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NOTES

THE STATE OF COPYRIGHT PROTECTION FOR ELECTRONIC DATABASES BEYOND PROCD V. ZEIDENBERG: ARE SHRINKWRAP LICENSES A VIABLE ALTERNATIVE FOR DATABASE PROTECTION?

JENNETT M. HILL*

INTRODUCTION

J-CAP Directories, Inc., specializing in computer disc technology, invests \$10 million researching and developing a comprehensive telephone listings database. The marketing department finds great demand for such a listing in the form of an electronic compilation. So, researchers compile 95 million listings and incorporate them into an electronic database. The listings include residential and commercial names, addresses and telephone numbers. The business listings contain pertinent industry data to enable marketing companies to target their customers. Software and database technicians develop a state-of-the-art database and access software while data entry personnel begin loading the 95 million records into the database. This database application enables the computer user to search using any number of fields: name, town, state, zip-code, industry code and telephone area code. The company stores the database application on CD-ROM² discs and packages the product, complete with a "how-to" manual, in an appealing box encased in cellophane. The box displays a warning that the purchase of this product is subject to a restrictive licensing agreement. In fact, the creative software engineers included a licensing agreement screen that appears each time the software is executed, forcing the user to respond by pressing "Enter."

The CD-ROM product is a tremendous success, until an entrepreneurial computer programmer purchases a copy of the database application. The entrepreneur downloads the CD-ROM data onto his computer and uploads J-

^{*} J.D. Candidate, 1998, Indiana University School of Law—Indianapolis; B.A., 1985, DePauw University, Greencastle, Indiana. The author would like to thank Professor Kenneth D. Crews for his guidance in the initial draft of this Note. The author would also like to give special thanks to her husband, Alan P. Hill, for his love, encouragement and support that made this Note—and law school—possible.

^{1.} A database application, for purposes of this Note, includes the database (compilation of data) and the software used to access the data.

^{2.} CD-ROM: Compact disk-read only memory.

CAP's sophisticated database onto an Internet host computer. The computer wizard develops his own software to access the downloaded database across the Internet. He then sells access to the Internet database for a fee. The entrepreneur accomplishes this in less than three months, investing only \$50,000.

J-CAP discovers its million dollar investment on the Internet and files suit alleging copyright infringement and a breach of the license agreement. To the company's surprise, the court finds no database protection under copyright law and holds the license agreement unenforceable as a matter of contract law! In essence, J-CAP Directories spent millions on a product it could not protect from subsequent developers. This hypothetical demonstrates the commercial inequities of database protection under copyright law. Within the last five years the courts have eroded and then propped up electronic database protection under both copyright and contract law. This Note analyzes the recent developments of copyright protection as it pertains to electronic databases.

Lacking sufficient copyright protection, many companies and state governments have turned to "shrinkwrap licenses," as an alternative to database protection. However, this raises a fundamental question: should other approaches to electronic database protection prevail in light of weak and unclear copyright protection given the specific preemption clause in § 301 of the Copyright Act? This Note examines these approaches and submits that the United States legislature should evaluate the enactment of a *sui generis* right for database protection to protect valuable economic and global resources.

Part I of this Note addresses the dilemma of electronic database protection through an analysis of two recent cases: Feist Publications, Inc. v. Rural Telephone Service Co.⁵ and ProCD, Inc. v. Zeidenberg.⁶ These cases highlight database protection issues under current copyright law. Part II of this Note discusses the evolution of the Copyright Act and its impact on computerized materials. This section discusses the preemption clause of the Act, and the role it plays in determining the validity of shrinkwrap licenses. This section further examines Congress' intent in enacting its 1976 revision of the Act and whether their policy and goals continue to guide the judiciary. Part III summarizes the state of database protection in view of the preceding cases and copyright law. Due to uncertain copyright protection for electronic databases, companies developed other methods of protection. Part IV evaluates these developments, specifically, shrink-wrap licenses as successfully secured in ProCD;⁷ the recent draft of the Uniform Commercial Code, which includes a new licensing section; and the international community's database protection proposals issued to the

^{3.} The term "shrinkwrap licenses" evolved from using a cellophane or plastic wrapping to package computer applications. Companies often enclosed a license agreement and referred to a brief provision of the agreement which presumably became effective once the purchaser opened the cellophane (or shrinkwrap) or executed the program. See infra note 154 and accompanying text.

