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The Devil's in the Details: The Quest for Legal Protection of Computer Databases and the Collections of Information Act, H.R. 2652 *

* Editor's Note: We encourage you to read David Atlas's comment on the recent, related case of Matthew Bender & Co., Inc. v. West Publishing Co., No. 94-*C0589, 1997 U.S. Dist. LEXIS 6915* (S.D.N.Y. May 19, 1997), appearing immediately infra at page 491.

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I. BACKGROUND

A. *The Digital Revolution's Impact*

Toward the end of the 1980s, digital technologies and international satellite telecommunications networks have ignited a revolution in the way information is reproduced and disseminated. This is a paradigm shift unparalleled since the invention of Gutenberg's movable type printing press in the fifteenth century. Leading this revolution is America's information technology industry, often defined as both computing and telecommunications, which is the nation's largest industry. n1

[*440] Increasingly, the information in the digital environment involves computer databases, some of which contain personal information on individuals while others contain information about society in general. There are personal information databases on practically everything, such as customer accounts, inventories, payrolls, student test scores, government tax rolls, voter registration and the contents of art collections. Databases on societal information have kept pace with the personal ones, with information on consumer buying preferences, credit reports, market opportunities, laws and regulations and mutual fund performance. Database and information providers, from traditional database publishers and financial information providers like Dun and Bradstreet, Lexis-Nexis(R) and the A.C. Nielsen Company, together with modern online Internet search engines like Yahoo!(R), InfoSeek!(R) and Lycos(R), have harnessed the stupendous advancements in digital and information technology to more efficiently and effectively process and present important commercial data and information to users. The database industry is a committed and key participant in the charge of the high-tech brigade.

As in the past, the existing legal, economic and political equilibrium has been upended by momentous changes in technology, and the Supreme Court has taken judicial notice that intellectual property, like copyright, "has developed in response to significant changes in technology." n2

This paper will discuss the nature of the legal protection of computer databases and the search for some balanced equilibria of the interests of the computer database industry and the public; illustrate the thin and uncertain copyright protection afforded to electronic databases in the wake of the watershed Supreme Court decision, *Feist Publications, Inc. v. Rural Telephone Service Co.;* n3 show that state contract and misappropriation laws have unfortunate limitations for the protection of computer databases; briefly illustrate Europe's successful efforts to use *sui generis* legislation to protect computer databases and sketch out Congress' attempts enact *sui generis* legislative protection; and examine the reasons why the first initiative failed. Finally, this paper will expose the dangers of the second initiative, The Collections of Information Act, n4 which is currently pending in the House of Representatives. As with most things,

[*441] the devil's in the details, and this bill is a risky piece of legislation that must be overhauled in order to strike a balance between computer database publishers and the public. This paper will propose a more measured misappropriation balancing test instead of the current pending legislation.

B. *Data is Big Business*

The issue of computer database protection goes well beyond theoretical debate. Databases are a multi billion-dollar industry in the United States. n5 Computer databases and other compilations of factual material are an integral part of the American economy. From medical journal articles to nationwide court rulings, electronic databases organize, aggregate and update what is often public information. Yet today, when commercially valuable data of scientific or financial importance are made available in electronic form, they also become available for rapid, inexpensive copying and manipulation. Intellectual property is being flooded and drowned by a tsunami of new technology. Copying and transmitting data is becoming too easy for the law to protect anyone's private ownership. The proliferation of the Internet and CD-ROM technology aggravates this problem. While this facilitates value-adding uses from one perspective, it also undermines the database provider's ability to recover costs, much less to generate a profit.

[*442] C. *Science Needs Free Flow of Data*

In contrast, to the scientific community, data is the backbone of scientific knowledge and the root of discovery. To the scientist, data offers a challenge to create new concepts, hypotheses and ideals to make sense of the patterns in the data. They provide the quantitative basis for testing and confirming theories and for translating new knowledge into useful applications for the benefit of mankind. Increasingly, all forms of research involve both formal and informal international scientist-to-scientist contact and exchanges of data. This increase in international collaboration is partly a result of changing political and economic conditions and the growing availability of electronic communication like e-mail. Whether carried out on a large scale under cooperative agreements or less formally among individual researchers, these collaborations have become integral to the search for scientific understanding. Their success -- as well as progress in achieving the public benefits of science -- depends on the full and open availability of scientific data. n6

Inextricably, there is a tension between these two communities. Industry wants to impose some control on their databases to protect its investments, whereas the scientific community passionately wants to protect the free access to information. What has essentially brought matters to a head is the current cloud of uncertainty of the scope of protection for computer databases afforded by copyright, contract and unfair competition laws.

II. *FEIST'S* THIN COPYRIGHT PROTECTION FOR COMPUTER DATABASES

The law places few barriers in the way of unauthorized use of databases. Facts have never been protectable under copyright law. n7 This rudimentary principle was fortified by the Supreme Court in *Feist*. A

[*443] database is a collection of facts. n8 By extension, the content of databases may not be protected by copyright. Before *Feist*, however, some circuit courts determined that facts may be protectable under other theories consistent with the spirit of copyright law. n9

To understand the logic of both the Supreme Court and those circuits that determined, before *Feist*, that some facts may be copyrightable, it is important to go back to the constitutional provision under which copyright laws are promulgated. The enabling clause is Art. I, Section 8 of the U.S. Constitution, which provides that Congress shall have the power, "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Discoveries." n10

In *The Trade-Mark Cases*, n11 the Supreme Court stated that, to get copyright protection, the writings of authors had to contain originality. Facts are not the work of an author because they exist -- that is, their existence merely was uncovered by the author -- and thus, they cannot be protected by copyright. The Copyright Act, however, expressly provides that compilations of facts are protectable. n12 The apparent conundrum is that a fact is not copyrightable, but a collection of facts may be.

In attempting to reconcile these seemingly contrary principles, several circuit courts determined that one justification for protecting fact collections was the "sweat of the brow" of the collector. "Industrious collection" should be rewarded. n13 *Feist* destroys this theory.

A. *The Facts of* Feist

Rural Telephone Service had the local telephone service franchise for certain towns in Kansas, and as part of its obligation in providing local telephone service, Rural published a directory alphabetically listing

[*444] all telephone subscribers in those towns. Feist published telephone directories covering an overlapping, but not identical, geographic territory. When Rural refused permission to Feist to reproduce Rural's listings in Feist's somewhat different directory, Feist nonetheless used Rural's directory as a source of information from which it gathered directory listings for its compilation. The lower courts found copyright infringement, largely relying on abundant prior case law n14 protecting telephone directories from being copied, even when the copier's work did not directly compete with the original. n15 The Supreme Court granted certiorari to determine the proper scope of copyright protection, but ultimately reversed on the ground that Rural's white pages directory was not protectable under copyright law at all. n16

Feist answered two material questions about protection for databases and compilations. First, whether the compilation/database is copyrightable? Second, if they are indeed copyrightable, by that standard, how may an owner prove infringement?

B. *Copyrightability under* Feist

The Supreme Court stated in unequivocal language that "without a doubt, the 'sweat of the brow' doctrine flouted basic copyright principles," n17 and firmly rejected it. At the same time, however, the Court reaffirmed the validity of the copyrightability of collection of facts by simply dissecting the language of § 101 of the Copyright Act defining compilations. n18

The *Feist* Court determined that the "sine qua non of copyright is originality," n19 which according to the Court, requires that a work be "independently created by the author (as opposed to copied from other works), and that it [possess] at least some minimal degree of creativity" in order to qualify for copyright protection. n20

[*445] Using this framework, the Court went on to distinguish the treatment of facts and factual compilations under the Copyright Act. The Court first noted that facts can never be original. n21 According to the Court, because they are "discovered" and not "created," they do not constitute an act of authorship and are therefore ineligible for copyright protection. n22 On the other hand, the Court believed that compilations "may possess the requisite originality . . . [because] the compilation author typically chooses which facts to include, in what order to place them and how to arrange the collected data so that they may be used effectively by readers." n23 Therefore, choices as to selection and arrangement of data, so long as they are sufficiently creative, may be protected by the copyright laws. n24

The copyright in a compilation is not all-inclusive, however, as protection extends only to the author's original expression or contribution. The Court emphasized that the copyright in a factual compilation "is thin . . . . A subsequent compiler remains free to use the facts contained in another's publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement." n25 The Court's reasoning was based primarily on policy considerations. Stating that the purpose of copyright law is "not to reward the labor of authors, but 'to promote the Progress of Science and useful Arts,'" n26 the Court in *Feist* mandated that facts should remain free and accessible to the public. n27

Turning to the merits of the case, the Supreme Court held that the data underlying the compilation -- the listings of the names, towns and telephone numbers -- were uncopyrightable facts. n28 Critical to its decision was the distinction between discovery and creation. The Court found that the listings at issue were not original either to Rural or to

[*446] anyone else. n29 While Rural may have been the first to discover, compile and report this information, it was preexisting; hence Rural did not create the facts. n30 In the context of the white pages, the Court found it easy to declare that the "data does not 'owe its origin' to Rural . . . . Rather, these bits of information are uncopyrightable facts." n31 The Court held that facts of every variety -- "scientific, historical, biographical, and news of the day" -- are simply unprotectible and in the public domain. n32

Feist, however, carefully explains that protection can only be granted for the way in which facts are selected, coordinated and arranged. "Originality requires only that the author make the selection or arrangement independently (i.e., without copying that selection or arrangement from another work), and that it display some minimal level of creativity." n33 The *Feist* Court did not set out a test by which to judge creativity, but instead, used phrases such as "commonplace," "practically inevitable" and "garden-variety" to establish negative guidelines. n34

C. Feist *Test for Infringement*

The test for copyright infringement is substantial similarity between the original work and the later work. According to *Feist*, the substantial similarity that of the later work must be to the "elements of the work that are copyrightable." n35 A defendant may not be punished for taking facts from plaintiff's work if he does not copy its expressive selection or arrangement or feature the same selection and arrangement as the first compiler. n36 A plaintiff must show substantial similarity between those elements, and only those elements, that provided copyrightability to the allegedly infringed compilation. n37

[*447] Based on the *Feist* test, copying of data is not an infringement if the selection and arrangement in the defendant's work is not substantially similar to the selection and arrangement in plaintiff's work. Even a significant overlap in the selection or arrangement will be excused if the defendant's database results from independent subjective judgment and does not piggyback on the plaintiff's product.

This decision represented a total reversal of the earlier judicial approach of several circuit courts that held that any substantial taking from a copyrightable compilation to be an infringement, thus requiring that second-comers independently collect material for a competing compilation. n38

Therefore, it is important to note that databases may be selected, coordinated and arranged in a way that satisfies the originality requirement and a minimal level of creativity, but anyone with access to the database may copy any of the facts it contains with impunity. In other words, the defendant is liable only if it copied those portions of plaintiff's database that are the product of plaintiff's creative judgment. Even worse for the compiler, if the data are arranged in an obvious manner, such as alphabetically, that arrangement also may be copied. n39 Worse still, if the data was not truly "selected" -- that is, culled from a larger universe of similar data -- even the selection may be copied because the data is simply recorded rather than chosen.

D. *The Post-Feist Saga in the Circuits*

Feist's teachings have proved influential to the lower courts' determination of copyrightability and assessing the scope of protection, and they have been instrumental in denying copyright protection for databases and compilations that do have the requisite original selection or arrangement of facts. Among works that are particularly vulnerable to a finding of uncopyrightability are comprehensive factual databases covering an entire universe of information, where the element of "selection" is lacking and the "arrangement" is obvious. n40 The irony is that the very comprehensiveness and ease of use of such a database may account both for its commercial value and its lack of copyright protection. The *Feist* warning that "the copyright in a factual compilation is

[*448] thin" n41 has been borne out in case law subsequent to the *Feist* decision. Even though the Court of Appeals for the Second Circuit has held that there is thin but not "*anorexic*" n42 copyright protection, it nevertheless held that wholesale takings from the copyrightable works of compilations may be non-infringing. n43 Moreover, the Court of Appeals for the Eleventh Circuit has granted a more diaphanous state of protection by its outright denial of copyrightability, a finding that was not disturbed by the Supreme Court recently. n44

E. *Eleventh Circuit's Diaphanous Level of Protection*

In *Warren Publishing, Inc. v. Microdos Data Corp.*, n45 the Court of Appeals for the Eleventh Circuit rejected Warren Publishing's claim of copyright infringement against Microdos over a compilation of information about cable television systems. Since 1988, Warren Publishing, Inc. had published its "Television and Cable Factbook," an annual directory of information about cable systems throughout the country. Warren sued Microdos for copyright infringement after Microdos began, in 1989, to market a computer software package which included a database of information on individual cable systems. Microdos denied any copyright infringement, saying its database used Federal Communications Commission reports which identify cable systems and communities served.

