0	0	0	0	0
	total	75	8	12	1	5	1	0	1	2	1	2
electrical group	heavy electric	9	2	0	0	4	1	1	0	0	1	0
	light electric	38	5	7	3	10	0	2	3	1	2	1
	electric wire	5	2	0	0	1	0	0	0	0	0	0
	total	52	9	7	3	15	1	3	3	1	3	1
chemical group	general chemistry	23	3	2	0	1	1	0	1	0	0	1
	organic chemistry	16	2	5	0	0	0	0	0	1	1	0
	rubber, plastics, paint, ink	19	3	3	1	3	0	0	1	1	0	1
	oil, petro-chemistry, etc.	16	1	5	0	0	1	0	0	0	0	1
	fiber	11	1	4	0	2	0	0	1	0	0	0
	pharmacy	17	1	3	0	1	1	1	0	2	0	0
	food cosmetic	12	0	2	1	1	1	0	1	0	0	2
	total	114	11	24	2	8	4	1	4	4	1	5
	trading	1	0	0	0	0	0	0	1	0		0
	total	242	28	36	6	28	6	4	9	7	5	8

Table 7. Evaluation Standard and Quantitatively Classified Application System

	industry	evaluation standard of invention or patent		quantitatively classified application system	
		provided	non	adopted	non
metal, machinery group	transportation power machine	26	11	4	28
	machinery tool	28	12	8	31
	iron and steel metal	14	3	8	9
	construction	4	5	0	9
	total	72	31	20	77
electrical group	heavy electric	15	3	4	13
	light electric	45	27	9	58
	electric wire	3	4	2	6
	total	63	34	15	77
chemical group	general chemistry	14	16	2	28
	organic chemistry	7	19	4	17
	rubber, plastics, paint, ink	19	10	5	25
	oil, petro-chemistry, etc.	8	13	6	16
	fiber	15	5	3	16
	pharmacy	9	17	5	18
	food cosmetic	11	11	3	16
	total	83	91	28	136
	trading	0	2	0	1
	total	218	158	63	291

Table 8. Time of Compensation

	industry	When filed or laid-open		When published or registered		When no examination request determined		When publicly known		
		yes	no	yes	no	yes	no	yes	no	being con-sidered
metal, machinery group	transportation power machine	35	0	34	4	1	28	0	24	6
	machinery tool	35	7	32	9	2	33	1	29	4
	iron and steel metal	16	2	17	1	2	16	0	17	1
	construction	4	5	6	3	0	8	0	8	0
	total	90	14	89	17	5	85	1	78	11
electrical group	heavy electric	18	0	16	2	0	18	3	13	1
	light electric	66	8	61	11	2	63	5	61	0
	electric wire	7	1	5	3	0	8	0	8	0
	total	91	9	82	16	2	89	8	82	1
chemical group	general chemistry	21	9	22	8	0	23	0	23	0
	organic chemistry	15	10	16	9	1	19	0	19	1
	rubber, plastics, paint, ink	23	7	22	5	1	22	1	21	0
	oil, petro-chemistry, etc.	15	7	18	5	1	18	0	19	0
	fiber	18	4	19	3	0	18	0	18	0
	pharmacy	9	13	13	11	0	19	0	18	0
	food cosmetic	13	8	11	9	0	17	0	16	1
	total	114	58	121	50	3	136	1	134	2
	trading									
	total	295	81	292	83	10	320	10	294	14

Table 9. Administration and Watching of Patent Information

	industry	administration of patent information				watching	
		central administration	admin. by factories, labs., divs.	both	others	employed	non
metal, machinery group	transportation power machine	22	2	14	0	34	4
	machinery tool	19	5	17	1	41	1
	iron and steel metal	8	0	10	0	17	0
	construction	6	1	3	0	9	1
	total	55	8	44	1	101	6
electrical group	heavy electric	7	3	8	0	16	2
	light electric	54	1	22	0	75	1
	electric wire	7	0	1	0	8	0
	total	68	4	31	0	99	2
chemical group	general chemistry	19	1	11	0	31	0
	organic chemistry	7	4	15	0	24	2
	rubber, plastics, paint, ink	15	5	11	0	31	1
	oil, petrochemistry, etc.	10	3	11	0	24	0
	fiber	7	5	10	0	21	1
	pharmacy	19	5	5	0	27	0
	food cosmetic	14	3	5	0	21	1
	total	91	20	68	0	179	5
	trading						
	total	214	38	143	1	379	13

Table 10. Delivery Service of Patent Information

	industry	official gazette(O.G.)	separated O.G.	bibliographic index	commercial processed material	own processed material	no service	only to res. div.	others	official gazette(O.G.)	separated O.G.	bibliographic index	commercial processed material	own processed material	no service	only to res. div.	others
metal, machinery group	transportation power machine	11	27	2	3	6	0	0	3	7	13	4	18	9	1	0	3
	machinery tool	16	33	4	6	8	2	0	0	16	20	3	16	9	4	0	0
	iron and steel metal	5	9	1	1	8	0	1	1	6	7	0	3	10	0	1	1
	construction	2	5	0	1	3	0	0	0	1	4	1	3	2	0	0	0
	total	24	74	7	11	25	2	1	4	30	44	8	40	30	5	1	4
electrical group	heavy electric	11	8	2	1	2	0	1	1	6	7	3	7	4	0	0	1
	light electric	30	53	8	10	6	0	6	4	13	39	10	32	7	1	5	5
	electric wire	0	8	0	2	2	0	0	1	0	3	0	5	1	0	0	1
	total	41	69	10	13	10	0	7	6	19	49	13	44	12	1	5	7
chemical group	general chemistry	4	18	3	3	13	0	2	0	2	14	1	13	14	0	2	1
	organic chemistry	9	8	2	2	10	1	6	3	6	7	5	6	11	1	6	2
	rubber, plastics, paint, ink	10	31	4	2	9	0	2	3	9	18	6	12	6	0	4	3
	oil, petro-chemistry, etc.	2	16	5	3	6	0	2	1	1	6	5	14	8	0	1	1
	fiber	12	15	1	2	5	1	2	1	7	10	2	12	6	1	3	1
	pharmacy	15	11	3	7	7	1	1	3	14	10	2	14	8	1	1	3
	food cosmetic	4	12	3	0	8	1	1	2	3	7	3	5	10	1	1	1
	total	56	111	21	19	58	4	16	13	42	72	24	76	63	4	18	12
	trading																
	total	121	254	38	43	93	6	24	23	91	165	44	160	105	10	24	23

Legal Protection of Computer Software in Japan

PIPA Japanese Group
Committee No. I
Naoki Kyomoto

Introduction:

As a result of the rapid advancement achieved in recent years both in the digital technology and in the IC (integration circuit) technology, computers have come to be in more and more extensive use, particularly in integration with communication networks.

To enable the extensive use of computers, increasingly greater amount of human and other resources have been poured into the development of computer software, i.e., computer programs.

Under the circumstances, the study of the legal protection of computer software is given as great importance as the improvement of computer hardware. Since the state of affairs of "Legal Protection of Computer Software in Japan" was once discussed in my report read at the 1974 PIPA Kyoto Congress (hereinafter referred to as "Kyoto Report"), here is a summary of the recent developments in this area of legal protection.

1. Patent Office's Guidelines for Examination and Other Developments:

(1) On December 26, 1975, the Patent Office published Examination Standard (Part I) for showing criteria for the patentability of software-

based inventions. The Standard is applicable in judging the patentability of inventions related to; (a) a program alone; (b) combination of a program and an apparatus (such as a computer or numerical control equipment); and (c) combination of a program and a system (e.g., an office automation system or a banking system) other than such an apparatus. The patentability of inventions other than the above (a)-(c) is judged under the General Examination Standard.

According to the Standard (Part I), a program, or a set of steps for commanding a computer to have the desired operation performed is deemed as lacking the utilization of the law of nature (stipulated under Article 2, Paragraph 1 of the existing Patent Law), unless at least one of the two causal relationships, i.e., (i) the relationship arising from both the structure of the computer and particular functions achieved within the computer, and (ii) the relationship of algorism governing the whole steps recited in the program is based on the law of nature. Accordingly, under the state where the former relationship is based on the law of nature, if that of the latter is based on any other law or rule (such as the one in playing cards) than the law of nature, the whole invention is rejected on the ground of the above-mentioned "lacking the utilization of the law of nature" rule. Thus, the Standard gives a clear basis for the judgement of the utilization of the law of nature of such a program-related invention, supplementing the guidelines discussed on pages 4 and 5 of the Kyoto Report.

(2) (i) The Patent Office plans to publish Examination Standard (Part II) for giving guidelines for drafting specifications for program-related inventions. It is quite uncertain, however, when it will be published.

(ii) The Patent Office recently set up a committee for studying the patentability of inventions employing microcomputers as their structural elements. The committee, consisting of Examiners from various Departments at the Patent Office, is aimed at studying whether it is possible to draw a definite line of patentability for such inventions and, if so, how specifications for such inventions should be drafted.

2. Board of Appeals Decisions and Court Decisions:

The Kyoto Report discussed the Tokyo High Court decision handed down on an application on a ciphering method (Gyo (na) No. 5 of 1958). Also, it touched on the judgement of the Patent Office on an invention relating to an apparatus for binary coded decimal to pure binary conversion (Japanese Patent Publication No. 21906/1967) and another invention relating a system for protecting special working programs of a computer (Japanese Patent Publication No. 5401/1966). A recent Board of Appeals decision will now be briefly introduced (Appeal Trial No. 4535/1969 decided July 16, 1980).

(1) Outline of the Invention:

The invention relates to a computer-operating method based

on a novel classification of memory addresses so that the addresses or the information on the addresses stored in the memory may be arranged according to their values.

(2) Outline of File History to the Board of Appeals Decision:

This application filed December 10, 1967 was finally rejected on the ground that "the invention" lacked the utilization of the law of nature. The applicant filed an appeal from this rejection contending that the invention contrived a novel operation method using a core memory without expanding the memory region, and that the objective of the invention distinctly utilizes the law of nature. Consequently, the application was published April 14, 1973 under the Patent Publication No. 11650/1973. Opposition was then filed and the Board of Appeals found it well founded. As a result, the Appeal was dismissed.

(3) Reasons for the Decision:

The present invention is based on a plurality of control processes whose performance is controlled by a program.

Whether the law of nature is utilized in an invention or not may be judged from two different viewpoints. One is the law on which the functions of a computer are based and the other is the law on which those functions are sequentially interrelated (this law may be substantially identical to the causal relationship (ii) defined in the Examination Standard (Part I)).

Incidentally, the principal object of the present invention lies in the classification of memory addresses. To attain this object, the invention relies on a mathematical principle, which defines the sequential interrelation of the above-mentioned functions.

Stated more definitely referring to the embodiment, the mathematical principle is such that the rank of a certain numeral in progression lined up in the order of values is determined by the total number of other numerals smaller than said certain numeral. The invention is therefore deemed to be a mere mathematical manipulation of numerals and, accordingly, lacks the utilization of the law of nature.

This is the first Appeal Board decision handling the issue of computer programs. It is also significant in that it has analysed in a clear-cut manner whether the law of nature has been utilized. The decision is expected to help the Patent Office Examiners of various technological fields to set a uniform standard for judgement of whether there is the utilization of the law of nature.

3. Possibility of Non-patent Protection of Software:

(1) The MITI registration system provided in May 1972 referred to in the Kyoto Report has not been put into effect yet.

(2) Similarly, the June 1973 report of the Culture Agency's Copyright Council has not led to a follow-up move for legislation yet.

(3) On the other hand, the Special Committee for Investigation and Research on Legal Protection of Software Industry, set-up by the Association for Promotion of Software Industry, started in September 1980 the "contract-standardization" work for fair commercial transactions of software between software suppliers and users. As a result, the Committee published an interim report in March 1981, outlining the present status of software protection in Japan under the Patent Law, the Copyright Law, the Trade Secret and Contracts. The committee plans to complete working on a model contract by the end of 1982.

Committee Presentations
Committee No. 2

SCM v. XEROX CORPORATION

The Right of a Patent Holder
With Economic Monopoly Power to Refuse to License

BY ROBERT A. STENZEL
Patent & Licensing Counsel
National Can Corporation

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Patent rights prevailed over the antitrust laws in the Second Circuit Court of Appeals case of SCM v. Xerox, 645F.2d 1195, 209 USPQ 889 (CA2, 1981) wherein the right of a patent holder to refuse to license his patents was upheld.

After the longest federal jury trial in history, a Hartford, Connecticut jury found in 1978 that Xerox Corporation, through its acquisition of the basic xerographic patents between 1946 and 1956 and through its refusal to license SCM in 1969, had violated Sections 1 and 2 of the Sherman Act and Section 7 of the Clayton Act. The jury concluded that because SCM had been barred from becoming a potential competitor through the refusal to license, it had suffered damages of $11.5 million in cumulative lost profits from 1969 to 1976 and $25.6 million in loss of net going concern value as of the end of 1976. Trebled, the damages amounted to $111.3 million.

Despite the jury verdict, District Court Judge Jon O. Newman found no basis in the law for monetary relief as a result of a refusal to license and ruled as a matter of law against SCM and in favor of Xerox. He noted a distinction between monetary damages and equitable relief stating:

> "Whatever the appropriateness of the distinction between damages and equitable relief in other contexts, it is viewed in the contest of this case as a matter of statutory construction, harmonizing the protective purposes of the patent laws with the competitive purposes of the antitrust laws. The usefulness of the private treble damage

> action for effective enforcement of the antitrust laws...will not be impaired by recognizing that in some circumstances the patent laws can best be accommodated to the antitrust laws by permitting only prospective equitable remedies."

In March, 1981, a three-judge panel of the Second Circuit Court of Appeals in New York City affirmed the denial of damages following in large part the District Court's reasoning concerning the need to harmonize the incentives of the patent system with the purpose of the antitrust laws. It explained:

> "Where a patent in the first instance has been lawfully acquired, a patent holder ordinarily should be allowed to exercise his patent's exclusionary power even after achieving commercial success; to allow the imposition of treble damages based on what a reviewing court might later consider, with the benefit of hindsight, to be too much success would seriously threaten the integrity of the patent system. Where, however, the acquisition itself is unlawful, the subsequent exercise of the ordinarily lawful exclusionary power inherent in the patent would be a continuing wrong, a continuing unlawful exclusion of potential competitors."

Although the Supreme Court is still considering whether to hear the case, and in fact, has asked the U.S. Solicitor General to submit comments, the Second Circuit decision is heartening to proponents of a strong patent system who feel the courts have too long subjugated the patent laws to the antitrust laws.

Patents have been getting "no respect," as a popular U.S. entertainer would say. Among reasons for this lack of respect

are a lack of understanding of what a patent is, and its characterization as a "monopoly."

A patent is by law a right to exclude others from making, using and selling a fully disclosed and carefully claimed idea that is new, useful and unobvious to one of ordinary skill in the art to which it pertains. As such, it puts no restriction on what the ordinary workman would do and hence, does not deprive the public of something it previously had the right to do. Rather, a patent adds to the sum total of human knowledge by disclosing a new and unobvious idea, and in return for the disclosure, only limits temporarily the use of that which it adds. After a period of time the fully disclosed and carefully claimed idea may be freely practiced by the public.

Because the word "monopoly" is almost synonymous with "unlawful" in the minds of society today and implies the taking away of some public right, it is unfortunate that patent rights are referred to as "monopolies." "Franchise" is perhaps a more accurate word, and I am sure there are better suggestions. Whatever the choice, the word should bring deserving praise to a patentee for his efforts in disclosing to the public something which was nonexistent in the prior art and distinguished over every combination of prior art available to one of ordinary skill in the art throughout the world.

That word would describe Chester Carlson, a patent attorney with an idea in the late 1930s for reproducing an image by reflecting the image onto a charged photoconductive plate to dissipate the charge in the areas receiving light, and developing the remaining charged areas with a finely powdered, charged, material that is transferred to a plain piece of paper and fused thereto. By filing his patent applications, he started the process of dedicating his ideas to the public and creating an industry which has contributed greatly to the U.S. and the world in many ways. Among the benefits overlooked are the tax revenues on the profits and wages it generates. Thus, enough federal taxes are produced each year by this one patent-based industry alone to cover the U.S. Patent Office budget many times over.

In a classic case well-known to many of the independent inventors of the over 4,000,000 patents granted in the U.S. since 1836, Inventor Carlson "got no respect." He took his invention to the big office machine companies but none were interested. Finally, a nonprofit research institute in Columbus, Ohio, Battelle Memorial Institute, agreed to act as his agent for developing and licensing the patented idea in return for 60% of any royalties received. Battelle also had great difficulty in persuading others of the value of the invention. Finally, however, a small company in Rochester, New York, which is now Xerox Corporation, took a nonexclusive license under the patents in 1946 for an 8% royalty and an agreement to sponsor research at

Battelle in the amount of $25,000 per year. A later agreement gave Xerox exclusive rights with a right to grant sublicenses, and, in fact, provided that Xerox use "diligent efforts" to seek sublicensees. A final agreement in 1956 gave Xerox ownership of the basic Carlson patents (in exchange for stock, as well as full rights in all future Battelle patents so long as Xerox continued to pay the annual research fee.

After 1960, Xerox prospered and steadfastly refused to license anyone under any of its patents. This attitude apparently concerned the FTC and in 1969 it filed a complaint, charging monopolistic practices and seeking broad equitable relief, including compulsory licensing of the patents and termination of the relationships which Xerox had established with the Rank Organization in England and Fuji Film in Japan. To many, it seemed an affront to the patent system and to the incentives for success which the system provided to patentees. However, the FTC apparently felt Xerox exceeded the limits of success with its patents and persisted until Xerox, in an apparent weak moment in 1975, signed a consent decree. The decree effected compulsory licensing by requiring Xerox to offer nonexclusive licenses under any three of its plain paper copier patents at no royalty and under all of its patents at nominal royalties of 1/2% per patent up to a maximum of 1-1/2% for any one product. Xerox in return received a nonexclusive grant back license on all Xerographic patents of each licensee. The Rank Xerox and Fuji-Xerox relationships, which by 1975 accounted for a good share of Xerox Corporation's total profits, were not disturbed.

Meanwhile, in 1973, SCM Corporation filed a private antitrust complaint against Xerox for monetary damages based on many of the charges in the FTC complaint. Thus, SCM claimed a violation of Section 1 of the Sherman Act because of Xerox's concerted refusal to deal in respect to its plain paper copier patented and unpatented technology. It also alleged Xerox possessed a monopoly power in a revelant market (all copiers) and a submarket (plain paper copiers) in that Xerox had acquired or maintained that market in violation of Section 2 of the Sherman Act by refusing to license its patents. Further, SCM alleged that the agreements between Xerox and Battelle violated Section 1 of the Sherman Act and Section 7 of the Clayton Act because the agreements had the effect of substantially lessening competition or tending to create a monopoly. Also included were additional charges concerning marketing practices and the overseas organizations. At the time SCM was a one-billion dollar plus company that was a leader in the rapidly diminishing coated paper copier field.

Trial began June 20, 1977 and lasted 14 months, producing a transcript of 47,000 pages. The jury deliberated 38 days before returning with its verdict. In affirming District Court Judge Newman, the Second Circuit Court of Appeals started its analysis with a review of the relationship between the patent and the antitrust laws, noting that little conflict between the

antitrust and patent law arises when the patented product represents merely one of many products that effectively compete in a given product market. It noted, however, that:

> "When...the patented product is so successful that it evolves into its own economic market, as was the case here, or succeeds in engulfing a large section of a preexisting product market, the patent and antitrust laws necessarily clash. In such cases, the primary purpose of the antitrust laws--to preserve competition--can be frustrated, albeit temporarily, by a holder's exercise of the patents inherent exclusionary power during its term."

The Court found the law unsettled in this area, but after analyzing a series of cases it concluded:

> "Where a patentholder...merely exercises his 'right to exclude others from making using or selling the invention'...by refusing unilaterally to license his patent for its seventeen-year term...such conduct is expressly permitted by the patent laws. The heart of the patentee's legal monopoly is the right to envoke the State's power to prevent others from utilizing his discovery without his consent... Simply stated, a patent-holder is permitted to maintain his patent monopoly through conduct permissible under the patent laws. No court has ever held that the antitrust laws require a patentholder to forfeit the exclusionary power inherent in his patent the instant his patent monopoly affords him monopoly over a relevant product market."

The United Shoe case (The United States v. United Shoe Machinery Corporation 110F Supp. 295) (D. Mass 1953), Aff'd per Curiam 347 U.S. 521 (1954) was distinguished on the basis that:

"In United Shoe, the primary vehicle found to have been employed...in achieving and maintaining its monopoly was its lease-only system of distributing its machines" and that "the patent acquisitions... occurred after United Shoe possessed substantial market power and were not one of the principal factors enabling (it) to achieve and hold its share of the market."

With regard to the United States v. Aluminum Company of America (case 148F. 2d 416, 65 USPQ6, (2d. Cir. 1945) the court noted:

"In Alcoa Judge Learned Hand stated that the 'successful competitor, having been urged to compete, must not be turned upon when he wins.'"

United States v. Grinnell Corporation 384 U.S. 563 (1966) was relied upon for its statement that:

"The offense of monopoly under Section 2 of the Sherman Act has two elements: (1) The possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen or historic accident." (Emphasis is in the original.)

Next, the Court repeated the admonition in Berkey Photo, Inc. v. Eastman Kodak Co. 603F. 2d 263 (2d Cir. 1979) Cert. denied 444 US1093 (1980) that:

"The mere possession of monopoly power does not ipso facto condemn a market participant..., the firm must refrain at all times from conduct directed at smothering competition."

After noting that patent acquisitions are not immune from the antitrust laws, the Court stated:

> "The patent system would be seriously undermined, however, were the threat of potential antitrust liability to attach upon the acquisition of a patent at a time prior to the existence of the relevant market and, even more disconcerting, at a time prior to the commercialization of the patented art."

The Court concluded:

> "We hold that where a patent has been lawfully acquired, subsequent conduct permissible under the patent laws cannot trigger any liability under the antitrust laws."

The inquiry thus shifted to the question of whether the acquisition of the patents was lawful under the antitrust laws.

The Court quickly decided that whether the patents were acquired from a research organization or generated internally had no bearing. It also noted the jury's finding that the patents were not obtained primarily for the purpose of blocking the development of competitive products.

With regard to Section 2 of the Sherman Act, the Court directed that:

"The focus should be upon the market power that will be conferred by the patent in relation to the market position then occupied by the acquiring party."

After reviewing the facts, the Court concluded that at the time of the 1956 agreement, Xerox had no economic monopoly in the relevant market or submarket and hence, its conduct was permissable. In doing so, the Court also rejected SCM's argument that the acquisition was unlawful if Xerox's economic monopoly was reasonably foreseeable, stating:

"The limitation that SCM would impose, however, turns not upon the market position of the acquiring party, but rather, upon the potential for commercial success a particular patent may hold... Presumably, under SCM's proposed rule, where the commercial success of a patented invention virtually is guaranteed, no person other than the inventor can hold exclusive rights in the patent, at least where it is foreseeable that the products generated under the patent will create their own relevant product market...

"We believe that, under the circumstances presented here, to impose antitrust liability upon Xerox would severely trample upon the incentives provided by our patent laws and thus undermine the entire patent system. Therefore, irrespective of the jury's implicit finding that Xerox's commercial success was reasonably foreseeable in 1956, Xerox was lawfully entitled to purchase the patents it did pursuant to the agreement it made with Battelle that year."

In regard to Section 1 of the Sherman Act, the Court rejected SCM's argument that absent the 1956 agreement, Battelle would have enforced the sublicensing obligation that its prior agreements had imposed upon Xerox and, as a result of these sublicenses, there would have been competitors. It decided that it was not foreseeable and that continued maintenance of the patents and acquisition of the patents through internal development work did not cause SCM any harm.

Section 7 of the Clayton Act prohibits a corporation from acquiring the whole or any part of the assets of another corporation where:

> "The effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly in any given line of commerce."

The Court notes:

> "Since a patent is a form of property and thus an asset..., there seems little reason to exempt patent acquisitions from scrutiny under this provision."

The Court considers that Section 7 was designed to curtail the anti-competitive consequences "in their incipiency" and thus requires concern with probabilities, not certainties. Nevertheless, the Court noted that a relevant product market and submarket did not exist until eight years after the acquisitions and hence, could not be foreseeable. Finally, the Court stated that:

"The patent laws circumscribe the scope of the provision here.... Where a company has acquired patents lawfully, it must be entitled to hold them free from the threat of antitrust liability for the seventeen years that the patent laws provide. To hold otherwise would unduly trespass upon the policies that underlie the patent law system. The restraint placed upon competition is temporarily limited by the term of the patents, and must, in deference to the patent system, be tolerated throughout the duration of the patent grants."

In its conclusion the Court stated:

"Based on the evidence presented we are convinced that none of Xerox's patent-related conduct contributed to any antitrust violation and that, therefore, SCM is not entitled to recover any monetary damages in connection with that claim."

The significant impact of the decision may be seen in the fact that the Court of Appeals decision has already been cited in several cases. Thus, in June of 1981 the Ninth Circuit Court of Appeals in the matter of the United States v. Westinghouse 648 F.2d 642, ___ USPQ ___ (CA9,1981) referred to the Xerox case in the following context:

"The antitrust laws do not grant the government a roving commission to reform the economy at will. Just as 'no court has ever held that the antitrust laws require a patent holder to forfeit the exclusionary power inherent in his patent the instant his patent monopoly affords him monopoly power'..., (citing SCM v. Xerox) so, too, no court has held that a patentee must grant further licenses to potential competitors merely because he has granted them some licenses. Just as 'the patent system would be seriously undermined... were the threat of potential antitrust liability

> to attach upon the acquisition of a patent at a time prior to the existence of their revelant market and, even more disconcerting, at a time prior to the commercialization of the patented art'(citing SCM v. Xerox)... so too would the patent system be undermined if a licensing agreement, perfectly legal when signed, might later form the basis of an antitrust violation because the licensee had flourished under the agreement."

More recently in the case of GAF Corp. v. Eastman Kodak Co., (519 F. Supp. 1203, ____ USPQ ____(SDNY 1981) a District Court in the Southern District of New York granted Kodak's motion for summary judgment dismissing GAF's claim that Kodak's policy of refusing to license any photo-chemical patents until five years after they issued was unlawful. GAF contended a patentee's refusal to license should be treated like any other refusal to deal by a monopolist, but Judge Pierce, relying on SCM v. Xerox ruled:

> "After discussing the inherent conflict between the antitrust and patent laws, the Second Circuit (held in SCM) that 'a patent holder is permitted to maintain his monopoly through conduct permissible under the patent laws' and that a unilateral refusal to license a patent for its seventeen-year term is conduct expressly permitted by the patent laws.
>
> Thus, Kodak's unilateral refusal to license internally developed patents may not trigger liability under the antitrust laws."

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Regulations on Technology Transfer in Southeast Asia

PIPA Comittee No. 2
by Kojiro OZU (Toshiba Corporation)
Yasuhiro MOCHIZUKI (Ajinomoto Co., Inc.)

Last year I visited the ASEAN countries as a member of the Fact Finding Mission that was sent by the Japan Patent Association to study industrial property systems in these countries. I would like to introduce you to the major points of our inspection, especially on the governments' regulations on technology transfer.

Some of you may recall that the team leader of the mission, Mr. Shoji Matsui of Takeda Pharmaceutical Industries, Ltd., gave lecture on "Situation of ASEAN Countries on Industrial Property Protection" at the PIPA Tokyo conference last year. Some of my speech may overlap with his lecture, but since the subject is an important one shared by the U.S.A. and Japan, I shall take up some problems involved in the regulations on technology transfer.

First of all, I would like to explain on technology transfer in the Philippines since the country, I suppose, is influential in this field as a leader among the five ASEAN nations. Afterwards I will refer to other countries.

THE PHILIPPINES

In 1967 the Philippines enacted the Investment Incentives Act to welcome foreign investments and stimulate their domestic industries. At the same time, the Foreign Business Regulations Act was established in the next year with the intention of imposing some restrictions on foreign investments. The Act was

to give priority to domestic capitals, while introducing foreign capitals seclectively.

All kinds of works relating to technology transfer are handled by the TTB (Technology Transfer Board). Its constitution, function and authority as well as the guideline for the evaluation and registration of license agreements are provided in the "Rules and Regulations to Implement the Intent and Provisions of Sec. 5 P.D. 1520 Creating the Technology Transfer Board within the Ministry of Industry" enacted in October, 1978. As far as the evaluation and registration procedures are concerned, there is no major problem except that the decision by the Board is not always made within the prescribed period of 60 days from the date of application.

However, the policy guidelines for evaluation in Rule V, Sec. 1 involve several problems. For instance, this Section 1(b) provides that royalty should not exceed the maximum rate established by the Board, which is now finding it difficult to decide the rates in certain industrial sectors.

According to the TTB, the acceptable rate is generally 2 to 3% of net sales and that there has been no case which provided the rate of more than 5%. Such a rate conforms to the fact that 2.5% royalty is permitted in many cases of compulsory patent licenses (All are pharmaceutical cases). The former rate, that is 2 to 3%, is mostly applied to the combined license of a patent and know-how, while the latter comparatively higher rate may be reflecting that the license in such cases is against the licensor's intention. Anyway, the TTB has been making efforts to reduce royalties in license agreements.