^{4. 17} U.S.C. § 301 (1994).

^{5. 499} U.S. 340 (1991).

^{6. 86} F.3d 1447 (7th Cir. 1996).

^{7.} *Id*.

World Intellectual Property Organization. This section also discusses the United States' response to international pressures regarding database protection. Finally, Part V analyzes methods for future database protection.

I. CASE LAW IMPACT ON DATABASE PROTECTION

Case law developments have weakened database protection under copyright law. In 1991, the Supreme Court eviscerated a popular theory upon which many courts and database developers relied—the "sweat of the brow" theory. With reduced copyright protection for databases, the technology industry turned to contract law by adopting the "shrinkwrap license" as their preferred method of protection. Some courts have declared shrinkwrap licenses unenforceable as a matter of contract law and federal preemption laws. In 1996, however, the Seventh Circuit held that a shrinkwrap license, which limited the use of a database application and secured exclusive rights in the database, was enforceable under contract law and was not preempted by the Copyright Act.

A. Feist: The Key to Protection is Originality

In Feist, the Supreme Court held that "white pages" in a phone book were not subject to copyright protection. Rural Telephone, a public utility company providing telephone service to communities in northwest Kansas, alleged that Feist Publications infringed on its copyright by publishing Rural's listings in Feist's area-wide directory. To compile white pages listings, Feist solicited area telephone publishing companies requesting licensing permission and offering to pay for the right to publish the listings in its directory. All companies agreed to grant a license except Rural. To avoid a large gap in its listings, Feist published 1,309 of Rural's listings and added the individuals' street addresses to its directory. The Supreme Court granted certiorari to determine "whether the copyright in Rural's directory protects the names, towns, and telephone numbers copied by Feist."

The Court focused on the requirement of "originality" to secure copyright protection and conceded that the threshold requirement for establishing

^{8.} The "sweat of the brow," or "industrious collection", theory protected a database when a significant amount of work was invested in compiling facts. See Feist, 499 U.S. at 352.

^{9.} See, e.g., Step-Saver Data Sys., Inc. v. Wyse Tech., Inc., 939 F.2d 91 (3d Cir. 1991); Arizona Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993).

^{10.} See, e.g., Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988).

^{11.} ProCD, 86 F.3d at 1455.

^{12.} Feist, 499 U.S. at 362-63.

^{13.} Id. at 344.

^{14.} Id. at 343.

^{15.} Id.

^{16.} Id. at 344. Rural's directory contained approximately 7, 700 total listings. Id. at 342.

^{17.} Id. at 344.

originality was low.¹⁸ Although individual facts are not copyrightable, factual "compilations" pass the requisite originality test because the author must select and arrange the facts.²⁰ The Court found an explicit originality requirement in the Copyright Act²¹ as well as an implicit requirement of originality in the Copyright Clause of the Constitution.²²

In defining originality, *Feist* denounced the "sweat of the brow" or "industrial collection" theories relied upon by lower courts to protect compilations. The court found that the purpose of copyright was to motivate authors to create works and not reward them based solely on industrious efforts.²³ "[T]he 1976 revisions to the Copyright Act leave no doubt that originality, not 'sweat of the brow,' is the touchstone of copyright protection in directories and other fact-based works."²⁴

The Court in Feist upheld a compiler's "selection and arrangement" as a method of demonstrating originality in a compilation.²⁵ Thus, the selection and

^{18. &}quot;The sine qua non of copyright is originality." *Id.* at 345. "To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice." *Id.*

^{19. &}quot;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." 17 U.S.C. § 101 (1994).

^{20.} Feist, 499 U.S. at 348. "[C]hoices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws." *Id.* (citing 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT §§ 2.11[D], 3.03 (1990)).

^{21.} *Id.* at 355 (citations omitted). The Court found the originality requirement in the phrase "original works of authorship" in § 102(a) of the Copyright Act. *Id.* "The two fundamental criteria of copyright protection [are] originality and fixation in tangible form The phrase 'original works of authorship,' which is purposely left undefined, is intended to incorporate without change the standard of originality established by the courts under the present [1909] copyright statute." *Id.* (quoting H.R. REP. No. 94-1476, at 51 (1976); S. REP. No. 94-473, at 50 (1975), *reprinted in* 1976, U.S.C.C.A.N. 5659, 5664).

