FEDERAL PATENT POLICY AND H.R. 8596

ISSUE

There is ample reason to believe that the present legislative framework and administrative policies governing the disposition of Government-funded inventions may be inhibiting their commercial development. Given the fact that the Government is responsible for more than half of the total United States investment in R&D, it is essential that these dollars be made to produce more than defense and space benefits. On the international side, policies that discourage investment by U. S. industry in Government-sponsored inventions meant to resolve social problems leaves the door open for foreign industry, especially if state-controlled or subsidized, to capitalize on these inventions to the detriment of American jobs and industry.

Representative Thornton, joined by 13 Congressmen, including the Chairman of the Committee on Science and Technology, has introduced H.R. 8596, which would establish a comprehensive Government-wide policy regulating the allocation of rights to inventions made by Government grantees, contractors, and employees, having as one of its main objectives maximizing utilization of such inventions. The bill also provides legal authority, now lacking in a number of Federal agencies, for the licensing of Government-owned patents.

Summary of H.R. 8596

Briefly, the major provisions of H.R. 8596 are:

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Title I, which contains a statement of findings and purposes.

Title II, which provides an institutional framework through OSTP and its subcommittees to assure uniform implementation of the Act's provisions.

Title III, Chapter 1, which would allow grantees and contractors the right to retain title to inventions subject to various limitations and conditions, including a case-by-case right of deviation in individual agencies where, for example, the Government is fully funding the development of a product or process to the point of commercial application.

Title III, Chapter 2, which is an effort to codify the criteria of Executive Order 10096 initially issued by President Truman allocating rights in inventions made by Federal employees in performance of official duties, and which also includes authority for such an incentive awards program covering inventions made by such employees.

Title IV, which provides all Federal agencies authority to license Federally-owned inventions. It also provides the Department of Commerce with certain additional authorities, so that a centralized Government licensing program could be undertaken, although participation in the Commerce program is left to agency discretion, and

Title V, which contains definitions, amendments and repealers of existing statutes.

In my opinion, the bill, except for Title III, Chapter 1, should not prove controversial, since most of its provisions embody precedents and conclusions that have been to some degree uniformly agreed upon.

Controversy over Title III, Chapter 1, seems inevitable, since it would supplant approximately 22 different statutory and administrative policies and procedures covering allocation of contractor and grantee inventions.

Genesis of H.R. 8596

H.R. 8596 is the culmination of years of discussion and agency operating experiences starting from the increased influx of Government

research and development funds after World War II to the present 22 billion dollar annual investment. The bill in part is an adaptation of a draft bill that was prepared in 1976 by an Interagency Committee on Government Patent Policy who appear to have been partially inspired by the 1972 Report on the Commission on Government Procurement. The Commission, composed of public and private sector members, recommended that Government patent policy continue to be guided by the President's memorandum on Government Patent Policy. However, the Commission also recommended legislation similar to the H.R. 8596 in the event of unsatisfactory experience under the President's Memorandum.

More obvious problems under the President's Memorandum became apparent soon after issuance of the Commission report. First a Justice Department memorandum maintaining that disposition by the Executive Department of future inventions at the time of contracting constitutes disposition of property requiring statutory authority, and lawsuits filed by Public Citizens, Inc., based on that thesis, directly challenged the constitutionality of parts of the President's Memorandum. In addition, the Congress has since instituted a number of new research and development programs through statutes having patent policy provisions inconsistent with the President's Memorandum. Notwithstanding the withdrawal of the Justice memorandum and dismissal of the Public Citizens's suits on procedural grounds, the probability and actuality of additional suits based on the same thesis and additional piecemeal legislation prompted the Committee on Government Patent Policy to develop the 1976 draft bill.

Patent Policy Alternatives

The most basic aspect of Government patent policy involving grantees and contractors is the type of patent clause that is included in any given grant or contract. Basically there are three types of clauses that might be used in any given situation:

(a) A provision giving the Government title to all contractor inventions.

(b) A provision providing for contractor retention of title, subject to whatever licenses and other rights it is agreed that the Government will obtain, or

(c) A provision that the Government will have the right to determine the disposition of rights in any inventions after they are identified (the "deferred determination" approach).

Debate over Government patent policy has centered on which and under what circumstances these types of clauses should be used in Government contracts and grants.

For the most part Government agencies now use only the last two types of clauses, since even most so-called "Title in the Government" clauses provide to the contractor the right to request greater rights than a nonexclusive license after an invention has been made (unless otherwise precluded by statute).