Now, please look at the papers in your hands titled "Summary Table on Effect of TTB Regulation on Technology Transfer Arrangements" issued by TTB. It shows the analytical figures about 221 license agreements that were approved and registered by the TTB since the establishment of the Board in 1979 till the end of 1980. The data indicate that the royalty rate was cut down by the government in 122 cases (55% of the total number). As a result, the licensors lost US$ 291,000 per year for each agreement, while the country saved foreign currency of US$ 15.5 million per year. The government is also expected to earn US$ 145 million per year by exporting the licensed products of these 221 agreements.

Accordingly, we must realize here that although the TTB is praising themselves for acquiring foreign currency by cutting down royalties, the earning is more important than the saving from the viewpoint of the accumulation of forign currency. The reduction of royalty is very likely to kill the opportunity of importing excellent technology from abroad. Thus the country could lose a chance to export various industrial or consumer products that might have been manufactured under license.

In other words, such a policy may hinder the Philippines from obtaining foreign currency and eventually from developing their industries as well as providing the employment opportunities. This becomes more realistic when we consider an erosion of patent protection through the compulsory license system in their patent law. Please refer to the Philippines Patent Law, Section 34 ~ 35 E. and Mr. Nishide's report at the 3rd committee of the AIPPI Tokyo Conference in 1980.

Malaysia, Indonesia and Thailand maintain substantially similar policy, though there is some difference in flexibility of its practice. Since Singapore respects the principle of free agreements, the gap between this country and the other ASEAN countries regarding technology transfer is supposed to expand more in future.

The term of agreement in both patent and know-how licenses is provided to be maximum 5 years and its extention requires re-evaluation and registration by the Philippine government. In case of know-how license, no one can obtain any approval for the renewal of agreements without convincing the TTB that the licensee needs the continual in-flow of advanced technique because of the rapid technology development, or that the term of 5 years is too short to pursue highly developed and complicated technology. Please refer to the TTB Resolution No. 188, Section 79, dated Oct. 3, 1979.

As to licensing industrial property rights, their renewal is approved as long as they remain valid. However, the royalty rate will be generally reduced at each renewal.

Trademark license is granted only when the case accompanies technology transfer or brings about economic merits such as the obtaining of foreign currency and the promotion of employment. The renewal of any existing trademark license is permitted, however. Even in this case, the royalty is kept as low as 0.5 to 1% of net sales although the TTB declared a flexible application of the royalty provision. So far, no case has exceeded 1%.

Moreover, it is not allowed to prohibit a licensee from using know-how after his agreement expired. Secrecy maintenance can be obligated for further 2 years from the termination of an agreement. The maximum so far is reported to be 5 years after the termination in case of important technology.

INDONESIA

Next, I would like to discuss the situation in Indonesia. The Japan and Indonesia Economic Committee held in Tolyo in July last year announced in its communique that "Matsujiro Ikeda, Executive Vice President of Marubeni Corporation, pointed to the importance of enacting a patent law in Indonesia so as to ensure the protection of industrial property rights associated with technology transfer from abroad." I fully agree to his words. One of the most important problems in this country is that a patent law has not been established yet. The government and judicial sources admit that they have already drafted a patent law and are studying it now. Therefore, it will be enacted within a few years. However, Japanese and US industries should repeatedly request their legislation so as to accelerate their procedures.

At present, the datails of the draft is unknown but it is said to involve various problems for the future. For instance, foods, drugs and chemicals themselves and their manufacturing processes are unpatentable, and compulsory license which weakenes patent protection is provided in the law.

Under such situation, present technology transfer is made only by know-how basis. Until 1973 since the enactment of

the Foreign Investment Law in 1967, loyalty rate was in the range of 1 to 10% and there was no particular limit to the term of agreement. However, the royalty after 1974 is maximum 2% as a general and the term of agreement 5 years. Royalty payment exceeding 2% is to be made from the licensee's net profit.

Since transferred technology is not protected by patent laws in Indonesia, it is critical for licensors to secure their know-how by themselves. The only practical solution would be a grant of licnese to their own subsidiaries so that they can control the know-how through their rights of management. However, the investment guidelines established in January, 1974 cause to restrict the possibility to set up a joint venture in this country. The main points of the guidelines are:

1. The investment ratio by Indonesian stockholders should reach more than 51% within 10 years after the establishment or approval of a joint venture.
2. More than 50% of Indonesian capital should be owned by pure Indonesian stockholders.
3. Partners of any joint venture should be pure Indonesians.

Such a localization policy and undeveloped infrastructure of their industries are barriers to introduce advanced technology from abroad.

SINGAPORE

Singapore, just like Japan, is not favoured with natural resources, and the country has been positive and successful in introducing foreign capital and technology. The introduc-

tion is administered by the Economic Development Board (EDB). Different from other ASEAN countries, its main role is not to restrict civilian activities but to promote occupational guidance and educational activities that will for the basis for inviting advanced technology from abroad.

There is no legal or administrative regulations against the introduction of foreign technology and capital except for those related to their retail distribution. As a whole, Singapore seems to be the most stable and safe country for the capital and technology investment although its supply and the fixing rate of labour is comparatively low at present.

MALAYSIA

The import of foreign technology requires approval of the Ministry of Trade and Industry whose guidelines are outlined as follows:

1. Royalty rate usually ranges from 1 to 5%.
2. License and technical service should be incorporated into a single agreement.
3. The government does not encourage incorporation of royalty into capital.
4. Initial payment is not desirable.
5. The term of agreement shall be usually 5 years during which licensees are to digest the licensed technology. The renewal of agreements needs the Ministry's approval, and the duration of the licensed patents is considered on its renewal.

6. If the licensed patents survive the term of license agreements, licensors must make the patents available for licensees even after the expiration of the agreements.
7. In case of know-how, secrecy obligation shall not exceed the term of agreement.
8. Governing laws shall be Malaysian laws.

As you will see in the guidelines, know-how is not highly evaluated in this country similarly to other developing countries. The government people as well as their legal counsels think it difficult to work out effective legal measures to prevent licensee's employees from using licensed know-how after they moved into other company.

Under such circumstances, transfer of know-how to any party but licensor's subsidiaries, employees' access to know-how shold be strictly limited, and labour management should be carefully controlled to prevent its disclosure to any outsiders.

THAILAND

In Thailand there is no written guidelines for the approval of license agreements. However, the Board of Investment (BOI) which is in charge of this matter seems to refer to "the Code of Conduct" as a basis for their judgement. Generally, royalty rate of 3 to 5% and the term of agreement for 3 to 8 years are regarded reasonable. Know-how license has been flexibly treated compared with other countries like the Philippines and Mayaysia but technology itself is not always highly evaluated. For example,

we see their Patent Law enacted in September, 1979 has not protected patentees as much as expected.

Incidentally, the government authorities consider that know-how becomes public knowledge after about 5 years.

Anyway, much stronger legal protection on patents and know-how is desirable here in order to promote the import of foreign technologies.

CONCLUSION

In developing countries, to regulate technology transfer has 3 main purposes. Firstly to select and approve the technology necessary for the industrial development of each country; secondly to reduce the cost of technology introduction to save foreign currency; and thirdly to watch and eliminate restrictive business practices.

Meanwhile, licensors' ultimate objective of licensing is nothing but to get finantial merits in various aspects. Since such merits include not only receiving royalty but also purchasing or selling energy, raw materials and parts, or collecting dividents from their subsidiaries, technology transfer will still exist even if its evaluation is not high enough in the ASEAN countries. However, they should recognize that their unreasonably low evaluation as well as their policy to save foreign currency to be paid as royalty have been killing the opportunities of inviting excellent technologies from abroad. Thus, they are losing the precious chances to improve their own technical standard and to earn foreign currency by exporting the products manufactured by utilizing suitable foreign technology.

In consideration of the past examples of the technology transfer in these countries, I admit the necessity of regulating restrictive business practice. However, especially, know-how should be properly protected so long as it has its proprietary value.

Also, as a patent system plays an important role to promote technology exchanges, it is an urgent task for those countries like Indonesia to establish the system. At the same time, other countries which already have their own patent system should reconsider and reinforce the protection of patent rights so as to encourage the patent application of excellent inventions and international technology exchanges.

To promote technology transfer to the developing countries, it is also important to give proper education to the people there so that they may acquire enough ability to digest and utilize imported technologies. The governments of advanced countries as well as their private industries could train technical experts and leaders by sending their own experts or by accepting trainees from these countries. The Japanese government and enterprises have begun to make efforts for such purposes recently. Nevertheless technical experts trained in Japan are still not given proper places for their activity.

It is desirable that more and more technology should be transferred so that these people may be given opportunities to contribute the industrial development in the developing countries.

Summary Table on Effects of TTB Regulation on Technology Transfer Arrangements (221 contracts approved and registered with the Board as of December 31, 1980)

Total estimated foreign exchange savings (This figure represents estimated foreign exchange savings for 5 years as a result of reduction of technology payments in contracts and does not include possible foreign exchange savings from import substitution due to the local manufacture of certain products)	$77,383,930.96
Estimated Annual Foreign Exchange Savings per contract (221)	$152,107.13
Estimated Annual Foreign Exchange Savings per contract with reduced payments (122)	$291,184.02
Total Estimated Foreign Exchange Earnings for 5 years from projected exports	$728,609,329.60
Annual Estimated Foreign Exchange Earnings from projected exports	$145.721.865.92
Average Annual Foreign Exchange Earnings per exporting firm(87)	$5,842,153.55
Average Annual Employment Level	$7,701
Total Estimated tax Revenues Accruing to the Government for 5 years(207) (representing withholding taxes paid by licensor)	P462,181,444.19

Annual Estimated Tax Revenue to The Government (represent withholding taxes)----------P92,436,288.84

Restrictive Business Practices

1.	Post-termination restriction on use of know-how	48
2.	Export Restriction	44
3.	Royalty free grantback	19
4.	Restriction on application of technology	9
5.	Tied-in provision	18
6.	Sole Liability of Licensee on infringement suit	20
7.	No warranty provision	14
8.	No access by licensee to licensor's improvements	2
9.	Exclusive rights by licensor over licensee's patented or patentable improvements	4
10.	Minimum payments	16
11.	Restriction on patent grants	2
12.	Restriction on competitive business	11
13.	Restriction on use of non-patented technical information after contract termination	2
14.	Restriction to use rights and licenses in case of early termination	7
15.	Guarantee that licensor's patents does not infringe third parties' patent rights	1

Other Provisions Required for Inclusion/Modification

1.	Duration in excess of 5 years	30
2.	Automatic Renewal	27
3.	Submission of undertaking on use of local raw materials	10
4.	Philippine withholding taxes on licensor's account	35
5.	Philippines laws to govern contract interpretation	73
6.	Royalty payments cover imported products	4
7.	Arbitration under ICC/Philippine law and the Philippines or any neutral country as venue	27
8.	Use of local-value-added	28
9.	Reduction of technician's fee	21
10.	Prior approval on entry of foreign technicians	12
11.	Restriction to contest licensor's patents	2
12.	Redefinition of Net Sales/Net Foreign Exchange Earnings to conform with TTB definition	32
13.	Disclosures of improvements made by licensee to licensor under an agreed fee	12
14.	Continued use by licensor of licensee's improvements after contract termination	1
15.	Restriction on sales volume of products	4
16.	Restriction on use of technology in licensee's undertaking to engage in the activity	1
17.	Prohibition to question validity of licensor's patents	7
18.	Licensor to determine selling price	1

GOVERNMENT PATENT POLICY - ITS IMPACT ON INNOVATION

Richard L. Donaldson

Many analysts believe that the sluggish U. S. economy in large measure has resulted from the failure of American industry to keep pace with the increased productivity of our foreign competitors.[1] This decrease of U. S. productivity is correlated with a significant decline in total U.S expenditures for research and development since 1970.[2] Since the primary means of improving productivity lies in the creation of new technologies, the need for increasing innovation in the U. S. is manifest. One technique, of course, would be to significantly increase the level of R&D funding; another alternative is to make better use of the results of current R&D.

In this latter regard, it is very disturbing to note that patents resulting from U. S. Government financed research rarely find their way to the commercial market in the form of new products. The significance of this is placed into perspective when you consider the fact that the United States Government finances approximately 50% of the research carried on in the United States, an amount totalling almost $30 billion per year![3] More than 28 thousand inventions have resulted from such Government sponsored programs and only about 5% of the 28 thousand inventions have been commercialized.[4]

As will be discussed in more detail later, the Government retains title to many of these inventions; accordingly, a license from the Government is required to bring the invention to the market. However, the Government Policy on licensing their patents is far from uniform, and each agency typically has its own set of regulations and some agencies even have varying policies within their different divisions. Thus, companies who want to use such inventions must be prepared to deal with at least 26 different sets of Government agency regulations. In addition to having to cope with this myriad of regulations, the prospective manufacturer under a government owned patent still has a more formidable hurdle to clear; that hurdle is the government policy of retaining ownership of patents resulting from government financed R&D, and granting non-exclusive licenses to those who want to use the inventions (including the contractor who made the invention with government funding.)

In many situations, particularly for small businesses, not owning an exclusive right to market the invention presents an insurmountable problem in securing the necessary risk capital to develop the product. It is no surprise that few of the government owned inventions are ever licensed. Failure to effectively commercialize these inventions surely has a negative impact on U.S. productivity and innovation.

The decline in U. S. productivity and innovation was addressed by President Carter in 1978. The President created a Special Advisory Committee consisting of more than 150 senior representatives from the industrial, public interest, labor, scientific and academic communities. The Committee charter was to study all the areas in which federal Government policy impacts on productivity and innovation. The Committee report placed special emphasis on the role of the patent system and the patent policy regarding Government funded research in promoting industrial innovation. Recommendations from this committee were incorporated into a Bill HR 6933 which, in turn, after a Senate amendment, was enacted into law as PL 96-517.

In its original form, the proposed legislation HR 6933 included a three prong thrust to spur innovation. First, it provided for re-examination to strengthen inventor confidence in the certainty of patent rights. Secondly, it provided for a new fee structure to strengthen the financial resources of the Patent Office. Finally, it sought to replace the 26 different agency policies on vesting of patent rights in Government funded research with a single uniform national policy.

It is this latter thrust, the uniform federal patent policy that I will concentrate on during the remainder of my time. The original proposal to replace the 26 agency policies with a single national policy was successful only with respect to small

businesses and non-profit contractors. Other contractors are still governed by previous agency policies.[5] Further, even though the uniform policy regarding large businesses was deleted in a compromise with the Senate, there is still a perceived need for such a policy with respect to large businesses and legislation is now pending in the House and Senate to provide such protection.[6]

Before explaining the new procedures related to the single uniform government patent policy, I would like first to briefly cover existing Government agency patent policies and how they work in practice, both with respect to small businesses and non-profit organizations and also with respect to large businesses. I think that this will clarify the often conflicting policies of the Government with respect to vesting of patent rights and highlight the difficulty in dealing with the Government on these issues.

The most comprehensive promulgation of the government patent policy was set forth by President Kennedy, and later modified by President Nixon.[7]

As explained in the President's statement, the basic policy of the Government is to secure principle or exclusive rights throughout the world to inventions made under contracts calling for research or development; the contractor typically would receive a non-exclusive license. In certain exceptional circumstances, the contractor can acquire greater rights, including title to inventions. Also, where the contract is in a

field of technology where the contractor has acquired technical competence, then the contractor would normally acquire title to inventions.[8]

The President's statement of policy governs if the contracting agency does not have an official policy. In practice, most of the Government agencies have their own specific policies that provide title to invention vests in the Government unless a waiver is granted. Criteria for granting a waiver, however, varies widely from agency to agency. For example, the Department of Defense will typically grant such a waiver if the contractor can show any commercialization at all relating to the invention. The Department of Energy has a much more restrictive policy that requires the contractor to prove he has made a significant contribution to the funding in order to qualify for the waiver. The Department of Energy uses 13 tests to determine whether or not to grant a request for an advance waiver.[9] If an advance waiver cannot be obtained, it is possible to request a waiver on a case-by-case basis. If the contractor can show he has a better chance of commercializing the invention than the government, the waiver is likely to be granted.[10] It should be noted, however, that the practice of seeking patent rights through case-by-case waiver requests subjects the contractor to definite risks regarding future licensing opportunities.

Is is apparent that when dealing with a Governmental agency

on a research contract, the contractor must make a special effort in order to retain title to inventions made under the contract. This requires a patent staff familiar with Government policies and waiver procedures and even then in many cases, it is not possible to get a waiver from the agency.

The large number of different agency regulations, and the different and often conflicting waiver procedures were primary reasons behind the new legislation. Congress believed that the myriad of government agency regulations played a significant role in the inability of the Federal agencies to deliver new inventions from the research and development programs to the market place. Congress cited a major cause of this failure as an ineffective patent policy regarding ownership of potentially important discoveries, and from its investigation, concluded that the private sector needs more protection for the time and effort needed to develop and commercialize new products than is afforded by non-exclusive licenses. This formed the basis for the provision of a single uniform national policy in the original version of the legislation that was subsequently enacted as PL 96-517. For reasons I will not dwell upon here, the Senate would not go along with abolishing all of the agency regulations in favor of a single patent policy. A compromise was reached, however, which provided the single policy for small businesses

since there was a persuasive showing that they had a particularly difficult time in dealing with the different agency rules.

The Legislative history of PL 96-517 shows that under existing agency procedures, big businesses could often negotiate a waiver and thereby retain title, while small businesses were forced to accept a contract on a take-it or leave-it basis.[11] Further, it was determined that many of the Governmental agencies in the past had routinely required small firms to grant licenses on background patents as a condition to receiving a contract calling for research.[12] As a consequence, small businesses avoided Government funded research, participating in only about 3.4% of such funding.[13] This was thought to have an even more significant adverse impact on innovation in view of the fact that some studies have shown that small businesses produce 24 times as many major innovations per research dollar as large firms.[14]

Another problem considered crucial by Congress relates to the difficulty of small businesses in commercializing an invention. For example, to develop an invention it has been estimated that it will require at least 10 times the expense as the initial research funding. Further, as pointed out previously, it is very difficult for small businesses to obtain the necessary risk capital without having title to the invention. This point was highlighted by testimony before the Science and Technology Committee where it was pointed out that according to NASA representatives, contractors

who were permitted some form of exclusive rights to the inventions achieved commercial application at a rate approximately 20 times greater than that achieved where the agency did not grant exclusive rights. In addition, a study by the Harbridge House on commercialization of Government financed research indicated that government supported inventions were utilized at a rate of 12% across all agencies but that the rate doubled when exclusive rights were left with the commercial contractor.[15]

Recognizing the critical importance of vesting exclusive rights in the contractor and further recognizing the special needs of small businesses and non-profit organizations, Congress concentrated on securing a uniform patent policy that provided exclusive rights to small businesses and non-profit organizations. These provisions are included in PL 96-517.

Turning now specifically to PL 96-517, I would like to discuss some of the significant provisions of the Federal Patent Policy.

The legislation is designed to promote the utilization and commercialization of inventions made with the Government's support to encourage participation of smaller firms in the Government research and development process and to promote increased cooperation and corroboration between the nonprofit and commercial sectors. It is believed by Congress that these changes in the Government Patent Policy will lead to greater productivity in the U.S., create economic growth, make Government research and development contracting more competitive and stimulate a greater return on the research funds expended each year by the Government.

The new patent rights policy provisions of public law 96-517 are set out in a new Chapter 38 under Title 35 of the United States Code, Sections 200 - 211. In summary, under this new legislation, small businesses, universities and nonprofit organizations can take title to patentable inventions arising out of Government financed research contracts under certain specific conditions as outlined below:

1. They qualify as a small business or nonprofit organization inaccordance with the legislation;[16]

2. The inventions to which they can take title are those which are conceived or first actually reduced to practice pursuant to a Government financed research project;[17]

3. That within a reasonable time, after the invention is made, the contractor takes three steps. First, he must disclose it to the Federal agency; secondly, he must elect to retain title; and thirdly, he must file the patent application on the invention within a reasonable period of time. Otherwise, the agency will take title.[18]

4. The agency retains a nonexclusive royalty-free, irrevocable, nontransferrable license to practice the invention throughout the world.[19]

5. The Government can award patent rights to the individual inventor if the contractor does not elect to retain title.[20]

6. The contractor may be required by the agency to grant license rights in any field of use to a responsible licensee

i. to achieve practical utilization of the invention within a reasonable timeframe or

ii. to allievate health or safety needs, etc. These march-in rights must be justified by the agency.[21]

7. The contractor who elects to retain title pursuant to this legislation must agree that the products using the invention will be made in the United States. He can, however, obtain a waiver of this requirement under a showing that reasonable but

unsuccessful efforts have been made to grant licenses or similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances, domestic manufacture is not commercially feasible.[22]

8. There is also provision for confidentiality of the contractor's plan for utilization of the invention. It specifically being pointed out that this information is not subject to the freedom of information act disclosure.[23]

Another specific aspect of the legislation is that the contractor will not be required to license background patents unless a provision has been approved by the head of the agency and a written justification has been signed by the head of the agency.[24]

In summary the new legislation, PL 96-517 provides small businesses or non-profit organization more protection for the time and effort needed to develop and commercialize new products by giving them the right to take title to inventions arising out of Government financed research and development contracts provided they meet the specified provisions of the legislation. This is in direct contrast to past Federal patent policies which require contractors to allow the funding agency to own any patentable discoveries made under research and development supported by the Federal Government unless the contractor could successfully

complete the lengthy waiver procedures justifying why patent rights should be left to the inventor. It is believed that this change in the Federal patent policy will promote utilization and commercialization of inventions made with Government support and specifically will encourage participation of smaller firms in the Government R&D process and promote increased cooperation and corroboration between the nonprofit and commercial sectors. It is also believed that the new Federal Patent Policy will stem the steady decline in the number of patentable inventions made under federally supported research and that the resulting increased technological innovation will provide a positive influence on the nation's economic growth.

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1. Report of the President's Advisory Committee on Industrial Innovation, September 1979.

2. Science Indicators, National Science Board, 1976, p 108-115.

3. Legislative History Public Law 96-517 U.S. Code Congressional and Administrative News, 96th Congress, 2nd Session 1980, p. 6488

4. Comments of Senator Dole, Congressional Record - Senate, November 20, 1980

5. Public Law 96-517, 35 USC 210(b)

6. HR 4564, S1657

7. Presidential Documents, Title 3 - The Presidents Memorandum of August 23, 1971, "Government Patent Policy".

8. Ibid

9. The 13 tests are set forth in 41 CFR 9-9.109-6(b) as follows:

   "(1) The extend to which the participation of the contractor will expedite the attainment of the purposes of the program;

   "(2) The extent to which a waiver of all or any part of such rights in any or all fields of technology is needed to secure the participation of the particular contractor;

   "(3) The extent to which the work to be performed under the contract is useful in the production or utilization of special nuclear material or atomic energy;

   "(4) The extent to which the contractor's commercial position may expedite utilization of the research, development, and demonstration program results;

"(5) The extent to which the Government has contributed to the field of technology to be funded under the contract;

"(6) The purpose and nature of the contract, including the intended use of the results developed thereunder;

"(7) The extent to which the contractor has made or will make substantial investment of financial resources or technology developed at the contractor's private expense which will directly benefit the work to be performed under the contract;

"(8) The extent to which the field of technology to be funded under the contract has been developed at the contractor's private expense;

"(9) The extent to which the Government intends to further develop to the point of commercial utilization the results of the contract effort;

"(10) The extent to which the contract objectives are concerned with the public health, public safety, or public welfare;

"(11) The likely effect of the waiver on competition and market concentration;

"(12) In the case of a nonprofit educational institution, the extent to which such institution has a technology transfer capability and program approved by the Head of the Agency or designee as being consistent with the applicable policies of this section; and

"(13) The small business status of the contractor."

10. 41 CFR 9-9.109-6(c)

11. Comments, Representative Smith of Iowa, Congressional Record - House, November 17, 1980.

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13. Government Patent Policy - Hearings before the Subcommittee on Domestic and International Planning and Analysis of the Committee on Science and Technology, U. S. House of Representatives, 94th Congress, 2nd Session, September 23, 27, 9, October 1, 1976, pp. 896, 897.

14. Comments - Representative Smith of Iowa, Congressional Record - House, November 17, 1980.

15. Congressional Record - House, November 17, 1980 - comments of Representative Brown of California, Chairman of the Science Research and Technology Subcommittee.

16. 35 USC 201

17. 35 USC 201, 202

18. 35 USC 202(c)

19. 35 USC 202(c)(4)

20. 35 USC 202(d)

21. 35 USC 203

22. 35 USC 204

23. 35 USC 205

24. 35 USC 202(f)

CURRICULUM VITAE

Richard Donaldson is Group Patent Counsel at Texas Instruments and has responsibility for patent and license issues related to the Semiconductor Group of TI. He has 13 years experience in the patent field and has been intimately involved in TI's patent licensing program since 1973, and has traveled to Japan on patent and license matters over 50 times. He received his BSEE from Kansas State University in 1965, his JD from St. Louis University, and an LLM from George Washington University, specializing in Trade Regulations.

Handling of Results achieved from Government-financed R & D

PIPA Committee No. 2

Japanese Group

by

Katsumi Tanaka
Yukio Sasaki

FUJITSU LIMITED

I. Preface

The positive introduction of technology from advanced countries has brought Japan to a technological level equal to the advanced countries. However, it will be difficult to unilaterally introduce technology from overseas in the future unless Japan also has some technology to offer in return. Therefore, independent technological development has been advocated in Japan in recent years and the Government has worked out some measures to promote technology to cope with the increasing competition in technological development under the slogan, "the state on the basis of technology".

There have been criticisms against the measures adopted by the Government in terms of the partnership between Government and people. As shown in the attached tables for example, the Government's share of the total research and development expenses in Japan is 27%, which is far lower than that in Europe and America, which averages approximately 50%. Moreover, how the achieved results (patents, etc.) of research and development financed by the Government are handled is not always in the best interest of the private company concerned because it is not very well protected, which will be discussed later. This document introduces the current situation in Japan concerning how the achieved results of the Government-financed technological development are handled with respect to the licensing problem, which is the task of this Committee.

II. Outline of Government Contributions to R & D and Handling of Results of R & D

Measures promoted by the Government for technological research and development by private companies include granting subsidies for reserarch and development, favorable tax benefits to compensate for the cost of research and development and installation of equipment, and special measures for financing the commercialization of new technology and new products.

On the other hand, the Government can enter into contract for research and development with private companies, which is another form of Government contribution to reasearch and development by private companies.

Generally, Government participation in technological research and development by private companies from the standpoint of fund sharing can be roughly divided into the types listed below (see the attached tables), and the achieved results are handled according to each type of participation though there may be slight differences in individual R & D cases.

Since the objective of this document is to report on the achieved results of technological development in which the Government has participated, descriptions of special financial measures, such as favorable tax benefits and financing the mere commercialization of new technology have been omitted.

(1) Promoting research and development through granting subsidies

By granting subsidies, the Government can promote research and development projects by private campanies. Available Government subsidies include the following.

Ministry of International Trade and Industry (MITI): "Subsidy for important technical research and development" (Budget for fiscal 1980 = ¥2,700 million)

MITI: "Subsidy for technical research and improvement" (Budget for fiscal 1980 = ¥1,000 million)

Ministry of Health and Welfare: "Subsidy for scientific testing and research" (Budget for fiscal 1980 = ¥7,100 million)

Ministry of Transport: "Subsidy for scientific technical application research" (Budget for fiscal 1980 = ¥180 million)

The achieved results of a research and development project subsidized by the Government belong to the private company concerned and the company may utilize them freely, since the project was managed by the company and the Government subsidy only covered part of the total cost. However, if the project is in the public interest, such as environmental protection the subsidized company must grant a license to a third party as instructed by the Government.

On the other hand, when the research and development was successful, the subsidized company is liable to refund to the Government all or part of the subsidy

according to the amount of profit made through utilization of the results. Government approval is also required for disposing of any equipment acquired with the subsidy.

(2) Government-supported research and development undertaken by private companies

In this case, the Government enters into contract for research and development with private companies and bears all expenses required to achieve the designated research goals, and the contracting company undertakes the research and development using the Government grant. This method is adopted for highly important technological development projects from the standpoint of national interest. Typical examples are the National Research and Development Program (known as the Large-Scale Project: budget for fiscal 1980 = ¥11.4 billion) and the New Energy Technical Development System (known as the Sunshine Project: budget for fiscal 1980 = ¥3,200 million), both of which are sponsored by MITI.

Since the Government bears all expenses required for research and development, the achieved results belong to the Government, and the contracting company has to pay royalties when utilizing them because the achieved results are national property.

A similar contract research method is also adopted by special corporations such as the Research Development Corporation of Japan and the Smaller Enterprise

Promotion Trade Association, which are treated as Government agencies. In this case, the achieved results of the research and development may be owned jointly by the principal and the contractor, or the contractor may be granted free license when the principal takes over the achieved results. That is, handling the achieved results in this case is rather flexible if there are no restrictions imposed on Government property.