^{22.} Id. at 351. The Court explained that "originality is a constitutionally mandated prerequisite for copyright protection." Id. The Copyright Clause authorizes Congress to "secur[e] for limited Times to Authors . . . the exclusive Right to their respective Writings." U.S. CONST. art. I., § 8, cl. 8. [hereinafter Copyright Clause]. Interestingly, this is the first time since 1879 that the Court has held a work unworthy of copyright protection on Constitutional grounds. Ralph Oman, Reflections on the Changing Shape of Database Protection, 40 FED. B. NEWS & J. 232, 237 n.18 (1993). In the 1800's, the Supreme Court decided two landmark cases that addressed the constitutional scope of works: Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884); and The Trade-Mark Cases, 100 U.S. 82 (1879).

^{23.} Feist, 499 U.S. at 349. "The primary objective of copyright is not to reward the labor of authors, but '[t]o promote the Progress of Science and useful Arts." *Id.* (quoting U.S. CONST. art. I., § 8, cl. 8).

^{24.} *Id.* at 359-60.

^{25.} *Id.* at 350. "[O]nly the compiler's selection and arrangement may be protected; the raw facts may be copied at will." *Id.*

arrangement of the factual compilation underlie an author's claim to originality. In *Feist*, however, the selection and arrangement "lack[ed] the modicum of creativity necessary to transform mere selection into copyrightable expression. Rural expended sufficient effort to make the white pages directory *useful*, but insufficient creativity to make it *original*." Although the Court reminded us that the originality requirement is rooted in the Constitution, it did not ignore the statutory requirements of originality either:

The [1976 Copyright Act] revisions explain with painstaking clarity that copyright requires originality, § 102(a); that facts are never original, § 102(b); that the copyright in a compilation does not extend to the facts it contains, § 103(b); and that a compilation is copyrightable only to the extent that it features an original selection, coordination, or arrangement, § 101.²⁷

The Court was unwilling to stretch the concept of authorship to protect an author's labor. Instead, only "those products that evince intellectual authorship" are protected under copyright law. Consequently, Feist has diminished copyright protection for databases. Although the selection and arrangement theory remains, it merely prevents copying the format of the data, but does not protect the tedious, expensive and comprehensive collection of the data itself.

The selection and arrangement theory has been applied in subsequent cases.³¹ For example, the Second Circuit found that a publisher's valuation for used vehicles (the "Red Book") was protected as a compilation under *Feist*.³²

- 26. *Id.* at 362-63 (emphasis added).
- 27. Id. at 360.
- 28. Oman, *supra* note 22, at 234.
- 29. Id.
- 30. See generally John F. Hayden, Recent Development, Copyright Protection of Computer Databases After Feist, 5 HARV. J.L. & TECH. 215, 236 (1991) (selection and arrangement "fails to protect the database's main contribution"—the collection of the data and database development); Jessica Litman, After Feist, 17 U. DAYTON L. REV. 607, 609 (1992) (author concedes that "computer databases are surely sufficiently original to merit copyright protection").
- 31. See e.g., CCC Info. Serv., Inc. v. Maclean Hunter Market Reports, Inc., 44 F.3d 61 (2d Cir. 1994), cert. denied, 116 S. Ct. 72 (1995); BellSouth Adver. & Publ'g Corp. v. Donnelley Info. Publ'g, Inc., 999 F.2d 1436 (11th Cir. 1993), cert. denied, 510 U.S. 1101 (1994) (a telephone publisher's competitor was permitted to copy elements of the publisher's compilation (name, address, etc.) without infringement because the competitor did not copy the selection, coordination or arrangement of the data); Victor Lalli Enter. v. Big Red Apples, Inc., 936 F.2d 671 (2d Cir. 1991) (finding that a compilation of horse racing statistics formatted in a static fashion lacked sufficient selection and arrangement to substantiate an original work); Montgomery County Ass'n of Realtors, Inc. v. Realty Photo Master Corp., 878 F. Supp. 804 (D. Md. 1995), aff'd, 91 F.3d 132 (4th Cir. 1996).
- 32. *Maclean*, 44 F.3d at 67. "Compilations that devise new and useful selections and arrangements of information unquestionably contribute to public knowledge by providing cheaper,

"The fact that the arrangement of data responds *logically* to the needs of the market for which the compilation was prepared does not negate originality."³³ In 1995, a Maryland court found an electronic database of real estate listings accompanied by photographs met the selection and arrangement originality requirement and granted the creator copyright protection.³⁴ Nonetheless, many companies are unsure of the stability of copyright protection for databases, and have therefore resorted to using contracts to protect their works.