A federal district court ruled that Warren's listings were sufficiently creative and original to be protected by copyright law. n46 The trial judge found that the defendant's database listings were substantially similar to the plaintiff's 1988 directory. In June 1997, the Eleventh Circuit overturned the decision, concluding that "Microdos copied no original selection, coordination or arrangement of Warren's factual compilation." n47

Basically, the Eleventh Circuit held that the plaintiff "did not exercise any creativity or judgment in 'selecting' cable systems to include

[*449] in its Factbook, but rather included the entire relevant universe known to it." n48 In spite of the fact that the copyrightability of the plaintiff's compilation was conceded by the defendant (and therefore not an issue on appeal), the court did not find any element of the plaintiff's work to be protectible. n49

The Eleventh Circuit held that the publisher's selection of "principal communities" in its compilation was not sufficiently original to merit copyright protection because the selection was not the publisher's own, but rather, was that of cable operators. n50 Since the publisher contacted cable operators to determine which community was considered the lead community within particular cable systems, the publisher's acts were nothing more than techniques for discovery of facts. n51

The Eleventh Circuit's refusal to protect compilations can be traced to the post-Feist case, *Bellsouth Advertising & Publishing Corp. v. Donnelley Information Publishing, Inc.* n52 There, the Eleventh Circuit held that the defendant's entry into a computer of all of the names, addresses and telephone numbers of advertisers in the plaintiff's yellow pages telephone directory, together with business type and type of advertisement, was not infringement. n53

Since the parties had stipulated to the copyrightability of the plaintiff's directory and agreed that "the only elements of a work entitled to compilation copyright protection are the selection, arrangement or coordination as they appear in the work as a whole," n54 the court of appeals focused on the elements of selection, coordination and arrangement that the plaintiff alleged were infringed. The Eleventh Circuit found each to be either unprotectible or not copied. For example, the plaintiff claimed (and the district court held) that it selected the listings by determining the geographic scope of the directory, establishing a closing date for changes, limiting listings to subscribers to its business telephone service, as well as through a variety of marketing techniques. The court of appeals found that these elements did not meet the level of creativity required by *Feist*. n55 Moreover, the court did not consider these

[*450] elements to be "acts of authorship, but techniques for the discovery of facts . . . . The protection of copyright must inhere in a creatively original *selection* of facts to be reported and not in the creative means used to discover those facts." n56

The court of appeals also found the arrangement of the directory "in an alphabetized list of business types, with individual businesses listed in alphabetical order under the applicable headings" to be unoriginal. n57 The plaintiff also failed to prove that its selection of headings in the plaintiff's directory, like "Attorneys" or "Banks," entailed any originality. n58

F. *Second Circuit's Thin But Not Anorexic Protection*

The following cases also illustrate the thin protection given to databases. In *Key Publications, Inc. v. Chinatown Today Publishing Enterprises Inc.*, n59 the Court of Appeals for the Second Circuit maintained the copyrightability of the yellow pages of a telephone directory for New York's Chinese-American community, finding the selection of entries in Key's directory was original. Furthermore, the arrangement of the directory into categories (e.g., Accountants, Bridal Shops, Shoe Stores, Bean Curd and Bean Sprout Shops) was, when "viewed in the aggregate," original because it "entailed the *de minimis* thought needed to withstand the originality requirement." n60 But, the Second Circuit felt that, while the initial compiler's directory is copyrightable, as long as the information in the second directory was arranged differently from the first directory, there will be no infringement, even though there was wholesale taking. n61 Accordingly, if the second publisher in assembling a compilation different from the first compilation is guided by a different selection principle, he or she is only appropriating factual information which is not protectible.

In *Kregos v. Associated Press*, n62 the court found the plaintiff's "pitching form" -- a form comprising nine statistics about a pitcher's

[*451] performance -- copyrightable. According to the court, Kregos' selection of those nine statistics from the universe of statistics could be original. n63 As a result, the district court's grant of summary judgment in favor of the defendant was reversed. n64 The baseball pitching forms at issue in that case illustrate the thin protection afforded compilations, as well as the duality of the creativity requirement. The panel decided that the plaintiff "[could not] have it both ways. If his decision to select . . . statistics . . . in combination with his other selections [has] enough creativity to merit copyright protection, then a competitor's decision to select in that same category performance statistics . . . may well insulate the competitor from a claim of infringement." n65

In both *Key Publications* and *Kregos*, the Second Circuit's holding that the work was sufficiently original to be copyrightable was followed by a finding of non-infringement, n66 illustrating the "thin" copyright protection, despite the wholesale takings of the initial publishers' material.

In *Victor Lalli Enterprises, Inc. v. Big Red Apple, Inc.*, n67 the Second Circuit found insufficient creativity to support copyright protection. The compilation at issue in *Lalli* comprised "lucky numbers" used in gambling, arranged in a grid with months along the vertical axis and days of the month along the horizontal axis. The numbers were computed according to a formula that was standard in that industry. The court found no originality in either the selection or arrangement of the data. "The format of the charts is a *convention*: Lalli exercises neither selectivity in what he reports nor creativity in how he reports it." n68 The compilation was therefore held uncopyrightable. n69

[*452] G. *Database Industry Sweating Over Lack of Copyright Protection*

The final prognosis for the computer database industry is not good. As a result of Feist and the post-Feist regime of copyright cases, the ramifications for the industry are succinctly captured by the chilling words of Judge Hatchett in Bellsouth Advertising & Publishing:

The majority's holding [denying copyrightability] establishes a rule of law that transforms the multi-billion dollar classified publishing industry from a business requiring the production of a useful directory based on multiple layers of creative decision-making, into a business requiring no more than a successful race to a data processing agency to copy another publisher's copyrighted work-product. n70

There is a twofold lacuna in the use of copyright protection for computer databases and compilations. First, a database may qualify for copyright protection only if the information it contains is selected, coordinated or arranged originally. Even then, according to the majority of the post-Feist opinions, much of the information in this type of database is available for wholesale copying. Second, databases producers that attempt to meet the growing market demand for comprehensive, logically organized collections of information may never achieve the originality standard in some circuits, notably the Eleventh. "Not only is the information in [these] works freely available for copying, but under decisions of some courts of appeals their method of organization -- and even their entire product -- may also be replicated with abandon by others, including unscrupulous competitors looking to make a quick profit by reaping where they have not sown." n71

Computer database designers usually arrange the stored data in ways that will increase the efficiency of the database by making the stored data accessible, and these arrangements may have sufficient authorship to satisfy the originality requirement. But under current law, if a company compiles a database of customer preferences, such as rental car or hotel accommodation choices, anyone with access to the database may copy the data without fear of copyright infringement liability. And

[*453] using the *Feist* test, if a catalog company assigns ascending numbers to its catalog items, a competitor may advertise similar items as substitutes for the first company's item numbers. Even if the database compiler conceives an original way to select, coordinate and arrange its data, individual items may be cherry-picked with impunity.

This is a problem for the companies in the multibillion dollar database industry that seek to protect their sizeable financial investment in compiling and marketing these databases. They complain that these legal setbacks have adversely affected their stock prices and decisions to invest in production of "vulnerable" databases. n72 The multibillion dollar question, then, is how to protect computer databases in the United States. It is possible that contract and state unfair competition law provide some degree of protection.

III. UNCERTAIN PROTECTION UNDER CONTRACT LAW

A. *Protection By Contract*

Contracts are an active tool that database owners can employ to protect their investment. The seller of a database can require that any purchaser enter into a written contract as a condition of purchase. For example, the provider of a database of computer lawyers could refuse to sell this information to anyone unless they first sign a written contract. That written agreement could expressly provide that the purchaser will not disclose the list of lawyers to anyone but authorized users, nor make any copies or allow unauthorized use of the information.

Typically, this takes the form of a license agreement between the preparer/licensor and the user/licensee of the database. A license agreement is unlike a typical purchase and sale agreement in that ownership of the product involved, the program, remains in the licensor. The licensee merely purchases the right to use the program. The licensee's right to use the program can be limited in any number of ways, the most common limitations being that (1) the licensee can only use the program on one or a select number of computers, (2) the licensee may not make any copies of the program, and (3) the licensee has to keep certain information about the program or the database confidential.

[*454] Many other types of limitations or rights and reservations can be contained within the license agreement between the parties. Form contracts as well as negotiated agreements tailored for individuals or institutions have been used. They may appear in traditional print, in shrink-wrap form, on a computer screen as part of software or on-line, or in a combination of these formats. For example, a user may first encounter license terms through shrink-wrap packaging and then receive the same or additional terms on his computer screen. Unfortunately, there has also been uncertainty as to the enforceability of these shrink-wrap licenses in the circuit courts of appeals.

B. *Shrinkwrap Licenses Not Enforced*

Several cases have held that shrinkwrap licenses were not enforceable. One of the first was *Vault Corp. v. Quaid Software Ltd.*, n73 which held unenforceable a Louisiana statute that would have authorized shrink-wrap licenses. In *Vault Corp.*, the defendant developed and sold a program that could copy computer diskettes encoded with a proprietary copy protection program called "PROLOK." In order to develop the program to defeat the copy-protection system, the defendant purchased PROLOK and reverse engineered the copy-protection scheme. The plaintiff, maker of the PROLOK program, claimed that the defendant had breached the shrink-wrapped license agreement, which prohibited decompilation or disassembly of PROLOK.

Louisiana law expressly permitted the inclusion in a shrink-wrap license agreement of terms prohibiting reverse-engineering, decompilation and disassembly. n74 The district court, however, concluded that the shrink-wrap license agreement was an unenforceable contract of adhesion and that Louisiana law authorizing such licenses was preempted by the federal Copyright Act. n75 The Court of Appeals for the Fifth Circuit upheld the district court's conclusion that the prohibition against decompilation or disassembly in the license agreement was unenforceable. n76

A similar issue was also put before the Court of Appeals for the Third Circuit in *Step-Saver Data Systems, Inc. v. Wyse Technology*. n77 In *Step-Saver*, the court held that the terms of a vendor's shrink-wrap

[*455] agreement were not enforceable against a value-added reseller, applying the "battle of the forms" rules set forth in § 2-207 of the Uniform Commercial Code. n78

In *Step-Saver*, the licensor included a complete license agreement printed on the top of the box containing the software. The box top stated that, by opening the package, the purchaser would agree to the terms of the license. The box top also provided for a refund if the purchaser did not want to agree to the license. The license disclaimed almost all express and implied warranties and had a sole remedy clause limiting the purchaser's remedy to a refund of the purchase price. The purchaser, a value-added reseller, bought and resold a number of units of the software over a period of time. Although the purchaser was aware of the terms of the boxtop license, he had objected to them, and was allegedly told by the licensor that the boxtop license agreement would not apply. Later, the purchaser's customers experienced numerous problems with the software that he attributed to defects in the software.

The boxtop license was treated by the court as new or additional terms of an agreement, subject to the battle-of-the-forms analysis set forth in U.C.C. § 2-207. n79 Relying on the licensor's knowledge that the purchaser had objected to the terms of the boxtop license, and evidence that the licensor sold the software in the face of such objections, the court held that the boxtop license was not enforceable because the licensor had failed to clearly expressed its unwillingness to proceed with the transactions in the absence of the boxtop license, and because the license contained additional terms that would substantially alter the distribution of risk between the parties. n80

The court was influenced by the fact that the parties agreed that the terms of the shrink-wrap agreement they did not discuss at any time in the course of the numerous telephone conversations between them, at which time additional copies of the program were ordered. n81 The programs were shipped in accordance with the purchaser's instructions and were accompanied by seller's invoice which apparently did not contain any terms and conditions similar to those found in the shrink-wrap agreement.

[*456] C. *The* ProCD *Breakthrough*

The wisdom in using contract protection for databases finally paid off when it actually saved a computer database provider in *ProCD v. Zeidenberg*. n82 ProCD compiled publicly available telephone and address information onto a CD-ROM. The database was distributed to consumers under a shrink-wrap license which limited the licensee's use and prohibited resale of the information contained on the discs. ProCD designed the license to appear on the user's screen upon installation of the program, and required the user to click a button indicating his or her agreement to the terms (hence the term 'click-wrap'). The terms of the agreement were contained within the package, but the outside of the package indicated there was an agreement inside. Zeidenberg purchased the product from a retail outlet in Wisconsin, ignored the license, and formed Silken Mountain Web Services, Inc., to resell the information at a lower price than that charged by ProCD. The database was available over the Internet to anyone willing to pay the price. Zeidenberg also purchased updated versions of SelectPhone and sold them over the Internet at a reduced price. ProCD sought a preliminary injunction against further distribution of the product.

The district court ruled in favor of the defendant. n83 Relying on *Feist*, the district court held that the telephone directory listings were not copyrightable since they were not selected, coordinated or arranged in a creative way. n84 The district court also held that the shrink-wrap license was ineffective. According to the court, since a contract includes only those terms to which the parties have agreed, the defendant could not possibly have agreed to the "hidden" terms contained only on the inside of the box at the time of purchase. n85 Moreover, the district court held that even if the shrink-wrap license was a contract, its enforcement was preempted by § 301 of the Copyright Act, since the subject matter was within the general scope of copyright and the contract purported to create rights equivalent to copyright rights. n86

[*457] The Court of Appeals for the Seventh Circuit reversed. n87 Writing for a unanimous court, Judge Easterbrook held that the license was enforceable, so long as its terms did not violate a rule of positive law and were not unconscionable. n88 Contrary to the reasoning in *Step-Saver*, the Seventh Circuit held that the contract was not formed until the purchaser agreed to the license that was displayed on his screen. n89 The court reasoned that, although contracts frequently are formed "simply by paying the price and walking out of the store," ProCD's sale was expressly subject to a license agreement. n90

The court held that a contract creates rights only between the parties, unlike the "exclusive rights" under copyright which are enforceable by the copyright owner against the world. n91 In the court's analysis, the vendor, as master of its offer, had invited acceptance by conduct, which Zeidenberg had done by using the software after having an opportunity to read the license in both hard-copy and on-screen form. n92 The court noted, in particular, that Zeidenberg had no choice but to accept the terms of the license by conduct as it appeared on his computer screen whenever he ran the software, and he could not proceed without indicating his acceptance of the license. n93 Judge Easterbrook also found that rights created by contract are not, as a general matter, equivalent to the exclusive rights under federal copyright law. n94

D. *The Jury's Still Out on Contract Protection for Databases*

Notwithstanding the decision in *Pro-CD*, it appears that the jury is still out as to whether shrink-wrap licenses can be used to protect computer databases in light of the conflicting views of the various circuits. All of these cases demonstrate the tenuous protection currently afforded to databases. Furthermore, not all of the circuit courts have had the opportunity to decide the contract/copyright preemption issue.

Exacerbating the limitations of the contract mode of protection

[*458] is the privity problem: contracts bind only those in privity, not third parties. n95 Therefore, although a contract may block unwanted activity by the primary consumer, it may not prevent such activity by downstream users. For example, if a CD-ROM initially sold with a shrink-wrap license is dropped on the street, the person who finds it may place its contents on the Internet without contractual liability.

A second concern relates to enforcement. The remedies available for breach of contract differ in various respects from the generous remedies provided by the Copyright Act. Principally, while specific enforcement of a contract is rarely available in action for breach, n96 injunctive relief is standard in copyright infringement suits and operative throughout the country. n97 Furthermore, a plaintiff in a breach of contract actions must prove damages, n98 whereas copyright law provides statutory damages and the possibility of an award of costs and attorney's fees to the prevailing party. n99

Moreover, contractual protection may vary from state to state. n100 Consequently, a contract that is effective in one state, may be unenforceable in another. *ProCd* may not prove to be the final judicial word on the subject and this uncertainty has supported calls for statutory *sui generis* protection of databases and compilations. A related jurisdictional difficulty is that even if state contract law is relatively consistent, many computer databases are marketed on a global scale. The contract laws of

[*459] other countries tend to differ from the standard U.S. model, sometimes placing greater restrictions on freedom of contract based on each country's conceptions of public policy. n101 A contractual remedy cannot be transported across borders, whereas a federal *sui generis* statutory framework that accords and receives reciprocal international protection with foreign statutory frameworks on database protection can.