(3) Research and development sponsored by private companies

In contrast to the examples given in item (2) above, private companies may sometimes bear all or part of research costs and sponsor research and development by a Government research institute or a national university, which is also a kind of Government participation in technological development for private companies. In this case, unlike the research and development by contract described in item (2) above, the achieved results do not belong to the private company which bears the costs, but to the research institute (the Government). The company as a sponsor is only given preference in use of the achieved results.

(4) Joint research and development

Sometimes a national research institute and a private company share expenses and both supply researchers to work either jointly or separately on a common project.

The achieved results are handled on a case-by-case basis. They may be owned by one party or owned jointly by both parties, taking into consideration the amount of money and personnel contributed. If it is decided that only one party should own the achieved results, the other party is given a preferential license. If it is decided that the patent should be owned jointly by both parties, the private company having participated in the research and development may be held liable for royalties to the Government, taking into consideration the fact that a national reserch institute does not profit by selling patented products like private companies.

III. Examples of Promoting R & D by Government Grants

This chapter describes research and development subsidized by Government grants, the Large-Scale Project and research and development promoted by Research Development Corporation of Japan. Of the four types of Government participation in research and development outlined in the preceding chapter, these are the most important and the most widely used.

(1) Subsidy for Important Technological Research and Developments

1) Outline

Generally, the Government (MITI) assists private companies in their important technological research

and development by granting subsidies to cover part of the total costs. A total of approximately ¥46.4 billion had been granted to a total 4,284 projects by fiscal 1980.

Various types of grants are available according to the stage of research and development, including basic research, application research, development for commercialization, and trial production for practical use. Subsidies are granted after checking the technological capability and finances of the applicant in accordance with the regulations for granting subsidies announced by the Ministry of International Trade and Industry in January of each year. In principle, subsidies granted are limited to up to one half of the total costs required by the subsidized company to accomplish the proposed research, including direct labor costs (pay and allowances for research personnel) and expenses for creating computer programs, and so forth required for the research, in addition to expenses for installing equipment (including the associated equipment and facilities) and for material and parts.

Originally grants are awarded to relatively large-scale technological development projects for which the subsidy granted per case exceeded ¥10 million. However, the Subsidy for Technical Research and Improvement is also available for relatively small-scale projects (subsidies granted per case range from ¥3 to ¥12 million) undertaken by medium or small-scale

companies.

2) Handling the achieved results

The results achieved from research and development for which a Government subsidy has been granted belong to the subsidized company concerned and can be used freely by the company.

However, if the research and development project is related to environmental protection or safety measures, the Government reserves the right to disclosed the achieved results in order to be utilized by the general public.

Moreover, if the Government deems it necessary, the subsidized company must give a license to a third party after consultations on terms and conditions.

3) Refunding grants

All or part of subsidies granted to private companies must be refunded to the Government in the following cases,

A): In the case of application research and research for trial production, when the Government finds that profits (including profits from selling products and royalties from patents) are being made within a predetermined period of time after completion of the development.

B): In the case of testing for industrialization, trial production for practical use, and

development for commercialization, when the Government finds that the proposed research and development have been successful.

(2) National Research and Development Program (Large-Scale Project)

1) Outline

The Large-Scale Project, inaugurated in 1966, is intended by the Government (in this case, the Agency of Industrial Science and Technology) to actively promote large-scale technological research and development projects which are important nationally, with the cooperation of industrial and academic circles and with all financing provided by the Government. One feature of this project is that the Government is involved in selecting the research and development projects, administration, management, and evaluation of the projects.

This project has been applied to 18 projects, 9 of which, such as jet engines for aircraft, optical measurement and control, and subsea oil production system, are currently being researched and developed.

2) Handling the achieved results

Research and development under this project may be undertaken by an affiliated research laboratory or institute under the Agency of Industrial Science and Technology or may be contracted by a private company. In either case, the achieved results including the

industrial property such as patents and know-how belong to the Government and are placed under Government disposition and management. Therefore, all patents and know-how already owned by the contracting company may be confirmed and sealed up in advance so that they can be clearly distinguished from the results that may be achieved from the research and development. Know-how to be placed under the Government disposition is designated by the Director of the Agency of Industrial Science and Technology from the results that are contained in the R & D report.

As the Government becomes the sole owner of all achieved results from the research and development projects, even the company engaged in the project must, if it desires to utilize the results, make a license agreement with, and pay royalties to, the Government.

An onerous license may be granted to a third party providing that a license conforms to industrial policy and requirement for public welfare and that the applicant has both the technical and financial means.

The Japan Industrial Technology Association has been founded to issue licenses to popularize and apply the achieved results from the Large-scale Project and other patents owned by the Agency of Industrial Science and Technology and other Government agencies.

(3) R & D promoted by Research Development Corporation of Japan

1) Outline

A fully Government-financed special corporation called the Research Development Corporation of Japan was founded in 1961 for promoting the development of new technology by private companies. This Corporation gathers uncommercialized results achieved from research and development projects covering all technological fields from universities and public laboratories and institutes as new technological developments. The Coporation selects new technologies in which the company concerned would like to commercialize but are afraid of the risks involved and finances the whole development (including the cost of equipment, personnel, and materials). The cost of development must be refunded to the Corporation if the development is successful, but need not be refunded if the development fails. In the case of failure, however, the acquired equipment must be turned over to the Corporation. Up to fiscal 1980, there have been 131 successful development projects and 19 failures. A total of ¥4,700 million was granted to 11 development projects during fiscal 1980.

2) Handling the achieved results

Patents, and so on which are the achieved results of

the development projects promoted by the Corporation are owned jointly by the Corporation and the contracting company (or owned jointly by three parties including the original owner of the uncommercialized results). The contracting company is generally authorized to have the exclusive right for selling the patented products resulting from the development project for three years on the condition that the contracting company pays the Corporation royalties according to the sales of the commercialized products.

In addition to the above-mentioned research and development, the Corporation is also engaged in licensing and transferring to private companies new technology or patents which can easily be commercialized as well as the results achieved from the above research and development projects.

A total of 144 cases had been referred to 192 companies by the end of fiscal 1980, of which 27 cases were referred to 30 companies during fiscal 1980. The Corporation also introduces new industrial technology to other countries through its publicity magazine "Industrial Technology Available from Japan."

Ⅳ. Problems on Handling the Results achieved from Government-financed R & D

In this document, we have discussed examples of technological development assisted by the Government and the special corporation and given examples of handling the

results achieved from them.

Assistance given by the Government through granting subsidies is conditional and, in the case of contract for research and development, the contracting company has no control over the achieved results and is required to pay royalties for any utilization.

The point is that the company concerned does not always benefit from these methods.

Especially in the case of research and development by contract method, it has been asked whether the Government should unconditionally gain all rights to the achieved results merely because it bears all expenses required for a research and development project, and whether the company that actually accomplished the research and development should pay royalties to the Government. One argument in favor of the contracting company concerned is that it has accumulated industrial expertise so far and can carry out research and development projected by the Government on the basis of its expertise. That is, the results would not have been achieved without the accumulated expertise of the contracting company.

Therefore, all contributions by the company contracting for research and development should be evaluated and due consideration given to handling the results achieved. Such considerations have, however, not been made for handling the results achieved from research and development by using contract method, and this has been criticised because it reduces the incentive of the private company

participating in the project.

There is also the problem for research workers engaged in research and development from the standpoint of protecting the inventors where the Government unilaterally and unconditionally gains all rights to inventions.

Given this situation, to promote research and development, it is most important to set forth conditions which will stimulate private companies as well as workers to carry out research.

Under the slogan of "establishing the state on the basis of technology", the Government of Japan is to take new measures for the promotion of technology. These are known as the, basic technology development system for industries in the coming generation; sponsored by MITI and the creative science and technology promotion project; sponsored by Science and Technology Agency. They have just new started in an attempt to further research and development of basic and original industrial technology in which Japan is behind Europe and America.

It is hoped, in these new systems, that due consideration will be given to the problems as discussed above to stimulate companies and workers involved in technological development projects and to more effectively accomplish the aims of Government-projected research and development, so that the Government, the companies concerned, the inventors, and the community can all benefit from such projects.

ATTACHMENT (1)

Table 1: Utilization and sharing rates of research expenses of major countries

(Unit: %)

Classification / Country (year)	Utilization rate				Sharing rate				
	Industry	Government	Non-profit research institutes	Universities etc.	Industry	Government	Non-profit research institutes	Universities etc.	Overseas
Japan (1977)	65.2	13.1	2.2	19.5	65.8	27.4	0.3	6.3	0.1
Japan (1978)	64.2	13.6	2.3	20.0	65.0	28.0	0.4	6.4	0.1
Japan (1979)	65.3	13.3	1.9	19.5	65.9	27.7	0.3	6.0	0.1
U.S.A. (1977)	69.6	14.3	3.5	12.6	45.8	50.6	1.6	2.0	-
U.S.A. (1978)	69.2	14.3	3.5	13.0	46.5	49.8	1.6	2.1	-
Britain (1975)	62.7	26.6	2.4	8.4	40.8	51.7	1.6	1.1	4.9
West Germany (1977)	68.4	15.2	0.2	16.2	55.6	41.3	0.2	-	2.9
France (1977)	60.3	22.8	1.4	15.5	41.1	52.7	0.6	-	5.6

Table 2: Government sharing rate excluding national defense research expenses

(Unit: ¥ billion)

Classsification / Country (year)	Research expenses	Research expenses borne by Government	National defense research expenses	Government sharing rate	Government sharing rate, excluding national defense research expenses
Japan (1977)	3,233.5	886.1	21.8	27.4%	26.9%
Japan (1978)	3,570.0	999.5	24.3	28.0%	27.5%
Japan (1979)	4,080.1	1,128.2	27.6	27.7%	27.2%
U.S.A. (1977)	11,549.0	5,840.1	2,732.3	50.6%	35.2%
U.S.A. (1978)	10,159.4	5,061.8	2,256,8	49.8%	35.5%
Britain (1975)	1,410.4	728.6	362.5	51.7%	34.9%
West Germany (1977)	2,824.7	1,167.3	184.6	41.3%	37.2%
France (1977)	1,813.6	956.2	333.4	52.7%	42.1%

Extracted from the "Science and Technology White Paper", 1981 (complied by Science and Technology Agency)

*Figures shown in the above tables are mainly taken from the following reference materials; "International Statistical Year 1975,1977" (OECD)

For Japan; "Investigative Report on Scientific and Technical Research" (Statistics Bureau, Prime Minister's Office)

For U.S.A.; "National Patterns of Science and Technology Resources(NSF80-308)" (NSF)

ATTACHMENT (2)

Handling of Results Achieved from Government-financed R & D

	Type of R & D	Role in R & D	Ownership of achieved results	Utilization of results by company engaged in R & D	Utilization of results by the third party	Remarks
1	R & D with Government-granted subsidy	Government bears part (approximately 1/2) of the R & D expenses by granting subsidy for R & D projects of private company	The R & D results belong to private company accomplishing R & D	The company can freely utilize the results.	In case of utilization of techniques that concern the public welfare, the owner must grant a license to the third party.	* All or part of the grant must be refunded to Government according to the degree of success of R & D, of amount of profits by utilizing results. * The equipment acquired with the grant belong to private company, but disposition must be approved by Government for some period.
2	Government-supported R & D undertaken by private company	Government designates the objectives of the R & D and bears all expenses. Private company undertakes the R & D.	The R & D results belong to Government.	Onerous license is granted to the company by Government.	Onerous license is granted to the third party.	* Upon completion of R & D the acquired equipment must be turned over to Government as instructed.
3	R & D sponsored by private company	Private company designates the objectives of the R & D and bears all or part of expenses. Government (national laboratory, institute or university) carries out the R & D.	The R & D results belong to Government.	Onerous license is granted to the company by Government.		
4	Joint R & D by Government and private company	Government and private company share the required expenses and supply research workers. The R & D is carried out either jointly or separately.	The R & D results may be granted to one party or may be owned jointly by both parties depending on the amount of contributions.	In case that the results are owned jointly by Government and company, there have been examples where the company is required to pay royalties.		

COMMENTS ON
THE U.S. JUSTICE DEPARTMENT'S
ANTITRUST GUIDE CONCERNING
RESEARCH JOINT VENTURES

NOVEMBER, 1980

FOR

THE PIPA CONGRESS

NOVEMBER 4 TO 6, 1981

WALT THOMAS ZIELINSKI

JUST ABOUT SEVEN YEARS AGO, I SPOKE TO YOU IN KYOTO ON ONE FACET OF U.S. ANTITRUST LAW. MY TOPIC WAS THE THEN PENDING LITIGATION INVOLVING THE U.S. DEPARTMENT OF JUSTICE, WESTINGHOUSE, AND MITSUBISHI. IT HAS TAKEN ALL THE INTERVENING TIME TO PRODUCE A HAPPY CONCLUSION, APART FROM THE COSTS THE SUIT MUST HAVE INCURRED. ONE HOPES THAT IT WILL NOT TAKE AS LONG, OR BE AS EXPENSIVE, FOR THE JUSTICE DEPARTMENT'S ANTITRUST GUIDE CONCERNING RESEARCH JOINT VENTURES TO PRODUCE WORTHWHILE RESULTS.

THE GUIDE, A COPY OF WHICH I HAVE HERE, CAN BE OBTAINED FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE FOR $4.50 AND DESERVES SERIOUS STUDY BY MEMBERS OF GROUPS LIKE PIPA WHICH, BY DEFINITION, ACTIVELY SEEK OUT AREAS OF CONSTRUCTIVE COOPERATION. FOR, WHILE THE GUIDE DOES NOT CHANGE THE U.S. ANTITRUST LAW, IT IS A STATEMENT ON BEHALF OF AN EARLIER AMERICAN GOVERNMENT --ONE PERHAPS MORE ZEALOUS ABOUT THE RIGOROUS ENFORCEMENT OF THE ANTITRUST LAW THAN THE CURRENT ADMINISTRATION IN WASHINGTON-- THAT SUGGESTS THAT CERTAIN VARIETIES OF JOINT RESEARCH WILL IN FUTURE BE VIEWED IN A MORE FAVORABLE LIGHT BY U.S. GOVERNMENT AUTHORITIES.

THE GUIDE MAKES CLEAR THAT THE JUSTICE DEPARTMENT SEEKS, IN EACH INSTANCE, TO MEASURE THREE PRINCIPAL CONSTITUENTS IN A RESEARCH JOINT VENTURE UNDER REVIEW AND THREE TYPES OF IMPACT EACH SUCH VENTURE MAY HAVE ON

COMPETITION. THUS,

> "THE LEGALITY OF A RESEARCH JOINT VENTURE DEPENDS ON THE NATURE OF THE PROPOSED RESEARCH, THE JOINT VENTURERS, THE INDUSTRY AND THE RESTRAINTS ON CONDUCT IMPOSED IN CONNECTION WITH THE PROJECT. IN GENERAL, THE CLOSER THE JOINT ACTIVITY IS TO THE BASIC RESEARCH END OF THE RESEARCH SPECTRUM --I.E., THE FARTHER REMOVED IT IS FROM SUBSTANTIAL MARKET EFFECTS AND DEVELOPMENTAL ISSUES-- THE MORE LIKELY IT IS TO BE ACCEPTABLE UNDER THE ANTITRUST LAWS. ALSO, THE GREATER THE NUMBER OF ACTUAL AND POTENTIAL COMPETITORS IN AN INDUSTRY, THE MORE LIKELY THAT A JOINT RESEARCH PROJECT WILL NOT UNREASONABLY RESTRAIN COMPETITION. AND, THE NARROWER THE FIELD OF JOINT ACTIVITY AND THE MORE LIMITED THE COLLATERAL RESTRAINTS INVOLVED, THE GREATER THE CHANCES THAT THE PROJECT WILL NOT OFFEND THE ANTI-TRUST LAWS.
>
> "IN EVALUATING THE LEGALITY OF A PARTICULAR JOINT RESEARCH PROJECT, IT IS USEFUL TO DISTINGUISH BETWEEN THREE DIFFERENT KINDS OF EFFECTS ON COMPETITION. THE FIRST IS THE EFFECT THAT THE ESSENTIAL ELEMENTS OF THE JOINT RESEARCH PROJECT WOULD HAVE IN LESSENING EXISTING AND POTENTIAL COMPETITION BETWEEN THE PARTICIPATING FIRMS. IF THE JOINT ACTIVITY HAS SOME PROBABLE AND

SIGNIFICANT (NON DE MINIMIS) ANTICOMPETITIVE EFFECT, THE QUESTION BECOMES WHETHER THE VENTURE IS, ON BALANCE, PRO-COMPETITIVE, TAKING INTO ACCOUNT ALL ASPECTS ECONOMICALLY AND TECHNICALLY NECESSARY FOR ITS SUCCESS. SECOND, THE PROJECT AGREEMENT, OR OTHER RELATED AGREEMENTS BETWEEN THE PARTICIPANTS, MAY CONTAIN SPECIFIC RESTRICTIONS THAT RESTRAIN COMPETITION. IF THESE RESTRICTIONS ARE NOT REASONABLY ANCILLARY TO THE ESSENTIAL ELEMENTS OF THE PROJECT OR ARE OF UNDUE SCOPE OR DURATION, THEY, TOO, WILL PRESENT MAJOR ANTITRUST CONCERNS. FINALLY, LIMITATIONS ON ACCESS TO PARTICIPATION IN JOINT RESEARCH OR TO THE FRUITS OF THAT RESEARCH MAY PRESENT ANTITRUST PROBLEMS IF THE EFFECT OF THOSE LIMITATIONS IS TO CREATE OR ABUSE MARKET POWER IN THE HANDS OF THE JOINT VENTURERS."*

IN OTHER WORDS, THERE ARE SEVERAL PRINCIPAL FACTORS TO BE CONSIDERED IF YOU WISH TO CONSTRUCT A RESEARCH JOINT VENTURE THAT WILL SATISFY THE U.S. JUSTICE DEPARTMENT. THEY ARE AS FOLLOWS:

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*ANTITRUST GUIDE CONCERNING RESEARCH JOINT VENTURES - NOVEMBER, 1980; SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402, PAGES 3 AND 4

Point I. Industry or Business - are the prospective venturers the only ones in the field or are they but a few of the competitors who make up the industry or business?

Point II. Nature or Type of Research - is the purpose of the research theoretical (basic), applied, or developmental, or is it directed to externalities?

Point III. Scope and Duration of Venture - is the purpose of the venture to solve a succession of industry problems or is it to deal with a specific problem or closely related group of problems, leaving others to be dealt with by different means?

Point IV. Impact on Research - will the joint research increase or decrease research competition?

Point V. Collateral Restraints - does participation in the venture require any of the parties not to do something it might otherwise be free to do, especially outside the immediate scope of the venture?

Point VI. Access - does the venture impose limitations on who may participate at the outset or who may gain access to the fruits of the venture once it has begun or been completed?

BEFORE PROCEEDING FURTHER WITH A DISCUSSION OF THESE POINTS, I BELIEVE IT IS WORTHWHILE TO MENTION THAT THEY ARE NOT NEW. THEY HAVE BEEN ON THE MIND OF OUR JUSTICE DEPARTMENT FOR A GOOD MANY YEARS AND IT HAS BASED BOTH LITIGATION AND WARNINGS TO BUSINESS IN THE FORM OF SPEECHES ON THEM. WHAT IS NEW ABOUT THEIR PRESENTATION IN THE 1980 GUIDE IS ITS EVIDENT ATTEMPT THERE TO MAKE THEM SEEM LESS OMINOUS OR MENACING TO COOPERATIVE EFFORT. THE GUIDE IS, AFTER ALL, THE JUSTICE DEPARTMENT'S RESPONSE TO PRESIDENT CARTER'S DIRECTION TO IT

> "TO CLARIFY ITS POSITION ON COLLABORATION AMONG FIRMS IN RESEARCH TO MAKE CERTAIN THAT THE ANTITRUST LAWS ARE NOT 'MISTAKENLY UNDERSTOOD TO PREVENT COOPERATIVE ACTIVITY, EVEN IN CIRCUMSTANCES WHERE IT WOULD FOSTER INNOVATION WITHOUT HARMING COMPETITION'." (PREFACE TO THE GUIDE).

IT IS ALSO IMPORTANT TO MENTION THAT A RECENT INQUIRY MADE AT THE JUSTICE DEPARTMENT, NOW ADMINISTERED BY PRESIDENT REAGAN'S PEOPLE, REVEALED NO INCLINATION TO ALTER THE ATTITUDE EXPRESSED BY THE GUIDE.

INDEED, WHILE THE GUIDE, IN THAT SECTION ENTITLED "EFFECTS OF THE ESSENTIAL ELEMENTS", SAYS--

> "ANALYSIS OF JOINT RESEARCH SHOULD NOT, HOWEVER, BE EQUATED WITH THAT OF MERGERS AND ACQUISITIONS. MARKET

STRUCTURE IS A PRIMARY FACTOR IN DETERMINING THE LEGALITY OF MERGERS AND ACQUISITIONS. STRUCTURE IS NO MORE THAN THE STARTING POINT IN ASSESSING THE EFFECT OF JOINT RESEARCH ON COMPETITION, HOWEVER, BECAUSE RESEARCH COMPETITION IS NORMALLY CONDUCTED AT LEAST ONE STEP REMOVED FROM THE MARKETPLACE AND BECAUSE JOINT RESEARCH, UNLIKE A MERGER, DOES NOT NECESSARILY ELIMINATE ADDITIONAL INDEPENDENT RESEARCH BY THE PARTIES" (PAGE 6 OF THE GUIDE)--, THEREBY LEAVING ONE RATHER UNSURE JUST HOW MUCH WEIGHT SHOULD BE GIVEN TO THE JUSTICE DEPARTMENT'S MERGER AND ACQUISITION CRITERIA, THERE IS AT LEAST A SUGGESTION IN RECENT STATEMENTS BY ASSISTANT ATTORNEY GENERAL BAXTER, WHO HEADS THE ANTITRUST DIVISION OF THE JUSTICE DEPARTMENT,* THAT FOREIGN PRODUCTION MIGHT IN SOME MANNER COME TO BE INCLUDED IN MARKET SHARE CALCULATIONS -- WHICH WOULD TEND, I BELIEVE, TO MAKE THE CRITERIA THEREFOR SOMEWHAT LESS BURDENSOME AND, CORRESPONDINGLY, LESS WEIGHTY IN RESEARCH JOINT VENTURE DELIBERATIONS.

IT IS IN LIGHT OF SUCH DEVELOPMENTS, THEN, THAT ONE MUST ASSESS THE GUIDE'S FURTHER ELABORATION ON POINT I INDUSTRY OR BUSINESS; TO WIT --

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*SEE BNA'S INTERNATIONAL TRADE REPORTER'S U.S. IMPORT WEEKLY, NO. 94, A10 AND 11 (SEPTEMBER 16, 1981)

"A PROJECT AMONG A NUMBER OF THE SMALLER FIRMS IN AN UNCONCENTRATED INDUSTRY IS PARTICULARLY UNLIKELY TO HAVE UNCOMPETITIVE EFFECTS. IF, FOR EXAMPLE, THE MARKET SHARES OF THE PARTICIPANTS ARE SO SMALL THAT THEY WOULD BE PERMITTED TO MERGE WITHOUT BEING CHALLENGED UNDER THE JUSTICE DEPARTMENT'S MERGER GUIDELINES, THEN THE EFFECTS OF THE ESSENTIAL ELEMENTS OF THE JOINT RESEARCH PROJECT ON COMPETITION ARE NOT LIKELY TO BE SUBSTANTIAL. ABSENT UNREASONABLY RESTRICTIVE COLLATERAL RESTRAINTS, SUCH VENTURES ARE PRESUMPTIVELY LAWFUL. IN ADDITION, EXCEPT PERHAPS FOR THE CASE IN WHICH ONE OF THE PARTICIPANTS IS A MONOPOLIST, JOINT RESEARCH AMONG FIRMS IN NON-COMPETING INDUSTRIES WILL SELDOM GIVE RISE TO ANTITRUST CONCERNS." (PAGE 7 OF THE GUIDE)

"INDUSTRY-WIDE RESEARCH PROJECTS THAT INCLUDE MANY OR ALL FIRMS IN A LINE OF COMMERCE, AS WELL AS PROJECTS INVOLVING THE DOMINANT FIRM OR FIRMS IN AN INDUSTRY POSE ANTITRUST CONCERNS." (PAGE 11 OF THE GUIDE)

ONE SENSES THAT POINT I. INDUSTRY OR BUSINESS AND, INDEED, THE WHOLE OF THE GUIDE IS BEST UNDERSTOOD IF ONE FIRST GRASPS THE MAXIM -- IN ALL THINGS, MODERATION.

IN ILLUMINATING POINT II. NATURE OR TYPE OF RESEARCH, THE GUIDE TELLS US THAT

"THE INTENSITY OF ANTITRUST CONCERNS ABOUT JOINT RESEARCH WILL VARY ALONG THE RESEARCH SPECTRUM: LESS INTENSE ABOUT 'PURE' BASIC RESEARCH, UNDERTAKEN WITHOUT ANCILLARY RESTRAINTS ON THE USE OF THE RESULTS, TO MORE INTENSE AT THE DEVELOPMENTAL END OF THE RESEARCH SPECTRUM, PARTICULARLY IF ANCILLARY RESTRAINTS ARE INVOLVED." (PAGE 1 OF THE GUIDE)

"CONFINING JOINT ACTIVITY TO THE EARLIER PHASES OF THE INNOVATIVE PROCESS RATHER THAN EXTENDING IT TO THE APPLICATION STAGE OF PRODUCTION OR MARKETING IS A MEANS OF LESSENING ANY POSSIBLE ADVERSE EFFECTS ON COMPETITION, AND IS USUALLY NECESSARY WHEN THE JOINT PROJECT IS BETWEEN SIGNIFICANT COMPETITORS IN AN OLIGOPOLY MARKET." (PAGE 11 OF THE GUIDE)

"HOWEVER, WHERE AN INDUSTRY-WIDE EFFORT IS CLEARLY THE MOST EFFICIENT MEANS BY WHICH RESEARCH CAN BE CARRIED OUT SUCCESSFULLY, A JOINT EFFORT WITHOUT UNDUE RESTRICTIONS WILL LIKELY BE LAWFUL... EXAMPLES OF PROBABLY LAWFUL, INDUSTRY-WIDE JOINT RESEARCH EFFORTS INCLUDE SITUATIONS IN WHICH AN ENTIRE INDUSTRY NEEDS A 'CRASH' PROGRAM TO SOLVE A COMMON PROBLEM THAT MAY THREATEN ITS EXISTENCE." (PAGE 12 OF THE GUIDE)

"A SPECIAL CASE IS PRESENTED WHEN THERE IS A JOINT VENTURE INVOLVING DOMINANT FIRMS OR AN ENTIRE INDUSTRY,

FORMED TO ENABLE PARTICIPANTS TO COMPLY WITH GOVERNMENT STANDARDS REGULATING EXTERNALITIES SUCH AS AIR, WATER, OR NOISE POLLUTION RESULTING FROM THE INDUSTRY'S ACTIVITIES. BECAUSE RESEARCH DEALING WITH EXTERNALITIES IS OFTEN COSTLY AND RISKY, PARTICULARLY IN REGARD TO TECHNOLOGY-FORCING STANDARDS, AND BECAUSE SMALL FIRMS IN AN INDUSTRY MAY LACK THE RESOURCES TO CONDUCT RESEARCH NECESSARY TO ENABLE THEM TO CONFORM THEIR CONDUCT TO GOVERNMENT STANDARDS, JOINT PROJECTS INVOLVING LARGE SEGMENTS OF THE INDUSTRY AFFECTED BY THE GOVERNMENT REGULATION ARE A NATURAL RESPONSE TO THE INDUSTRY'S COMMON PROBLEM." (PAGE 12 OF THE GUIDE)

"CARE MUST BE TAKEN TO AVOID SETTING UP THESE PROJECTS SO THAT THEY ENABLE THE PARTIES TO SLOW THE PACE OF RESEARCH OR FAIL INTENTIONALLY TO MEET THE GOVERNMENT STANDARDS, NOR SHOULD SUCH PROJECTS OVERFLOW INTO AREAS WHERE COMPETITION COULD CONTINUE UNABATED... WHERE THE GOVERNMENT REGULATION AFFECTS ONLY A SINGLE INDUSTRY, THE OPTIMUM COURSE MAY BE TO ENCOURAGE A NUMBER OF VENTURES OF SUFFICIENT SIZE AND CAPABLE OF PERFORMING THE NEEDED RESEARCH IN AN ECONOMICAL MANNER. ALSO, DELEGATION OF RESEARCH TO NEUTRAL EXPERTS, SUCH AS UNIVERSITY FACULTY, IF CAREFULLY STRUCTURED, MAY HELP TO LESSEN THE ANTICOMPETITIVE POTENTIAL OF ARRANGEMENTS INVOLVING RIVAL FIRMS, AND ENSURE REASONABLY PROMPT

DISSEMINATION OF RESULTS." (PAGE 13 OF THE GUIDE)

THE GUIDE'S POSITION ON POINT III. SCOPE AND DURATION OF VENTURE IS CLEAR ENOUGH:

"A PROJECT THAT IS NARROW IN SCOPE AND SHORT IN DURATION WOULD BE LESS LIKELY TO HAVE ANTICOMPETITIVE CONSEQUENCES THEN A BROADER OR LENGTHIER ONE." (PAGES 10 AND 11 OF THE GUIDE)

TURNING TO POINT IV. IMPACT ON RESEARCH, THE GUIDE TAKES THE POSITION THAT

"IF THE COST AND RISK OF THE RESEARCH IN RELATION TO ITS POTENTIAL REWARDS ARE SUCH THAT THE PARTICIPANTS COULD NOT OR WOULD NOT HAVE UNDERTAKEN THE PROJECT INDIVIDUALLY, THEN THE VENTURE WILL HAVE THE EFFECT OF INCREASING RATHER THAN DECREASING INNOVATION. THIS MAY HAPPEN, FOR EXAMPLE, IF INDIVIDUAL FIRMS LACK THE RESOURCES TO FINANCE INDEPENDENT RESEARCH PROJECTS ON A REASONABLY EFFICIENT SCALE OR THE RISKS INVOLVED IN THAT RESEARCH ARE SO HIGH THAT THE EFFORT MUST BE SHARED TO MAKE A RESEARCH PROJECT PRACTICABLE. IT MAY ALSO OCCUR IN INDUSTRIES IN WHICH THE FIRMS ARE SMALL IN SIZE AND THERE IS A HISTORY OF LITTLE OR NO INVESTMENT IN RESEARCH, SO THAT ONLY JOINT EFFORT BETWEEN SEVERAL FIRMS (OR EVEN AN INDUSTRY-WIDE

PROJECT) CAN BE EXPECTED TO PRODUCE INNOVATION. IF, ON THE OTHER HAND, THE JOINT RESEARCH REPLACES EXISTING INDIVIDUAL RESEARCH BY THE PARTICIPANTS OR CAUSES THOSE FIRMS TO FOREGO RESEARCH WHICH, IN THE ABSENCE OF THE JOINT PROJECT, THEY WOULD HAVE PERFORMED INDIVIDUALLY, THE FORMATION OF A JOINT PROJECT MIGHT WELL SLOW THE RATE OF TECHNOLOGICAL PROGRESS IN THE INDUSTRY, UNLESS THE PROJECT INVOLVES SUBSTANTIAL EFFICIENCIES." (PAGES 8 AND 9 OF THE GUIDE)

"A FIRM WHICH KNOWS THAT MANY OR MOST OF ITS COMPETITORS ARE NOT VIGOROUSLY PURSUING INDEPENDENT RESEARCH BECAUSE OF A JOINT PROJECT MAY RELAX ITS OWN EFFORTS AND ACQUIESCE IN A SLOW-MOVING, PASSIVE, UNIMAGINATIVE JOINT RESEARCH PROGRAM. HENCE, THE DANGER ARISES THAT THE JOINT PROJECT MAY BECOME A DEVICE TO RETARD RATHER THAN TO STIMULATE INNOVATIVE EFFORTS. IN THESE CIRCUMSTANCES THE PACE OF INNOVATION PURSUED BY THE COLLECTIVE RESEARCH PROJECT MAY BE GEARED TO THAT PREFERRED BY ITS LEAST AGGRESSIVE MEMBER. THERE IS DANGER, ALSO, THAT A SINGLE PROJECT WILL PRODUCE LESS INNOVATION THAN WILL A VARIETY OF SINGLE AND JOINT EFFORTS EMPLOYING ALTERNATIVE APROACHES." (PAGES 11 AND 12 OF THE GUIDE)

IT OCCURS TO ME THAT POINT IV. IMPACT ON RESEARCH IS

THAT AREA OF THE SUBJECT WHEREIN THE BUSINESSMAN AND THE TECHNOLOGIST HAVE THE GREATEST OPPORTUNITY TO ESTABLISH THE SOUNDNESS OF A PROPOSED RESEARCH JOINT VENTURE. ALL THE OTHER POINTS, THOSE ALREADY MENTIONED AND THOSE YET TO BE DISCUSSED, COVER AREAS OF THE SUBJECT WHEREIN THE LAWYERS ARE MORE AT HOME AND BETTER EQUIPPED TO ATTACK OR DEFEND SUCH VENTURE. ANOTHER WAY OF EXPRESSING THE UNDERLYING THOUGHT HERE IS THAT, IF THE BUSINESSMAN AND THE TECHNOLOGIST CANNOT DEVELOP A SOUND, STRONG CASE FOR THE VENTURE UNDER POINT IV. IMPACT ON RESEARCH, NOTHING IN THE REST OF THE GUIDE APPEARS TO ASSURE THAT THE JUSTICE DEPARTMENT WILL FAVOR IT.