Notwithstanding the number of outstanding statutes, most agencies, including major research and development agencies such as DOD and HEW, have no statutory provisions regulating their policies and have been guided by the Presidential Memorandum. In fact, many of the agencies with statutes have generally followed that policy to the extent that

it is not incompatible with their statutes. However, the President's Memorandum only establishes general guidelines as to when title in the Government, title in the Contractor, or deferred determination clauses should be used. It has not prevented the development of a maze of individual agency regulations and procedures, and has provided no guarantee that agencies would consider similar contracts as requiring similar clauses. H. R. 8596 has as one of its objectives the elimination of this current web of statutes and regulations.

Available Approaches for a Legislative Government Patent Policy

More important, H. R. 8596 has as its basic objective the development of a policy that will enhance economic growth by maximizing utilization of Government-supported inventions. The primary issue remains whether the approach taken in Title III, Chapter 1, of the bill will best accomplish that result.

It is anticipated that opponents of the bill will argue that allowing contractors to retain title is a "give-away," "anticompetitive," and provides contractors with a "windfall." Objective review of the subject has been difficult to achieve in the past, since opponents are wont to dispose of the issue through the catchwords cited above, and others such as "what the Government pays for it should own." Experience indicates that there are few situations in which the Government funds inventions resulting from its programs to the point of practical application outside of situations where the Government is the invention's primary purchaser. Notwithstanding, it is not possible at this time to

statistically conclude that the contractor's ultimate financial contribution to bringing an invention resulting from Government funding to the marketplace is in any given case significant in comparison to that of the Government. This leads to what is believed to be the most persuasive argument or approach available to opponents of the H.R.

. . . that disposition be made at the time of contracting on a case-by-case basis and/or deferred until identification of an invention.

Under such an approach it is contemplated that disposition, whether made at the time of contracting or after identifcation of the invention, will take into consideration the equities of the Government vis-a-vis the contractor in ultimately bringing the invention to the marketplace. However, since the equities of the parties at the time of contracting in a yet-to-be-made invention are virtually impossible to assess objectively, opponents of H. R. 8596 have indicated a clear predilection toward deferring determination of ownership until an invention has been made, so that deposition can be made on better facts. Accordingly, it is believed that if uniformity is to be one of the prerequisites of a legislative Government patent policy, the choice appears to be realistically limited to the H.R. 8596 and deferred determination approaches. (As already noted, a "title in the Government" approach which does not take into consideration requests for greater rights in the contractor after an invention has been made and has been virtually abandoned by the major R&D agencies, as it is not considered a means of maximizing utilization of Government-funded inventions, since it rejects the need

for the patent incentive in the contractor in all situations.) Accordingly, the remainder of the presentation is limited to comparing the H.R. 8596 and deferred determination approaches against the objectives sought by a legislative Government patent policy.

The Objectives of Government Patent Policy

There is general agreement that the primary objectives of Government patent policy should be to (1) promote further private development and utilization of Government-supported inventions, (2) ensure that the Government's interest in practicing inventions resulting from its support is protected, (3) ensure that patent rights in Government-owned inventions are not used for unfair, anticompetitive or suppressive purposes, (4) minimize the cost of administering patent policies through uniform principles, and (5) attract the best qualified contractors.

Comparison of the Deferred Determination and the "Title-in-the-Contractor" Approach Against the Objectives of Government Patent Policy

Objective (2) is satisfied equally by either approach, since the Government as a *minimum* will retain a royalty-free license, even if the contractor has title (Stated in other words, if the Government is the primary purchaser, it makes little difference who has title.)

The fourth objective (minimizing administrative costs) is best met by the H. R. 8596 approach, since agency experience indicates that a great amount of Government and contractor time is required to process requests for rights made under deferred determination clauses. Indeed, a great hardship would be involved in shifting to a Government-wide

deferred determination approach, unless this was accompanied by a significant increase in the patent and related support staffs of a number of agencies. For example, it is unlikely that DOD could expeditiously process each contractor requests for patent rights under a deferred determination procedure with present staffing.