It is therefore not surprising that the database industry believes that "contract law, while an important component of any adequate legal regime, is by no means a substitute sufficient by itself." n102 Another form of protection may exist in state misappropriation law.

IV. **STATE MISAPPROPRIATION LAW IS ALSO INAPPROPRIATE**

A. ***State Misappropriation Law Is Not the Magic Bullet***

It can be argued that *Feist* was Janus-faced in discussing the scope of legal protection for compilations and databases. On one side, *Feist* confers *thin* copyright protection for compilations, but on the other side, *Feist* envisions non-copyright-based protection of facts. The Supreme Court suggested that "protection for the fruits of . . . research [presumably, facts] may in certain circumstances be available under a theory of unfair competition." n103 Indeed, in explaining its rejection of the "sweat of the brow" doctrine, the Court stated that the "best example is *International News Service v. The Associated Press*," n104 (*INS*) a case in which the court rejected copyright protection of facts, but which nevertheless protected facts from misappropriation.

As one court recently stated, "unfair competition includes a broad range of claims which are cognizable in federal and state courts." n105 State unfair competition law includes both common law and statutory

[*460] causes of action. Foremost among the non-statutory branches of unfair competition is the misappropriation doctrine which originated in *INS*. In this case, the Supreme Court affirmed an injunction prohibiting INS from selling news which INS had copied from the Associated Press (AP). n106 Generally, under the *INS* doctrine, a cause of action for misappropriation arises when "(1) the plaintiff has invested substantial time and money [to develop a] 'property'; (2) a defendant has appropriated the property at little or no cost; and (3) the plaintiff has been injured by the defendant's conduct." n107 Although *INS* was based on federal common law which no longer exists, n108 it has been relied on over the years by various state courts in fashioning relief for similar conduct. n109 However, the misappropriation cause of action has evolved differently in various state jurisdictions. n110 Moreover, among academics, there is some disagreement as to the extent to which state unfair competition laws can provide some supplementary relief against the unauthorized copying of commercially valuable data that are not protected by trade secret or copyright laws. n111 This divergence

[*461] of academic opinion cannot comfort the very real fears in the marketplace of the paucity of legal protection over the crown jewels of the multibillion dollar database industry. Adding to this uncertainty is the question of preemption of state unfair competition claims by federal copyright legislation. Although the Copyright Act "has been applied by various courts to preempt a wide range of actions," n112 courts have found many state unfair competition claims survive preemption. n113 Moreover, the legislative history of the Copyright Act of 1976 demonstrates Congress' intent that some state unfair competition claims survive preemption. The House Judiciary Committee Report on the 1976 Amendments to the Copyright Act stated:

'Misappropriation' is not necessarily synonymous with copyright infringement, and thus a cause of action . . . is not preempted if it is in fact based neither on a right within the general scope of copyright . . . nor on a right equivalent thereto. For example, state law should have the flexibility to afford a remedy . . . against a consistent pattern of unauthorized appropriation by a competitor of the facts . . . constituting 'hot' news, whether in the traditional mold of *International News Service v. The Associated Press*, or in the newer form of data updates from scientific, business, or financial data bases. n114

B. ***No News but Hot News***

Notwithstanding that state misappropriation doctrines can survive preemption, there are substantive problems in using state misappropriation laws to protect computer databases. Such problems flow from the requirement that the information sought to be protected

[*462] had to be time sensitive information, or "hot news." n115 Unfortunately, most databases are usually archival in nature and not "hot news." Nevertheless, it has been observed n116 that the following decisions protect not only "hot news" appropriations but also ordinary news contained in databases. In *Nash v. CBS, Inc.*, the Northern District of Illinois held that "all misappropriation claims, except those similar to the examples cited in the House Report, are preempted." n117 The court explained that because the misappropriation claims at issue in *Nash* involved the use of ideas contained in an historical work, and "did not involve the 'systematic' appropriation of 'hot news' *or valuable stored information*," the claims were preempted. n118 The Court of Appeals for the Seventh Circuit affirmed the district court's view. n119 The import of *Nash* is the confirmation that misappropriation claims related to hot news *or* valuable stored information are not preempted.

Similarly, the Southern District of New York has confirmed the continued vitality of state claims alleging the misappropriation of hot news or information stored in databases. In *Mayer v. Josiah Wedgwood and Sons, Ltd.*, n120 the court culled from the legislative history of the Copyright Act examples of "misappropriation claims preserved by the statute." n121 One "example of an unpreempted misappropriation action" set forth by the court involved the taking of hot news. n122 The court also specified that a state misappropriation action properly would lie when one "improperly invades another's computerized database and gains access to the data . . . . These examples involve subject matter other than copyright, specifically the facts and data as opposed to their expression" and thus are not subject to preemption. n123

[*463] However, the latest incarnation of the misappropriation rule (for the state of New York at least) seems to depart from the generous and industry-friendly approach taken in *Nash* and *Mayer*, by insisting on the "hot news" requirement for misappropriation cases. The Court of Appeals for the Second Circuit in *National Basketball Association v. Motorola Inc.*, n124 (*NBA*) held that despite the Copyright Act's general preemption of state legal claims equivalent to copyright claims, states can still prohibit a direct competitor of a compiler of time-sensitive information, or "hot news," from taking the information in a way which "free-rides" on the originator's efforts, if such free-riding "would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened." n125 More importantly, the Second Circuit protection under New York common law, without preemption, in the following circumstances:

(i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant's use of the information constitutes free-riding on the plaintiff's efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiff; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened. n126

In view of the foregoing and the billions of dollars at stake, state misappropriation doctrine is uncertain in scope as state courts may apply it differently in various circumstances. The *NBA* case is only one decision in one circuit, applying the law of one state. As with state contract law, there are inconsistent approaches in different states and, consequently, difficult jurisdictional and choice of law questions are likely to arise. Greater certainty and national uniformity are necessary for meaningful protection in today's multi-billion dollar computer database marketplace, especially in the on-line world.

Therefore, it is reasonable to conclude that unless a federal *sui generis* statute is adopted, the database industry will be hard pressed to depend on varying state misappropriation law. The database industry has faulted this mode of protection as insufficiently comprehensive and illsuited since the "hot news" doctrine does not protect databases composed of historical information. Moreover, the doctrine is inapplicable for protection against unauthorized uses of databases by those who are not the originator's direct competitor. n127 Even the U.S. Copyright Office

[*464] has stated that the misappropriation doctrine is uncertain, and thus supports the industry's view. n128 Copyright laws protect the copyright holder against losses of revenue in potential, as well as actual markets. There have been different results from state-law misappropriation cases. n129 These concerns are similarly magnified in the international context. Sadly, the state unfair competition approach is not the "magic bullet" to succor industry from the scarcity of protection in their computer databases.

V. DATABASES STILL IN SEARCH OF PROTECTION

As we have seen, federal copyright, state contract and unfair competition/misappropriation laws may provide some stop-gap or sputtering protection to compilations and databases, the current legal situation is a sloppy, patch-like quilt. Attorneys need to have predictability and certainty in the law to properly advise clients. These gaps can be filled only by federal legislation. *Sui generis* legislative initiatives are is reasonable because companies that make the contents of databases accessible to the public often become vulnerable to market-destructive appropriations that existing laws do not adequately remedy. n130 It may now be helpful to look at an international model n131 of *sui generis* statutory protection of computer databases that has had an effect in the formulation of the two Congressional statutory legislative initiatives.

[*465] A. *The Europeans Make it Look so Easy*

Europe has moved toward a *sui generis* form of protection with relative ease. On March 11, 1996, the European Commission adopted a Directive on the Legal Protection of Databases n132 requiring European Union (EU) member states to implement database protection laws by January 1, 1998.

The EU's Database Directive calls for the creation of a *sui generis* property right in the factual contents of any database that has been created through "substantial investment." This right, which lasts for fifteen years, is to protect database owners from acts of "extraction" and "re-utilization" of the facts in their databases, but this term of protection could be extended indefinitely if there was substantial investment. Database makers who are non-EU members, however, will not be able to enforce a *sui generis* right in Europe unless their home countries provide comparable protection to EU database makers. n133

Although the EU Directive is largely positive in its creation of a new protection for databases as a supplement to copyright law, some provisions raise significant problems for U.S. database producers. The Directive (1) limits the ability of database producers and their customers to freely license or contract for use of databases; (2) provides that the new protections may last only fifteen years -- not long enough to assure a fair return on a producer's investment, especially for databases that are archival in nature (i.e., not revised or updated); and (3) denies the new protection for databases whose owners are nationals of the United States or other non-EU member countries unless they are "established" in or are "genuinely linked" to an EU member nation or unless their own national laws "offer comparable protection" to databases produced by EU residents. n134

The bottom line is that many U.S. computer databases that are worth billions of dollars may be denied protection under the EU Directive,

[*466] placing U.S. producers at a competitive disadvantage throughout the huge European market. More troubling is that it is clear that the vast majority of EU countries intend to meet this deadline. n135 Unless and until the reciprocity provision of the European Directive is withdrawn, U.S. producers are likely to suffer some degree of competitive disadvantage vis-a-vis their European counterparts. Large producers may be able to avoid the harm by setting up commercial establishments within the territory of the European Union, but smaller producers may not have this option available to them.

B. *H.R. 3531 Bites the Dust*

Certain large U.S. database producers unsuccessfully tried to enact *sui generis* database protection in the United States in spring 1996. Encouraged by the EU initiative, the Database Investment and Intellectual Property Antipiracy Act of 1996 n136 (H.R. 3531) was introduced in the House of Representatives. This bill would have enacted a broad *sui generis* right in databases. No corresponding bill was introduced in the Senate.

In summary, H.R. 3531 provided a longer period of protection for databases than that of the EU Directive. n137 It also bestowed more powerful, exclusive rights, e.g., an exclusive right to control the uses of database contents, not just extractions and reuses of them. These exclusive rights would be enforced by allowing database makers to control any use that "adversely affects the actual or potential market for that database" in addition to uses that otherwise "conflict with the database owner's normal exploitation." n138 There is a provision that forbids

[*467] "repeated or systematic use or reuse of insubstantial parts," and also expressly forbids extraction or even uses of insubstantial parts "that cumulatively conflict . . . with . . . normal exploitation . . . or adversely affect . . . the actual or potential market." n139 This latter clause is reinforced by other provisions which make illegal extraction or reuse of even insubstantial parts of a protected database in any product or service that directly or indirectly competes with the database from which it was extracted in any market, however distant. n140 Also forbidden are extraction, use or reuse of even insubstantial parts "by or for multiple persons within an organization or entity in lieu of . . . authorized additional use or reuse . . . by license, purchase, or otherwise." n141

Taken together, these and other provisions of the proposed H.R. 3531 reinforced the preclusion of the formation of an evolving public domain from which third parties can freely draw. n142 To this end, the bill expressly and unreasonably confined permissible acts of "independent creation" to data or materials not found in a database subject to the proposed *sui generis* regime. n143 This restriction applied regardless of whether the unauthorized extraction or use was made for purposes of noncommercial scientific endeavor or for commercially important, value-added products that build incrementally on existing compilations of data. Every unauthorized use or reuse of existing data thus potentially violates the database owner's unbounded derivative work right. Furthermore, the existence of this potential violation is determined without regard to the substantiality of the second comer's own expenditure of effort or resources, to the similarity or differences of the latter's product or service, or to the public-good aspects of the activities undertaken. n144

The most glaring defects of H.R. 3531 was that there were no public interest exceptions or privileges (like fair use), or harsh criminal penalties and ancillary rules reinforcing self-help policing of on-line transmissions. To the database industry, it was a legislative tool that

[*468] would protect their assets, but to the scientific and research community, H.R. 3531 was a scheme to monopolistically "lock up" data and information at the expense of society and science. The concerns raised by H.R. 3531's detractors comprise the following:

1. *Sui generis* laws to protect databases should, on the whole, reflect a proper balance between public and private interests, including the public interest in free competition, that is, between public goods and private intellectual property.
2. Such laws should contain measures specifically designed to preserve and promote the scientific and educational enterprise, including the need to facilitate and encourage the establishment and maintenance of databases essential to the work of science. n145

Any *sui generis* legislation must address the deep and vehement concerns of the scientific and academic community who suspect big database corporations of unfairly "hoarding" knowledge and information in an overly protective statutory environment. This "hoarding" may unnecessarily erode the rights of the American research and education community and could have detrimental impacts on the conduct of research and educational activities in this country. The scientific and academic communities do not want industry to build legal fences around "raw" scientific data and experimental results, which would result in less competition among researchers, and leads to fewer new discoveries.

Predictably, H.R. 3531 was passionately condemned and vilified by the research and scientific community n146 as well as legal academics n147

[*469] for failing to consider and incorporate the important role that affordable, unrestricted flows of data have traditionally played in supporting U.S. research and education, or in other sectors vital to economic development. The research and scientific community have argued that the proposed regime risked precipitating an avalanche of unintended consequences that could ultimately endanger both the foundations of basic science and the technological superiority of the national innovation system. n148 In the face of relentless and organized opposition, the bill was referred to committee, no action was taken, and it has since become a footnote in the tortuous quest for *sui generis* statutory protection for computer databases.