THE GUIDE HAS THIS TO SAY WITH RESPECT TO POINT V. COLLATERAL RESTRAINTS:

> "WHERE THE ESSENTIAL ELEMENTS OF A RESEARCH JOINT VENTURE DO NOT VIOLATE ANTITRUST LAWS, ITS COLLATERAL RESTRAINTS ARE THEN JUDGED UNDER SECTION 1 OF THE SHERMAN ACT, WHICH FORBIDS ALL FORMS OF AGREEMENT IN UNREASONABLE RESTRAINT OF TRADE. CERTAIN AGREEMENTS AMONG COMPETITORS, SUCH AS THOSE HAVING THE SOLE OR PRIMARY PURPOSE TO FIX PRICES OR DIVIDE MARKETS, AS WELL AS MOST TYING ARRANGEMENTS AND GROUP BOYCOTTS, ARE CONCLUSIVELY PRESUMED TO BE UNREASONABLE; THEY ARE 'PER SE' ILLEGAL. OTHER COLLATERAL RESTRICTIONS, REASONABLY RELATED TO A LEGITIMATE BUSINESS TRANSACTION SUCH AS A

JOINT RESEARCH ARRANGEMENT, ARE JUDGED BY A 'RULE OF REASON'. THIS JUDGMENT INVOLVES A FULL FACTUAL INQUIRY INTO THE PURPOSE AND EFFECT OF THE RESTRAINT. COLLATERAL RESTRICTIONS SUBJECT TO THE 'RULE OF REASON' ARE LAWFUL IF THEY (1) ARE REASONABLY ANCILLARY TO A LAWFUL MAIN PURPOSE OF THE AGREEMENT, (2) HAVE A SCOPE OR DURATION NO GREATER THAN NECESSARY TO ACHIEVE THAT PURPOSE, AND (3) ARE NOT PART OF AN OVERALL PATTERN OF RESTRICTIVE AGREEMENTS THAT HAS UNWARRANTED ANTICOMPETITIVE EFFECTS." (PAGES 14 AND 15 OF THE GUIDE)

"EXAMPLES OF CLOSELY RELATED COLLATERAL RESTRAINTS INCLUDE: THE OBLIGATION TO EXCHANGE ANY RESULTS FROM RESEARCH UNDERTAKEN PREVIOUSLY IN THE FIELD OF THE JOINT RESEARCH, THE DUTY NOT TO DISCLOSE RESULTS OF THE JOINT RESEARCH TO OUTSIDE PARTIES UNTIL PATENTS ARE OBTAINED, AND THE DIVISION OF PARTICULAR ASPECTS OF THE RESEARCH BETWEEN THE VENTURERS. THESE RESTRAINTS ARE GENERALLY REASONABLY NECESSARY FOR THE SUCCESS OF JOINT RESEARCH AND WOULD NOT ORDINARILY HAVE SIGNIFICANT ANTICOMPETITIVE IMPACT." (PAGE 16 OF THE GUIDE)

"WHILE IN SOME CASES . . . MORE REMOTE RESTRAINTS MAY BE REASONABLY NECESSARY TO THE SUCCESS OF THE JOINT RESEARCH, JOINT RESEARCH NORMALLY DOES NOT NECESSITATE

JOINT DEVELOPMENT OR MANUFACTURE." (PAGE 17 OF THE GUIDE)

"OTHER RESTRAINTS UNRELATED OR ONLY SLIGHTLY RELATED TO THE JOINT RESEARCH VENTURE'S PURPOSES MAY NOT BE PER SE VIOLATIONS BUT MAY STILL BE OBJECTIONABLE AS UNDULY RESTRICTIVE OF COMPETITION UNDER THE 'RULE OF REASON'. AN AGREEMENT BY THE PARTICIPANTS TO FOREGO INDEPENDENT RESEARCH IN COMPETITION WITH THE JOINT VENTURE MAY CONSTITUTE AN UNREASONABLE COMPETITIVE RESTRAINT. THE SHARING OF CONFIDENTIAL INFORMATION ABOUT COSTS OF PRODUCTION, OR SIMILAR MATTERS NOT CLOSELY RELATED TO THE RESEARCH UNDERTAKEN COULD ALSO TEND TO ELIMINATE COMPETITION AMONG JOINT VENTURERS." (PAGES 17 AND 18 OF THE GUIDE)

"JOINT VENTURES SET UP TO ENGAGE IN RESEARCH ON EXTERNALITIES PROBLEMS PRESENT SPECIAL ISSUES WITH RESPECT TO COLLATERAL RESTRAINTS. RESTRAINTS ON PUBLIC KNOWLEDGE CONCERNING THE SUBJECT MATTER OF THE JOINT VENTURE ON EXTERNALITIES RESEARCH SHOULD SELDOM BE PERMITTED, FOR SUCH RESTRAINTS MAY PREVENT THE REGULATORS OR THE PUBLIC FROM LEARNING OF SUBSTANTIAL PROGRESS BY ONE OR MORE VENTURERS TOWARD ATTAINING A REGULATORY GOAL, AND THUS INHIBIT ADEQUATE DETERMINATION OF THE PUBLIC INTEREST. SIMILARLY, THE

POOLING OF CONFIDENTIAL INFORMATION, SUCH AS PRODUCT INTRODUCTION DATES, WHILE QUESTIONABLE EVEN IN AN ORDINARY RESEARCH JOINT VENTURE, IS ESPECIALLY SUSPECT IN A JOINT PROJECT DEALING WITH EXTERNALITIES, FOR IT CAN ENABLE THE VENTURERS TO PREVENT ANY OF THEIR NUMBER FROM PICKING UP THE PACE OF INNOVATION BY MAKING AVAILABLE A PRODUCT OR PROCESS OF WHICH THE OTHER JOINT VENTURERS ARE AWARE." (PAGES 18 AND 19 OF THE GUIDE)

"EXAMPLES OF PRACTICES WITH A CLOSE RELATIONSHIP TO THE PURPOSES OF THE JOINT VENTURE INCLUDE CROSS-LICENSING OF PATENTS AND EXCHANGE OF KNOW-HOW POSSESSED BY THE PARTNERS THAT WOULD CONTRIBUTE DIRECTLY TO THE SUCCESS OF THE RESEARCH PROJECT. SUCH EXCHANGES ARE PARTICULARLY NECESSARY, FOR INSTANCE, WHEN A 'BLOCKING' PATENT THAT WOULD PREVENT RESEARCH OR DEVELOPMENT IS HELD BY ONE OF THE PARTNERS. IT IS NOT UNREASONABLE IN SUCH CIRCUMSTANCES TO LIMIT THE USE OF THE CONTRIBUTED PATENTS TO THAT FIELD AT WHICH THE RESEARCH IS DIRECTED IF IT IS A CLEARLY SEPARATE FIELD OF USE. IT IS ALSO NORMALLY PERMISSIBLE FOR THE PARTNERS TO AGREE TO EXCHANGE ALL TECHNICAL INFORMATION DIRECTLY RELEVANT TO THE SUCCESS OF THE PROJECT GAINED BY THEIR INDEPENDENT RESEARCH EFFORTS DURING THE PENDENCY OF THE VENTURE... (BUT AN) AGREEMENT BETWEEN THE PARTNERS, FOR INSTANCE, NOT TO INTRODUCE NEW PRODUCTS OR TO DISCONTINUE OLD

PRODUCTS THAT COMPETE WITH THE FRUITS OF THE JOINT RESEARCH IS USUALLY UNREASONABLE. LIKEWISE, AN AGREEMENT TO POOL PATENTS NOT REASONABLY NECESSARY TO THE WORK OF THE JOINT VENTURE RAISES ANTITRUST CONCERNS." (PAGE 19 AND 20 OF THE GUIDE)

IN CONNECTION WITH POINT VI. ACCESS, THE GUIDE INFORMS US THAT

"PRINCIPLES DEVELOPED IN ANTITRUST CASES DEALING WITH JOINT FACILITIES ESTABLISHED BY COMPETING FIRMS SUGGEST THAT IF A JOINT RESEARCH VENTURE BECOMES THE KEY TO COMPETING EFFECTIVELY IN MARKETS SERVED BY THE PARTICIPANTS, AND IF THE RESEARCH EFFORT IS NOT PRACTICABLY OR EFFECTIVELY DUPLICABLE BY EXCLUDED FIRMS, ACCESS TO THE VENTURE, (OR TO ITS RESULTS, IF PARTICIPATION ITSELF IS NOT ESSENTIAL) ON REASONABLE TERMS MAY BE MANDATED BY THE SHERMAN ACT." (PAGE 21 OF THE GUIDE)

"COLLECTIVE DENIAL OF ACCESS, OR OF LICENSES, PARTICULARLY BY MAJOR COMPETITORS IN REGARD TO ACTUAL OR POTENTIAL COMPETITORS, WITH RESULTANT SIGNIFICANT INJURY TO COMPETITION IN A RELEVANT MARKET, RAISES SERIOUS PROBLEMS UNDER SHERMAN ACT SECTION 1 AS BEING A BOYCOTT OR CONCERTED REFUSAL TO DEAL." (PAGE 22 OF THE GUIDE)

"HOWEVER, UNDER THE ANTITRUST LAWS, SUCCESS IN ITSELF DOES NOT ALWAYS REQUIRE ACCESS, PARTICULARLY IF THE FIRMS IN THE VENTURE WERE NOT DOMINANT PRIOR TO THE NEW TECHNOLOGICAL DEVELOPMENT.

"LASTLY, ALTHOUGH THE ANTITRUST LAWS MAY REQUIRE THAT ACCESS TO A KEY JOINT VENTURE BE MADE AVAILABLE TO ENSURE CONTINUING FUNCTIONING OF THE COMPETITIVE PROCESS, THEY DO NOT REQUIRE THAT ACCESS BE FREE OF CHARGE. THE JOINT VENTURERS MAY INSIST THAT ANY OUTSIDERS WISHING TO JOIN A VENTURE OR TO OBTAIN THE RESULTS OF THAT VENTURE PAY REASONABLE ROYALTIES OR OTHERWISE BEAR THEIR FAIR SHARE OF THE BURDENS AND EXPENSES OF THE PROJECT." (PAGE 23 OF THE GUIDE)

I HAVE ATTEMPTED HERE TO CONVEY THE ESSENCE OF THE JUSTICE DEPARTMENT'S ANTITRUST GUIDE CONCERNING RESEARCH JOINT VENTURES NOVEMBER, 1980 TO YOU. AS YOU WILL SEE FROM THE ATTACHED COPY OF ITS TABLE OF CONTENTS, IT ALSO INCLUDES NUMEROUS HYPOTHETICAL EXAMPLES OF RESEARCH JOINT VENTURES THAT WOULD OR WOULD NOT BE ACCEPTABLE TO THE JUSTICE DEPARTMENT. IN ADDITION, THERE ARE MANY FOOTNOTES AND CITATIONS OF CASES AND ARTICLES THAT MAY PROVE HELPFUL TO YOU IN ANALYZING THE CORRECTNESS OF A PARTICULAR PROPOSED RESEARCH JOINT VENTURE OR IN HELPING YOU AND YOUR CLIENTS TO ORGANIZE ONE.

IT SHOULD ALSO BE NOTED THAT THE THIRD SECTION OF THE

GUIDE IS GIVEN OVER TO EXPLAINING, AND RECOMMENDING RESORT TO, THE JUSTICE DEPARTMENT'S NON-MANDATORY BUSINESS REVIEW PROCEDURE. THIS IS A MECHANISM FOR GAINING, PERHAPS, FURTHER GUIDANCE FROM THE JUSTICE DEPARTMENT WITH RESPECT TO WHAT YOU PROPOSE TO DO IN A PARTICULAR CASE. NATURALLY, OPINIONS AMONG LAWYERS FAMILIAR WITH THIS PROCEDURE VARY AS TO WHETHER IT SHOULD BE FOLLOWED IN A GIVEN INSTANCE. BUT, PARTICULARLY IN THE AREA HERE UNDER CONSIDERATION, I.E., RESEARCH JOINT VENTURES, IT MAY WELL BE UNDESIRABLE TO DO SO, BECAUSE, EXCEPT IN THE RARE CASE, ANY SUBMISSION MADE TO THE JUSTICE DEPARTMENT WITH RESPECT TO IT WILL BE HELD IN A FILE AVAILABLE TO THE PUBLIC: THERE IS, THEREFORE, NO ASSURANCE OF CONFIDENTIALITY.

IF THERE ARE ANY QUESTIONS REGARDING THE GUIDE YOU WOULD LIKE TO HAVE ME TRY TO ANSWER, PLEASE ASK THEM NOW.

WALT THOMAS ZIELINSKI

"Comments On The U.S. Justice Department's Antitrust Guide Concerning Research Joint Ventures"

(Walt Thomas Zielinski)

TABLE OF CONTENTS

"Settlement Of Dispute Among Japanese Enterprises"

PIPA Committee No. 2, Japanese Group

by

Jûrô Ichimura

Shin-Etsu Chemical Co., Ltd.

- Contents -

1. Introduction

It was on the characteristics of Japanese contracts that I spoke of at last year's 11th Congress in Tokyo, in a speech entitled "Characteristics of Japanese Contracts and Background". As you are aware, these contracts are based on the "fair and equitable principles" with historical and cultural peculiarities of the Japanese in the background.

My talk today is an extension of that speech. I am introducing to you this time a mode of behaviour or the manner in which Japanese enterprises behave when involved in a settlement of a dispute in a written contract or in a business transaction between the parties concerned. It may differ greatly from the mode of actions of American enterprises.

It is difficult, I'm sure, for people with thought of Western rationalism to understand the underlying philosophy of settling a dispute between the parties concerned in Japanese enterprises and the ways of coping with such a dispute, like that of the Japanese contracts I spoke of at length at last year's Congress. This is because I feel that too much stress is laid on personal ties or on relationships between the parties concerned in the enterprises which are often accompanied by emotion.

Setting aside the judgement of value of whether the mode of behaviour of Japanese enterprises is preferable or not, I would like to show you the Japanese behaviour as it is and should feel greatly rewarded for my speech if it should prove helpful to the mutual understanding between Japan and the United States.

2. Now, how in the world does an enterprise in Japan cope with a civil dispute?

To answer this question, or better still, to give you a clue to this issue, I would like to present to you with a typical example of how a Japanese and a West European enterprise each acted in its own right in an attempt to settle a dispute over a design.

A case of infringement of design right was contested between a leading large-scale retail dealer running some 200 supermarkets distributed throughout the Japanese archipelago and a subsidiary company of a world leading food manufacturer in Japan having its headquarters in Switzerland.

The giant Japanese retail dealer, while selling instant coffee products under a famous Swiss brand on a mass scale, began to sell its own developed brand instant coffee simultaneously at stores throughout the country. The shape of the container was identical with that of the Swiss brand's but its labels were not. Thus, they were not misleading at all as to cause confusion among the general consumer of the source of the products.

Dispute over the design between the 2 parties suddenly broke out. This Swiss food company concluded that the shape of the container developed by its counterpart infringes upon its own design right.

The Swiss maker, thus, delivered a letter of warning to the Japanese retailer through its lawyer, demanding that manufacturing and sales of the products be immediately stopped and at the same time filed a provisional disposition with the court to stop the

big Japanese retail dealer from making and selling its products.

Startled by the fact that the Swiss company resorted suddenly to legal means, the giant Japanese firm stiffened its attitude. To counter this Swiss action, it thought of stopping the sales of the Swiss products immediately at all shops. They must have taken legal steps necessary to cope with the Swiss action. Suspension of business dealings was a shocking blow to the Swiss food maker. In a few days, all the Swiss brand products disappeared completely from all shops controlled by the giant Japanese firm.

And a statement by the president of this giant Japanese dealer was carried in a newspaper. It said in effect, "the steps the Swiss food manufacturer took disregarded long-standing commercial practices in Japan and unilaterally destroyed a mutually trustworthy ties. As a consequence, I could not help stopping all dealings with the Swiss company". It is not difficult to imagine how perplexed or puzzled the Swiss food company must have been at the hardened attitude the Japanese retail dealer assumed. This Japanese company was one of the best clients of the Swiss food manufacturer.

I am cutting short may explanation of this controversial issue at this juncture. At any rate, both parties eventually reconciled and settled this problem through talks. And soon thereafter, the famous Swiss brand products again appeared in shops operated by the giant Japanese firm with its own developed products in slightly modified shaped containers also sold on the market.

3. Characteristic features of a civil dispute in Japan.

Now, this case shows a characteristic feature of a West

European and a Japanese approach towards a civil dispute.

The Swiss food maker must have thought that the fact that the Japanese retail dealer was one of its best clients had nothing whatsoever to do with the acts of an infringement by the Japanese enterprise. In this sense, it could be said that it was not necessary for the Swiss food manufacturer to hesitate at all to appeal to legal means in order to protect its rights and to eliminate the infringement.

Meanwhile, the big retail dealer is seen, particularly, as very conservative among the many Japanese enterprises. As a matter of fact, it regards the consumer and the confidence of its customers as its greatest business assets. It seems that they were afraid of receiving a social sanction lying outside the sphere of the laws as a result of being legally prosecuted or accused of more than they were of a legal sanction.

I believe that the Japanese retail dealer, while meeting its opponent with measures to stop business dealings, did not go to the extent of resorting to legal means even if there were prospects of a success in litigation in court. The scheme it adopted was to bring its opponent - the Swiss food company - to the negotiating table.

In the negotiations, both parties conceded a little. As a result, this dispute was settled through norms lying outside the bound of the laws such as commercial practices which prevailed in the country.

Generally, Japanese attach great importance to emotional human

ties. In an enterprise, stress is laid on the establishment and maintenance of a mutually friendly relationship. And what control these human and commercial relations are the social norms that lie outside the sphere of the laws such as social customs, social practices, morals, etc. In this context, the norm of laws may be said to have only a secondary meaning or significance.

If you remember, and I suppose many of you here do, I elaborated on this detail in my Tokyo speech last year.

Now, if, in the case of a dispute between the Japanese giant retailer and the Swiss food manufacturer, the latter were a Japanese company, how would the Swiss company behave or act?

I suppose that the manager of a section where most contacts are made in dealings with the Japanese retail dealer -- in this case, probably the manager of the sales section of the Swiss company -- will first draw the attention of the manager whom he is always in contact with -- in this case, it is probably the manager in charge of the procurement section of the big Japanese company -- to the infringement case, stating the fact that there is a fear that acts of the Japanese retail company may become a serious obstacle to the maintenance of good business relations between them, and then appeal to the retail dealer's spirit of fair play.

Warned in such an informal manner, the Japanese retailer would send a reply to the Swiss food maker through the same channel as I just pointed out -- a reply that they are ready to alter their position if there are grounds of any infringement act as maintained by the Swiss company or that they could not consent to

the Swiss company's claims because they see no grounds.

The legal and patent sections of both these companies will not intervene directly in this issue at this stage. They will instead each offer merely advice to the ones in charge of the negotiations. Much less will the court or a lawyer intervene in such a dispute.

Concrete steps to settle the dispute will be determined at the negotiations between the 2 parties.

In these negotiations, the Swiss food manufacturer will not lay claim to all of its rights beginning with the cease of the infringement up to its demand for compensation for damages brought about by the infringement acts even if all of its rights have been infringed upon.

In case it seeks all-out after its legal rights, people will say this Swiss company is a thoughtless enterprise disregarding trustworthy commercial ties and, as a result, it is bound to meet with social sanctions which lie outside the sphere of the laws. Because of this bare fact, the Swiss enterprise with a preconceived plan to make a little concession from the very beginning to the Japanese retail dealer looks to an out-of-court settlement.

In such a settlement, acts of infringement will come to a halt or a license agreement will be concluded on the basis of the design rights concerned and all past infringement acts will become immune from obligation. As a matter of fact, in Japan today one can see numerous cases of license agreements with warnings of infringement of patent rights as a turning-point.

Thus, a large percentage of the civil disputes in this country are settled by inter partes consultations or negotiations.

A settlement of a dispute through inter partes talks will restore the once impaired business relations between the 2 parties and further strengthen those relations. In Japan, as you are aware, there is a proverb which says, "Ame futte, ji katamaru". It means that when rain falls, the ground gets loose, or rather, soft. But when it stops raining and the ground dries up, the ground gets firmer or more solid than ever before. This proverb is, I think, truly descriptive of the philosophy of the Japanese when coping with a dispute or any difficult problems.

4. Settlement of a civil dispute through talks, or in court, or by arbitration.

Now, the Japanese are, generally speaking, prejudiced against contesting a civil dispute all-out in court and settling it legally. They will not go all-out to the bitter end to stress legal terms or letters contained in a contract when settling a dispute through negotiations because assuming a contrary attitude, it is feared, will render the restoration of friendly personal ties impossible.

Such mode of behaviour of the Japanese stems from a distinctive historical and cultural qualities of this nation. For reference, please see my papers I presented at last year's Tokyo Congress.

My discussion, thus far, might have given you the idea that in Japan unofficial norms such as social customs, morals and so forth which lie outside the sphere of laws take precedence over the official legal norm. If it did, then, I must say it is wrong

because there is a tacit understanding that though unofficial the social norms may be, that which runs counter to or goes against the legal norm is not permissible. And social norms are acted on by a legal norm and universally accepted idea and, thus, undergo changes.

Consequently, it could be said that although a legal norm does not play a leading part in a civil dispute, it acts as a supporter to sustain the principal role.

Now, a settlement of a dispute through consultations, of course, does have its own shortcomings, too. It is a fact that the number of dispute cases which are incapable of being settled through talks are on the increase.

If one feels uneasy about a settlement through consultation, he can, if he wishes to, ask for or seek a mediation or an irrevocable decision in court or he can seek an arbitration award through arbitration.

However, as a practical problem, it is not that simple to secure an irrevocable decision in court because, first, one must expect that it will probably take months, or perhaps years and cost a lot to obtain a court's decision. On top of that, there is a tendecy nowadays that a court tries to avoid giving out decisions on civil cases.

Ordinarily, a court would recommend to both the plaintiff and the defendant a settlement either through mediation or by compromise when it has completed examination of evidence.

In fact, it is said that ninety per cent of the civil cases have been settled by compromise.

"Compromise" means that parties to a dispute make mutual concessions and promise to stop the dispute that has been going on until an amicable settlement. (Article 695 of the Civil Code). In a compromise, then, it is expected that the parties concerned will mutually concede in a dispute.

A court will try to seek a compromise in a dispute regardless of how far an appeal has been upgraded. (Article 136 of the Code of Civil Procedure).

There will not be a great difference between the results obtainable in court and those which can be secured in a settlement through talks because even in an out-of-court settlement both parties will conduct negotiations on the assumption of the results of a compromise in court.

If a compromise is reached or established in court, it will have the same effect as an established decision or irrevocable judgement. Consequently, legally, a compromise reached in court could be said to have been stabilized. Since a compromise reached through talks or consultations is a sort of contract, it could be regarded as being endorsed by a social or a legal sanction in a sense that a contract must be fulfilled or abided by.

Next, with respect to arbitration by a Civil Mediation Board, may I make a brief comment upon it because a legal expert by the name of Dr. Junjiro Tsubota delivered an excellent speech at the Tokyo Congress last year.

According to Dr. Tsubota, there is not much merit to an arbitration as is claimed as far as speed, or cost of a settlement, or simplicity of procedure, is concerned. Whether an arbitration is advantageous in settling a dispute depends, of course, on whether one could find reliable arbitrators. It is best, after all, to proceed with a conciliation. As a permanent arbitration body, we have the Japan Commercial Arbitration Association. Our PIPA also has its own conciliation system. However, there are hardly any cases in which such opportunities are taken advantage of to settle a dispute. That is how things stand in our country.

According to the Japan Commercial Arbitration Association, the development of arbitration cases in the association is very few in number. However, on the contrary, the number of consultative cases in the form of preventive measures are increasing. The arbitration body is, more or less, playing the role of a lawyer instead of fulfilling its primary function.

I think that, while making the best use of the advantage of a conciliatory method through consultation, an arbitration should be taken advantage of more because it is a method in which a 3rd party performs a mediation role to make up for the shortcomings that are liable to arise.

5. Conclusion

A settlement of most of the civil disputes through conciliation by inter partes talks is not necessarily a unique phenomenon in our country. I am sure the same is true of a settlement of a civil dispute in the United States. You will understand that the differences between our country and your country in this matter

lie in the rules and process in the inter partes talks.

The Japanese is a people possessing a strong group consciousness. A group, in this case, could be, on a small scale, a family, or a relative, or a community, or a workshop, or, on a large scale, it could be a huge business or industrial organization, or even a national government. And in each of these groups, there is a non-official mechanism in which law and order are maintained. There is also a system which effectively settles disputes arising in the groups.

However, with the defeat of Japan in the Second World War as a turning-point, this conventional social structure began to crumble.

The unofficial norms such as the commercial practices, which exist in an enterprise group having a mutual business ties such as the group to which the big Japanese retail dealer and the Swiss food dealer belong, are said to have worked effectively in settling the dispute between the Japanese and the Swiss dealer which I introduced to you earlier.