The fifth objective (attracting the best qualified contractors) seems best satisfied by H.R. 8596, since there is evidence that many firms with established commercial positions and which are not primarily engaged in Government contracting would refuse to undertake or compete for Government research and development contracts (or subcontracts) in the area of their established positions if the Government insisted upon the use of a deferred determination clause. It is not realistic to believe that such firms will jeopardize a privately established commercial position on the chance of ownership of a major improvement of such position made with Government funding. Refusal to participate in this situation will probably necessitate that the Government contract with a less qualified contractor or not contract at all.

To avoid this problem the policy would have to leave open the negotiation of other terms in cases which demand deviation from a deferred determination clause. However, this would necessarily increase the administrative costs of a deferred determination approach, since negotiation of special patent clauses at the time of contracting is a time consuming process. More important is the fact that no definitive criteria has ever been developed, nor does it appear likely that it can be developed, which would establish when such a deviation was justified.

This centers the debate on which approach best meets the objectives of promoting utilization of Government-funded inventions while guarding against abuse (objectives 1 and 3).

In general, opponents of H.R. 8596 argue that leaving first option to rights in inventions to contractors will not really ensure greater utilization and will lead to abuses, such as suppression, higher prices, and market concentration. Proponents argue that the H.R. 8596 will maximize utilization of Government-funded inventions, that the potential abuses are more theoretical than real, and that in any case, the bill's "march-in" provisions are available to rectify any abuses that might develop. They also argue that the issue of higher prices, to the extent it is true, assumes that the invention is commercialized, while under the deferred approach many fewer inventions will be commercialized. For those that are not, the issue of price is moot, and the public has been deprived of many new or improved products.

Factors Affecting Utilization

A decision by any firm to invest in the development and marketing of a patentable invention is dependent on numerous factors, only one of which may be patent ownership. Obviously, patent rights will not be a factor in such decisions unless a commercial market is envisioned. But all other things being equal, the ownership of patent rights is a positive incentive for investment in commercialization. Ownership may well be the deciding factor on commitment of private capital, since studies have shown that the cost of bringing an invention from its initial conception or reduction to practice (which is as far as most

Government inventions are funded by the Government) to the commercial market is approximately 10 times the cost expended in first inventing it under a Government grant or contract. In many situations this additional investment will not be made if it is perceived that a competitor can avoid this initial investment and undersell the original developer.

Further, as a general proposition, the inventing organization is more likely to be interested than will other organizations in commercializing an invention due to inherent ability to assess the merits of the invention from inception through early stages of development.

It is probably also better qualified, or at least as qualified as any other firm, to promote or undertake further technical development, since it may have know-how not necessarily available to other companies. It will also normally have an inventor and technical team willing to advocate that their idea be brought to fruition. Further, in the case of many commercial contractors a Government-funded invention may only be an improvement on extensive contractor-owned technology, and, therefore, will not alone form a basis for a major new commercial line.

Can the Deferred-Determination Approach Minimize Monopoly Profits Without Inhibiting Utilization

Because of the above circumstances, proponents of H.R. 8596 argue that there are strong reasons to permit the inventing contractor a first opportunity to retain title to its invention and commercialize it. Indeed, in the case of nonprofit organizations or smaller non-manufacturing firms, it is believed unreasonable to expect any effort on their part in transferring the invention to concerns capable of

marketing without the incentive of ownership. In fact, it is argued that there is little point in going through a deferred determination process if the Government's objective is to maximize utilization.

Deferred determination advocates would claim that the Government can make a better judgment after the invention is identified, denying where not necessary exclusivity and all the abuses it may engender. Implicit in this claim is the assumption that Government personnel will either be in a position (i) to determine if the existence of exclusive patent rights is needed as an incentive to further development, or (ii) to find a better qualified firm to commercialize the invention through a Government licensing effort after taking title to the invention.

As to whether exclusivity is needed as an incentive for private investment in an identified invention, it should be recognized that if the Government determines that exclusivity is not needed but is wrong, no further development may take place. On the other hand, if the Government was right, consumers may save the hypothetical difference in price that would be charged by someone holding exclusive rights, as opposed to someone who developed the product without exclusive rights. In any case, the public will presumably get an improved product or process which they find more beneficial than its previous alternative.

Moreover, for the Government to be right more often than not when making a deferred determination would require extensive technical, marketing, and economic studies of the firms, technology, industries

and market involved. The cost to taxpayers of such programs could be more than any savings they would produce for consumers. This appears to be the present situation, since in most deferred determination cases exclusivity has been deemed necessary, and the costly determination process has been engaged in simply to confirm this fact. This has been substantiated by NASA, HEW and NSF (the three agencies who have historically made the largest number of deferred determinations) by the grant of over 90 percent of the requests for "greater rights" over a period spanning 10 years.