B. ProCD: A Viable approach to Database Protection?

ProCD invested ten million dollars to compile a comprehensive directory comprising 3,000 telephone directories in one computer database.³⁵ ProCD packaged this database application and sold the product as "SelectPhone" on CD-ROM.³⁶ On the outside of each box ProCD alerted purchasers that a license was enclosed in the database application.³⁷ This license, which limited use of the database application to non-commercial purposes, was not only printed in the manual, but also appeared on the computer screen each time the enduser executed the software.³⁸ Computer science student Matthew Zeidenberg purchased a consumer version of the database application and developed his own software to access the database.³⁹ He then placed the database on an Internet server and charged his clients to access the database through his company, Silken Mountain Web Services, Inc.⁴⁰ ProCD asserted that Zeidenberg went beyond the scope of the shrinkwrap license when he placed the database on the server and provided access across the Internet.⁴¹

Contrary to prior circuit court decisions, 42 the court in ProCD held that a

easier, and better organized access to information." Id. at 66.

- 33. *Id.* at 67 (emphasis added).
- 34. Montgomery, 878 F. Supp. at 810. The district court held that the computer database's arrangement was sufficient to sustain the originality requirement under Feist. The court concluded that the database developer added "marketing puffery" for each home which could not be categorized as factual, further supporting an original "presentation" and "arrangement." Id.
 - 35. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996).
 - 36. *Id*.
 - 37. Id. at 1450.
- 38. *Id.* "Enduser" is used to refer to the person using the electronic database for searches. For example, a student accessing Westlaw's database to perform legal searches is an "enduser" for purposes of this Note.
 - 39. *Id*.
 - 40. *Id*.
 - 41. Id.
- 42. Step-Saver Data Sys., Inc. v. Wyse Tech., Inc., 939 F.2d 91 (3d Cir. 1991) ("limited use license agreement" printed on package containing computer software did not become part of the parties' agreement and was therefore unenforceable); Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988) (provisions in plaintiff's license agreement, which prohibited decompilation or disassembly of its program, was unenforceable); Arizona Retail Sys. Inc. v. Software Link, Inc.,

shrinkwrap license, imposing restrictions on an enduser, was enforceable.⁴³ In reaching its decision, the court relied upon contract law finding that "[a] vendor, as master of the offer, may invite acceptance by conduct, and may propose limitations on the kind of conduct that constitutes acceptance." Further, "the U.C.C. consistently permits the parties to structure their relations so that the buyer has a chance to make a final decision after a detailed review."

As to preemption, the court held that copyright law did not preempt private contracts as "courts usually read preemption clauses to leave private contracts unaffected. . . . [j]ust as [the copyright preemption clause] does not itself interfere with private transactions in intellectual property, so it does not prevent states from respecting those transactions." Moreover, "whether a particular license is generous or restrictive, a simple two-party contract is not 'equivalent to any of the exclusive rights within the general scope of copyright' and therefore may be enforced." Breaking precedent, the Seventh Circuit created a circuit split by enforcing shrinkwrap licenses in spite of copyright preemption. In short, the Seventh Circuit endorsed the use of shrinkwrap licenses as a valid method for database protection.

II. HISTORICAL DEVELOPMENTS IN COMPUTER COPYRIGHT PROTECTION

A. Copyright Protection for Compilations

The Constitution grants Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors, the exclusive Right to their respective Writings and Discoveries." The framers

831 F. Supp. 759 (D. Ariz. 1993) (buyer was aware of the terms of the license before purchasing the software because the buyer requested an evaluation diskette detailing similar terms). See infra note 125 and accompanying text.

- 43. *ProCD*, 86 F.3d at 1449.
- 44. *Id.* at 1452. The court, relying on several sections of the U.C.C. as adopted by Wisconsin, stated:

A contract for sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract.