Such unofficial norms as these are no longer effective in an inter partes dispute in different groups to which the parties concerned belong. This fact is obvious if you follow, for example, the issue arising between the enterprise and the consumer such as the pollution or product liability issue.

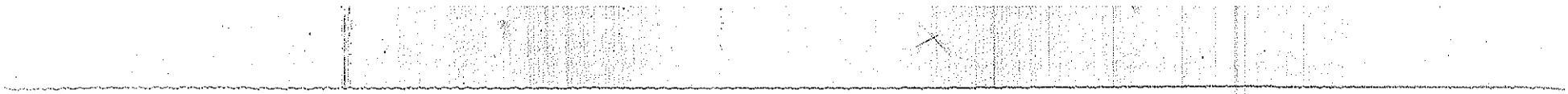
It follows then that the role that both a social norm which lies outside the sphere of the laws and an unofficial social sanction play as a means to solve our civil dispute is declining.

We Japanese value emotional human ties very highly. It is my belief that this characteristic is one of the salient points of our society.

Consequently, it is desirable that all legal problems including matters involving civil disputes should be solved through talks in a spirit of inter partes fair play.

I strongly believe that the rules and process of consultations should be based on a formal legal system.

Committee Presentations
Committee No. 3



ORAL REPORT TO PIPA ON NAIROBI DIPLOMATIC CONFERENCE
ALAN D. LOURIE, NEW YORK, NOVEMBER 5, 1981

I think you know that the Paris Convention goes back to 1883, and, if it survives, it will observe its 100th anniversary in two years. The Paris Convention, to most of us, has meant the right of priority and national treatment. It was last amended in Stockholm in 1967. In Geneva, in March 1980, a diplomatic conference convened to attempt to revise the convention in a variety of ways. After four weeks they "agreed" on one thing: that the consensus necessary to ratify was no longer a unanimous one, but one which did not have more than twelve negative votes. The United States dissented from that position and I understand did so at the opening of the Nairobi convention as well. Just prior to the Paris Convention talks there was a proposal to protect the Olympic symbol. There was agreement on that and a treaty was signed over the United States' objection; we did not sign it.

Regarding the Paris Convention, the conference reconvened in Nairobi on September 28. There was a provision for protection of appellations of origin, which the United States did not favor, one for giving inventors' certificates equal status to patents (this was pressed by the Soviet Union), provisions to give preferential treatment to developing countries by means of lower fees and longer priority periods, and there were final clauses having various degrees of significance. There was a proposal to eliminate Article 5 quater, which relates to importation and the effect of process patents.

Finally, there was Article 5A, which was the most important provision, and this dealt with remedies for non-working and other abuses, including the grant of exclusive compulsory licenses. Now PIPA, as a non-governmental organization, an "NGO" in the WIPO language, has observer status. I went to the meeting, not because Tom or anyone else decided that I was the most knowledgeable and most qualified to go. I simply volunteered and went. Karl Jorda also went the first week; I attended the last week. Mr. Ono, Chairman of the Japanese group, was there the last week. The role of an observer is not always a happy one at a WIPO conference because you can't attend all of the meetings. One couldn't attend the group meetings, for example. (I'll discuss and identify the groups momentarily.) I understand that early in the conference most of the meetings were in groups so that observers had a lot of free time on their hands. And, in fact, observers concerned with trademark issues had a great deal of free time on their hands, particularly those who came for a month. But the last week was more interesting, and most of the sessions that were held I could attend.

The U.S. delegation, as you know, was headed by Ambassador William Schuyler, former Commissioner of Patents, who was given Ambassador status for this purpose. It included Mike Kirk, Lee Schroeder, and Harvey Winter of the Patent Office and State Department, respectively. There were a number of advisors from the private sector: George Clark, Don Dunner, Joe DiGrandi, Tom Smith, Alan Cooper, Dick Witte, Beverly Pattishall, and Larry Evans. I saw only a few of these people because they were there for different times. George Cooper was an observer from the U.S. Trade Association for four weeks and Bart Kish attended for the last two weeks. Bart is from Merck, representing the International Chamber of Commerce, and Bart is a real expert. I think the U.S. delegation was well informed, worked hard, and did a fine job in defending the interests of the patent system and inventors better than any other national delegation.

Let me identify the various groups that were present. Group B consists of the industrialized nations -- the United States, Japan and Europe, plus a few others. This group was badly split. The United States stood alone against exclusive compulsory licenses. There was a group of six headed by Canada, and including Australia, New Zealand, Spain, Portugal, and Turkey, which were pressing for a universal text in which there would be no special privileges for developing nations. More than that, though, they also wanted the same exclusive compulsory license privileges as the developing countries. The rest of Group B, led by Switzerland, Germany and the United Kingdom, appeared anxious to reach some agreement. They did the best they could, but, from my vantage point, they obviously wanted to have an agreement, whereas I think the U.S. point of view was we would simply not accept certain things, such as exclusive compulsory licenses.

The Soviet bloc is Group D; they were only interested in inventors' certificates, and otherwise they provided mild support for the developing countries.

The Group of 77, consisting of the developing countries, is the largest. Essentially, their interest is in weakening the system, which they view as dominated by us, and they want to promote technology transfer on their own terms.

The Chairman of Group B was a Mr. Braendli, who was Director of the Patent Office in Switzerland. Mr. Davis is the Comptroller General of Patents in the U.K.. He was active, and a Frau Steup from Germany was also active. The leader of the third world delegation from Ghana, Mr. Vanderpuye was aided significantly by a Brazilian delegate, Mr. Alencar, whose English was quite extraordinary.

I think you should know the nomenclature of the WIPO conventions so that you get a little bit of their flavor. No matter what a delegate looks like, sounds like, what the content of his talk is, he's a "distinguished delegate" and is always referred to as such. And when he speaks he is constantly giving thanks to the other delegates in appreciation for their expressions, and when one states a position, it's always a compromise in the interest of harmony and against what one would really like to do. Also at these meetings, one doesn't speak, one makes an intervention, so we constantly have distinguished delegates making interventions in the spirit of compromise.

WIPO is a very efficient organization. There were a number of papers being introduced for consideration and they are numbered, e.g. paper 36, 37, 38. But some papers don't have official status and those are called "non-papers". So we were constantly discussing non-paper number 2, and then at one point just prior to my arrival, the chairman of one of the committees broke the group into a smaller negotiating session, and that was called "Friends of the Chairman". So you have to learn a whole new vocabulary if you are going to learn anything from these sessions.

The sessions consisted of plenary sessions, which were rare (I assume there was one to open the meeting, and I attended one to close the meeting); then there were committee meetings. Committee I dealt with most issues, Committee II, inventors certificates, and Committee III, the final clauses; then there were group meetings, which, as I say, observers could not attend. Committee I was the main arena of activity. That's where Article 5A was discussed, in the negotiating committee, which I believe was synonymous with the "Friends of the Chairman", the chairman of that committee being from Argentina. The negotiating committee meetings constituted most of the final week and we discussed the chairman's non-paper. The issues were all 5A. I believe there were one or two meetings on Article 1 relating to inventors certificates earlier. Otherwise, it was all Article 5A.

I have prepared a copy of what I believe is the agreed text that came out of these sessions on Article 5A. Despite the efficiency of the organization and all the official papers, and this is not a criticism, there simply wasn't time before all of us left for an official printed text, which I assume will be coming out in due course. I put together this document which I believe is accurate. There may be stylistic changes, there may be different ways of arranging the subject matter, but, to the best of my observation as an observer, this is what came out of it.

The debate essentially was over sub-paragraphs 4, 6, and 8. With respect to number 4, the nature and the burden of the proof to avoid a non-voluntary license for failure to work; the time limits; the so-called justification clause (shall one justify, satisfy, convince -- which words should be used -- the authorities to justify non-working). The question arose, were the words to reflect the subjective judgment of an official making a political or economic judgment, or were they to constitute a legal determination based on rules of law? Obviously we prefer the latter, which are much more susceptible to dealing with on appeal.

In Subparagraph 6, should there be exclusive non-voluntary licenses and if so what should the time periods be?

In Subparagraph 8 should there be special provisions for developing countries -- non-voluntary licenses, or rights of forfeiture, or an exclusive such license? And, if so, for non-working or only for other abuses, and how does one express this and what are other abuses than non-working? Bill Schuyler asked that question several times and never got an answer. One key question that was discussed -- people here may know the answer or may think they know the answer: Does the Paris Convention now permit exclusive compulsory licenses for abuses other than non-working? It says in Article 5A, subparagraph 4, that, for non-working, compulsory licenses shall be nonexclusive. By inference, does that mean for other abuses they can be exclusive? That would also apply to developed countries. To the extent that is so, and many at the conference stated publicly and privately that it was so, this new draft is an improvement in that respect because exclusive compulsory licenses are only provided for developing countries.

As I said, the U.S. was adamant against exclusive compulsory licenses. At a key point late in the deliberations, Bill Schuyler made what I call, and I hope people take it in a proper sense, a "Motherhood" speech in which he very dramatically and forcefully defended the rights of inventors and property owners, saying it was they who advanced technology, and that their property was being given away. He said the United States would never be a party to depriving inventors of the right to practice their own invention. This speech really warmed the hearts of all the private sector and even brought some applause, which in fact was out of place.

Schuyler said that private observers and advisors were sitting there watching their governments, unresponsive to their pleas, give away their property, and for a while, and this was the most dramatic moment during the week that I attended and

I'm sure for the whole meeting, it seemed as though things might slow down. There were expressions of support from Australia and France, and, when this was repeated at the plenary, the Congo said it was understandable that the United States as a technology exporting country should feel the need to protect its inventors. The Australians acknowledged that they are technology importers and they don't want to kill the goose that laid the golden egg. However, in the final analysis, Article 5A contained the exclusive compulsory license provision over the U.S. dissent. It was approved by Committee I and by the plenary and will presumably serve as a basis for the next diplomatic conference which may well occur in a year or so.

When I arrived, at the beginning of the fourth week, the meeting had really gone nowhere, and the feeling I got was that if it ends this way, there might not be a new conference, simply because so little had been achieved. But at the end of the fourth week, with the agreement on the 5A text, the feeling was stronger that there will be another diplomatic conference.

Looking at what did come out, subparagraph 4 is no great departure from what we presently have; subparagraph 6 is limited to non-exclusive compulsory licenses, and this is acceptable. Subparagraph 8, though, is special for developing countries. There can be non-voluntary licenses within 30 months (that's a compromise between two and three years). They can be exclusive for up to 4 1/2 years where there are circumstances constituting abuse, and non-working is one of the constituent elements of the abuse. If you know what that means, be pleased, because people who were at the meeting didn't know what it means. These words were hammered out between Group B and the Group of 77. I didn't attend the group meetings where some of the subtleties were discussed, but certainly the Group of 77 didn't articulate exactly what they meant by each of these words that they were pressing for so hard.

There can be forfeiture or revocation for non-working after five years. Now, in essence, it's also five years if the law provides for non-voluntary licenses and the grant of the non-voluntary license would not ensure working. There was in the text an agreed statement that the conference could only identify two such cases justifying forfeiture; one, where there was no applicant who could ensure sufficient working, and this differs from the present text where you must have granted the compulsory license and found that it didn't ensure working, and second, as in the present text, that the license did not in fact ensure working.

So that's where we came out. There are lots of questions about what happens next, but, from my standpoint it was a very interesting experience. I am appreciative of Tom O'Brien and PIPA for permitting me to observe on your behalf and also appreciative of my company, SmithKline, for financing it. I think Mr. Ono will have some comments from the Japanese point of view.

ADL
11/9/81

AGREED TEXT OF ARTICLE 5A (Unofficial)

(1)(a) Any country of the Union has the right to require by its national law that the inventions for which that country has granted a patent, or in the case of countries providing for a deferred examination when a provisional protection has been granted, be worked in its territory by the owner of the patent or under his authorization.

(1)(b) Importation of articles incorporating the patented invention or made by the patented process does not constitute working of the patented invention. However, any country of the Union has the right to regard the importation of articles incorporating the patented invention made by the patented process as fulfilling the requirements of working the patented invention.

(2)(a) For the purposes of this Article, "non-voluntary license" means a license to work a patented invention without the authorization of the owner of the patent; it also means a license to work a patented invention given by the owner of the patent where the national law obliges him to give such a license.

(2)(b) Any country of the Union has the right to adopt legislative measures to prevent abuses resulting from the exercising of the right granted by the patent. However, importation into the country where the patent has been granted of articles manufactured in any of the countries of the Union shall not, in the absence of circumstances constituting abuse of the patent rights, entail forfeiture of the patent.

(3) Forfeiture of the patent shall not be provided for except in cases where the grant of non-voluntary licenses would not have been sufficient to prevent the said abuses. No proceedings for the forfeiture or revocation of the patent may be instituted before the expiration of two years from the grant of the first non-voluntary license.

(4) A non-voluntary license may not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of filing of the patent application or three years from the date of the grant of the patent, whichever period expires last; it shall be refused if the owner of the patent proves circumstances which, in the judgment of the national authorities competent to grant non-voluntary licenses, justify the non-working or insufficient working of the patented invention.

(5) Any country of the Union has the right to provide in its national law, where the exploitation of the patented invention is required by reason of public interest, in particular national security, nutrition, health, and the development of other vital sectors of the national economy, for the possibility of exploitation, at any time, of the patented invention by the government of that country or by third persons authorized by it.

(6) Any non-voluntary license shall be non-exclusive and shall not be transferable, even in the form of a grant of a sub-license, except with that part of the enterprise or goodwill which exploits such license.

(7) Any decision relating to the grant of a non-voluntary license or to exploitation in the public interest, including the amount of the just payment to which the patentee is entitled, or any decision relating to the revocation or forfeiture of a patent shall be subject to review at a distinct higher level in accordance with the applicable national law.

(8) Notwithstanding anything contained in paragraphs (3), (4) and (6), developing countries have the right to apply the following provisions:

(a) Any developing country has the right to grant non-voluntary licenses where the patented invention is not worked, or is not sufficiently worked, by the owner of the patent or under his authorization in the territory of that country within 30 months from the grant of the patent in that country, unless the owner of the patent proves circumstances which, in the judgment of the national authorities competent to grant non-voluntary licenses, justify the non-working or insufficient working of the patented invention. Where the national law provides for deferred examination for patentability and the procedure for such examination has not been initiated within three years from the filing of the patent application, the time limit referred to in the preceding sentence shall be four years from the filing of the said application.

(a<u>bis</u>) However, a non-voluntary license may be exclusive for a period of up to four and one-half years in the case where it is determined by the national authority competent to grant non-voluntary licenses that there are circumstances constituting abuse of the patent right and that the non-working or insufficient working is one of the constituent elements of the abuse, subject to the condition that the patent may not be forfeited or revoked for non-working or insufficient working for a further period of 18 months after the expiration of the exclusive license.

(b) Any developing country has the right to provide in its national law that the patent may be forfeited or may be revoked where the patented invention is not worked, or is not sufficiently worked, in the country before the expiration of five years from the grant of the patent in that country, provided that the national law of the country provides for a system of non-voluntary licenses applicable to that patent and that, in the opinion of the national authorities competent for forfeiture or revocation, the grant of a non-voluntary license would not ensure sufficient working of the patented invention, unless the owner of the patent proves circumstances which, in the judgment of the national authorities competent to grant non-voluntary licenses, justify the non-working or insufficient working of the patented invention.

There should be an agreed statement in the Records of the Diplomatic Conference as follows: The Conference could identify only two cases either of which would justify forfeiture or revocation: (a) that, at the time of the decision concerning forfeiture or revocation the grant of a non-voluntary license would not be possible because there is no applicant for a non-voluntary license who could ensure sufficient working, or (b) that the beneficiary of a non-voluntary license, if one was granted before the decision concerning forfeiture or revocation, did not, in fact, ensure sufficient working.

(9) The foregoing provisions shall be applicable, mutatis mutandis, to utility models.

<u>Observation:</u> the Director General will make the following declaration in the Plenary:

"The International Bureau of WIPO will continue to assemble from all countries members of the Paris Union and disseminate information on the existence of, and any changes in, any national measures provided for under Article 5A of the Paris Convention and will publish the text of any corresponding national law as provided in Article 15(2) of the Paris Convention.

ADL
11/9/81

Report on Nairobi Diplomatic Conference

Koichi Ono
President of Japanese Group

Thank you very much, Mr. Chairman.

I believe that you have fully understood the atmosphere and result of Nairobi Conference from the excellent speech by Dr. Lourie.

I like to make a supplemental explanation on the question of Article 5A of Paris Convention. As far as I understand from information, the issues discussed in Nairobi among B-Group countries have the background on the interpretation of Article 5A of Stockholm text of Paris Convention. Therefore, I like to start from this point.

Please refer to Article 5A of Stockholm text. I have no intention to give you a lecture on the interpretation of the Article, but at first I read the relevant paragraph of the Article and then make a comment thereon.

> (2) Each country of the Union shall have the right to take legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.

As you understand from para (2), each member country has the right to legislate measures providing for the grant of compulsory license to prevent an abuse. In this paragraph, nothing is mentioned whether the compulsory license shall be exclusive or non-exclusive. Therefore, even if a country of the member countries takes legislative measures providing for the grant of "exclusive" compulsory licenses to prevent an abuse, the country is not considered to have made a breach of

this paragraph. This interpretation is the basis of discussions.

Now, turning to paragraph (4), it reads:

> (4) A compulsory license may not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of filing of the patent application or three years from the date of the grant of the patent, whichever period expires last; it shall be refused if the patentee justifies his inaction by legitimate reasons. Such a compulsory license shall be non-exclusive and shall not be transferable, even in the form of the grant of a sub-license, except with that part of the enterprise or goodwill which exploits such license.

Please note the second sentence reads "Such a compulsory license shall be non-exclusive ---." This "such a compulsory license" is interpreted to mean "a compulsory license" in the first sentence, i.e. a compulsory license on the ground of failure to work or insufficient working.

Now, back to paragraph (2), "failure to work" is mentioned as an example of "abuses". Thus, when we follow the Stockholm text, there are many kinds of abuses, and failure to work is one example. In order to prevent abuses, each country has a right to legislate measures providing compulsory licenses. Nothing is mentioned on the kind of such compulsory licenses, i.e. exclusive or non-exclusive. However, a compulsory license on the ground of failure to work shall be non-exclusive from paragraph (4).

Now, there is a question whether failure to work <u>per se</u> can really be an abuse or not. Non-working or insufficient working can be an element or condition of abuse, but failure to work or insufficient working <u>per se</u> can not be considered to be an abuse.

This question has been clarified in Nairobi Conference.

However, then, there has arisen another question, i.e. what is abuse? In Stockholm text, abuse is exemplified by "failure to work", although such an exemplification seems not adequate, but the abuse in the Article 5A adopted by Committee #1 in Nairobi Conference has no definition or example. In other words, it is not clear what abuse is, but a countermeasure for abuse is provided. This is another subject of discussion.
Further, the period of exclusivity is provided to be up to 4.5 years. This period seems short, but practically is very close to the entire period in which real patent protection is sought, for a certain field of industry, e.g. pharmaceuticals, because the commercialization of pharmaceuticals is usually started average 8 years or more after the relevant patent application.
Six countries of B-Group, i.e. Canada, Australia, New Zealand, Portugal, Spain and Turkey, have proposed a universality of non-voluntary exclusive license. That is, non-voluntary exclusive license may be granted not only in developing countries but also in all member countries where there is a certain economical reason. This proposal seems to have been supported by socialism countries and developing countries.
I believe that all industries in Japan, regardless the kind of industry, strongly oppose the proposal on the universality of non-voluntary exclusive license.
I have not yet made detailed discussion with people of Japanese industries. Their reaction and opinion may vary depending upon the kind of industry. One of the most reliable Japanese newspapers in Tokyo reported the Nairobi Conference on the top of the first page in October 28 issue.

Now, more and more people are paying attention to the future of the Conference.

Patent system has a basic principle of encouraging invention by protecting it resulting in the development and progress of industry. Abuse or misuse of patent right has been criticized and various countermeasures to prevent such abuse or misuse have been legislated, for example, antitrust laws. Now, abuse of patent system, not patent right, again abuse of patent system should not be justified even under the name of treaty.

REPORT OF FACT-FINDING MISSION ON INDUSTRIAL PROPERTY SYSTEM OF PEOPLE'S REPUBLIC OF CHINA FROM JAPAN PATENT ASSOCIATION

---------- PATENT AND TRADEMARK ----------

Japanese Group, Committee No. 3
Reporter: Akio Takahashi
Kazuhisa Imai

Introduction

For 10 days from July 1 through July 10, 1981, the Fact-Finding Mission on Industrial Property System of People's Republic of China, organized by Japan Patent Association visited People's Republic of China to investigate present situation concerning patent, trademark and technology transfer, and to have discussions with high officials in various fields. The mission, headed by Mr. Sadakazu Shindo, chairman of Japan Patent Association, was composed of 14 members from representatives of patent department of private enterprises.

Many people engaging in the area of industrial property right, as either individuals or groups, have so far visited China. However the visit of the mission composed of the representatives of private enterprises was indeed the first case for China. The people concerned there were looking forward to the mission with greater expectation. Accordingly, the mission could obtain more fruitful result than initially expected.

In the first half, I will talk about matters regarding legislation of the Patent Law, organization dealing with industrial property right, and a development of current Trademark Law in China. In the second half, Mr. Omote will report subjects regarding "licensing".

With respect to the legislative history and lawful circumstances of years ago, many references, oral and written, have been introduced so far. Accordingly, I would like to mention the current situation. As a matter of course, what I mention here is based upon information obtained mainly through questions and answers with Chinese officials.

Recent development for legislation concerning patent

People's Republic of China intends to protect and encourage inventions, utility models and industrial designs under the Patent Law. I would like to explain about "status quo of legislation", "expected contents of Patent Law" and "organizations dealing with industrial property right".

1. Status quo of legislation

A bill of the Patent Law was already drafted by the Patent Office. At present, the bill has been passed to the State Counsel. After the deliberation at the State Counsel, it will be sent before the National People's Congress where it shall be finally enacted as a law. However, there are some arguments objecting legislation of the Patent Law which makes it difficult, at present, to foresee when the Chinese Patent Law is to come into force.

2. Expected contents of patent

Generally speaking, China's Patent Law will not include drastic provisions as often found recently in those of developing countries. It seems that the Law as a whole will be acceptable one for industrialized countries. While being a member of the communism countries, People's Republic of China has, reportedly, no intention to adopt the so-called Inventor's Certificate adopted in U.S.S.R.

Let me show you some major points which are known to us through discussions we had while staying in China. There would be a possibility of change in a course of further study. The expected flow chart for obtaining patent is shown in Appendix 1 (page 11).

(1) Requirements for patent

(a) The first file system is to be introduced. Patent is granted to an invention having novelty, inventive step and utility.

(b) Following inventions are not patented:

Foods and beverages; pharmaceuticals; chemicals; new species of animals and plants; transformation of atomic nuclei; diagnostic and medical treatments; and software.

Regarding the first five items, i.e., from foods and beverages to new species of animals and plants, a process patent is available.

(2) Formality

The applicant is requested to file a request for

application, a specification, claims and prior art references.

(3) Priority right

China is not a member of Paris Union. However, any foreign applicant may claim a priority of 12 months. It is not yet clear when China will be a member of Paris Union.

(4) Preliminary examination

Upon filing, application is examined whether satisfying the formal requirements and whether filling in unpatentable inventions. If rejected, the applicant may appeal for reexamination within three months from the date of rejection.

(5) Publication of application

Any application is laid open to public after 18 months from its filing date or its priority date. Since then, the application is to be given a provisional protection, which can retrospectively demand payment of compensation upon grant of patent.

(6) Substantive examination

Upon request for examination, a substantive examination is taken place. Request for examination is required to be filed within 2 years from the laid-open date. Once examination is requested, the applicant is allowed to file necessary amendments. In case rejected, applicant may appeal against the rejection within 3 months from the date of rejection.

(7) Opposition

A request for examination, if filed, is notified in the Official Gazette. Within 6 months from the date of the notification, anybody may file an opposition against notified application.

(8) Term of patent

A patent right is effective for 15 years from the filing date.

(9) Annuity

Upon publication (laid-open) of the application, annuity payments are required. If annuity is not paid, the application shall be deemed to have been withdrawn. The amount of annuity is not yet known.

(10) Working

(a) The patentee is requested working of his patented invention by himself or under license.

(b) If the working of a patented invention has not been carried out for 3 years, a compulsory license is applicable thereafter. However, there is no further provision for non-working. Accordingly, non-working does not result in forfeiture of patent right.

(c) Importation is not regarded as working.

(11) Monopoly right (Exclusive right)

In principle, a monopoly of the patent, or an exclusive right to the patent, is available under the law. However, the patentee of Chinese national cannot claim the exclusive right against other Chinese residents. In such case, the patentee shall grant

a license to other parties of interest under an agreement with a reasonable royalty.

(12) Litigation

Anybody may sue against injunction, recovery of damages, invalidation of patent, etc. before the Court of People. Also he can appeal against the decision of reexamination.

3. Expected contents of Utility Model

(1) Definition

Utility Models are granted to articles having a novel shape and/or construction or a combination of them.

(2) Priority right

Any foreign applicant may enjoy a 12-month priority.

(3) Examination

Only formal examination is taken place after filed.

(4) Term of Utility Model

Utility Models are effective for 5 years from the filing date. Extension is possible for another 5 years.

(5) Invalidation

Anybody may file an invalidation suit against a registered Utility Model.

(6) Flow chart for obtaining Utility Model

See Appendix 2 (page 12).

4. Expected contents of Design Patent

(1) Requirements

Design Patents are granted to industrial articles

having a new shape, pattern, or color or combination of them to enhance their appearance in beauty.

(2) Priority right

Applicants may enjoy claiming a 6-month priority.

(3) Term of Design Patent

As in the case of the Utility Model, the term of Design Patent is 5 years. Extension is possible for another 5 years upon request.

(4) Flow chart for obtaining Design Patent

See Appendix 2 (page 12).

Organizations dealing with industrial property rights

1. Patent Office

The Patent Office was organized on January 14, 1980 and now about 300 staff members are working there. The Patent Office comprises: Legal Board, Training Board, Documentation Board and Examination Board, for which 7, 6, 35 and 60 people are working respectively. In addition, there is a department handling matters concerning personnel and general administration. The present organization is, however, tentative for legislation of the Patent Law. Upon enactment of the Law, it is likely to be changed.

2. Agent

It is planned to set up the Patent Section in the Legal Affairs Department of the China Council for the Promotion of International Trade as in the case of already established Trademark Section. Every foreign patent application must be filed through this Section. This patent Section will

be further divided into four groups specialized for: Electronics, Machinery, Chemistry and Miscellaneous. The number of patent applications from foreign countries are expected to be in the range of 5,000 - 10,000 per year according to the China Council for the Promotion of International Trade. To handle these applications, more than 200 staffs, according to their assumption, is needed.

Development concerning Trademark

The current "Implementing Rule under Regulations governning Trademarks" has a history of 18 years since it was enacted in April 1963. Since then, approximately 50,000 trademarks have been registered in China. Trademarks filed by foreign applicants account for 15 percent. Japanese applications for trademarks under the Japan-China Trademark Agreement reached 3,600 in total. Out of them, 2,025 applications were registered while 127 were rejected.

To cope with changes of both domestic and international environment surrounding China, revision of current rule is under study. It is reported that a draft amendment has been completed and is to be submitted before the National People's Congress. It is not known when the amendment will enact.

Items likely to be amended are as follows:

1. Under the current rule, protection of consumers has been emphasized and that of trademark owners has not been clarified. The amendment is to explicitly define

the protection of manufacturers and consumers by providing the trademark right.

2. According to the current rule, the term of trademark is 10 years for foreigners, while there is not such limitation of term for Chinese nationals. The amended term of trademark right expires 10 years irrespective of the nationality.
3. Opposition system is to be introduced. At present, there is no provision for opposition.
4. Trademark license is to be introduced.
5. Time limit for cancellation by non-use will extend to 3 - 5 years from present 1 year.
6. Clarify trademarks not eligible for registration.
7. National treatment and other incentives are given to the nationals having bilateral agreement.
8. International Classification of Goods is to be adopted.