Similarly, the ability of Government personnel to decide after an invention is identified that utilization will best be promoted by the Government's taking title and offering the invention for licensing, assumes that commercial developers, other than the inventing contractor, can be found (presumably but not necessarily on a nonexclusive basis). There is really no effective means for Government personnel to ensure that other firms, whether licensed exclusively or nonexclusively, would do a better job of developing the invention than a willing contractor or a licensee of the contractor. One can be sure that in most cases the inventing organization will have little interest or incentive to transfer its know-how to another firm, possibly a competitor. Moreover, the very process of attempting to find alternative developers will simply serve to delay private investment and cool the interest of the inventing contractor. It will also force the Government into the expense

of filing patent applications in order to assure that a patent is available if exclusive licensing is ultimately deemed necessary.

It is important also to emphasize that a deferred determination that is truly geared to resolve the questions that trouble opponents of H. R. 8596 approach would be so costly, complex, and time consuming as to discourage many contractors from requesting rights in the first instance, especially small businesses and universities. They may even neglect to report the invention under such circumstances. In all likelihood, without a request for rights to trigger the deferred determination process, most agencies will have little incentive to do anything with the disclosure and, in most cases, the invention will be practiced by no one, as seems to be the case with a very substantial portion of the 28,000 patented inventions now in the Government's patent portfolio. Indeed, under a deferred determination approach the agencies could be devoting so many resources to those cases where rights were requested that they would have insufficient personnel or interest to study inventions and encourage development and marketing where rights were not requested. Thus, it appears that H.R. 8596 is more likely than alternate approaches to maximize the commercialization of Government-funded inventions.

Other Concerns of Deferred Determination Advocates

In addition to the concern over higher profits, advocates of the deferred determination approach have generally voiced two other concerns. First, they express the fear that some contractors will take advantage

of patent rights to suppress the utilization of an invention. Such fears have been expressed throughout the years, but no case of such suppression has ever been documented, despite the thousands of instances in which Government contractors have retained title to inventions. Further, H. R. 8596 includes so-called "march-in" provisions that would remedy any such abuse.

Finally, proponents of deferred determinations argue title-in-the-contractor may lead to concentration of an industry by a contractor. Studies indicate that contractors normally license their patent technologies and that, in any event, alternative technologies are generally available. No example of such concentration has ever been given. It is also questionable whether the Government could identify the possibility of such concentration during the deferred determination process.

A strong argument can be made that allowing contractors to retain patent rights will tend to promote competition in an industry, whereas a deferred determination approach where the Government normally retained title and either dedicated the invention to the public or licensed the invention on a nonexclusive basis approach would do otherwise. The proposition that title-in-the-contractor can lead to concentration is very much dependent on the assumption of a competitive marketplace in which all concerns start with equal capacities. In fact, many industries are currently oligarchial in structure and do not fit the model of pure competition. When this is the case, the

retention of rights in the Government and a policy of nonexclusive dedication or licensing tends to serve the interests of the dominant firms for whom patent rights are not normally a major factor in maintaining dominance. Rather, control of resources, extensive marketing and distribution systems, and superior financial resources are more important factors in maintaining dominance and preventing entry of new firms. It is important to note that such firms may well be foreign-based and dominant through subsidization by their governments, making the inadequacies of a policy of the Government's normally acquiring title even more pronounced. Certainly the Government should not be conducting research and development and permitting the results to enure to the benefit of foreign countries to the detriment of our own economy.

On the other hand, smaller firms in an industry must of necessity rely on a proprietary position in new innovations and products in order to protect their investment in foreign and domestic markets. Thus, patent rights tend to be a much more significant factor affecting their investment decisions. They may need the exclusivity of patent rights to offset the probability that a successful innovation will lead to copying by a dominant firm which would soon undercut their market through marketing, financial, and other commercial techniques. Accordingly, the deferred determination approach in which title normally is retained by the Government may, in fact, be anti-competitive, since it encourages the status quo by discouraging innovation.

Congressman Thornton has provided an unprecedented forum for resolution of one of the country's least understood but important problems. While giving the patent bar the opportunity to educate the public on the essential part the patent system plays in the economic life of a country pledged to individual freedom and the right of individuals to contribute to its society - this is an opportunity we cannot afford to lose to parochial interests.