C. *If At First, You Don't Succeed. . . .*

Undeterred by, and attempting to learn from the unheralded demise of H.R. 3531, The Collections of Information Antipiracy Act, (H.R. 2652), was introduced on October 9, 1997 by Rep. Howard Coble (R-North Carolina). n149 H.R. 2652 would outlaw the misappropriation of information in databases and proposes a new Chapter 12 to Title 17 for the protection of databases. The bill was touted by Rep. Coble, Chairman of the U.S. House Subcommittee on Courts and Intellectual Property, as "a minimalist approach grounded in unfair competition principles as a complement to copyright." n150

[*470] VI. BIG PROBLEMS WITH THE COLLECTIONS OF INFORMATION ANTIPIRACY ACT

A. *Highlights*

Under the proposed bill, H.R. 2652 imposes liability on any person who extracts, or uses in commerce, all or a substantial part of a collection of information gathered, organized, or maintained by another person through the investment of substantial monetary or other resources, so as to harm that other person's actual or potential market for a product or service that incorporates that collection of information and is offered by that other person in commerce. n151

Section 1202, however, outlines the following "permitted acts," which are not prohibited under the bill:

* Extraction or use of an individual item of information, or other insubstantial part of a collection of information, in itself;
* Gathering information or using information obtained by means other than extracting it from a collection of information gathered, organized, or maintained by another person through the investment of substantial monetary or other resources;
* Extracting information, or using information within any entity or organization, for the sole purpose of verifying the accuracy of information independently gathered, organized, or maintained by that person;
* Extracting or using information for not-for-profit educational, scientific, or research purposes in a manner that does not harm the actual or potential market for the product or service referred to in § 1201; and
* Extracting or using information for the sole purpose of news reporting. n152

The bill also prescribed several remedies provided at § 1206, namely, civil remedies for violating the bill's prohibitions, which include: injunctive relief, impoundment, and monetary relief (including damages and attorney's fees). However, injunctive relief and impoundment are not available against the federal government. Criminal penalties are also

[*471] available, under § 1207 of H.R. 2652, and include fines ranging from $ 250,000 to $ 500,000, and imprisonment of five to ten years.

B. ***The Devil's in the Details***

Unlike its doomed predecessor, H.R. 2652 appears to permit some form of nonprofit educational, scientific and research uses of databases without the owner's consent. It also permits the use of information for news-gathering purposes and allows commercial competitors to use "an individual item of information or another insubstantial part of a collection of information." Opening the House hearings on the Collections of Information Antipiracy Act, Rep. Coble tried to assuage concerns that there was "nothing sinister" n153 in Congress' attempt to pass H.R. 2652. Rep. Coble dispelled rumors that the bill was "on the fast track," declaring that he was the "driver" with "no plans to drive too fast." It is fortuitous that there will not be a hasty examination of H.R. 2652, because there will likely be extensive opposition from the same groups that successfully torpedoed H.R. 3531, H.R. 2652's hapless predecessor.

C. ***What Exactly is "A Collection of Information?"***

One major grievance is the far-reaching language of the bill coupled with its over broad definition of the subject matter of protection. In fact, the term "database" is not even used in the bill. There is a vague term "collection of information," where "information" is defined as "facts, data, works of authorship, or any other intangible material capable of being collected and organized in a systematic way." n154

Basically, anything could be defined as a collection of information, and since there is no time limit to the protection, there will be perpetual protection beyond the recoupment of investment. Such an idea conflicts with the values of a free market economy. The phrases' current definition would encompass, for example, recordings of audiovisual, cinematographic, literary or musical works under its protective cloak --

[*472] works that the EU Database Directive expressly disclaims. n155 Finally, if such broad language is passed, it may open the floodgates for lobbyists from every single other industry in the U.S. who will be clamoring for comparable protection. Those in technology driven industries, like biotechnology, electronics and computers, preferring not to endure the rigors and pitfalls of the patent procurement and litigation process, may lobby and petition for a similar asylum from Congress. In fact, a biotechnology company may even argue that its technology is covered by H.R. 2652, since information relating to the technology, as well as the product embodying the technology, could conceivably be covered by this black hole-like definition of "collection of information."

D. Illusory Exemption for Not-For-Profit Education, Scientific or Research Uses

Despite the fact that H.R. 2652 has a provision on "permitted acts" n156 which relates to not-for-profit uses, the prvision is no more than a restatement of the basic principle of liability, since it is applicable only when a use does not "harm the actual or potential market for the product." This limitation (which has no equivalent in the adjacent subsection providing a significant exemption for news reporting) renders the education, science and research immunity virtually futile because, in the event that any scientific or research use has a harmful effect on the potential market for the collection of information, this sort of conduct is not exempted and is liable to the criminal and civil remedies under the Act. It is equivalent to someone offering a broken umbrella to a person caught in a New York downpour. Also worrisome is the implication that these are the only classes of information appropriation which would be exempted. What if the police, courts, or other government bodies needed to extract and use the information? What happens if the health authorities need to extract or use commercial clinical information if there was an outbreak of some deadly mutating virus? There should be a broader class of privileged users of such databases especially if certain emergencies or contingencies arise. These are very reasonable safeguards to include into the current language of the bill.

[*473] E. ***No Time Limitation -- It Just Goes on and on***

It is unfortunate that, in extolling the advantages of H.R. 2652, Rep. Coble failed to mention that, whereas H.R. 3531 limited database protection to twenty-five years beginning with the date the database was made public or commercialized, the currently proposed H.R. 2652 provides no limit on the term of protection. It is important to evaluate the extensive overlap between the coverage of H.R. 2652 and that of the Copyright Act, especially in light of the fact that, while the term of copyright is limited, the duration of protection under the legislation is not. H.R. 2652 would apply to all compiled information, including archival, historical and scientific data already in the public domain. Thus, unauthorized extraction or use of this information, of the kind which scientists are accustomed to making today, could appear to harm the market for the compilation as a matter of definition. This will have a chilling effect on users of such databases. Additionally, H.R. 2652, as drafted, could be retroactive; it may extend protection to existing compilations and users may be liable under the civil and criminal remedies of H.R. 2652. This would defeat the legitimate expectations and make numerous current users vulnerable to legal action.

Moreover, § 103(b) of the Copyright Act makes clear that when a derivative work is copyrighted, only newly added original expression in that work will be protected under the copyright. n157 Any "original expression" from a pre-existing work in which the copyright has expired is in the public domain and can be freely copied, as can the facts or data from both versions. Under H.R. 2652, this position is unclear. It could be argued that H.R. 2652 is tantamount to an overreaching information grab. This maneuver has swapped an inveterate state of overprotection for a current state of underprotection. There should be a careful balance of public and private corporate interests.

F. ***Even Trademarks Don't Last Forever***

As far as duration of protection goes, the Register of the U.S. Copyright Office, Ms. Marybeth Peters, stated in her testimony that the absence of a term "is analytically consistent" with the "misappropriation approach [because] unfair competition and misappropriation laws . . . do not confer . . . property rights but . . . prohibit wrongful conduct [and] do not contain specified durations. Often, however, they incorporate concepts of ongoing investment,

[*474] typically as part of the circumstances that make the prohibited conduct wrongful." n158 She also noted that there is no fixed duration for the protection of trademarks as long as the trademark owners continue to use them in connection with goods or services, although there are some judicial and statutory exceptions on this unlimited duration for marks that are not used for a long period or are abandoned. Unfortunately, there are no such limitations in the current language in H.R. 2652.

However, trademark protection is proportionate to the use of the mark and the goodwill that is built up by use of the mark. The right and power of the trademark owner is not absolute. Like most laws, there are both statutory and common law defenses that can used against the trademark owner. Basically, if the trademark owner fails to defend the mark from known infringing use, trademark protection may be lost. This is a safeguard that can be easily included into the current proposed language of H.R. 2625. Suppose a botanist had been working on some applied agricultural commercial database and was paying a fee for such use. At the same time, he had been extracting from a unimportant field of a commercial database covering exotic Amazonian fauna for his personal use and research. This conduct was tolerated by the database provider and no fee was paid for this extraction. This went on for many years until it is discovered that one species of this Amazonian fauna could be used to cure cancer. However, the botanist needs to continue research and use of the database but the database provider refuses to allow further access unless a hefty fee is paid. Under the current language of the act, the botanist has no recourse. But, if the aforesaid suggested defenses are incorporated into the current bill, the botanist could rely on estoppel or acquiescence against the database provider, and continue such use.

To use another analogy, a real estate property interest may be limited or destroyed by adverse possession or prescriptive easements when the owner of the property, through inactive occupation, has surrendered his rights to the property. Therefore, H.R. 2652 should have a "use" requirement; it should not be allowed to protect subject matter that is no longer in use. Circuit Court Judge Alex Kozinsky observed:

Intellectual property law is full of careful balances between what's set aside for the owner and what's left in the public domain for the rest of us: The relatively short life of patents; the longer, but finite, life of copyrights; copyright's idea-expression dichotomy; the fair use doctrine; the prohibition on copyrighting facts; the compulsory license of television broadcasts and musical compositions; federal preemption of overbroad state intellectual property laws; the nominative use doctrine in trademark law; the right to make soundalike recordings. All of these diminish an intellectual property owner's

[*475] rights. All let the public use something created by someone else. But all are necessary to maintain a free environment in which creative genius can flourish. n159

It is ironic that the state not only confers a miserly twenty-year period of protection for patents, but also forces patent applicants to endure and comply with stringent, exhaustive requirements and examination of their applications (applicants must show that there invention is useful, novel, and unobvious) before they can obtain patent protection. On the other hand, all that database producers need to do to get everlasting protection for their databases is to have "a collection of information gathered, organized, or maintained by another person through the investment of substantial monetary or other resources." n160

Assuming that one of the main purposes of H.R. 2652 was to restore copyright-like protection to computer databases by legislatively overruling *Feist*, logically, the same pre-Feist period of protection for copyright n161 should be accorded to the computer databases.

Therefore, it is not unreasonable to insist that the contemplated *sui generis* intellectual property protection for computer databases have similar exemptions and limitations as all other intellectual property laws. At the end of the day, the scope of protection of trademark and unfair competition laws are not untrammeled nor absolute. It is imperative that if Congress does not impose a fixed-term of protection, Congress should enact some statutory defenses in light of business conditions permitting fair use and other established principles described by Judge Kozinsky.

G. ***Fair Use and Other Exceptions***

The database industry has expressly stated that the "copyright-concept of fair-use should be incorporated in any new law dealing with database protection." n162 However, their position is that it is already provided for in the permitted acts provision of § 1202(d), but, as the preceding discussion has shown, such an interpretation is questionable and may not be sustainable. In the view that both industry and the public are in accord with the need for the fair-use exception, it is imperative that

[*476] Congress makes the necessary amendment to explicate and clearly articulate this fair-use exception in the current language of H.R. 2652.

Therefore, Congress should look no further than the wording of the statutory defense of fair use from the Copyright Act. n163 The House Judiciary Committee Report on the 1976 Amendments to the Copyright Act stated:

The judicial doctrine of fair use, one of the most important and well-established limitations on the exclusive right of copyright owners, would be given express statutory recognition for the first time in section 107.

The doctrine is an equitable rule of reason . . . where the courts have evolved some criteria . . . reduced to the four standards which have been adopted in section 107: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work. n164

In its wisdom, Congress also sought to characterize fair use as a dynamic and organic doctrine, leaving it to the courts to adapt the doctrine to particular situations on a case-by-case basis. In other words, the categories of fair use are not closed. There are legions of researchers, students, and members of the public that benefit from access to the databases found in library collections. Currently, the access and use of these databases is supported by fair-use and the right of libraries to reproduce materials under certain circumstances, as well as other related provisions of the Copyright Act.

Unlike the Copyright Act, which includes numerous exemptions and limitations in support of education and libraries, H.R. 2652 has no comparable exemptions. If database owners want to enjoy the benefits of copyright-like protection through a *sui generis* statutory framework, they must also bear the social burden attendant with copyright law. Examples of such burdens already existing in copyright include the infringement exemption for face-to-face teaching activities, library and archival uses, and other public interest pursuits. n165 Compulsory licenses

[*477] for certain socially-favored types of uses which would ensure the availability of data at a reasonable price should also be provided. n166

A related concern is that, under H.R. 2652, there are no obligations imposed on database proprietors to keep their data accessible, or to notify users when they intend to abandon databases and their claims to legal protection in them. H.R. 2652 is also conspicuously silent on another important statutory exception to copyright that has enabled free circulation and dissemination of information: the "first sale" doctrine. n167 Currently, without this express exception, a vendor of a copy of a database, on CD-ROM or in book form, could continue to charge the purchaser license fees for using, or permitting others (students or library patrons, for example) to use that copy for its intended purpose. This "pay-per-use" model will have a chilling effect on users (researchers, academia and students) whose access to data has previously been available at no fee or at a reasonable cost. In view of the foregoing, it was not surprising that the library community was extremely critical of H.R. 2652. n168

Therefore, such a doctrine, as embodied in § 107 of the Copyright Act, should be expressly incorporated into the H.R. 2652. This will temper the protection of databases with four well-established and judicially interpreted statutory factors, and judges will have the discretion to balance the interests of industry and the public with the collective wisdom of existing judicial opinions.

H. *The "Insubstantial Parts" Test*

H.R. 2652, which allows a taking of "insubstantial parts" n169 of a collection of information, has been castigated by *all* quarters n170 because

[*478] there is great uncertainty and ambiguity as to whether "substantial" refers to both qualitative and quantitative parts of a collection. The bill is silent on this important point. As a result, an ambiguity exists as to whether an extraction or use of a quantitatively insubstantial but qualitatively substantial part of a collection of information is actionable. Because a use or extraction of a relatively small, but crucial part of a collection can cause real harm to the collection maker's market, a clarification should be made in the definition. For example, if an exhaustive database covers three-hundred or more fields, and the user extracts two items in each field, such an extraction seems quantitatively small. However, the disproportionately large size of the database owner's investment in the extracted fields could enable the database owner to claim that a qualitatively significant extraction had occurred, even if the user had no knowledge of the distribution of the publisher's investment over the different fields. Because the user cannot know such matters in advance, the "potential harm" test makes the "insubstantial parts" exception virtually useless in practice due to the uncertainty in the scope of its application.

In any event, the insubstantial parts exception is not a meaningful substitute for the kind of fair use exception recognized under current copyright laws. Since the basis for liability under § 1201 is an undefined "harm" to the investor's "actual or potential market," the concept of harm to potential markets is limitless from either a quantitative or qualitative perspective, one cannot know in advance which taking is permitted. The fear of lawsuits by large and powerful database publishers and providers will then exert a chilling effect on those otherwise disposed to probe the substance of the exception.

I. ***Aggravated Problems with Sole-Source Collections of Information***

The database industry is heavily characterized by sole source data providers. n171 The opportunity to choose among providers, however,

[*479] rarely occurs in practice because the bulk of all electronic compilations of data reportedly emanates from sole-source providers. n172 "Niche" marketing appears characteristic of both the private and public sectors. n173 This lack of effective competition, with its inherent possibilities for discouraging add-on products and encouraging abuses of market power, was ignored by H. R. 2625. In many cases, a particular scientific data set is likely to be of interest to only a few scientists and practitioners, and a private market may support only one distributor, due to economies of scale, which may have the potential for abuse.