In addition to the above amendments, the mission obtained information on following matters through questions and answers:

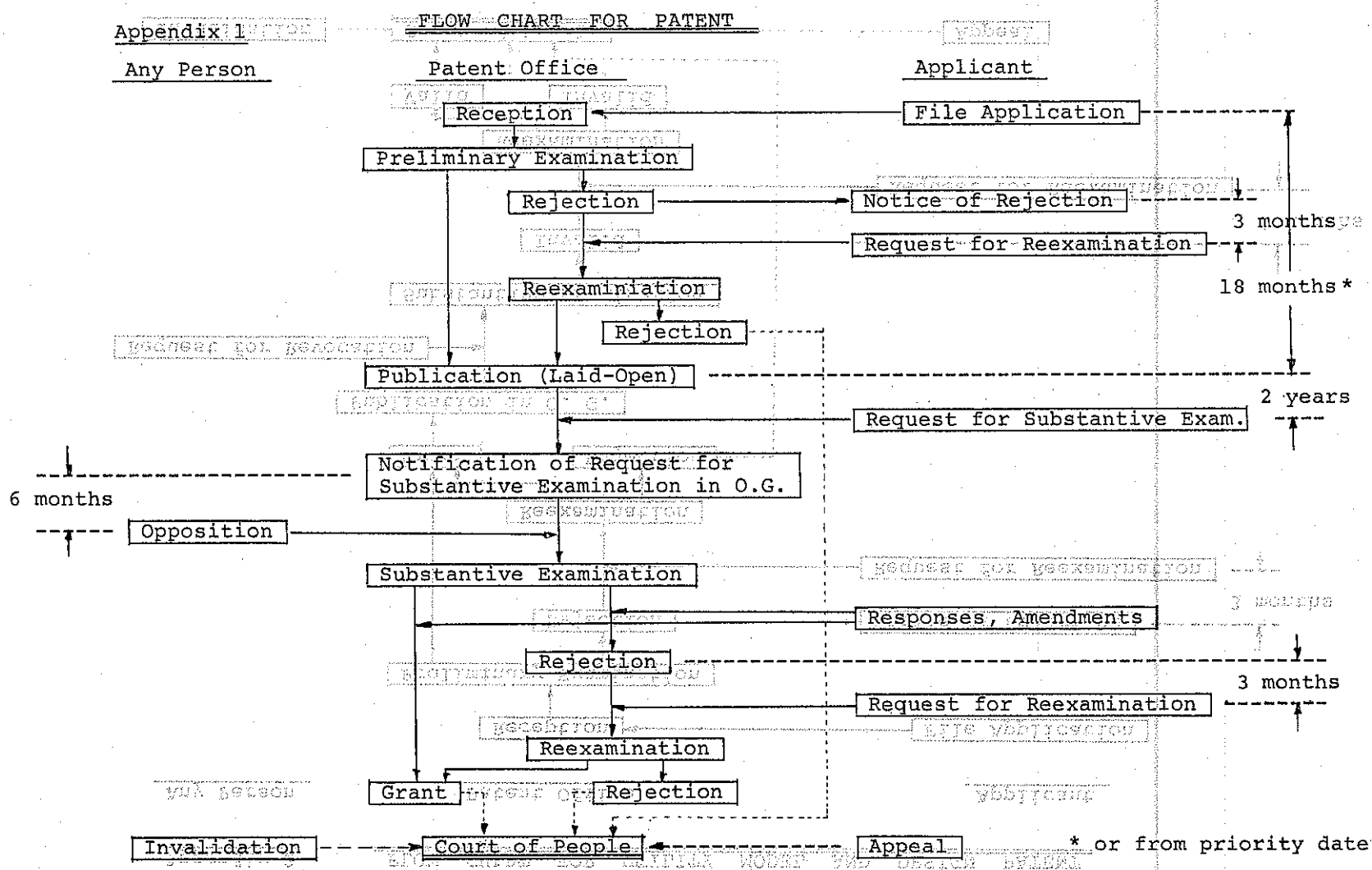
(a) Protection of well-known trademarks, (b) Joint ownership, (c) Trademark using in connection with goods, (d) Modification of registered trademark, (e) Infringement of registered trademark, (f) Classification list for similar goods, (g) Trademark search, (h) Trademark Journal.

The details were introduced in September issue of "Patent Management" published by Japan Patent Association, although they were written in Japanese.

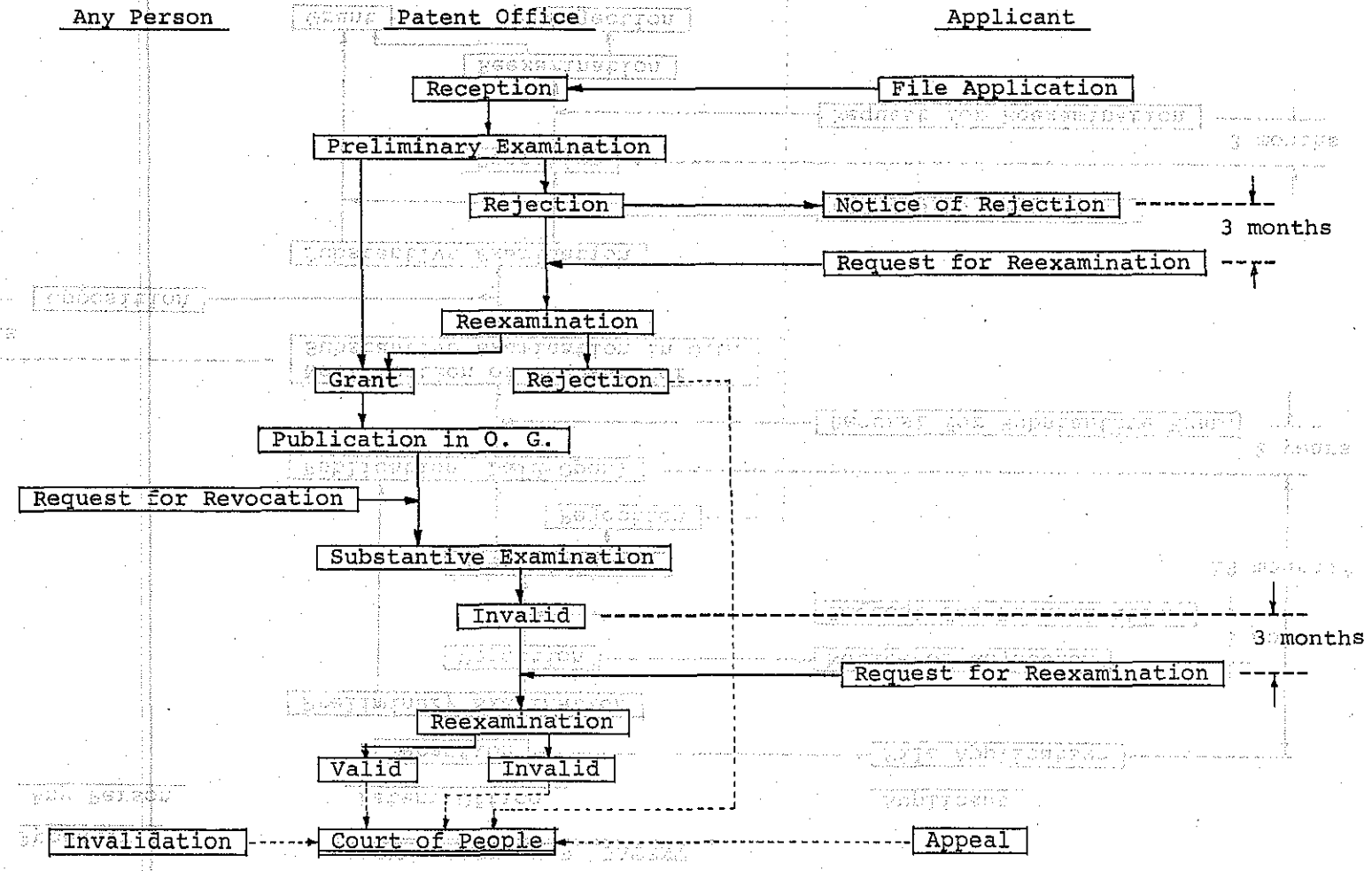
I have generally outlined the current situation concerning the patent and trademark laws in People's Republic of China. Finally, let me repeat again that the enforcement of the Patent Law will take more years, and there is a possibility of change of contents during the course of deliveration of ligislation.

Appendix 1

FLOW CHART FOR PATENT



Appendix 2 FLOW CHART FOR UTILITY MODEL AND DESIGN PATENT



By Mr. Calvin N. Sparrow, Eli Lilly & Co.

RECENT DEVELOPMENTS IN LAW AND PRACTICE IN SELECTED LATIN AMERICAN COUNTRIES

MY TASK TODAY IS TO DESCRIBE RECENT DEVELOPMENTS IN PATENT AND TRADEMARK LAW AND PRACTICE IN SELECTED LATIN AMERICAN COUNTRIES. I WILL INTERPRET THE WORD "RECENT" RATHER LOOSELY, GOING BACK IN TIME SEVERAL YEARS WHEN IT SEEMS APPROPRIATE. MY SELECTION OF LATIN AMERICAN COUNTRIES WAS LARGELY CONSTRAINED BY THE TIME AVAILABLE TO US AND WAS THEREFORE ARBITRARY, BUT I HOPE NOT CAPRICIOUS. I WILL BEGIN WITH SOME RECENT DEVELOPMENTS IN MEXICO.

MEXICO

THE LONG-AWAITED REGULATIONS UNDER THE 1976 MEXICAN LAW ON INVENTIONS AND MARKS WERE PUBLISHED AND CAME INTO FORCE IN FEBRUARY OF THIS YEAR. THE NEW REGULATIONS MADE SOME PROCEDURAL CHANGES IN PATENT PRACTICE WHICH ARE NOT PARTICULARLY IMPORTANT IN THEMSELVES BUT ARE TROUBLESOME IF OVERLOOKED. I HAVE LISTED THE MORE IMPORTANT OF THE NEW PROVISIONS IN AN APPENDIX A WHICH IS ATTACHED HERETO. I USE THE WORD "CHANGE" WITH SOME HESITATION IN RESPECT OF AT LEAST ONE OF THE ITEMS IN APPENDIX A. ARTICLE 25 OF THE NEW REGULATIONS PRESCRIBES THAT CLAIMS SHALL CONTAIN, WHENEVER POSSIBLE, A PREAMBLE ACKNOWLEDGING THE STATE OF THE ART AND A PART WHICH CHARACTERIZES THE NOVEL TECHNICAL FEATURES FOR WHICH PROTECTION IS SOUGHT.

ARTICLE 25 SEEMS MERELY TO FORMALIZE WHAT HAS LONG BEEN GOOD CLAIM DRAFTING PRACTICE IN MEXICO.

THE NEW TRADEMARK REGULATIONS SEEM SOMEWHAT MORE SIGNIFICANT THAN THOSE FOR PATENTS. A NEW "MEXICAN" CLASSIFICATION SYSTEM IS SET UP. THERE ARE NOW 75 CLASSES WITH CLASSES 1 TO 55 PERTAINING TO GOODS AND CLASSES 56 TO 75 PERTAINING TO SERVICES. THE MAJOR CHANGES IN THE GOODS CLASSES ARE SUMMARIZED IN APPENDIX B.

THERE ARE THREE ARTICLES IN THE NEW MEXICAN REGULATIONS WHICH PROVIDE FOR THE TRANSITION FROM THE OLD TO THE NEW. ONLY THE THIRD TRANSITIONAL ARTICLE IS IMPORTANT TO US. THAT ARTICLE REQUIRES US TO REVISE OUR CLASSIFICATION OF GOODS TO CONFORM TO THE NEW CLASSES UPON APPLICATION FOR RENEWAL OF REGISTRATION. I HAVE BEEN ADVISED BY MEXICAN COUNSEL THAT RECLASSIFICATION MAY BE APPLIED AT ANY TIME PRIOR TO RENEWAL.

THE GENERAL SITUATION OF INDUSTRIAL PROPERTY IN MEXICO IS NOT A HAPPY ONE. PATENTS AND CERTIFICATES OF INVENTION HAVE A LIFE OF ONLY TEN (10) YEARS FROM THE DATE OF GRANT. INVENTIONS OF PHARMACEUTICALS, AGRICHEMICALS, FOODS AND FEEDS, CAN BE PROTECTED ONLY BY CERTIFICATES OF INVENTION CLAIMING A PROCESS FOR MAKING THE PRODUCT. THE ONLY RIGHT THE HOLDER OF A CERTIFICATE OF INVENTION HAS IS TO COLLECT A ROYALTY.

THE "LINKING" REQUIREMENT OF THE TRADEMARK LAW IS STILL WITH US IN MEXICO, ALTHOUGH THE DATE FOR ENFORCING IT HAS BEEN EXTENDED AND IS LIKELY TO BE EXTENDED AGAIN WHEN THE PRESENT EXTENSION RUNS OUT.

ARGENTINA

A NEW LAW ON LICENSE AGREEMENTS AND TRANSFER OF TECHNOLOGY CAME INTO FORCE IN ARGENTINA IN MARCH OF THIS YEAR. THE NEW LAW IS THE FOURTH IN A DECADE. GOVERNMENT INTERVENTION IN PATENT AND TRADEMARK LICENSING AND THE TRANSFER OF TECHNOLOGY GENERALLY BEGAN IN ARGENTINA IN THE LAST HALF OF 1971.[1] THAT FIRST LAW SET UP A NATIONAL REGISTRY OF LICENSE AGREEMENTS AND TRANSFER OF TECHNOLOGY. RECORDAL OF AGREEMENTS WAS NOT COMPULSORY BUT FAILURE TO RECORD RENDERED AN AGREEMENT UNENFORCEABLE, MADE PAYMENT OF ROYALTIES UNDER THE AGREEMENT ILLEGAL, AND EXPENSES NON-DEDUCTIBLE FOR INCOME TAX PURPOSES.

A SECOND LAW CAME INTO FORCE NOT TOO LONG AFTERWARD. IT WAS LAW NO. 20,794. I MUST CONFESS THAT I COULD NOT FIND A REFERENCE TO THE DATE OF ENACTMENT OF THAT SECOND LAW. I DIDN'T LOOK TOO HARD AS THE DATE IS NOT PARTICULARLY RELEVANT TO OUR PURPOSE. THE SECOND LAW DEPRIVED THE OFFICIALS OF THE NATIONAL REGISTRY OF WHAT DISCRETION THEY HAD HAD TO APPROVE CONTRACTS UNDER THE FIRST LAW AND RECORDAL PROCEEDINGS GROUND SUBSTANTIALLY TO A HALT.

A THIRD LAW ON LICENSING AND THE TRANSFER OF TECHNOLOGY CAME INTO FORCE IN AUGUST OF 1977 AND SUPERSEDED THE FIRST LAW.[2] THE THIRD LAW DISTINGUISHED AGREEMENTS BETWEEN PARENT COMPANIES AND THEIR SUBSIDIARIES FROM AGREEMENTS BETWEEN UNRELATED COMPANIES, AND MADE RECORDAL COMPULSORY WITH A HEAVY FINE FOR FAILURE TO RECORD.

THE THIRD LAW SPECIFIED THAT CERTAIN CLAUSES WERE TO BE INCLUDED IN ALL CONTRACTS AND PROVIDED FOR A NUMBER OF "IMPLICIT" CLAUSES WHICH WERE TO BE READ INTO ANY CONTRACT WHICH DID NOT EXPLICITLY RECITE THEM. THESE IMPLICIT CLAUSES RELATED TO GUARANTEES OF THE EFFECTIVENESS OF THE TECHNOLOGY TRANSFERRED, THE PROVISION OF TRAINING BY THE SUPPLIER OF THE TECHNOLOGY, PRICES, SECRECY AND QUALITY. THERE WAS ALSO A LONG LIST OF CLAUSES, THE PRESENCE OF WHICH WOULD RESULT IN REFUSAL TO APPROVE THE CONTRACT.

THE FOURTH CURRENT LAW SUPERSEDES THE THIRD AND SEEMS TO BE A SMALL STEP IN THE RIGHT DIRECTION.[3] THE LATEST LAW PRESERVES THE DISTINCTION BETWEEN CONTRACTS TO WHICH THE PARTIES ARE PARENT AND SUBSIDIARY AND THOSE TO WHICH THE PARTIES ARE UNRELATED. CONTRACTS BETWEEN PARENT COMPANIES AND THEIR SUBSIDIARIES MUST BE SUBMITTED FOR APPROVAL. CONTRACTS BETWEEN UNRELATED COMPANIES ARE TO BE SUBMITTED FOR "INFORMATIVE PURPOSES". FAILURE TO SUBMIT A CONTRACT. WHETHER FOR APPROVAL

OR FOR INFORMATIVE PURPOSES, DOES NOT RENDER THE CONTRACT UNENFORCEABLE BUT DOES IMPACT ON THE CORPORATE INCOME TAX. THE RECEIVER OF TECHNOLOGY UNDER A CONTRACT WHICH HAS NOT BEEN SUBMITTED MAY NOT DEDUCT ITS PAYMENTS AND EXPENSES FOR INCOME TAX PURPOSES. THE SUPPLIER OF TECHNOLOGY ALSO MAY NOT DEDUCT HIS EXPENSES AND PAYMENTS MADE TO THE SUPPLIER ARE CONSIDERED NET PROFIT FOR INCOME TAX PURPOSES.

THE LATEST LAW PUTS NO RESTRICTIONS ON CONTRACTS BETWEEN UNRELATED COMPANIES OTHER THAN THE REQUIREMENT TO FILE THE CONTRACT FOR INFORMATIVE PURPOSES. THE PROVISION IN THE 1977 LAW RELATING TO THE SO-CALLED "IMPLICIT" CLAUSES IS GONE AS ARE THE LONG LIST OF CLAUSES WHICH INCURRED AUTOMATIC REFUSAL. THE NEW LAW DOES IMPOSE SOME SEVERE RESTRICTIONS ON CONTRACTS BETWEEN PARENT COMPANIES AND THEIR SUBSIDIARIES. THESE RESTRICTIONS ARE SET OUT IN ARTICLE 5 OF THE NEW LAW AS IMPLEMENTED BY ARTICLE 3 OF THE REGULATIONS UNDER THE NEW LAW. THESE TWO ARTICLES APPEAR IN APPENDIX C.

ARTICLE 5 OF THE NEW LAW PROVIDES FOR MANDATORY REFUSAL OF CONTRACTS WHICH CONTEMPLATE PAYMENT OF ROYALTIES FOR USE OF TRADEMARKS. THIS IS A SEVERE RESTRICTION INDEED IN VIEW OF THE VALUE WE ALL PLACE ON OUR MARKS.

ARTICLE 3 OF THE IMPLEMENTING DECREE PUTS A 5% MAXIMUM ON ROYALTY PAYMENTS.

APPENDIX A

SOME CHANGES IN PATENT AND CERTIFICATE OF INVENTION PRACTICE REQUIRED BY 1981 RULES

ARTICLE 18: WHEN THE APPLICANT IS NOT THE INVENTOR, THE ASSIGNMENT TO THE APPLICANT MUST BE NOTARIZED.

ARTICLE 25: CLAIMS ARE TO CONTAIN, IF POSSIBLE, A PREAMBLE ACKNOWLEDGING THE STATE OF THE ART AND A CHARACTERIZING CLAUSE.

ARTICLE 28: DRAWINGS FOR DUPLICATE COPIES OF APPLICATIONS MAY BE REPRODUCED IN ANY SUITABLE MANNER PROVIDED THE REPRODUCTIONS ARE THE SAME SIZE AS THE ORIGINAL DRAWINGS.

ARTICLE 33: A PATENT APPLICATION COVERING AN INVENTION WHICH IS PROPERLY COVERED IN AN APPLICATION FOR A CERTIFICATE OF INVENTION MAY BE CONVERTED TO AN APPLICATION FOR A CERTIFICATE OF INVENTION. FAILURE TO MAKE THE CONVERSION UPON REQUEST WILL CAUSE FINAL REJECTION.

ARTICLE 39: THE SPANISH TRANSLATION OF THE PRIORITY DOCUMENT(S) FOR CONVENTION APPLICATIONS MUST BE SIGNED BY AN OFFICIALLY AUTHORIZED EXPERT.

ARTICLE 40: APPLICANTS FOR PATENTS AND CERTIFICATES OF INVENTION MUST SUBMIT THREE SMALL SIZE COPIES OF THE DRAWINGS UPON PAYMENT OF FINAL FEES.

APPENDIX B

SUMMARY OF CHANGES IN CLASSIFICATION OF GOODS REQUIRED BY THE NEW MEXICAN REGULATIONS

CLASS 4	IS RESTRICTED TO "ABRASIVES AND MATERIALS FOR POLISHING"
CLASS 6	IS RESTRICTED TO "CHEMICAL PRODUCTS FOR INDUSTRY, SCIENCE, PHOTOGRAPHY, AGRICULTURE, HORTICULTURE, AND SILVICULTURE, WITH EXCLUSION OF PRODUCTS FOR MEDICAL SCIENCE"
CLASS 18	NOW COVERS "LIVE ANIMALS AND FOODS FOR THEM"
CLASS 26	NOW COVERS "SCIENTIFIC, WEIGHTING, MEASURING, NAUTIC, GEODESIC, PHOTOGRAPHIC, CINEMATOGRAPHIC, OPTIC, CONTROLLING, RESCUE, BYOYING AND TEACHING APPARATUS, AND SENSITIZED PAPER AND FILMS"
CLASS 39	"CLOTHING" FOOTWEAR IS NOW EXCLUDED FROM THIS CLASS
CLASS 50	NOW COVERS "SOAPS AND DETERGENTS"
CLASS 51	COVERS "MEDICINES AND PHARMACEUTICAL PREPARATIONS"
CLASS 52	COVERS "COSMETICS AND PERFUMERY PRODUCTS"
CLASS 53	COVERS "ALL KINDS OF FOOTWEAR"

CLASS 54 COVERS "MEDICAL PLASTERS, BANDAGES, GAUZES AND COTTON (SURGICAL)"

CLASS 55 COVERS "NON-CLASSIFIED GOODS"

APPENDIX C

ARTICLE 5 OF ARGENTINA'S LAW NO. 22,426 ON THE TRANSFER OF TECHNOLOGY

THE JURIDICAL ACTS INCLUDED IN (HERE REFERENCE IS MADE TO CONTRACTS BETWEEN RELATED COMPANIES) SHALL BE APPROVED, IF AFTER THEIR EXAMINATION IT IS CONCLUDED THAT THEIR CONSIDERATIONS AND CONDITIONS CONCUR WITH THE USUAL MARKET PRACTICES BETWEEN INDEPENDENT ENTITIES, AND PROVIDED THAT THE AGREED CONSIDERATION IS IN ACCORDANCE WITH THE TECHNOLOGY TO BE TRANSFERRED. THESE JURIDICAL ACTS SHALL NOT BE APPROVED WHEN THEY FORESEE THE PAYMENT OF ROYALTIES FOR THE USE OF TRADEMARKS.

THE REGULATION OF THE PRESENT LAW SHALL ESTABLISH GUIDELINES WITH RESPECT TO THE SPECIFICATIONS OF THIS ARTICLE.

ARTICLE 3 OF IMPLEMENTING DECREE NO. 580

TO THE EFFECTS MENTIONED UNDER ARTICLE 5 OF THE LAW, IT WILL BE PRESUMED THAT THE AMOUNT TO BE PAID AS A COMPENSATION FOR THE TRANSFER OF TECHNOLOGY IS FAIR WHENEVER IT DOES NOT EXCEED FIVE PERCENT (5%) ON THE NET SALES VALUE OF THE PRODUCTS MANUFACTURED OR THE SERVICES PERFORMED BY MEANS OF THE TRANSFERRED TECHNOLOGY.

REFERENCES

1) LAW NO. 19,231 OF 10 SEPTEMBER 1971. SEE ALSO IMPLEMENTING DECREE NO. 6187 OF 22 DECEMBER 1971 AND RESOLUTIONS NO. 97 AND NO. 119 OF 18 SEPTEMBER AND 10 DECEMBER 1973, RESPECTIVELY.

2) LAW NO. 21,617 OF 12 AUGUST 1977.

3) LAW NO. 22,426 OF 13 MARCH 1981. SEE ALSO IMPLEMENTING DECREE NO. 580 OF 25 MARCH 1981.

REPORT OF FACT-FINDING MISSION ON INDUSTRIAL PROPERTY SYSTEM OF PRC FROM JAPAN PATENT ASSOCIATION

- Technology Transfer -

Committee No.3
Shoji MATSUI
Zenjiro NAKAMURA
Speaker Hideki OMOTE

The Fact-Finding Mission composed of 14 representatives from the Japan Patent Association visited the People's Republic of China from July 1st to July 10th, and obtained a lot of useful information through exchange of views with the competent Chinese officials on their way of thinking about operation of the planned patent law and the current trademark law as well as about the licensing of technology.

Prior to our Mission's visit, a government delegation including some representatives from private sector, headed by Commissioner of the Japan Patent Office visited China in April, 1979, to review developments of the patent legislation and to exchange opinions raised in various industrial fields. After the delegation's visit, other fact-finding missions to the country were dispatched by the Japan Institute of Invention and Innovation, and the Japan Patent Attorneys' Association with the object of talking mainly about problems pertaining to a system for promotion of invention, technical information management, filing procedures, etc.

The Japan Patent Association composed of about ~~490~~ 460 leading enterprises of Japan had a strong desire, from a standpoint of private sector, to promote transfer of technology between the two countries through licensing agreements based on patents and relevant knowhow under the principle of mutual benefit, and we were looking for a good chance to visit China to get a first-hand knowledge of the patent legislation and technology licensing policies of China and to discuss the matters with the authorities concerned.

Having heard the news that the Chinese patent law was finally drafted and would be promulgated in the not-so-distant future, our Mission gave effect to the project and successfully attained the anticipated purposes.

While our exchange of views covered the whole field of the industrial property system and technology transfer, as Mr. Takahashi has just reported on the outline of the drafted patent law and a revision of the trademark law, I would like to report on the matter of technology transfer as the key subject.

With respect to the licensing policies of China, we expected to obtain as much information as possible on China's idea and status of arrangement of statutory system mainly in connection with technology transfer covering patents and knowhow not accompanied with equipment (pure licensing). Further, as the matter to be requested to the Chinese side, we endeavoured to have China recognize the importance of an early establishment of Chinese patent system so that smooth transfer of technology to China could be realized.

Our delegation, prior to the visit sent questionnaires in line with the above purport to officials concerned in China. The Chinese side requested us to introduce the post-war licensing situation in Japan and its experience, together with the historical practice of administrative control on license by the Japanese Government.

1. Places visited and summary of talks:

Technology Transfer Department of the Import Export Commission is carrying out planning of policy drafting of laws and regulations concerning pure license, and permission and sanction on technical contract, from the general standpoint. The main portion of this report was obtained from Mr. Pei Chao, Vice-Director, and Mr. Cao Jiarui, Deputy Director, on the occasion of our visit to the commission.

At the China Council for the Promotion of International Trade, we called on Mr. Ren Jianxin, Director, Legal Affairs Department, and could hear about the joint venture enterprises and the arbitration matters in China.

Chinese Foreign Trade Department is in charge of planning and practice of Chinese foreign trade policy. Its No. 4 Bureau is in charge of Asian and ASEAN countries. We called on Mr. Rin Liandei, Vice-Director of No. 4 Bureau, and could learn from him the current Chinese situation and the future outlook as to the general problems of trade between Japan and China.

At said three offices, we gathered information about China's idea about license and plan of enacting laws and regulations, etc., and one of our delegates addressed a lecture on Japan's post-war experiences on license before the Chinese officials concerned, and they, vigorous exchange of views were made.

I will report a summary of the findings about the matters relating to the licensing policies and the questions & answers from the both sides.

2. Explanations by Chinese side:

(1) China has just finished its Sixth Chinese General Congress of Communist Party to summarize its 30 years' history. Accordingly, China will never change its policy of technology exchange with foreign countries or formation policy of joint venture with them in the future. China is rather taking a direction to strengthen these policies. At present, China is in a period of adjustment for economic establishment. Until about 1985 no large induction of equipment will be expected excepting the matters relating to energy and the people's living. In the latter half of 1980's, China will take off to conduct its international trade vigorously. At present, China has started to steer its 5 years' and 10 years' economic plans from 1981.

(2) China has hitherto had many relations with foreign countries, especially with Japan with respect to licenses on import of plants, etc. It is the problem how to materialize these relations in the future. China is preparing to enact Patent Law. The basic attitude of China is to respect the international customary practice, to keep faith, and to make practice as per the license contract. Accordingly, the license business is believed to be smoothly conducted even if there is no patent law in China.

(3) With regard to the inter-governmental investment guarantee agreement, China has already signed with U.S.A. and is negotiating with West Germany. China has been continuing talks with Japan since May this year, and is positively promoting the matter.

(4) Technology Transfer Dept., Import Export Commission, has the functions to carry out planning of national policy of technology transfer, drafting of laws thereof, and adjustment with the related divisions, so as to promote technology transfer. Contracts for technology are concluded between the individual Japanese enterprises and the Chinese corporations in charge of the practice of technology. The Technology Transfer Dept. is in charge of examining all contracts and is responsible for providing guidance to such contracts.

(5) Although China has a short history in having handled the pure license, China succeeded in concluding 65 cases of licenses during the period from 1979 to June this year. Classified by type of industry, licenses relating to machine, electric apparatuses, and electronics are large in number. Classified by country, licenses are contracted with West Germany (20 cases),

U.S.A (13 cases), Japan (10 cases), France (7 cases), and U.K. and Switzerland (6 cases) respectively*. China desires to promote mainly the pure license rather than the plant imports in the future.

(6) In order to realize smooth transfer of technology under the pure license, China started to study enacting a technology transfer law. China is now studying the Code of Conduct of United Nations and Technology Transfer Law of Spain, etc. For this purpose China dispatched two fact-finding teams overseas.

"Laws on Joint Ventures Using Chinese and Foreign Investments" (Joint Venture Law) only prescribes that the industrial property right and knowhow may be invested as capitals. As to the transfer of technology, provision is to be made by Technology Transfer Law. Both are to be placed on parallel relations.

(7) Examination of contracts for technology in China must meet all of the four points of Chinese policy of industry technology and national economy, and target of technology development. This basic policy is generally almost the same as that which was adopted in Japan in its post-war technology import age.

(8) On the important matters concerning contracts for technology:

1) Secrecy: China will observe the secrecy of knowhow in accordance with contracts. It was reported in a certain magazine that the contents of knowhow contracts with China are apt to be appropriated and used by other corporations in China, even if an obligation clause to keep the knowhow secret is included in the contracts. This is quite a regrettable news to China.

Should it be the case to admit that the secret is disclosed to any other party than the contracting parties, the royalty demanded by the licensor would become so high that no contract would be concluded. In the instances of contracts concluded with foreign countries, the provisions to keep secret have been included, in which China has been observing the secrecy as contracted. Since, being different from the purchase of articles, a contract for technology covers a long period of time, China considers the relations of trust between the contracting parties to be important.

2) Royalty: China has no idea of setting the upper limit to the royalty. Since each contract is different in its value, China has been dealing with the matter case by case.

3) Limitation of territory: China will accept the limitation of exports from China to the third countries in which the licensor has patents or to which the licensor grants its license exclusively.

4) Grant back: China considers it necessary to offer improvement of technology reciprocally.

(9) "Joint Venture Law" was promulgated in July 1979. Under said law there have so far been 300 offers, of which 20 cases were contracted. The amount invested reached $220,000,000. Of those contracted, 13 cases are for engineering enterprises with which successful results are being realized. The proportion of foreign capital is prescribed to be more than 25% by the "Joint Venture Law". There is also a record of 51% foreign capital. In any case, there is no upper limit to the foreign capital proportion in the joint venture corporation.

The term for existence of joint venture enterprises is fixed, for instance, up to 5 years, 10 years, 20 years, etc. Negotiations for extension of the term is possible before the expiration.

(10) Disposition of conflicts with foreign countries concerning industrial property right, technology exchange, foreign trade, etc. in economic activities is to be taken up by the Foreign Economic and Trade Arbitration Commission, China Council for the Promotion of International Trade. Acting for the lawsuit ia also to be taken up by this Commission.

3. Explanations by our delegation

(1) The following lecture was addressed by Mr. Matsui, Vice-President of the delegation. There were present 30 members from Technology Transfer Dept. and other technological corporations, which, we noted, was a token of their strong interest in the subject matter.

Subject: "Technology transfer and industrialization viewed from Japanese experience"

Items: 1. Summary of post-war technology import and role of patent system in Japan

2. Important matters on contract for technology, i.e., (1) royalty, (2) terms of contract, (3) secrecy, (4) customs duty, (5) territory, (6) warranty, (7) arbitration

(2) Main questionnaires from Chinese side:

1) In China, some people hold the opinion that a patent system is not always necessary in licensing arrangements. On this point, our opinion was requested. Against this, we commented that, in the

case of a knowhow contract, only the contracting parties are bound by the agreed matters contained in said contract, so that, even if the knowhow flows out and a third party uses said knowhow, the licensor can hardly stop the use by said third party. Accordingly, if the license is not supported by a patent, the licensor who cannot be clear of uneasiness does not like to offer the important technology with the result that smooth transfer of technology would hardly take place.

2) Besides the above, the following questions were raised, to which replies were made respectively.

A. The respective number of cases and ratio of patent, knowhow, and patent/knowhow in the post-war technology import in Japan.

B. Progress of laws and administrative guidance concerning licenses in Japan.

C. Relationship between Foreign Investment Deliberation Council and Fair Trade Commission.

D. Scope of licensor's improved technology on contracted product.

E. Problems in exporting the contracted product.

F. Whether the monopolistic contract is disadvantageous to the licensee or not.

G. On the countermeasures against the case where the knowhow in the knowhow contract and the protection of knowhow. (has been disclosed by a third party)

H. View about the opinion that it would be more advantageous not to file a patent application on an invention but to keep it secret as knowhow.

4. Summary:

Through the discussion on license which lasted over 6 hours, it was known that the Chinese side was steadily preparing to complete drafting of Patent Law for smooth transfer of technology and preparation for enforcement regulations for technology import law and "Joint Venture Law", etc. It was also known that China has been realistically dealing with the matters such as royalty, secrecy, territory, etc. which are the important matters in contracts for technology by respecting the international practice.

The socialist China is endeavouring to find out possible points of harmony with the capitalistic countries on license. Our delegation was also impressed that it would not be impossible to find out a point of harmony. Especially as to keeping secret of technology, the Chinese side repeatedly emphasized not to disclose it to any sources outside the parties involved.

In concluding a contract for technology with China, it is essential to incorporate the important matters completely in the contract. As the Chinese side was also stressing this point, special attention should be paid.

Changes in Patent Examination Practice in the USSR

Japanese Group, Committee No.3

Reporter: Dr. Akira Mifune

Mitsuru Nishimura

1. Introduction

The Soviet Union has a dual system to protect inventions, consisting of a patent and an inventor's certificate, of which a patent is solely applied for by foreigners. For instance, the statistics prepared by the WIPO show that all of the 2,448 patent applications filed with the Soviet government in 1979 were made by foreigners (on the other hand, only 217 or about 0.3% of total 68,760 inventor's certificates were applied for by foreigners in the same year) and that about 10% of the whole patent applications were made by Japanese applicants. Such being the case, it may be said that the practice for the applied patents set up in the Soviet Union should be regarded as a matter of concern for those who are in charge of patents in the Western corporations.

Now, the patent law of the Soviet Union (Statute on Discoveries, Inventions and Rationalization Proposals) provides the requirements to be supplied in the specification attached to the patent application and the inventor's certificate application in Article 44, whose last paragraph stipulates that the claims "shall be the only criteria for defining the scope of the invention and shall be in the form of briefly worded statement indicating the essence of the invention from the technical viewpoint." This is followed by the provisions specifying that:

(1) a device shall be characterized by reference to the features of its design,

(2) a process ——— by reference to a certain sequence of actions (methods and operations with the help of material objects), and

(3) a substance ——— by reference to its ingredients and their quantitative ratios.

Before the introduction of the recent changes in the patent examination practice, the abovementioned provisions were carried out reasonably in general and the relation between the technology disclosed concretely in the specification and the scope of protection given in the claim did not differ so much from the examination conducted in Japan, the U.S.A., and West European countries.

In the past, we had problems with the patent administration of the Soviet Union in the facts that chemical substances and pharmaceutical preparations were not accepted as the object of a patent, that the examination took a long period of time, and that examiners requested applicants to present extensive and detailed data; however, the protection of chemical products, uses of chemical substances and products (methods of uses), and methods for preparing chemical substances under patent was recognized up to somewhat reasonable degree.

2. Changes Made in Examination Practice.

The Soviet Union became very strict about the examination of patents applied for its authority in the field of chemistry since around April, 1980, and came to grant a patent only for a patent with a very narrow scope of claims as compared with the former time.

This fact begun to arouse considerable attention among some of the Japanese corporations last autumn and in response to a problem presented by Monsanto Co. via Mitsubishi Chemical Industries Ltd., the Keidanren (Federation of Economic Organizations), Japan Patent Association, and Japan Chemical Industry Association took up this problem seriously early this year. The last two of these organizations addressed a questionnaire to their members, respectively. The replies submitted to the questionnaires by the Japanese corporations are summarized below to show how changes have recently been brought to the examination practice in the Soviet Union.

(1) Chemical Composition

The new practice requests not only to concretely define the kind and quantity of the specified effective ingredients in the claims in applying a patent for an invention of a chemical composition but also to minutely define the kind and mixing ratio of the filler, auxiliary and formulation agents, etc. which do not consitute the essential elements for the invention. No patents are granted unless their claims are made up in the form of a "prescription". For instance, a patent was granted to an agricultural fungicide or insecticide so far as its effective ingredients, which composed the essential elements for a fungicide or insecticide, were defined qualitatively and quantitatively as well in the past; however, it is now requested to define the kind and mixing ratio of the unessential elements, or auxiliary agents (optional additives) such as carrier, surface active agent, etc. in the claim.

Furthermore, it is requested that the claim should be strictly

satisfied and supported by the contents of the example in all its aspects. The general explanation made in the specification is not taken into consideration. To cite an example, in a case where one of the compounds which constitute a chemical composition is one which has a substituent R_1 at the benzene nucleus (), a definition of "R_1 is a lower alkyl group having 1 to 4 carbon atoms" in the claim is limited only to an ethyl group if the example specifically refers only to the ethyl group and does not work to cover these compounds in which R_1 is respectively a methyl group, propyl group and butyl group, to be protected under the patent even if they are mentioned in the general explanation of the specification. The same practice is also applied to the mixing ratio of the respective ingredients and the claim is requested to define the ratio in such a way as to indicate "effective active ingredient A being X% and auxiliary agent B being Y%". A case is reported in which a claim defining like "0.1% or more" is allowed to cover only one condition of "0.1%" simply because "0.1% or more" defines only the lowest limit of "0.1%" and does not defines the highest limit.

The presentation of supplementary examples in an atempt to support the claim to cope with such an office action is in most cases rejected if such presentation is made when the two-month period is over after the acceptance of the application. Since an office action is generally sent to the applicant long after said two-month period is over, it is rather difficult to maintain the claim satisfactory as desired at the time of filing the application by presenting additional data as "examples".

According to the new practice, therefore, a patent is granted only to the compositions mentioned in the examples at the time of

application and in case where only one example is provided for the composition, the invention most probably becomes a one-point patent. Under these circumstances, the applicant has finally to make a choice between the two, either to take a narrow-scoped claim of "prescription" type which is limited to what is mentioned in the examples or to abandon the application.

(2) Uses (Method of Use)

A method-of-use patent is regarded to be one of the effective means to protect the invention of a chemical substance or composition in the light of its usefulness and especially in a country, where no chemical substance patent is allowed of, this type of patent and the aforementioned composition patent play an important role.

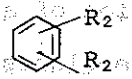
The new practice taken by the Soviet Union requests to give a detailed description of the respective physical steps of the new method of use. Several corporations informed us of the cases where they were requested to define the quantity to be used in an invention of a novel plant growth regulator or where it is instructed to numerically define the reaction conditions (for instance, the reaction temperature described in the examples) in an invention of the reaction method in which a new catalytic composition is used.

Also there is a case where an invention mainly comprising the use of a novel chemical substance is excluded from under the patent protection because the invention is regarded as the invention of "chemical substance". More particularly, this means it is not sufficient to state that a group of chemical compounds are known

by simply presenting their general formulas and it is required that all of the compounds to be claimed are already known.

(3) Chemical Process

With regard to an invention of chemical process or method, the claim is required to define the kinds of starting materials and end products and the parameters of reaction conditions in strict conformity with the content of examples.

For instance, in an invention in which a group of compounds expressed by a general formula  is used as a starting material, if the examples only mention that R_2 represents Cl and Br, and R_3 represents -H and -CH, it is required to define "R_2 is a chloro or bromo group and R_3 is a hydrogen atom or a methyl group" in the claim, too and an expression like "R_2 is a halogen group and R_3 is a hydrogen atom or a lower alkyl group" is not allowed. Even with regard to the obvious reaction conditions, it is requested to numerically define the parameters of temperature, pressure, time, etc., and there is a case in which it was requested to define like "the reduction should be conducted in an aqueous alcohol solvent with the use of Raney nickel" in the place of "the reduction reaction".

In all cases, the applicant's request for the reconsideration of the examiner explaining that the requirement for diffinition is unreasonable is neglected and the patent application is rejected unless the examiner's request for such definition is accepted by the applicant. And the patent claims granted in the U.S.S.R. come to have an extremely narrow scope as compared with other countries. This makes it meaningless to apply for a patent and to maintain a patent at the cost of a high annuity in the Soviet Union.

It is said that the abovementioned new examination practice is also applied to the examination of an inventor's certificate or a patent applied though PCT route; however, none of such cases has so far been reported in our country. It is also said that this new practice is applied not only to an invention made in the field of chemistry but also to an invention in the fields of electricity and machinery. So far as the Japanese corporations' patent are concerned, however, the new practice of examination influence only the field of chemistry, especially high molecular compositions, agricultural chemicals, glass, catalysts, etc.

3. Response among Japanese Corporations

As already mentioned, the Japan Patent Association and Japan Chemical Industry Association respectively made a survey by sending out a questionnaire to their member companies. The results are shown in the Appendix I. According to the surveys, Japanese chemical companies filed patent applications with the Soviet Union only for specific all selected inventions and most of the corporations (about 88%) filed not more than three applications. Even though, as much as 24% of the chemical companies reply that they have actually underwent the influence of the new examination practice. 38% of the chemical companies are aware of the change in the examination practice and 39% of them predict that this change will exert influence upon the export of technology and products to the Soviet Union and the mode of transaction with that country.

To cope with such change in the practice taken by the Soviet Union, 61% of the corporations who replied to the questionnaire consider that some representation should be made against the new

practice and also that it is necessary for them for the time being to understand the content of the new Soviet examination standards and to fully consider and refer to them in preparing the specification at the time of patent application.

Under these circumstances, the Japan Patent Association and Japan Chemical Industry Association wrote respectively letters of request (Refer to Appendix II and III) in May this year to the USSR State Committee for Inventions and Discoveries and other related government agencies. Referring to the recent examination practice, The letter of Japan Patent Association requested the Soviet Union authorities to use their discretion in the handling of the new practice as follows:

> "If the rigid policy as mentioned above is continued further in the future, almost all of the enterprises in Japan would be reluctant or cease to file patent applications on inventions concerning their new technology in the USSR. Then, this would give a bad and damaging effect on their technical cooperation with the USSR.
>
> Accordingly, representing the Japanese industries, we respectfully submit that the authorities as concerned in the USSR should reconsider the significant change recently made in patent policy and revive the former reasonable practice for the patent protection. Finally, may we add that it is of our firm belief that the better patent protection being provided for, the more desirable technological cooperation and business relationship will be advanced for mutual interest."

The above letter of request from Japan Patent Association may be deemed to be very significant as measures to express the concern of the whole Japanese industries as to the following points:

(1) Though the problems are presently raised with the inventions made in the field of chemistry, the same problems are likely to confront the inventions made in the fields of electricity and machinery.

(2) This kind of practice taken by the Soviet Union is apt to spread to other communist countries and further to developing countries, possibly bringing about the retrogression of the patent system in general.

Similar letters of request, we have heard, were also sent to the Soviet Union authorities from the chemical manufacturers associations in the U.S.A. and West Germany.

4. Reaction of the Soviet Union.

The Japan Chemical Industry Association received a letter dated July 31, 1981 from the Chairman of the Soviet State Committee for Inventions and Discoveries insisting that the present practice is reasonable. The letter also contains a noteworthy information and opinion as follows:

1. All requirements put forth by the Committee with regard to patent applications in the field of chemistry are based upon the existing law of 1973. The Committee, however, is examining the revision of the existing law related with protection of patents on chemical compositions including agricultural chemicals.

2. In the Soviet Union, the equivalents of characteristics described in the claims are taken into consideration in determining the protection scope of an invention, especially in investigating an infringement of the patent. Therefore, it is not proper to say that the concrete description of the ingredient composition in the claims narrows the protection scope of an invention in the Soviet Union since it is not required to describe all possible variants in the main claim.

According to a recent information, the USSR State Committee for Inventions and Discoveries had discussions with the Patent Department of Chamber of Commerce and Industry this fall and some of the AIPPI personnel from the Western countries were invited to the Soviet Union to supply their opinions in October. The Soviet Union authorities are expected to make a public statement of its conclusion before long and we would like to direct our keenest attention to it.

It is reported that the State Committee for Inventions and Discoveries and the Chamber of Commerce and Industry are now preparing an explanatory book on the basic text of of regulations and the enforcement regulations for the Patent Law of 1978 and its English version is expected to be published early next year (1982). It is also reported that the Practical Guide, which contains advices, precautions and requests addressed to foreign applicants, application procedure for PCT, and examination practice, is going to be issued and its English version is expected to be published by the end of next year.

In any case, facing the present problem, the Soviet Union authorities seem to have realized their negligence in giving due publicity for the new practice among the Estern corporations. We may expect that the Soviet Union is going to clarify the content of their regulations and examination standard as motivated by the actions taken by the Western corporations (though we are not sure that the examination standard or practice itself will be improved).

5. Conclusion

As mentioned in the above, the recent examination practice

towards patent application in the field of chemistry is quite abnormal. It threatens the established patent system which is carefully and reasonably designed to protect inventions and to encourage the industrial development. If this based and too strict examination practice is to continue hereafter, the filing of a patent application with the Soviet Union will become meaningless. This means that our inventions are not properly protected in the Soviet Union and that under such circumstances commercial relations with and transfer of technology to that country will surely hindered.

Since this is guite not only to the Western corporations but also to the industrial development in the Soviet Union itself, we strongly hope that the Soviet Union authorities will lose no time in coming back to the authodox examination practice so that all inventions may be properly protected.

I am sure that the close collaboration of the U.S.A. and Japan to exchange information on this problem and to jointly keep a careful watch on the movements of the Soviet authorities is seriously necessary.

APPENDIX:

I. Summary of the results obtained from the questionnaires.

II. A copy of the letter addressed to the Soviet authorities from the President of Japan Patent Association.

III. A copy of the letter addressed to the Soviet authorities from the President of Japan Chemical Industry Association.

APPENDIX I.

Summary of the results obtained from the questionnaires.

I. Questionnaire by Japan Patent Association (Replied by 45 corporations)

(1) Do you think the Soviet examination practice offers problem?

Field of industry		Pharmacy	Chemistry	Electricity	Metals and Machinary	Total	%
Applied for Soviet patent	Found problem with examination	1	4	2	0	7	22.6
	Found no problem with examination	9	10	3	2	24	77.4
Applied for no Soviet patent		2	9	1	2	16	
Total		12	13	6	4	45	100

2. Questionnaire by Japan Chemical Industry/Association (Replied by 42 chemical corporations)

(1) The number of patent applications filed with the Soviet Union.

Average annual application	Number of corporation	%
More than 20 applications per year	0	0
10 to 20 applications per year	1	2.4
4 to 10 applications per year	4	9.8
Not more than 3 applications per year	36	87.8
Total	41*	100

(2) Mode of applications filed with the Soviet Union

Mode of applications	Number of corporations	%
Soviet Union is always included in the foreign patent applications	0	0
Applied for specific inventions	26	61.9
Scarcely applied for patents	16	38.1
Total	42	100

(3) How was the change in the Soviet patent practice regarded?

Attitude towards new practice	Number of corporations	%
(1) Change is seriously regarded and suffered actually.	10	23.8
(2) No experience of change but change is somewhat known.	6	14.3
(3) See no change.	8	19.0
(4) Others**	18	42.9
Total	42	100

Note: * Most of them scarcely had an experience and some replied that they were not aware of the change since their applications were still pending.

(4) About countermeasures to be taken against the present problem.

(a) Whether any countermeasure is necessary.

Comments on new practice	Number of corporations	%
(1) This is a serious problem and countermeasures should be taken immediately.	3	7.1
(2) All possible measures should be taken though it may be difficult.	19	45.2
(3) It is practically not possible to move the Soviet authorities; no countermeasure be taken.	11	26.2
(4) Have no special concern.	9	21.4
Total	42	100

(b) Countermeasures likely workable

Counter measures	Number of proposals	%	Remarks
Measures to be taken at the time of filing an application	4	17.4	To perfect the content of the specification.
Representation to be made to the Soviet authorities	14	60.9	
To conduct investigations and others	5	21.7	To investigate the particulars of new examination practice, etc.
Total	23	100	

(5) Influence of the change in the Soviet patent practice

Degree of influence	Number of corporations	%
Will undergo influence.	13	39.4
Not much influence.	8	24.2
No influence.	9	27.3
Can make no estimate of influence.	3	9.1
Total	33	100

9 corporations replied that the Soviet patents would substantially become meaningless.

APPENDIX II.

JAPAN PATENT ASSOCIATION

Kanda Sanwa Building 4F,
5, 2-chome, Kanda Ogawamachi
Chiyoda-ku, Tokyo, 101, Japan

Cable address: JAPAPATENTA SSO
Tel: Tokyo 03-295-8475, 8476

May 15, 1981

Dear Sir:

Re: PATENT PROTECTION IN THE USSR

It has been a well established rule in the USSR that, though any chemical compounds per se are not permitted as the subject matter for patent, a new composition comprising chemicals as well as a new method-of-use of chemicals are patentable. For example, a new herbicide can not be protected by a compound per se patent, but protected by a composition patent claiming a composition comprising chemicals, as an active ingredient, and any auxiliary or formulating agent (e.g. solvent, surfactant and any carriers) in the finished product; a new use of chemicals for plant growth regulation can be protected by a method-of-use patent, and so on. Further, such types of patent protection are extended to products such as dyestuff, paints, industrial coatings, etc.

We believe that such established rule has enhanced and would enhance the international reputation of the USSR as a responsible trading partner, based on which the Japanese enterprises have been filing patent applications in the USSR, hoping that the Japanese technical cooperation and trade with the USSR in this area would smoothly and friendly be conducted and continued.

Japanese enterprises filing patent applications in the USSR, however, have recently noted that there has been taking place a very significant change in policy for the patent examination in these days. As to such a change,some problems as experienced by some Japanese enterprises will be mentioned in the following.

(1) re. Composition Patent

With respect to the invention of a new composition comprising chemicals, the USSR State Committee For Inventions and Discoveries has begun to take an extremely rigid attitude and accepts only a very narrow scope of the claim for patent like a "prescription" type, especially in the field of agrochemical inventions.

That is, in the examination prosecution, the Examiner required an applicant to define a specific active chemical substance and a specific kind of auxiliary or formulating agent, and, in addition to this, to define specific quantities of the auxiliary or formulating agent. Such specific definitions were required to be made mainly based on the specific support in the working examples, and the general explanation of the invention, which per se is a statement of the inventive concept and idea, was almost not taken into consideration by the Examiner.

Accordingly, in order to meet the examiner's requirement, an applicant was forced to restrict the claim to much narrower scope thereof in principle based on the actual support in the working examples. In this respect, if the applicant would wish to get a patent with adequate protection, the applicant has to list every possible substance in every possible set of quantities or proportions thereof supported in principle by the working examples, since lots of the possible auxiliary or formulating agent (e.g. solvent, surfactant, carriers, etc.) may be alternatively used in the composition in question and its quantity or proportion may be modified to some reasonable extent that the substantial effectiveness is not changed. However, it would be practically quite impossible for the applicant to do so.

In this respect, an applicant receiving the office action requiring him to restrict the claim responded to it with an argument that a certain range of the quantity of auxiliary of formulating agent should be allowed by submitting some test data as concerned to be supplemented, but the USSR State Committee For Inventions and Discoveries refused to accept the same for the reason that the said data was submitted after the lapse of two months from acceptance of the application for examination, only during which the voluntary addition of example is allowd under Article 55 of the law, although submitting of such test data had been accepted in the past.

Because of such a rigid practice as stated above, even if an applicant gets a patent, such a patent as "prescription" type would be very weak in the protection of the invention and so be of little value, since any third party as unauthorized can exercise substantially the same composition as the patented one, avoiding the patented scope of claim by substitution of an equally effective auxiliary or formulating agent or varying the quantity or proportion thereof, or both.

In addition to the above, it has recently reported that there was an invalidity decision of the State Committee, stating that an auxiliary or formulating agent in a composition had no synergistic effect with the active ingredient and accordingly could not be included in the patented claim and consequently, since the necessary auxiliary or formulating agent was artificially taken out from the claim, there was nothing in the claim but the active chemical substance (compound per se), which can not be given patent protection in the USSR as a matter of law. If such an attitude as above in the decision is broadly applied to other composition patent applications or patents in the USSR, the majority of patent applications or patents would be rejected or invalidated, respectively. In this respect, it is understood that patentability of a composition in most cases lies in finding of new usefulness of an active ingredient per se, but does not lie in some synergistic effect of the same with an auxiliary or formulating agent.

Under such situations as above, some of Japanese applicants were disappointed in such a rigid attitude so that they abandoned their applications and some of them once responded to the rejection with an argument stating the unreasonable attitude of the USSR State Committee for Inventions and Discoveries, but abandoned it without filing an appeal against the final rejection since the rejection could not be expected to be reversed even in the appeal.

Then, the Russian authorities should note that it is the present situation in Japan that the Japanese industries in this area are reluctant to file applications concerning composition inventions as such, in the present Russian rigid policy is faithfully put into practice further in the future and reasonable protection of new composition can never be expected.

(2) Method-of-Use:

It has recently been noted that the rigid practice as described has also begun to be applied to the

examination of a method-of-use invention. The approach to this type of inventions in the office action was substantially the same as that to the composition invention, that is, each physical step in the new use must be explained in specific form. Further, it is noted that the methods, the essential novelty of which consists in the use of a new chemical substance only, are excluded from the patentable subject matter.

However, this method-of-use patent is considered to be the only remaining effective way to protect most of the composition inventions in the USSR, where chemicals per se are an unpatentable subject matter and some of the compositions also are not accepted, and accordingly it would be useful to protect such inventions.

Accordingly, if USSR State Committee for Inventions and Discoveries would take a similar action as taken in the composition case to method-of-use invention, the method-of-use patent protection in the USSR would virtually terminate.

(3) Others:

The Japanese chemical industries filing patent applications in the USSR have experienced the extremely rigid practice requiring the applicants to restrict the claims to the exemplified parameters. For example, an examiner required the applicants to define the reaction conditions (e.g. solvent, temperature, etc.) in the process claim, although such reaction conditions per se are conventional in view of the process per se being analogous. Such a requirement is practiced only in some developing countries, and some of the applicants made an argument in this respect, but were eventually obliged to yield to the requirement.

In conclusion, as mentioned above, it has been noted that, in case of limitation of the claim according to the requirements raised in refusal of the application, the general explanation of the invention is not so taken into consideration that the patent claim was unreasonably restricted to narrow scope according to the working examples.
Further, it has been experienced that there is a tendency to reject additional examples or test data for proving technical progress, as mentioned above, if these are filed more than two months after acceptance of the application for examination. The examination practices as such would serve to make the claim narrower and make the patent protection weaker so that the past reasonable practice in the examination will be taken leave

of from the USSR.

If the rigid policy as mentioned above is continued further in the future, almost all of the enterprises in Japan would be reluctant or cease to file patent applications on inventions concerning their new technology in the USSR. Then, this would give a bad and damaging effect on their technical cooperation with the USSR.

Accordingly, representing the Japanese industries, we respectfully submit that the authorities as concerned in the USSR should reconsider the significant change recently made in patent policy and revive the former reasonable practice for the patent protection. Finally, may we add that it is of our firm belief that the better patent protection being provided for, the more desirable technological cooperation and business relationship will be advanced for mutual interest.

Thank you very much in advance for your keenly paying attention to the contents described in this letter.

Sincerely yours,

JAPAN PATENT ASSOCIATION

Koshiro Matsuoka

Koshiro Matsuoka, President

APPENDIX III.

JAPAN CHEMICAL INDUSTRY ASSOCIATION

TELEPHONE : 03-580-0758
TELEGRAMS : NICHEMAS TOKYO

Tokyo Club Bldg., 2-6, Kasumigaseki
3-Chome, Chiyoda-ku, Tokyo, Japan

May 29, 1981

Dear Sir,

Over these several years, there has been a steady and uninterrupted expansion of trade and technical cooperation between USSR and Japan in the domain of chemical industry. Our organization, the Japan Chemical Industry Association, is very happy about the development and is sincerely looking forward to the future growth of the successful relationships between our two countries.

On the other hand, a recent and significant change has come to our attention concerning the policy of examining USSR patent applications. We are greatly concerned with the new situation because it may exert an adverse impact on the continued development of our technological cooperation with USSR in future. In this letter, we would like to take the liberty of explaining those specific problems we are experiencing lately and respectfully asking you to give your thoughtful consideration and assistance so that the difficulty will be eliminated in due course.

The Japan Chemical Industry Association is a non-profit making entity comprising approximately 170 major manufacturers of chemical products as well as 61 Trade organizations related to chemical industry in Japan. Some members of the Association recently reported that, in connection with examination of applications for USSR patents (and in particular those concerning composition and manufacturing process), "the USSR authorities in charge were gradually altering their attitude to restrict scope of claim of the patent applications to unreasonably narrow one". In view of this, our Association decided to circulate a questionnaire among 42 large manufacturers who were the members, and the results indicated the following facts. Namely, about 62% of these companies are filing several or more patent applications in USSR per year, and 60% of these applicants are experiencing, either directly or indirectly,

the difficulties as already mentioned with their USSR patent applications. A number of replies we received further pointed out specific instances of the difficulty. Based on the results, we can only conclude that there have already been some substantial changes in the policy of conducting examination of USSR patent applications by your esteemed agency.

More specifically, the changes with which we are concerned are the following:

(1) With regard to applications relating to chemical composition

With respect to the invention of a new composition comprising a new chemical substance and auxiliary agent in general, the USSR State Committee for Inventions and Discoveries has begun to take an extremely rigid attitude and accepts only a very narrow scope of the claim for patent like a "prescription" type, especially in the field of agro-chemical inventions.

That is, in the examination prosecution, the Examiner required an applicant to define a specific active chemical substance and a specific kind of auxiliary or formulating agent, and, in addition to this, to define specific quantities of the auxiliary or formulating agent. Such specific definitions were required to be made mainly based on the specific support in the working examples, and the general explanation of the invention, which per se is a statement of the inventive concept and idea, was almost not taken into consideration by the Examiner.