The European Commission was so concerned about this phenomenon that the final watered down version of EU directive stipulated a tri-annual review of the effects of sole source licensing so as to prevent or check monopolistic practices. n174 However, the EC did *not* include a compulsory licensing scheme, as was initially proposed in the EU *sui generis* regime. n175

It has been suggested that if there is any *sui generis* legislation for databases in the U.S., there should be a compulsory licensing mechanism which would be loosely modeled on that provided by copyright lawfor nondramatic musical works. n176 This would level the playing field by increasing the bargaining power of privileged users. It would allow the scientific and educational communities to license data for essential needs in the event that publishers fail to supply the data on reasonable terms and conditions. The compulsory license mechanism would permit either side to seek a judicial decision triggering or blocking the compulsory

[*480] license for privileged uses. In practice, a built-in duty to negotiate before seeking such a license, coupled with the uncertainty inherent in the applicable legal standards and the well-known limits of judicial capability, should ordinarily lead to a conciliation between database publishers and scientists. Properly designed, such a compulsory licensing mechanism could enhance competition in a fully commercialized information market by ensuring that value-added products are not kept off the market by database makers refusing to license sole-source data and by ensuring that the stimulus of competition is a potential restraint on those database makers inclined to seek monopolistic levies.

Not surprisingly, the database industry has stated that "laws mandating special access to such database products and services are ill-advised and will have a chilling effect on further development of the database market and the future, widespread availability of particular types of information. Existing antitrust and related laws are adequate to address any problems that may arise in this sphere." n177 The U.S. Copyright Office supports this view that "the bill makes the choice to leave the issue to be dealt with through existing mechanisms of antitrust law and general federal regulation and oversight of particular industries." n178

In any event, leaving it to antitrust law to sort out the problem of monopoly power merely postpones the problem. Congress should provide some leadership by deeply and thoughtfully considering the incorporation of the adequate and reasonable safeguards, like the express statutory defenses, fair use or the compulsory licensing scheme, each of which was discussed earlier. At the very least, Congress should examine the probable anti-competitive and monopolistic issues that may arise from granting blanket protection for computer databases and their contents.

J. *The Fundamental Flaw*

H.R. 2652 contains an even more fundamental flaw that those problems already considered. The US Copyright Office has stated that any statutory protection model should either be "(1) an exclusive property right, or (2) some form of Federal unfair competition law, focusing on the nature of the conduct prohibited . . ." n179

Perhaps the focus of an unfair competition model should be a balancing approach embodying factors such as fairness, commercial

[*481] circumstances, and the nature of the material taken. Protection could exist so long as an investment of continued value was being taken unfairly. The balancing test in a federal unfair competition statute is preferred to the simple *per se* act of misappropriation, as espoused by § 1201 of H.R. 2652, without any consideration of any of the surrounding facts and circumstances of the state of competition.

The provisions in H.R. 2652 far exceed the traditional misappropriation doctrine. As described earlier in this paper, traditional misappropriation doctrine penalizes only predatory "free-riding" that destroys the incentive to create or maintain compilations. Even though industry felt that the value of the NBA-type state misappropriation protection was limited because the contents of many databases did not amount to "hot news," what was missed in the discussion is that, in the formulation of any new federal law, there is no need to slavishly incorporate all the features of a state law. It would be perfectly appropriate for Congress to list the "hot news" requirement as *one* of the possible requirements (and not a strict mandatory requirement) in order to have protection under a misappropriation action. It should be noted that there is already state case law that has extended state misappropriation actions in situations where there is no "hot news." n180

K. Where is the Competitor?

Rep. Coble had proclaimed that H.R. 2652 eliminates unfair competition by making it a civil wrong under federal law. n181 This is ironic, since H.R. 2652 actually *does away* with the competitor requirement in order to find liability against alleged wrongdoers. As it currently stands, § 1201 of H.R. 2652 bars a substantial unauthorized "use in commerce" *or* "extraction" of a compilation's contents whenever it would "harm" the original compiler's actual or potential market. Rather than applying only between direct commercial competitors, § 1201 would penalize any *per se* "substantial" use or extraction of data that affected the actual or oriental market for a product or service.

Thus, the prohibitions in this bill would go beyond the sphere of competition, and the long arm of the law will reach the activities of not-for-profit institutions such as libraries or charities. This creates potentially serious consequences to libraries as providers of information services, and could conceivably chill the legitimate use of databases and

[*482] related collections. H.R. 2652's extension to the protection to "potential markets" is also problematic. This could have an anti-competitive effect on the development of new products and information resources.

L. *Throwing the Baby Out with the Bath Water*

The rationale for the expansive scope of this language is to satisfy the need to "[rectify] the injustice that takes place when a dishonest customer or a 'cyberprankster' -- without permission -- electronically copies the databases and makes freely available through the Internet a database compiled by a hard-working entrepreneur." n182 These risks are not limited to competitor's market-destructive acts. n183 The apotheosis of non-competitors was found in *LaMacchia v. United States*, n184 where a Boston judge dismissed a case against a twenty-year-old engineering student at the Massachusetts Institute of Technology accused of illegally distributing more than $ 1 million in copyrighted software over the Internet, on the grounds there was no financial gain involved and he acted without the commercial motive required in cases of criminal copyright infringement. Although unmotivated by any desire for pecuniary gain, his actions cost the affected software developers over $ 1 million in losses.

The database industry believes that § 1201 of H.R. 2652 deals with the non-traditional "competitor" who inflicts grievous harm upon a database publisher while not acting in the guise of competition. It is also directed against willful, commercial-scale database pirates out to gain notoriety, not money. Because it was feared that database piracy on the Internet may occur without the exchange of money, the database industry wanted to plug any possible "LaMacchia loophole" in any *sui generis* legislation protecting databases. n185

At this stage, it should be noted that the author does not endorse nor encourage the sophomoric and dangerous conduct of LaMacchia. Unfortunately, to use the overbroad scope of § 1201 to stop these sort of

[*483] juvenile hijinks and antics is like using a sledgehammer to open a walnut. Minor offenders or persons (e.g., educators, researchers and scientists), who honestly believed that they had a legitimate right to engage in the behavior prohibited by the bill would be unwittingly snared with the broad language of the bill because (as discussed earlier in this paper) the § 1202(d) permitted acts of not-for-profit, educational, scientific or research uses of databases are illusory and useless. There should be express exempting provisions for an educator who feels that his or her action is a fair use of the database (assuming that H.R. 2652 will include such fair use defenses into the legislation, or that a judge may judicially create such defenses).

Curiously, *LaMacchia* was the poster boy for the U.S. software industry's fight against these sorts of blatant acts of software piracy. This culminated in the recent successful passage and enactment of the No Electronic Theft Act n186 (NET). While Congress was very careful to ensure that the coverage of the NET legislation was sufficient to catch LaMacchia-like pranksters, but it went out of its way to ensure that the law exempts innocent infringers under the copyright fair use doctrine. In particular, there was great emphasis that the "willful" requirement would exclude an educator who, in good faith, believes that he or she is engaging in a fair use of copyrighted material. n187

With NET, Congress manifested a sensibility and empathy for both industry and the public, a lesson that should be applied to H.R. 2652. It is undeniable that well-crafted language can be employed to prevent such abuses without throwing the baby out with the bath water. Since the criminal penalties that entail a criminal breach of § 1201 of H.R. 2652 are likely to be ruinous, n188 it is imperative that careful thought and consideration be used to draft language that specifically directed to cover such conduct and not innocent infringers.

[*484] M. *H.R. 2652's Winter of Discontent*

Perhaps reacting to the justified characterization that H.R. 2652 was nothing more than a piece of sweetheart legislation n189 introduced for the benefit of the database publishing industry, the House Judiciary Subcommittee on Courts and Intellectual Property convened a second day of testimony on February 12, 1998, with a promising proposition from Subcommittee Chairman Coble who offered assurances that the Subcommittee had "a very open mind on amendments." He indicated that after two days of hearings, some amendments to address issues like "sole source government information, a statute of limitations, permissible uses by scientific, educational and research Institutions and defining a potential market" will be proffered. n190 Some of these thorny issues were raised earlier in this paper and it remains to be seen whether Congress will constructively address them or merely pay them lip service.

The Information Technology Association of America n191 expressed its concern about potential restrictions on some high technology companies' ability to share data between and among computer networks. Testimony n192 was given concerning a major U.S. manufacturer that had contracted with a firm to design and operate its intranet n193 and

[*485] the manufacturer supplied all of the data used to develop the databases employed in the operation of the system. When the intranet operator defaulted on its contract, the manufacturer sought to contract with a new firm. When the manufacturer sought to have its data transferred to the new intranet service provider, however, the original firm claimed proprietary rights, under the sweat of the brow argument, in the databases it had compiled using the manufacturer's data.

Although it is arguable that the intranet operator would have had a valid claim after applying the Feist standard or the manufacturer may have been better served with a clearer contract specifying the ownership of any work-product or work product-in-progress in the event of a termination of the contract, this set of facts is germane to the well-founded fear that if H.R. 2652 was passed with its broad language unchecked, database operators could plausibly use H.R. 2652, what was contemplated to be a defensive mechanism against fraud and misappropriation, into an offensive weapon used as a power grab for rights and benefits that were not the intended consequence of such proposed legislation.

One of the ambiguities in the language of H.R. 2652 is the express disclaimer that it does not extend to computer programs n194 that provide that the exclusion 'does not apply to a collection of information directly or indirectly incorporated in a computer program.' However, this exclusion does not escape ambiguity because it is uncertain whether a command structure -- a collection of commands -- is viewed as a collection of information incorporated in a program and whether such proposed legislation also protects a 'look-up table for translation purposes.' n195 One could argue that the phrase "collection of information . . . incorporated in a computer program" refers to information related to the application rather the functioning of the program itself. For example,

[*486] in a program designed to detect structural stress, the engineering constants in the program would be protected, while the interface specifications would not. From the current language of the Bill, it is unclear what sort of interpretation can be reached and this provokes uncertainty as to the ambit of protection. n196

The greatest fears have come from the quarters that have passionately argued n197 for the protection of a vibrant public domain drawing support from the seminal Supreme Court decision of Feist that warned about the adverse effects on free flow of information by "creating . . . monopolies in public domain materials." n198 Supporting these viewpoints were the guardians of the engine of university research and education, the university library community. It offered testimony before Congress in February 1998 n199 , with the innocents' point of view, that H.R. 2652 is likely to maneuver considerable amounts of public domain material into proprietary packaging and superimpose a new proprietary regime on existing and well-understood forms of intellectual property management and drew several compelling real life examples where current undergoing universities' collaborative development and use of information would be seriously impeded or precluded by overly restrictive proprietary controls over the uses of information. Its crystallized concern was the unmitigated impact that the proposed legislation would overreach far beyond the provision of economic incentives to create new information products, resulting in a loss of access to primary data -- to facts not currently subject to proprietary control.

At this stage, it should be noted that the author empathizes with the concerns of most of the views of these public domain advocates. Although the popularly appealing moral imperative may lie with

[*487] maintaining a vigorous public domain, databases should have some protection and in view that the traditional misappropriation doctrine penalizes only predatory "free-riding" that destroys the incentive to create or maintain a compilation, this paper proposes a balance of factors test approach or this balance of factors test could be incorporated in the statute giving the judiciary to apply it on a case by case basis. This eliminates most of the qualms associated with the risky H.R. 2652 as introduced in the Fall of 1997. It is encouraging to see that all parties concerned are making the appropriate and valid representations on the defects of the current bill and is hoped that Congress will reach a golden mean satisfying the well-founded fears of all parties.

VII. A BETTER TOMMORROW: AN ALTERNATIVE AND BALANCED UNFAIR COMPETITION PARADIGM

The direction and scope of H.R. 2652 is draconian. When one is considering protection for databases of facts, it would be wise to recall a phrase from the seminal *Feist* decision, "*common sense tells us that 100 uncopyrightable facts do not magically change their status when gathered together in one place*." n200 It time to apply some common sense into the evaluation of H.R. 2652. A better *sui generis* federal unfair competition statute should not make the simple *per se* act of every misappropriation decision hinge on whether there is harm on an actual or potential market. This is far too narrow a focus for a true misappropriation law. H.R. 2652 should adopt a more objective balance of circumstances test for its *sui generis* misappropriation regime.

An appropriate test would weigh the complaint of misappropriation against the relevant facts and business circumstances of the parties involved. Congress could enact a statutory, non-exclusive list of factors that courts may consider in determining whether an act of unfair competition has been committed by the offending party based on the likelihood of actual financial harm to the database owner, notwithstanding the absence of competition. This statute should be tempered with the express exemptions enjoyed by users under the copyright fair use doctrine, other copyright exemptions and those relevant defenses and exceptions under trademark law discussed earlier. A federal statute could spell out some market-oriented criteria n201 as well as some relevant factual

[*488] considerations n202 which the court should consider before determining when a user had engaged in an "unfair extraction."

Some appropriate market-oriented factors would be: (1) the time, effort and costs of developing an information product, (2) the costs and method of copying, (3) whether copying yields a substantially identical product, (4) the price of sale offered by the copyist and the price of the database owner in view to recoup the substantial research and development costs, (5) whether consumers, believing the two products are substantially identical, decide to purchase the cheaper one (thereby inducing market failure because the first entity is unable to recoup its expenses) and (6) whether such a market failure could have been averted by a period of protection that would allow the first enitity to recoup its expenses and justify its investment in developing the information product.

The fact-based considerations would be (1) the quantum of data appropriated by the user, (2) the nature of the data appropriated, (3) the purpose for which the user appropriated it, (4) the degree of investment initially required to bring that data into being, (5) the degree of dependence or independence of the user's own development and the substantiality of the user's own investment in such development, (6) the degree of similarity between the contents of the database and a product developed by the user -- even if only privately consumed, (7) the proximity or remoteness of the markets in which the database owner and the user are operating and (8) how quickly the user was able to come into the market with his or her product, compared with the time required to develop the original database.

The benefits of having such objective criteria are obvious because it strikes a workable balance, taking into account all important aspects of the economic and cultural bargain n203 between intellectual property owners and the public. A balanced arrangement should be made for the owners/current creators sector and the group of would-be creators/borrowers of creations. Strict rules on the use of these databases will encourage current creators of database products, it may hamper future creative efforts. Overprotection of any sector could result in that particular sector becoming dominated by the less innovative members, which would lower the incentives to innovate, leading to the detriment of the public.

[*489] The history of the medieval guilds and cartels shows that this risk is not imaginary. n204

VIII. CONCLUSION

In formulating any *sui generis* statutory protection for computer databases, it is useful to heed another warning of Judge Alex Kozinsky:

'*Overprotecting* intellectual property is as harmful as underprotecting it. Creativity is impossible without a rich public domain. Nothing today, likely nothing since we tamed fire, is genuinely new: Culture, like science and technology, grows by accretion, each new creator building on the works of those who came before. *Overprotection stifles the very creative forces it's supposed to nurture*.' n205

Using sui generis legislation to enhance the scope of intellectual property protection for computer database owners is perfectly permissible, but it should not be done at the expense of the numerous involved constituencies discussed earlier. The next task is for Congress to constructively address these serious problems and criticisms that were illustrated in this paper. Congress must strike the right balance between the public and the computer database industry. Perhaps, the following piece of wisdom endorsed by the Supreme Court neatly sums up the balance that Congress must make:

'The fortunes of the law of copyright have always been closely connected with freedom of expression, on the one hand, and with technological improvements in means of dissemination, on the other. Successive ages have drawn different balances among the interest of the writer in the control and exploitation of his intellectual property, the related interest of the publisher, and the competing interest of society in the untrammeled dissemination of ideas.' n206

Until then, H.R. 2652 is certain to continue to experience its winter of discontent from critics. Even if Congress needs to enact domestic legislation providing *sui generis* protection against unfair extraction of databases for commercial purposes that is equivalent to the EU Database Directive to fulfill a reciprocity requirement to get EU

[*490] protection for the US databases, n207 there should not be any rush to judgment or any ill-considered and incomplete accommodation of the issues. Congress must not be enamored with the same seduction of high technology that has inspired lobbyists and policymakers to churn out cures like H.R. 2652, which turn out to be worse than the ailment.

Remedial Congressional action to H.R. 2652, along the lines as suggested in this paper and points raised by Rep. Coble in February 1998 should redeem H.R. 2652, making it more fair and equitable for all parties concerned. Moreover, the inclusion of more checks and balances will enable H.R. 2652 to disinherit its stigma of being nothing more than narrow special interest legislation. This requires careful retooling of H.R. 2652's technical legal machinery, as well as the inclusion of safeguards that deals with the specific needs of the scientific and educational communities. Congress must do so because the future of the U.S., maybe the world, information economy, the scientific community and the continued success of the U.S. database industry is on.

n1 Steve Lohr, *Information Technology Field Is Rated Largest U.S. Industry*, N.Y. TIMES, Nov. 18, 1997, at D5. *See also Reauthorization of the National Telecommunications & Information Agency (NTIA): Hearings Before the Subcomm. on Telecomm., Trade & Consumer Protection of the House Comm. on Commerce*, 105th Cong., 1st Sess. 60 (1997) (statement of Larry Irving, Assistant Secretary for Communications and Information, U.S. Department of Commerce) (stating that the telecommunications and information-related industries will generate more than three-quarters of a trillion dollars in annual revenues by the early 21st century).

n2 *Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 430, 220 U.S.P.Q. (BNA) 665, 673 (1984).*

n3 *499 U.S. 340, 18 U.S.P.Q.2d (BNA) 1275 (1991).*

n4 H.R. 2652, 105th Cong. (1997).

n5 The estimated sales revenue of the various categories of the U.S. database industry range from $ 4.5 billion to $ 200 billion. These categories include: publishing industry and related services, newspapers, books and magazines, data processing and network services, business information supplier, data processing and preparation, electronic information industry, database revenues of business information, electronic information services, electronic delivery of business information (primarily online and CD-ROM), information retrieval services and commercial nonphysical research. *The Collections of Information Antipiracy Act: Hearings on H.R. 2652 Before the Subcomm. on Courts & Intellectual Property of the House Comm. on the Judiciary*, 105th Cong., 1st Sess. (1997), *available in 1997 WL 14152428* (statement of Dr. Laura D'Andrea Tyson, Professor of Economics and Business Administration at the University of California at Berkley, former National Economic Advisor to President Clinton) (summarizing Laura D'Andrea Tyson and Edward F. Sherry, STATUTORY PROTECTION FOR DATABASES: ECONOMIC AND PUBLIC POLICY ISSUES (visited Dec. 2, 1997) <http://www.infoindustry.org/ppgrc/doclib/grdoc016.htm>).

n6 COMMITTEE ON ISSUES IN THE TRANSBORDER FLOW OF SCIENTIFIC DATA, U.S. NATIONAL COMMITTEE FOR CODATA, COMMISSION ON PHYSICAL SCIENCES, MATHEMATICS, AND APPLICATIONS, NATIONAL RESEARCH COUNCIL, BITS OF POWER: ISSUES IN GLOBAL ACCESS TO SCIENTIFIC DATA, ch. 1 at 17-18 (1997). Also available on the National Academy Press's website (visited Dec. 2, 1997)

<http:www.nap.edu/readingroom/books/BitsOfPower/index.html>. The Report discusses technical, economic, and legal impediments to the free flow of scientific and technical data in electronic environments.

n7 *See, e.g., Feist, 499 U.S. at 350, 18 U.S.P.Q.2d at 1280.*

n8 "Data" is defined as "individual facts, statistics, or items of information," and "database" is defined as "a comprehensive collection of related data organized for convenient access, generally in a computer." RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE 508 (2d ed. 1987).

n9 *See, e.g., Hutchinson Tel. Co. v. Fronteer Directory Co., 770 F.2d 128, 132, 228 U.S.P.Q. (BNA) 537, 539 (8th Cir. 1985); Jeweler's Circular Publ'g Co. v. Keystone Pub'g Co., 281 F. 83, 88* (2d Cir.), *cert. denied, 259 U.S. 581 (1922).*

n10 U.S. CONST. art. I, § 8, cl. 8.

n11 *100 U.S. 82, 94 (1879).*

n12 *17 U.S.C. § 103* (1976).

n13 *See, e.g., Jeweler's Circular, 281 F. at 88.*

n14 *See, e.g., Hutchinson, 770 F.2d at 132; Jeweler's Circular, 281 F. at 88.*

n15 *Feist, 499 U.S. 340, 344, 18 U.S.P.Q.2d (BNA) 1275, 1277 (1991).*

n16 *Id. at 363, 18 U.S.P.Q.2d at 1285.*

n17 *Id. at 354, 18 U.S.P.Q.2d at 1281.*

n18 "A 'compilation' is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term 'compilation' includes collective works." *17 U.S.C. § 101* (1976).

n19 *Feist, 499 U.S. at 345, 18 U.S.P.Q.2d at 1278.*

n20 *Id.*

n21 *Id. at 347, 18 U.S.P.Q.2d at 1278.*

n22 *Id. 347-48, 18 U.S.P.Q.2d at 1278-79.*

n23 *Id. at 348, 18 U.S.P.Q.2d at 1279.*

n24 *See id.* The Court summarized the statutory standard as requiring the satisfaction of three elements: "(1) the collection and assembly of pre-existing material, facts, or data; (2) the selection, coordination, or arrangement of those materials; and (3) the creation, by

virtue of the particular selection, coordination, or arrangement, of an 'original' work of authorship." *Id. at 357, 18 U.S.P.Q.2d at 1282.*

n25 *Id. at 349, 18 U.S.P.Q.2d at 1279.*

n26 *Id.* (citing U.S. CONST. art. I, § 8, cl. 8).

n27 *Id. at 349-50, 18 U.S.P.Q.2d at 1279-80.*

n28 *Id. at 361, 18 U.S.P.Q.2d at 1284.*

n29 *Id.*

n30 *Id.*

n31 *Id.* (quoting *Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 58 (1884)).*

n32 *Id.* at 348, 18 U.S.P.Q.2d at 1279.

n33 *Id.* at 358, 18 U.S.P.Q.2d at 1283.

n34 *Id.* at 362-63, 18 U.S.P.Q.2d at 1284-85.

n35 *Id.* at 361, 18 U.S.P.Q.2d at 1284.

n36 *Id.* at 348, 18 U.S.P.Q.2d at 1279. This is consistent with the Court's statement that "facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted." *Id.* at 350, 18 U.S.P.Q.2d at 1280.

n37 *Id.* at 348, 18 U.S.P.Q.2d at 1279.

n38 *See, e.g., Jeweler's Circular Publ'g Co. v. Keystone Pub'g Co., 281 F. 83, 93* (2d Cir.), *cert. denied, 259 U.S. 581 (1922).*

n39 *Feist, 499 U.S. at 363, 18 U.S.P.Q.2d at 1285.*

n40 *See, e.g., Warren Publ'g, Inc. v. Microdos Data Corp., 115 F.3d 1509, 1517-18, 43 U.S.P.Q.2d (BNA) 1065, 1071-72* (11th Cir.), *cert. denied, 118 S. Ct. 397 (1997).*

n41 *Feist, 499 U.S. at 349, 18 U.S.P.Q.2d at 1279.*

n42 *Key Publications, Inc. v. Chinatown Today Publ'g Enter. Inc., 945 F.2d 509, 514, 29 U.S.P.Q.2d (BNA) 1122, 1126 (2d Cir. 1991)* (emphasis added).

n43 *Id.*

n44 *Warren, 115 F.3d 1509, 43 U.S.P.Q.2d (BNA) 1065* (11th Cir.), *cert. denied, 118 S. Ct. 397 (1997).*

n45 *Id. at 1520, 43 U.S.P.Q.2d at 1074.*

n46 *Id. at 1513, 43 U.S.P.Q.2d at 1068.*

n47 *Id. at 1520-21, 43 U.S.P.Q.2d at 1074.*

n48 *Id. at 1518, 43 U.S.P.Q.2d at 1072.*

n49 *Id.*

n50 *Id. at 1519, 43 U.S.P.Q.2d at 1073.*

n51 *Id.*

n52 *999 F.2d 1436, 28 U.S.P.Q.2d (BNA) 1001 (11th Cir. 1993), cert. denied, 510 U.S. 1101 (1994).*

n53 *Id. at 1446, 28 U.S.P.Q.2d at 1008-09.*

n54 *Id. at 1438, 28 U.S.P.Q.2d at 1002.*

n55 *Id. at 1441, 28 U.S.P.Q.2d at 1004.*

n56 *Id. at 1441, 28 U.S.P.Q.2d at 1005* (emphasis in original).

n57 *Id. at 1442, 28 U.S.P.Q.2d at 1005.*

n58 *Id. at 1444, 28 U.S.P.Q.2d at 1007.*

n59 *Key Publications, Inc. v. Chinatown Today Publ'g Enter. Inc., 945 F.2d 509, 513-14, 29 U.S.P.Q.2d (BNA) 1122, 1125 (2d Cir. 1991).*

n60 *Id. at 514, 20 U.S.P.Q.2d at 1125.*

n61 *Id. at 514, 20 U.S.P.Q.2d at 1126.*

n62 *937 F.2d 700, 705, 19 U.S.P.Q.2d (BNA) 1161, 1165 (2d Cir. 1991).*

n63 *Id. at 704, 19 U.S.P.Q.2d at 1164.*

n64 *Id. at 711, 19 U.S.P.Q.2d at 1169.*

n65 *Id. at 710, 19 U.S.P.Q.2d at 1169.*

n66 The Second Circuit found that the defendant's compilation did not infringe in Key Publications. *See Key Publications, Inc. v. Chinatown Today Publ'g Enter. Inc., 945 F.2d 509, 515-16, 29 U.S.P.Q.2d (BNA) 1122, 1127 (2d Cir. 1991).* In *Kregos*, the district court reached that same conclusion on remand. *795 F. Supp. 1325, 1334, 23 U.S.P.Q.2d (BNA) 1368, 1375 (S.D.N.Y. 1992), aff'd, 3 F.3d 656, 27 U.S.P.Q.2d (BNA) 1881 (2d Cir. 1993).*

n67 *936 F.2d 671, 673, 19 U.S.P.Q.2d (BNA) 1226, 1227-28 (2d Cir. 1991).*

n68 *Id.* (emphasis added).

n69 The Sixth Circuit relied on Victor Lalli and other cases in concluding that a catalogue of replacement belts "organized in a manner unknown to the industry prior to its publication" was insufficiently creative to qualify for copyright protection. *See J. Thomas Distribs., Inc. v. Greenline Distribs., Inc., 100 F.3d 956, Unpublished Disposition, 41 U.S.P.Q.2d (BNA) 1382, 1383 (6th Cir. 1996).*

n70 *Bellsouth Adver. & Publ'g Corp. v. Donnelley Info. Publ'g, Inc, 999 F.2d 1436, 1471, 28 U.S.P.Q.2d (BNA) 1001, 1009 (11th Cir. 1993), cert. denied, 510 U.S. 1101 (1994)* (Hatchett, J., dissenting).

n71 *The Collections of Information Antipiracy Act: Hearings on H.R. 2652 Before the Subcomm. on Courts & Intellectual Property of the House Comm. on the Judiciary*, 105th Cong., 1st Sess. (1997), *available in* (visited Dec. 2, 1997) <http:www.infoindustry.org/ppgrc/doclib/grdoc017.htm> (Written Statement of the Information Industry Association (IIA)). The Collections of Information Act is critically examined and discussed infra.

n72 *See* David C. Johnston, *West Publishing Loses a Decision On Copyright*, N.Y. TIMES, May 21, 1997, at D5. *See also* Raymond Snoddy, *Reed Elsevier Shares Drop on U.S. Legal Ruling*, FINANCIAL TIMES, May 23, 1997, at 24. The ruling was *Matthew Bender & Co. v. West Publ'g Co., 42 U.S.P.Q.2d (BNA) 1930, 1934* (S.D.N.Y.), *appeal docketed*, No. 97-7910 (2d Cir. 1997).

n73 *847 F.2d 255, 270, 7 U.S.P.Q.2d (BNA) 1281, 1295 (5th Cir. 1988).*

n74 LA. REV. STAT. ANN. § 51:1964 (West 1997).