(2) With regard to applications relating to manufacturing process

The Japanese chemical industries filing patent applications in the USSR have experienced the extremely rigid practice requiring the applicants to restrict the claims to the exemplified parameters. For example, an examiner required the applicants to define the reaction conditions (e.g. solvent, temperature, etc.) in the process claim, although such reaction conditions per se are conventional in view of the process per se being analogous. In another instance, composition of a catalyst which is used in a synthetic reaction process was limited to the very narrow scope cited as an example.

Because its scope of claims is thus restricted so rigidly to a very limited one, such a patent - if granted at all - could be avoided very easily, and the protection it provides would turn out to be an extremely ineffective one.

As we stated earlier, we are very concerned at the policy change because it will inevitably discourage the Japanese industry to seek patent protection in USSR. According to the questionnaire already referred to, 40% of the respondent companies state that the change in your agency's policy, if it is real, would exert a significant adverse impact on future technical cooperation between your country and Japan.

In order to be successful and rewarding to both partners, any technological cooperation between two countries must be based on the mutual trust and respect for each other's own rights and priority. This is particularly true in the case of programs involving an advanced technology, because its innovative nature and novelty makes it far more vulnerable to such impediments as explained earlier; on the other hand, it is precisely this type of advanced technology, in our opinion, that contribute the most to the success of such cooperation.

We believe that the problem which has been worrying us is not due to an intended shift in your agency's policy with a view to impede patent applications and to discourage our willingness to promote the mutual cooperation. It is sincerely hoped that your esteemed Agency will understand the nature of our strong concern and will kindly revert to the previous bases of examination which we had found to be quite reasonable and promoted the exchange continuously over the years in the past.

We look forward to your favorable consideration to the matter and hope very much that the technological cooperation between USSR and Japan will continue to grow.

Yours respectfully,

JAPAN CHEMICAL INDUSTRY ASSOCIATION

Yoshio Maruta

Yoshio Maruta, President

LAW OF THE SEA TREATY - CURRENT STATUS

By

Homer O. Blair

Vice President

Patents and Licensing

Itek Corporation

Before

The Twelfth Annual Congress of the

Pacific Industrial Property Association

New York, New York

November 6, 1981

Last year at the Eleventh Annual PIPA Congress in Tokyo, Jack Maurer introduced you to the Law of the Sea Treaty and pointed out a number of the problems that Jack and others have recognized in the present draft.[1] I will briefly review some of the background of the treaty for those of you who were not present to hear Jack's speech.

Background

The United Nations held conferences on the Law of the Sea in Geneva in 1958 and 1960. On December 17, 1970, the United Nations General Assembly declared that "the area of the sea-bed and ocean floor and the subsoil thereof, beyond the limits of

[1] Law of the Sea Treaty: A Constitution for the Seas, John E. Maurer, Pacific Industrial Property Association Presentation, Eleventh International Congress, Tokyo, October 22-24, 1980, pp. 608-620.

national jurisdiction, as well as its resources, is the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States".[2]

Since that date, negotiations have taken place in an effort to develop a global treaty on the use of the world's oceans and the law governing them. Negotiations began in 1974 on the Law of the Sea (LOS) Treaty with final negotiations being contemplated in March-April 1981 in New York, with the final draft being presented at Caracas later in 1981. The latest draft[3] is 180 pages long, most of which I will not touch upon in this paper.

When the Reagan Administration took over early in 1981, there was considerable unhappiness in the United States with the terms of the treaty which had been drafted up to that time. Part of the unhappiness was due to the transfer of technology provisions, of which no one in the patent, licensing and technology transfer community in the United States was aware or had been consulted about during the negotiations. Late in 1980, Alan Swabey, a Canadian member of LES USA/Canada, alerted some of us in the U.S. to these problems. As a result, the U.S. Chapter of AIPPI, the American Patent Law Association, LES USA/Canada, PIPA, the Patent, Trademark and Copyright Section of the American Bar Association and others reviewed the treaty and made their

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[2] Resolution 2749 (XXV).

[3] "Third Conference on the Law of the Sea", United Nations, A/CONF. 62/WP. 10/Rev. 3, 27 August 1980. One free copy can be obtained by writing the United Nations in New York or by telephoning (212) 754-4475 (Public Inquiries) in New York.

opinions known to various Government circles and elsewhere in speeches, articles, etc.[4]

As a result of these concerns, the Reagan Administration replaced the entire U.S. negotiating team and informed the United Nations that the United States would not complete negotiations on the treaty until it had completely reviewed the background of the proposed treaty and the entire situation relating to the Law of the Sea.

Thus, while the United States has participated in the negotiations that took place in April 1981 and August 1981, nothing of substance has happened in these negotiations, awaiting the determination of the United States Government position.

[4a] Technology Transfer as an Issue in North/South Negotiations, Homer O. Blair, Vanderbilt Journal of Transnational Law, Vol. 14, No. 2, Spring 1981, pp. 301-326 (Law of the Sea Treaty discussed briefly on pp. 318-319.).

[4b] International Technology Transfer: United Nations Code of Conduct and Law of the Sea Treaty, Homer O. Blair, John Marshall Law School 25th Intellectual Property Law Seminar, February 1981 (to be published later this year).

[4c] Statement of George W. Whitney, President, American Patent Law Association before the Committee on Foreign Relations, United States Senate, March 5, 1981 on Law of the Sea Treaty negotiations.

[4d] Position Paper on Law of the Sea Treaty, Technology Transfer Task Force, Chamber of Commerce of the United States, Aug. 5, 1981.

[4e] Law of the Sea Treaty, Statement by Richard A. Legatski, National Ocean Industries Association, Hearing before the Subcommittee on Oceanography, Committee on Merchant Marine and Fisheries, U.S. House of Representatives, October 22, 1981.

[4f] Letter from Richard A. Legatski, National Ocean Industries Association to the Honorable Larry Pressler, Chairman, Subcommittee on Arms Control, Oceans, International Operations and Environment, Committee on Foreign Relations, United States Senate, Oct. 6, 1981.

I am informed that a draft paper embodying a new position for the United States Government has been prepared and is being reviewed in various levels of the United States Government, but it is not yet available for comments by non-governmental people. Some feel this paper will be available in November 1981 while others feel it might be sometime thereafter.

In any event, I would like to review with you briefly some aspects of the technology transfer provisions of this treaty, a few of the other provisions of this treaty, and some comments made by U.S. Ambassador James L. Malone, who is chairman of the U.S. Delegation to the Law of the Sea Treaty Conference.

Technology Transfer

In order to give you the full flavor of some of the technology transfer provisions of the treaty, I have set forth in the footnotes, Article 5 of Annex III of the treaty which relates to technology transfer as it applies to underwater mineral-containing nodules.[5]

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[5] Annex III - Basic Conditions of Prospecting, Exploration and Exploitation, p. 130ff., Article 5, p. 132ff.

Article 5

Transfer of Technology

1. When submitting a proposed plan of work, every applicant shall make available to the Authority a general description of the equipment and methods to be used in carrying out activities in the Area, as well as other relevant non-proprietary information about the characteristics of such technology, and information as to where such technology is available.

2. Every operator under an approved plan of work shall inform the Authority of revisions in the description and information required by paragraph 1 whenever a substantial technological change or innovation is introduced.

5 (cont'd.)

3. Every contract for the conduct of activities in the Area entered into by the Authority shall contain the following undertakings by the operator:

(a) To make available to the Enterprise, if and when the Authority shall so request and on fair and reasonable commercial terms and conditions, the technology which he uses in carrying out activities in the Area under the contract and which he is legally entitled to transfer. This shall be done by means of license or other appropriate arrangements which the operator shall negotiate with the Enterprise and which shall be set forth in a special agreement supplementary to the contract. This commitment may be invoked only if the Enterprise finds that it is unable to obtain the same or equally efficient and useful technology on the open market and on fair and reasonable commercial terms and conditions;

(b) To obtain a written assurance from the owner of any technology not covered under subparagraph (a) that the operator uses in carrying out activities in the Area under the contract and which is not generally available on the open market that the owner will, if and when the Authority so requests, make available to the Enterprise to the same extent as made available to the operator, that technology under license or other appropriate arrangements and on fair and reasonable commercial terms and conditions. If such assurance is not obtained, the technology in question shall not be used by the operator in carrying out activities in the Area;

(c) To acquire, if and when requested to do so by the Enterprise and whenever it is possible to do so without substantial cost to the contractor, a legally binding and enforceable right to transfer to the Enterprise in accordance with subparagraph (a) any technology he uses in carrying out activities in the Area under the contract which he is not legally entitled to transfer and which is not generally available on the open market. In cases where there is a substantial corporate relationship between the operator and the owner of the technology, the closeness of this relationship and the degree of control or influence shall be relevant to the determination whether all feasible measures have been taken. In cases where the operator exercises effective control over the owner, failure to acquire the legal rights from the owner shall be considered relevant to the applicant's qualifications for any subsequent proposed plan of work;

(d) To facilitate the acquisition by the Enterprise under license or other appropriate arrangements and on fair and reasonable commercial terms and conditions any technology covered by subparagraph (b) should the Enterprise decide to negotiate directly with the owner of the technology and request such facilitation;

5 (cont'd.)

(e) To take the same measures as those prescribed in subparagraphs (a), (b), (c) and (d) for the benefit of a developing State or group of developing States which has applied for a contract under article 9, provided that these measures shall be limited to the exploitation of the part of the area proposed by the contractor which has been reserved pursuant to article 8 and provided that activities under the contract sought by the developing State or group of developing States would not involve transfer of technology to a third State or the nationals of a third State. Obligations under this provision shall only apply with respect to any given contractor where technology has not been requested or transferred by him to the Enterprise.

4. Disputes concerning the undertakings required by paragraph 3, like other provisions of the contracts, shall be subject to compulsory dispute settlement in accordance with Part XI, and monetary penalties, suspension, or termination of contract as provided in article 18. Disputes as to whether offers made by the contractor are within the range of fair and reasonable commercial terms and conditions may be submitted by either party to binding commercial arbitration in accordance with the UNCITRAL Arbitration Rules or other arbitration rules as may be prescribed in the rules, regulations and procedures of the Authority. In any case in which the finding is negative, the contractor shall be given 45 days to revise his offer to bring it within that range before the Authority makes any determinations with respect to violation of the contract and the imposition of penalties, as provided in article 18.

5. In the event that the Enterprise is unable to obtain appropriate technology on fair and reasonable commercial terms and conditions to commence in a timely manner the recovery and processing of minerals from the Area, either the Council or the Assembly may convene a group of States Parties composed of those which are engaged in activities in the Area, those which have sponsored entities which are engaged in activities in the Area and other States Parties having access to such technology. This group shall consult together and shall take effective measures to ensure that such technology is made available to the Enterprise on fair and reasonable commercial terms and conditions. Each such State Party shall take all feasible measures to this end within its own legal system.

6. In the case of joint ventures with the Enterprise, technology transfer will be in accordance with the terms of the joint venture agreement.

7. The undertakings required by paragraph 3 shall be included in each contract for the conduct of activities in the Area until 10 years after the Enterprise has begun commercial production of minerals from the resources of the Area and may be invoked during that period.

8. For the purposes of this article, "technology" means the specialized equipment and technical know-how, including manuals, designs, operating instructions, training and technical advice and assistance, necessary to assemble, maintain and operate a viable system and the legal right to use these items for that purpose on a non-exclusive basis.

Article 5 of Annex III provides, among other things, that every contract for the conduct of activities in the Area entered into by the Authority shall contain a number of undertakings by the operator including (3a) "to make available to the Enterprise, if and when the Authority shall so request and on fair and reasonable commercial terms and conditions, the technology which he uses in carrying out activities in the Area under the contract". Thus, this is a compulsory license and provides that anyone operating in the area of the sea must agree to make their technology available to the Enterprise in order to obtain the contract.

This provision, which is far stronger than the normal government contracting activities of the United States, apparently was negotiated with no consultation or reference to private sector transfer of technology experts and has just recently come to light.

In addition, Section 3b of Article 5 provides that if the proposed contractor is not the owner of the technology required to be licensed to the Enterprise, the contractor must "obtain a written assurance from the owner of the technology.." that the owner will make this technology available "under license or other appropriate arrangements" if necessary. If such written assurance is not obtained from the owner of the technology, "the technology in question should not be used by the operator in carrying out activities in the Area."

Section 3d of Article 5 provides that if the Enterprise decides to negotiate directly with the owner of the technology, the contractor must agree to "facilitate the acquisition of technology by the Enterprise..."

Article 5, Section 3e, obligates the contractor to take the same measures as mentioned above in connection with paragraphs a-d "for the benefit of any developing State" that wishes to acquire this technology. The treaty also provides[6] that disputes concerning these above undertakings shall be subject to compulsory dispute settlement as provided in various sections of the Treaty.

Reservation of Sites for Development by the Enterprises

Annex III also provides[7] that each application submitted to the Authority shall cover a total area, which need not be a single continuous area, sufficiently large and of sufficient estimated commercial value to allow two mining operations. The applicant shall divide the area in two parts of equal estimated value and submit all the data obtained by him. The Authority shall designate the part which may be developed by the applicant, and the other part is to be reserved solely for the conduct of activities by the Authority through the Enterprise or in association with developing countries. Thus, the applicant does not know which of the two areas he will be permitted to develop, and the Enterprise and/or developing countries will be encouraged to compete with the applicant on the other site.

Financial Terms of Contracts

Article 13[8] of Annex III relates to the financial terms of contracts for exploitation, etc. The Authority shall be

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[6]Annex III, Article 5 (4), p. 133.

[7]Article 8, Reservation of Sites.

[8]Annex III, Article 13, p. 139ff.

guided by a number of objectives including stimulation of the transfer of technology to the Enterprise[9]. Another objective is to enable the Enterprise to engage in sea-bed mining[10] effectively "at the same time" as the contractors.

Apparently, the Law of the Sea is not contemplating any activity by small or medium size businesses because the fee[11] for the administrative costs of processing an application for a contract of exploration and exploitation is $500,000 (this is not a typographical error) per application. Fortunately, if the cost incurred by the Authority in processing the application is less than $500,000, the Authority shall refund the difference to the applicant.

There are a number of complex provisions for establishing the financial terms of the contract including an annual fixed fee of $1,000,000[12], a royalty[13] of five percent of the market value of the processed metals produced from nodules extracted from the contract area for the first ten years of commercial production and a royalty of 12% for years thereafter, if that is the way the contractor chooses to make a financial contribution to the Authority. There are other provisions if the contractor would prefer to give a share of his net proceeds to the Authority, etc.

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[9]Annex III, Article 13 (1d), p. 139.

[10]Ibid, Article 13, (1e), p. 139.

[11]Ibid, Article 13, (2), p. 139.

[12]Ibid, Article 13, (3), p. 139.

[13]Ibid, Article 13 (5), p. 140.

There are a number of other provisions relating to technology and technology transfer but we don't have time to go into them today. Suffice it to say that while some of them are phrased in innocuous ways, others have been objected to by those of us in the technology transfer and licensing professions.

Other Treaty Provisions

To give you more of a flavor for some other parts of the treaty which do not specifically relate to technology transfer but show the kind of negotiations which are performed by the United States delegation, I will briefly discuss the structure of the United Nations organizations which will administer the Law of the Sea Treaty.

The International Sea-Bed Authority[14]

The treaty establishes the International Sea-Bed Authority (The Authority) which is the organization through which the States shall organize and control activities in the area, particularly with a view toward administering the resources.[15]

The Authority includes[16] an Assembly, a Council and a Secretariat. Also established is an Enterprise,[17] the organ through which the Authority carries out its functions.

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[14] See Section 5 of draft LOS Treaty, p. 61ff.

[15] Ibid., Article 157 (1), p. 61.

[16] Ibid., Article 158 (1), p. 61.

[17] Ibid., Article 158 (2), p. 61.

The Council

The Council is the executive organ[18] of the Authority and has a wide number of powers. The Council consists of thirty-six members (each member is a different country). There has been considerable concern expressed about the provision for determining these thirty-six member countries.

As can be seen for the provision governing this election[19],

[18] Ibid, Article 162 (1), p. 67.

[19] Ibid, Article 161, Composition, Procedure and Voting, p. 65.

1. The Council shall consist of 36 members of the Authority elected by the Assembly, the election to take place in the following order:

(a) Four members from among the eight States Parties which have the largest investments in preparation for and in the conduct of activities in the Area, either directly or through their nationals, including at least one State from the Eastern (Socialist) European region;

(b) Four members from among those States Parties which, during the last five years for which statistics are available, have either consumed more than two per cent of total world imports of the commodities produced from the categories of minerals to be derived from the Area, and in any case one State from the Eastern (Socialist) European region;

(c) Four members from among countries which on the basis of production in areas under their jurisdiction are major net exporters of the categories of minerals to be derived from the Area, including at least two developing countries whose exports of such minerals have a substantial bearing upon their economies;

(d) Six members from among developing States, representing special interests. The special interests to be represented shall include those of States with large populations, States which are land-locked or geographically disadvantaged, States which are major importers of the categories of minerals to be derived from the Area, States which are potential producers of such minerals, and least developed States;

(d) Eighteen members elected according to the principle of ensuring an equitable geographical distribution of seats in the Council as a whole, provided that each geographical region shall have at least one member elected under this subparagraph. For this purpose the geographical regions shall be Africa, Asia, Eastern Europe (Socialist), Latin America, Western Europe & others.

neither the United States nor Canada are guaranteed a seat on the council even though they are two of the most active countries in sea-bed activity and have very large coast lines. On the other hand, category (a) and (b) each provide for at least one State from the Eastern (Socialist) European region, category (c) must include two developing countries and category (d) provides that all six members in this category must be from developing states. Category (e) provides that "eighteen members are elected according to the principle of insuring an equitable geographical distribution of seats" and provides that each geographical region shall have at least one member. The geographical regions are set forth as being "Africa, Asia, Eastern Europe (Socialist), Latin America, Western Europe and others". There are no provisions that North America is a geographical region.

Thus, of the thirty-six members, at least three must be from the Eastern Europe (Socialist) region and at least eight must be from developing countries, not including additional members from each of Africa, Asia, and Latin America, which probably would be three more developing countries. There is no requirement that either the United States or Canada, or any nation in North America, must be included. Also, Japan is not specifically included, but may have a chance to be included as a country from Asia. Some have expressed concern that our negotiators did not represent the United States very well in this portion of the treaty.

The treaty also provides that, in the Council, decisions

on questions of substance[20] under various provisions shall be made by a two-thirds majority of the members present and voting or a three-fourths majority of the members present and voting, providing that such majority includes a majority of the members of the Council.

The Enterprise

The treaty provides for an Enterprise which is[21] "the organ of the Authority which shall carry out the activities in the area directly", including "transportation, processing and marketing of minerals recovered from the Area".

Recent U.S. Government Views

Recently, Ambassador James L. Malone has made a statement which sets forth a number of the concerns which the United States has with the Law of the Sea Treaty.[22] According to Ambassador Malone, the United States' objectives in the Law of the Sea Treaty negotiations are as follows:

1. The U.S. role in the decision making system of the Sea-Bed Authority ought to approximate the economic stake which the United States has as a major contributor to the Authority and the Enterprise. As presently constructed, the Assembly and the Council do not meet this objective.

2. It has been the U.S. understanding, and those of others, that the Council, and not the Assembly, would exercise

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[20] Ibid, Article 161 (7b, c), p. 66.

[21] Ibid, Article 170 (1), p. 74.

[22] Statement by Ambassador James L. Malone, Special Representative of the U.S., to an informal meeting convened by the President of the Law of the Sea Conference and the Chairman of the First Committee, August 13, 1981.

the principal policy-making powers of the Authority. The current draft must be modified to reflect this concern. Also, the composition and voting arrangement for the Council need to be modified.

3. The treaty should establish a regime which has as its overriding objective encouraging the development of mineral resources for worldwide consumption. The United States feels that Articles 150 and 151 do not do this and actually express a clear preference for limitations on the production of sea-bed mineral resources as well as other objectives which are designed to limit the access of the United States and others to deep sea-bed resources.

4. The United States feels that U.S. companies with the capacity and qualifications to develop the mineral resources of the area should not face obstacles in obtaining the Authority's permission. As the treaty is presently drafted, the complex approvals and lack of objective criteria for these approvals do not make it clear that a qualified applicant will be granted permission to develop the resources.

5. The U.S. objective with respect to the exploitation of the resources is to institute a system which provides for non-discriminatory and certain access to the resources. As the Enterprise has significantly lower operating costs than any other operator in the area, certain financial advantages and the benefit of free prospecting done by others at many of its sites, it will have a distinct advantage over private organizations. The Enterprise will also not have to develop its own technology, and it will have a right to demand the technology of others at whatever price forced sales produce.

6. The United States seeks a regime which cannot be changed except by an amendment to the basic Law of the Sea Treaty which can be submitted to the United States Senate for its advice and consent in the same manner as the treaty itself. However, the treaty provides for a review conference in the future which can alter the treaty by an action of 2/3 of the States who are party to the treaty. Such an arrangement is unacceptable.

7. It is one of the objectives of the United States to avoid unreasonable interference with the conduct of mining operations by private organizations. The draft Law of the Sea Treaty at present provides many discretionary provisions and therefore allows for operational interference by various organs of the Authority. Operators could be ordered, for example, to cease work entirely or to maintain levels of commercial production which under the economic circumstances prevailing might ruin the contractor. It is not at all clear that once an operator has a contract that operator will be able to conduct his activities so as to realize the fruits of the prior investment necessary to obtain this contract.

8. Another U.S. objective is to minimize the budgetary impact of international agreements. The present treaty is structured in such a way that the companies of most Western industrialized countries have said that special tax relief would be essential from their Government if they were going to function under the Law of the Sea Treaty. Also, the convention places substantial continued obligations on the States to support the Enterprise.

the export of technology is generally undertaken by private enterprises, they will generally never export their technology unless adequate patent protection is assured and they are reasonably remunerated.

In the case of inventions which are directly related to human life, such as pharmaceutical inventions, a vast stockpile of clinical data necessary for the governmental approval must precede the actual sale of the products which is generally only possible after more than perhaps a decade of development efforts and a huge amount of investment. Unless it is assured, positively and officially, that foreign enterprises may receive a fair return on their investment, it is no wonder that they would seek to recoup their costs for the development of new technology by exporting their products rather than bringing their technological innovations as such into your country. However, if your country would continue to maintain a system ensuring adequate protection for the technology, foreign enterprises would not stick to a policy of exporting products, but would instead consider exporting their technology as such without worrying about unhonored bills.

It may be true that not a few patents owned by foreign enterprises remain unworked probably because the patentee and the prospective licensee have failed to reach an agreement as to the term of working. Sanction to work such patents to more than a limited extent would not promote the transfer of technology. Nor, would it help develop national technology and economy by so weakening or abolishing patent protection in the specific fields of technology, as is seen from the instance in Italy where the pharmaceutical industry is less developed than other fields of industry because of the abolition of patent protection for pharmaceuticals, though the Italian Parliament has recently enforced the law to extend patentability to pharmaceuticals, realizing the necessity of patent protection for such products for the welfare and public interest of their people. The opponents of patents for pharmaceutical products are inclined to point out that the existence of patents would only enable large foreign enterprises to strengthen their monopolistic position at the cost of small domestic enterprises and consumers for whom the result of such patents is an increase in the price of new pharmaceutical products. The price of pharmaceutical products, however, is not necessarily higher in the countries allowing patentability thereof than in the countries that do not allow it. Of course, we do not deny that trade abuses are apt to be caused by monopolistic position of large enterprises in the specific field of technology, but such abuses including the undue high price of pharmaceuticals would be possible to be controlled by the pertinent governmental regulations. In Japan, the price of new pharmaceutical products, patented or unpatented, applied for registration in the Official Drug Price List of Medical Insurance System is decided by taking into due consideration the price of chemically similar products having bioequivalence actually being sold in the market under the regulations of the Health & Welfare Ministry. "Maximum Allowable Cost" in the United States may also be said to be a kind of a governmental control of price of pharmaceuticals. In general, if the price of a new drug under patent protection is unreasonable high, other drugs which have been on the market,

JAPAN PATENT ASSOCIATION

Kanda Sanwa Building 4F.
5, 2-chome, Kanda Ogawamachi
Chiyoda-ku, Tokyo, 101, Japan

Cable address: JAPAPATENTA SSO
Tel: Tokyo 03-295-8475, 8476

May 19, 1981

The Secretary,
Industrial Property Advisory Committee
P.O. Box 200
Woden, A.C.T. 2608
AUSTRALIA

Dear Sir:

Re: Review of Australian Patent System

The Japan Patent Association is an organization composed of about 460 leading enterprises of Japan, and can be considered as representative of various business fields, i.e. electricals, mechanicals; automobiles, textiles, chemicals, pharmaceuticals, constructions and so forth, as well as major trading firms.

The major objectives of the Association are, among others, to contribute to the development of the industrial property system, realization of its sound practical enforcement, acceleration or promotion of licences of patents, know-how and trademarks, and further to acquire first-hand knowledge on actual conditions of industrial property systems in foreign countries.

We note that your Committee is undertaking a comprehensive review of the Australian Patent System to see, primarily, how it can best contribute to the efficiency and progressiveness of the Australian economy, and we were told that submissions from foreign industrial associations would be duly taken into consideration by your Committee in undertaking the review. We, therefore, take the liberty of forwarding our opinion based on the experiences of Japan as follows.

In our understanding, the existing Australian Patent System offers adequate protection for inventions in various technical fields inclusive of those in pharmaceutical and computer fields, and if, as reported to us, there is such critical opinion that patents in the latter specific fields are not well made available in Australia in the overall interests of the economy of the country, this should not be attributed to the protection on inventions in these fields.

In our opinion, even if the large majority of patents issued by your country are not directly linked to production, the very fact that inventions are protected by patents provides an incentive to foreigners for investment and technology export. Since

develop higher technology of their own in various fields of technology.

We can definitely say that one of the important factors which contributed to the development of the Japanese industry after World War II was the positive import of foreign technology. The reasons why the transfer of technology to Japan was so successfully accomplished are that the patent system of Japan was applied equally to foreign and domestic inventors, and that the patent protection here in Japan was very attractive and proved satisfactory to foreign inventors and enterprises.

As to the life-term of patents, it is an international trend to extend it up to twenty years from the filing of application, and we share the view that the extension of the patent term is necessary or appropriate for inventions on pharmaceuticals due to the fact that the term tends to be substantially shortened by some extraneous factors such as efficacy and safety testings required under the governmental regulations, making it difficult to compensate for the research costs of inventions.

In conclusion, we respectfully submit that the current Australian Patent System would be to the advantage of Australian innovative industry and should by all means continue to exist for promoting further development of the Australian economy, with improvement in the patent term, and that the weakening or abolishing of patent protection in the specific fields of technology should never be contemplated from the negative viewpoint of protectionists that such a revision would be advantageous to Australian innovative industry and be in the interest of Australia.

Yours very truly,

JAPAN PATENT ASSOCIATION

Koshiro Matsuoka

Koshiro Matsuoka, President

having a similar medical efficacy and a lower price, can be used instead. As regards unworked patents which, despite its technical and economic merits, may remain unworked in your country because of a difference in proposed terms between the parties, foreigners would be encouraged to perform their productive and commercial activities in Australia if, as previously stated, your country should keep a system under which adequate patent protection can be afforded to the foreign inventors, return being promised. Technology progress and industrialization cannot be accomplished in a short period of time. When Japan legislated the Patent Law in 1885, the technological level of Japan was far behind that of Western countries. Around 1941 when Japan was involved in World War II, the Japanese technology was on a considerably advanced level. In 1945 when the war was terminated, a great difference in terms of technology was again observed between Japan and Western countries. Now, thirty-six years since then, Japan has achieved a great technology innovation, and in many fields of technology, the level is not less advanced than that of Western countries.

During that long period covering nearly a century since the establishment of the patent law, Japan has never abolished the patent system or even tried to weaken patent protection. Of course, the Japanese Patent System has always been in line with the principles of the Paris Convention. It is true that technology innovation and industrialization cannot be achieved without the aid of patent system, and it is also true that a considerably long period is required for attaining the purpose. In view of the experiences of Japan, it may be said that inventions can hardly be created in technical fields in which none are patentable. Transfer of technology in such fields is of course difficult. Therefore, development of industry in such fields will inevitably be retarded.

Certain countries where inventions by nationals are few in number seem to be considering establishment of system of weak patent protection. However, under the weak patent system, inventions by nationals of those countries would decrease in number, resulting in further delay in the development of the national industry by means of their national technology. Also some countries may have an idea to give discriminatory treatment to inventions by foreign applicants by giving them less protection. Consequently, there would surely be fewer patent applications by foreigners and fewer patent rights owned by foreigners. However, the fact is that foreign technology owners are inclined to avoid exporting their technology to countries where their inventions are not protected by patent rights.

For your reference, during the post-war period of 1950 to 1979, Japan imported technology amounting to the number of 34,011 from European and American enterprises. Thanks to such import of technology, Japan has successfully filled the technological gap which had obviously existed between Japan and the then-industrialized countties. Furthermore, based on such imported technical knowledge, Japan has come to have a basic power to