n75 *Vault Corp., 847 F.2d at 269, 7 U.S.P.Q.2d at 1294.*

n76 *Id. at 270, 7 U.S.P.Q.2d at 1295.*

n77 *939 F.2d 91 (3d Cir. 1991).*

n78 U.C.C. § 2-207 (1977).

n79 *Step-Saver, 939 F.2d at 99.*

n80 *Id. at 103.*

n81 *Id. at 95.*

n82 *86 F.3d. 1447, 39 U.S.P.Q.2d (BNA) 1161 (7th Cir. 1996), rev'g 908 F. Supp. 640, 38 U.S.P.Q.2d (BNA) 1513 (W.D. Wis. 1996).*

n83 *ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 38 U.S.P.Q.2d (BNA) 1513 (W.D. Wis. 1996).*

n84 *Id. at 647, 38 U.S.P.Q.2d at 1518.*

n85 *Id. at 654, 38 U.S.P.Q.2d at 1524.*

n86 *Id. at 656-59, 38 U.S.P.Q.2d at 1525-28.*

n87 *ProCD, 86 F.3d 1447, 39 U.S.P.Q.2d (BNA) 1161 (7th Cir. 1996).*

n88 *Id. at 1449, 39 U.S.P.Q.2d at 1161.*

n89 *Id. at 1452-53, 39 U.S.P.Q.2d at 1165.*

n90 *Id.*

n91 *Id. at 1454, 39 U.S.P.Q.2d at 1166.*

n92 *Id.*

n93 *Id. at 1454, 39 U.S.P.Q.2d at 1167.*

n94 *Id. at 1455, 39 U.S.P.Q.2d at 1167.*

n95 *Id. at 1454, 39 U.S.P.Q.2d at 1166* (stating that contracts "generally affect only their parties"); *see also Gold'n Plump Poultry Inc., v. Simmons Eng'g Co., 805 F.2d 1312, 1318 (8th Cir. 1986)* ("Plaintiff must show privity of contract with defendant to have right of enforcement [and the contract is not enforceable against one who is not in privity]. Strangers to contract acquire no rights under the contract.")

n96 *See* E. Allen Farnsworth, FARNSWORTH ON CONTRACTS § § 12.4-12.6 (1990 & Supp. 1996) (stating that courts historically have been unwilling to compel performance of contract if legal remedy of damages is adequate to protect injured party).

n97 *17 U.S.C. § 502* (1976)

n98 *See* RESTATEMENT (SECOND) OF CONTRACTS § 352 (1981); (U.C.C.) § 1-106 comment 1; U.C.C. § 2-715 comment 4; Farnsworth, *supra* note 96, at § § 12.8-12.9.

n99 The Act permits statutory damages "in a sum of not less than $ 500 or more than $ 20,000 as the court considers just," and up to $ 100,000 in the court's discretion for willful infringement. *17 U.S.C. § 504*(c). Costs and attorney's fees may be awarded to the prevailing party in the court's discretion. *See 17 U.S.C. § 505* (1976).

n100 *Compare Bussard v. College of St. Thomas, 200 N.W.2d 155 (Minn. 1972)* (excluding evidence of prior negotiations when determining whether an agreement is integrated) *with Masterson v. Sine, 436 P.2d 561 (Cal. 1968)* (looking to all relevant circumstances including prior negotiations to determine whether an agreement is integrated).

n101 *See, e.g.*, Turner Entertainment Co. v. Huston, Court of Appeal of Versailles [France], Combined Civil Chambers, Decision No. 68, Roll No. 615/92 (Dec. 19, 1994) (as translated in 16 ENT. L. REP. (March 1995)) (declining to enforce employment contract between U.S. film studio and U.S. director and screenwriter due to French public policy favoring moral rights).

n102 *Written Statement of Information Industry Association, supra* note 71 at 5.

n103 *Feist, 499 U.S. at 354, 18 U.S.P.Q.2d at 1281.*

n104 *248 U.S. 215, 231 (1918).*

n105 *Balboa Ins. Co. v. Trans Global Equities, 267 Cal. Rptr. 787, 795, 15 U.S.P.Q.2d (BNA) 1082, 1087* (Cal. Ct. App.), *cert. denied, 498 U.S. 940 (1990).*

n106 *INS, 248 U.S. at 242-43.*

n107 *Self Directed Placement Corp. v. Control Data Corp., 908 F.2d 462, 467, 15 U.S.P.Q.2d (BNA) 1536, 1540 (9th Cir. 1990),* (quoting *Balboa, 267 Cal. Rptr. at 795, 15 U.S.P.Q.2d at 1087).*

n108 *See Erie R.R. v. Tompkins, 304 U.S. 64, 78 (1938).*

n109 *See generally* Douglas G. Baird, *Common Law Intellectual Property and the Legacy of* International News Serv. v. Associated Press, *50 U. CHI. L. REV. 411 (1983).*

n110 For instance, "although it traces its roots to *INS*, the New York misappropriation tort has grown much broader. It is now a fact-oriented action providing relief from all types of 'commercial immorality.'" *Mayer v. Josiah Wedgwood and Sons, Ltd., 601 F. Supp. 1523, 1534, 225 U.S.P.Q. (BNA) 776, 783 (S.D.N.Y. 1985); see also, Nash v. CBS, Inc., 704 F. Supp. 823, 834, 10 U.S.P.Q.2d (BNA) 1026, 1034 (N.D. Ill. 1989), aff'd, 899 F.2d 1537, 14 U.S.P.Q.2d (BNA) 1755 (7th Cir. 1990)* ("The Supreme Court of Illinois has not defined the tort [of misappropriation] precisely, but it appears to permit the owner

of intellectual property to state a claim for wrongful taking of the property"); Moreover, various states have codified aspects of the law of unfair competition. For example, MASS. GEN. L. ANN ch. 93A, § 2(a) "makes unlawful any 'unfair or deceptive' acts or practices in the conduct of any trade or commerce." *Haberman v. Hustler Magazine, Inc., 626 F.Supp. 201, 214 (D. Mass. 1986)* (quoting MASS. GEN. L. ANN. ch. 93A, § 2(a) (West 1985)). Similarly, California statutes empower "a court to enjoin unfairly competitive acts." *Balboa Ins., supra* note 105 (citing CAL. BUS. & PROF. CODE § § 17200 and 17203 (West 1988)). Such statutes provide private causes of action for acts of unfair competition.

n111 *See, e.g.*, Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse, 78 VA. L. REV. 149, 165 (1992)* (proposing the creation of a misappropriation tort for malcompetitive copying that would provide supplemental protection); Dennis S. Karjala, *Misappropriation as a Third Intellectual Property Paradigm, 94 COLUM. L. REV. 2594, 2601-08 (1994)* (focusing on misappropriation to fill the gap of protection between patent and copyright law). *But see* Leo J. Raskind, *The Misappropriation Doctrine as a Competitive Norm of Intellectual Property Law, 75 MINN. L. REV. 875 (1991)* (identifying gaps in the analytical framework of the misappropriation doctrine).

n112 *Mayer, 601 F. Supp. at 1534, 225 U.S.P.Q. at 783.*

n113 In the context of Copyright law, Congress expressly set forth those aspects of state law which were and were not preempted by the Copyright Act of 1976. Specifically, *17 U.S.C. § 301* "establishes that all legal or equitable rights that are equivalent to any of the exclusive rights . . . [within the general scope of copyright] . . . are governed exclusively by [the Copyright Act of 1976]." *Stillman v. Leo Burnett Co., 720 F. Supp. 1353, 1362, 13 U.S.P.Q.2d (BNA) 1203, 1211 (N.D. Ill. 1989);* Thus, a state law claim -- whether statutory or common law -- is preempted if two conditions are met: whether "(1) the work in which the right is asserted is fixed in a tangible form and comes within the subject matter of copyright [as defined by *17 U.S.C. § § 102* and 103] and (2) [the state law created] right is equivalent to any of the [exclusive] rights specified in [*17 U.S.C. § 106].*" *Id.*; *see also Brignoli v. Balch Hardy & Scheinman, Inc., 645 F. Supp. 1201, 1204 (S.D.N.Y. 1986).*

n114 H.R. Rep. No. 1476, 94th Cong. 132 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5748.

n115 *See, e.g., INS, supra* note 104.

n116 Paul T. Sheils and Robert Penchina, *What's All the Fuss About Feist? The Sky is not Falling on The Intellectual Property Rights of Online Database Proprietors, 17 U. DAYTON L. REV. 563, 582 (1992).*

n117 *Nash v. CBS, Inc., 704 F. Supp. 823, 834, 10 U.S.P.Q.2d (BNA) 1026, 1035 (N.D. Ill. 1989), aff'd., 899 F.2d 1537, 14 U.S.P.Q.2d (BNA) 1755 (7th Cir. 1990).*

n118 *Id. at 835, 10 U.S.P.Q.2d at 1035* (emphasis added).

n119 *Nash v. CBS, Inc., 899 F.2d 1537, 14 U.S.P.Q.2d (BNA) 175, aff'g 704 F. Supp. 823, 10 U.S.P.Q.2d (BNA) 1026 (N.D. Ill. 1989).*

n120 *601 F. Supp. 1523, 1534, 225 U.S.P.Q. (BNA) 776, 783 (S.D.N.Y. 1985).*

n121 *Id. at 1533, 225 U.S.P.Q. at 782.*

n122 *Id. at 1534, 225 U.S.P.Q. at 782*

n123 *Id. at 1534, 225 U.S.P.Q. at 783.*

n124 *105 F.3d 841, 41 U.S.P.Q.2d (BNA) 1585 (2d Cir. 1997).*

n125 *Id. at 845, 41 U.S.P.Q.2d at 1589.*

n126 *Id.*

n127 *Written Statement of Information Industry Association, supra* note 71 at 5.

n128 U.S. Copyright Office, REPORT ON LEGAL PROTECTION FOR DATABASES, 82-85 (1997) (visited Dec. 2, 1997) <http://lcweb.loc.gov/copyright/more.html#pt>.

n129 *See U.S. Golf Ass'n. v. St. Andrews Sys., 749 F.2d 1028, 1038, 224 U.S.P.Q. (BNA) 646, 654 (3d Cir. 1984)* (when information is not used by a direct competitor, "the public interest in free access outweighs the public interest in providing an additional incentive to the creator or gatherer of information"); *NFL v. Governor, 435 F. Supp. 1372, 1378-79, 195 U.S.P.Q. (BNA) 803, 806 (D. Del. 1977); Board of Trade of the City of Chicago v. Dow Jones and Co., 98 Ill. 2d 109, 125, 456 N.E.2d 84, 92 (1983)* (misappropriation does not require direct competition between plaintiff and defendant).

n130 J.H. Reichman, *Legal Hybrids Between the Patent and Copyright Paradigms, 94 COLUM. L. REV. 2432, at 2443-44, 2480-88, 2490-98 (1994)* (discussing hybrid intellectual property regimes adopted outside the United States).

n131 G. M. Hunsucker, *The European Database Directive: Regional Stepping Stone to an International Model?* 7 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 697 (1997).

n132 Directive 96/9/EC of the European Parliament and of the Council of the EU of Mar. 11, 1996 on the Legal Protection of Databases, 1996 O.J. (L 77/20) (the Database Directive). The European Database Directive defines a database as "a collection of works, data or other independent materials arranged in a systematic or methodical way and capable of being accessed by electronic or other means." *Id.* at 24.

n133 Germany has already enacted enabling legislation and the other EU members are expected to follow suit before Jan. 1, 1998. *See* U.S. COPYRIGHT OFFICE REPORT, *supra* note 128 at 50.

n134 Jens L. Gaster, *The New EU Directive Concerning the Legal Protection of Data Bases*, FOURTH ANNUAL CONFERENCE ON INT'L INTELL. PROP. & POLICY, 35, 46 (Fordham Univ. School of Law, Apr. 11, 1996).

n135 *Written Statement of Information Industry Association, supra* note 71 at n.9. At the Information Meeting on Intellectual Property in Databases held Sept. 17-19, 1997 at the World Intellectual Property Organization, the EU delegation stated that the pace for implementation of this Directive is much faster than for other directives. Moreover,

delegations from ten EU member countries that spoke at the meeting stated their countries' intention to proceed with implementation of the Directive by year's end.

n136 H.R. 3531, 104th Cong. (1996). This bill was introduced by Rep. Carlos Moorhead, chairman of the House Subcommittee on Courts and Intellectual Property. It was referred to the Committee on the Judiciary. No further action was taken on the Bill.

n137 The U.S. protection term was twenty-five years as compared to fifteen years for the EU model. Moreover, if the owner continued to invest in updating or otherwise maintaining the database in question, its twenty-five year initial term of protection could be continually renewed without limit. *See* H.R. 3531, § 6(a).

n138 *See* H.R. 3531, § § 4(a)(1), (2).

n139 *Id.* at § 4(a)(2); *see also, id.* at § 5(a).

n140 *Id.* at § § 4(a)(2), 4(b). This restriction covers markets in which the database owner has a demonstrable interest or expectation in licensing or otherwise reusing the database, as well as markets in which customers might reasonably be expected to become customers for the database.

n141 *Id.* at § 4(b)(4).

n142 Reichman and Samuelson, *Intellectual Property Rights in Data? 50 VAND. L. REV. 51, 147-48 (1997).*

n143 *See, e.g.*, H.R. 3531, § 5(B) ("Nothing in this Act shall in any way restrict any person from independently collecting, assembling or compiling works, data or materials from sources other than a database subject to this Act.")

n144 *Id.* at § § 4, 5, 6.

n145 BITS OF POWER, *supra* note 6, Chap. 5 at 163. BITS OF POWER is the approved report of the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

n146 *Id.* at Chap. 4-5. *See also* Peter A. Jaszi, SOME PUBLIC INTEREST CONSIDERATIONS RELATING TO H.R. 3531 DATABASE INVESTMENT AND INTELLECTUAL PROPERTY ANTIPIRACY ACT OF 1996 (visited Dec. 2, 1997) <http://www.arl.org/info/frn/copy/peter.html> (on file with author), Stanford University Libraries, COPYRIGHT AND FAIR USE - WIPO PROPOSAL AND H.R. 3531, (visited Dec. 2, 1997) <http://fairuse.stanford.edu/database/index.html>. Several web sites have criticized H.R. 3531 and are currently focused on the latest Congressional initiative *The Collections of Information Act, H.R. 2652, supra* note 4. *See* Association of Research Libraries, (visited Dec. 2, 1997) <http://www.arl.org/info.html>; The Digital Future Coalition, STATEMENTS, PRESS, AND KEY DOCUMENTS (visited Dec. 2, 1997) <http://www.ari.net/dfc/newstand/media.htm#news>. The Union for the Public Domain, PROPOSALS TO REGULATE THE PUBLIC, RIGHTS TO USE INFORMATION STORED IN DATABASES, (visited Dec. 2, 1997) <http://www.public-domain.org/database/database.html>; Hyperlaw Inc., DATABASE PROTECTION PROPOSALS PAGE, (visited Dec. 2, 1997)

<http://www.hyperlaw.com/dbpage.htm>.

n147 *See* Reichman and Samuelson, *supra* note 142 at 102 et. sq., and Peter A. Jaszi, *Goodbye to All That -- A Reluctant (and Perhaps Premature) Adieu to a Constitutionally-Grounded Discourse of Public Interest in Copyright Law*, 29 VAND. J. TRANSNAT'L L.J. 595, 599-600 (1996).

n148 *See, e.g.*, Paul A. David and Dominique Foray, *Accessing and Expanding the Science and Technology Knowledge Base*, SCIENCE, TECHNOLOGY, INDUSTRY REV. 16(3), 38-59 (1995); Paul Ginsparg, *Winners and Losers in the Global Research Village*, paper presented to UNESCO Conference on Electronic Publishing, February 19-23, 1996, Paris. *See also*, Cristiano Antonelli, *The Economic Theory of Information Networks*, The Economics of Information Networks (C. Antonelli, ed., 1992).

n149 H.R. 2652, 105th Cong. (1997).

n150 *The Introduction of the Collections of Information Antipiracy Act, H.R. 2652*, 143 Cong. Rec. E2000-02 (daily ed. Oct. 9, 1997) (statement of Rep. Coble).

n151 *See* H.R. 2652, *supra* note 149 at 1201.

n152 *Id.*

n153 David Braun, *Nothing Sinister About Database Law, Congressman Says*, TechWeb, Oct. 23, 1997. (visited Dec. 2, 1997) <http:techweb.com/wire/news/1997/10/1023database.html> (also on file with author).

n154 *See* H.R. 2652, *supra* note 149 at 1204(1).

n155 *See* Database Directive, *supra* note 132, recital 17, O.J. L 77/20, at 21 (1996).

n156 H.R. 2652, *supra* note 149 at 1202(d).

n157 *17 U.S.C. § 103*(b) (1976).

n158 *The Collections of Information Antipiracy Act: Hearings on H.R. 265, supra* note 4 at 10, (statement of Ms. Marybeth Peters, Register of Copyrights) (visited Dec. 2, 1997) <http://www.house.gov./judiciary/41112.htm> (also on file with author).

n159 *Vanna White v. Samsung Elec. Am., Inc., 989 F.2d 1512, 1516, 26 U.S.P.Q.2d (BNA) 1362, 1366 (9th Cir. 1993)* (Kozinski, J., dissenting).

n160 H.R. 2652, 105th Cong. (1997).

n161 *See 17 U.S.C. § 302*(c) (1976) (The term of protection for works for hire is seventy-five years from publication or one-hundred years from creation, whichever expires first.).

n162 *Written Statement of Information Industry Association, supra* note 71 at 10.

n163 *17 U.S.C. § 107* (1976).

n164 H.R. Rep. No. 94-1476 at 65-70 *reprinted in* 1976 U.S.C.C.A.N. 5659, 5678-83.

n165 *See e.g., 17 U.S.C. § 108* (reproduction by libraries and archives); § 110(a) (face-to-face teaching activities); § 110(b) (broadcasts of nondramatic literary or musical works for certain educational purposes); § 114 (limiting rights and scope of protection in

sound recordings); § 115 (compulsory license for musical works recorded on sound recordings); § 117 (archival uses of computer programs), § 118 (exemptions for use by noncommercial broadcasters); § 120 (right to photograph architectural works).

n166 Reichman, *supra* note 142, pp. 103-109.

n167 *See 17 U.S.C. § 109*(a) (Under the first-sale doctrine, once the copyright holder has sold a copy of the copyrighted work, the owner of the copy "could sell or otherwise dispose of the possession of that copy" without the copyright holder's consent.) *See also Bobbs-Merrill Co. v. Strauss, 210 U.S. 339, 349-51 (1908).*

n168 *The Collections of Information Antipiracy Act: Hearings on H.R. 2652 supra* note 4 (statement of James G. Neal, President of the Association of Research Libraries testifying on behalf of the American Association of Law Libraries, the American Library Association, the Association of Research Libraries, the Medical Library Association, and the Special Libraries Association) (visited Dec. 2, 1997) <http://www.house.gov./judiciary/41119.htm> (also on file with author).

n169 H.R. 2652 § 1202(a).

n170 *The Collections of Information Antipiracy Act: Hearings on H.R. 2652, supra* note 4, Statement of J.H. Reichman, Visiting Professor of Law, University of Michigan and Professor of Law, Vanderbilt University, (visited Dec. 2, 1997) <http://www.house.gov./judiciary/41121.htm> (also on file with author). *See also* Statement of Paul Warren, Executive Publisher, Warren Publ'g, Inc., on behalf of the Coalition Against Database Piracy (visited Dec. 2, 1997) <http://www.house.gov./judiciary/41117.htm> (also on file with author).

n171 "Sole-source data" is defined as data that cannot be independently created, collected or obtained from any other source. *See* U.S. COPYRIGHT OFFICE REPORT, *supra* note 128 at 102.

n172 *See Reichman Testimony in The Collections of Information Antipiracy Act: Hearings on H.R. 2652, supra* note 118, (Prof. Reichman referred to the following databases: MDL Drug Data Report (MDDR) (Chemical compounds with potential drug applications); Visible Human (digitized photographs of human anatomy); Derwent World Patents Index (comprehensive world wide list of patents); Jane's (worldwide defense and security data) as illustrative of the sole-source database companies.

n173 *BITS OF POWER, supra* note 6, Chap. 5, text accompanying footnote 78 at 180.

n174 Database Directive, *supra* note 132, art. 16(3), O.J. L 77/20, at 27 (1996) (Every three years . . . the Commission . . . shall examine in particular the application of the *sui generis* right, . . . especially whether the application of this right has led to abuse of a dominant position or other interference with free competition which would justify . . . the establishment of non-voluntary licensing arrangements.). *See also* Hunsucker, *supra* note 131, text accompanying footnotes 295-296 at 755.

n175 *Compare* Explanatory Statement at COM(92)24 final-SYN 393 accompanying the Council Directive Initial Proposal, art. 8, O.J. C 156/03, at 9 (1992) with Council Directive Amended Proposal, art. 11, O.J. C 308/01, at 13-14 (1993) (mandating

compulsory licenses on "fair and nondiscriminatory terms" in the case of sole-source data.). *See* Hunsucker, *supra* note 131

n176 *See* Hunsucker, *supra* note 131, text accompanying footnote 341 at 765.

n177 *Written Statement of Information Industry Association, supra* note 71 at 10.

n178 *Statement of Ms. Marybeth Peters, Register of Copyrights, supra* note 158 at 11.

n179 U.S. COPYRIGHT OFFICE REPORT, *supra* note 128 at 89.

n180 *See* Nash, *supra* note 110 at 834 and Mayer, *supra* note 110 at 1534.

n181 *Rep. Coble's Statement in The Introduction of the Collections of Information Antipiracy Act, supra* note 150.

n182 *Warren Testimony in The Collections of Information Antipiracy Act: Hearings on H.R. 2652, supra* note 150 at 7. (visited Dec. 2, 1997) <http://www.house.gov./judiciary/41117.htm> (also on file with author).

n183 *See ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 38 U.S.P.Q.2d (BNA) 1513 (W.D. Wis. 1996)* (defendant loaded the database onto the Internet, from whence it could be downloaded by anyone with the desire to do so).

n184 *871 F. Supp. 535, 33 U.S.P.Q.2d (BNA) 1978 (D. Mass. 1994).*

n185 *Id. at 544-45, 33 U.S.P.Q.2d at 1985-86.*

n186 H.R. 2265, 105th Cong. (1997). NET will make piracy on the high seas of cyberspace a felony. In sum, this bill extends criminal infringement of copyright to include any person, not just those who act for purposes of commercial advantage or private financial gain, who willfully infringe a copyright. Specifically, the bill: (1) expands the definition of "financial gain" to include the expectation of receipt of anything of value, including the receipt of other copyrighted works; (2) sets penalties for willfully infringing a copyright by reproducing or distributing (including electronically), during any 180-day period, one or more copies of one or more copyrighted works with a total retail value of more than $ 1,000.

n187 143 Cong. Rec. S12689-01 (daily ed. Nov. 13, 1997) (statement of Sen. Hatch).

n188 *See* H.R. 2652, 105th Cong. (1997) (In § 1207(b) of H.R. 2652, any breach of § 1201 "(a) shall be punishable by a fine of not more than $ 250,000 or imprisonment for not more than 5 years, or both. A second or subsequent offense under subsection (a) shall be punishable by a fine of not more than $ 500,000 or imprisonment for not more than 10 years, or both.")

n189 *See* The Bureau of National Affairs, Inc., *Database Anti-piracy Measure Criticized as Sweetheart Legislation For Law Publishers*, BNA Patent, Trademark and Copyright Law Daily, Oct. 27, 1997, *available in* LEXIS, News Library, Curnws File.

n190 *The Collections of Information Antipiracy Act, H.R. 2652*, Statement of Rep. Howard Coble, Chairman, Subcommittee on Courts and Intellectual Property, available the House Judiciary Committee Website, (visited Mar. 13, 1997) <http://www.house.gov/judiciary/41141.htm> (also on file with author).

n191 The ITAA represents over 11,000 direct and affiliated member companies involved in every facet of the information technology industry, including computer hardware, software, the Internet, and telecommunications. The members are copyright owners, database compilers and users, Internet access and service providers, and content users. See *The Collections of Information Antipiracy Act: Hearings on H.R. 2652 Before the Subcomm. on Courts and Intellectual Property Committee of the House Comm. on the Judiciary*, 105th Cong., 1st Sess. (Feb. 12, 1998) (statement of Tim D. Casey on behalf of the Information Technology Association of America) (visited Mar. 13, 1997) <http://www.house.gov/judiciary/41149.htm > (also on file with author)

n192 *Id.*

n193 An intranet is an 'internal web' or network connecting an affiliated set of users using standard Internet protocols where access is limited to a defined community of interest and are, logically, "internal" to an organization, see *The Intranet FAQ*, Innegry Inc. (updated Feb. 10, 1998), (visited on Mar. 13, 1998), <http://www.innergy.com/ifaql.html#A1> (also on file with author). Businesses are increasingly using expansive intranets that must interface with the databases of suppliers, vendors, distributors, and customers. Numerous entities, like Sony Corp., Ford Motors and even the US Navy Atlantic Command have increasingly used Intranet systems to meet their computing needs, see *WebBusiness Intranet Case Studies*, WebMaster Mag., (Feb. 20, 1998) (visited on Mar. 13, 1998) <http://www.cio.com/WebMaster/wm_cases.html> (also on file with author). The prediction is that Intranet adoption has gone beyond leading edge companies and is now penetrating mainstream companies in healthcare, banking, manufacturing and publishing etc., see *Intranet Trends- Second Wave - A White Paper*, Sage Research, Inc. (Spring 1997) (visited on Mar. 13, 1998) <http://techweb.cmp.com/cw/cwi/netcentral/study.html> (also on file with author).

n194 H.R. 2652 § 1203(b).

n195 *See supra* The Collections of Information Antipiracy Act: Hearings on H.R. 2652 (statement of Jonathan Band on behalf of the Online Banking Association) (visited Mar. 13, 1997) <http://www.house.gov/judiciary/41148.htm> (also on file with author).

n196 *See supra* note 195.

n197 Reichman, *supra* note 142. See also Jaszi, *supra* note 147 at 596 (expressing concern about lack of attention to the public domain in current copyright policy indicatives); Jessica Litman, *The Public Domain, 39 Emory L.J. 965, 967 (1990)* (arguing that the public domain has been undervalued in recent copyright case law); David L. Lange, *Recognizing the Public Domain*, 44 Law & Contemp. Probs. 147, 171-73 (1981) (arguing that the public domain has been under-valued in recent trademark and unfair competition case law).

n198 *See supra* note 3, *499 U.S. at 354.*

n199 *See The Collections of Information Antipiracy Act: Hearings on H.R. 2652, supra* note 196 (statement of Dr. Debra Stewart, Vice Provost And Dean of the Graduate School North Carolina State University, on behalf of The Association of American Universities The American Council on Education and the National Association of State

Universities and Land-Grant Colleges) (visited Mar. 13, 1997) <http://www.house.gov/judiciary/41144.htm > (also on file with author).

n200 *See supra* note 3, *499 U.S. at 345, 18 U.S.P.Q.2d at 1287.*

n201 *See* Gordon, *supra* note 111 at 266-73.

n202 *See* Reichman, *supra* note 142 at 143.

n203 *See*, Jaszi, *supra* note 146 at 599-600 (stressing the "economic and cultural bargain between authors and users . . . at the heart of U.S. [copyright] law, as reflected in the Patent and Copyright Clause [of the Constitution], and a parade of Supreme Court precedents. . . ."). *See also* Robert A. Kreiss, *Accessibility and Commercialization in Copyright Theory, 43 U.C.L.A. L. REV. 1, 6-22 (1995)* (discussing the incentive structure of copyright law).

n204 *See* Antony Black, Guilds and Civil Society in European Political Thought from the Twelfth Century to the Present 17 (1984). *See generally* Richard A. Posner, *The Material Basis of Jurisprudence, 69 IND. L.J. 1, 11 (1993).*

n205 *Vanna White v. Samsung Electronics America, Inc., 989 F.2d 1512, 1513, 26 U.S.P.Q. 2d (BNA) 1352, 1364 (9th Cir. 1993)* (Kozinski, J., dissenting).

n206 B. KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT vii-viii (1967), *cited with approval in Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 431 n.12, 220 U.S.P.Q. (BNA) 665, 782 n12 (1984).*

n207 *See supra* note 135.