- .. A buyer accepts goods under § 2-606(1)(b) when, after an opportunity to inspect, he fails to make an effective rejection under § 2-602(1). ProCD extended an opportunity to reject if a buyer should find the license terms unsatisfactory; Zeidenberg inspected the package, tried out the software, learned of the license, and did not reject the goods.
- Id. at 1452-53 (citations omitted).
 - 45. Id. at 1453.
- 46. Id. at 1454-55. The copyright preemption clause (§ 301(a)), in pertinent part, provides 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 this title." 17 U.S.C. § 301(a) (1994).
 - 47. *ProCD*, 86 F.3d at 1455 (citing 17 U.S.C. § 301(a) (1994)).
 - 48. See infra note 125 and accompanying text.
 - 49. U.S. CONST. art. I, § 8, cl. 8.

intended copyright law to induce creative works which benefit the public.⁵⁰ However, protecting an author's creative rights may conflict with the public's right to access the work.⁵¹ To balance these competing interests, Congress enacted the 1790 copyright statute.⁵²

This first statute provided only limited protection ⁵³ but, by 1909, copyright protection also included compilations of facts. ⁵⁴ Today, the 1976 Copyright Act expressly covers nine categories of works including compilations. ⁵⁵ "A 'compilation' results from a process of selecting, bringing together, organizing, and arranging previously existing material of all kinds, regardless of whether the individual items in the material have been or ever could have been subject of copyright." The subject matter of a compilation, however, "extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material."

In response to emerging technologies, Congress formed a national commission to provide recommendations for copyright reform.⁵⁸ Based upon recommendations from this commission (CONTU), Congress amended the Act to explicitly protect computer programs as literary works.⁵⁹ Amended § 117, for

^{50.} Deborah Kemp, Limitations' Upon the Software Producer's Rights: Vault Corp. v. Quaid Software Ltd., 16 RUTGERS COMPUTER & TECH. L.J. 85, 89 (1990). The purpose of copyright law is "to promote the advancement of knowledge and learning by giving authors economic incentives (in the form of exclusive rights to their creations) to labor on creative, knowledge-enriching works." CCC Info. Serv., Inc. v. Maclean Hunter Market Reports, Inc., 44 F.3d 61, 65 (2d Cir. 1994).

^{51.} Kemp, *supra* note 50, at 89.

^{52.} Irvin R. Gross, A New Framework for Software Protection: Distinguishing Between Interactive and Non-Interactive Aspects of Computer Programs, 20 RUTGERS COMPUTER & TECH. L.J. 107, 128 (1994) (citing Act of May 31, 1790, ch. 15, 1 Stat. 124) (repealed 1802)).

^{53.} Id. The Act of May 31, 1790 protected only a "book, map or chart." Id. at 128 n.83.

^{54.} Copyright Act of 1909, ch. 320, § 5(a), 35 Stat. 1075, 1076 (1909) (current version at 17 U.S.C. §§ 101-1101 (1994)).

^{55. 17} U.S.C. § 102(a) (1994). Section 102 covers eight of the nine categories: "literary works; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings; and, architectural works." *Id.* Section 103 of the Copyright Act addresses the ninth category: copyright for compilations. *See generally* 17 U.S.C. § 103 (1994).

^{56.} H.R. REP. No. 94-1476, at 57 (1976).

^{57. 17} U.S.C. § 103(b) (1994).

^{58.} NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS (CONTU), 93d Cong., 2d Sess., Final Report of the National Commission on New Technological Uses of Copyrighted Works 1 (Comm. Print 1978) [hereinafter CONTU Report].

^{59.} Gross, *supra* note 52, at 129 n.88 (citing Computer Software Copyright Act, Pub. L. No. 96-517, § 10(b), 94 Stat. 3028 (codified as amended at 17 U.S.C. § 117 (1994)).

example, now permits the owner of a computer program to make a backup copy of the program without copyright infringement.⁶⁰ The 1976 Act also codified case law developments under the 1909 Act by including key terms such as "selection" and "arrangement." Although the CONTU Report did not expressly address "selection" and "arrangement" theories defined in the Copyright Act, it did cite three cases which followed both the "sweat of the brow" and "selection and arrangement" theories.⁶³

CONTU recognized that a database is an electronic version of a comprehensive compilation of facts.⁶⁴ As such, courts treat databases as "compilations" under the Copyright Act.⁶⁵ A commercially viable electronic database includes as many facts (data) as necessary to meet the needs of its enduser. A successfully compiled and designed database then allows the enduser to select and arrange the data in a fashion suitable to his or her needs.⁶⁶ A compilation's pre-existing "facts," however, remain unprotected.⁶⁷

- 60. 17 U.S.C. § 117 (1994).
- 61. See, e.g., Jeweler's Circular Publ'g Co. v. Keystone Publ'g Co., 281 F. 83, 88 (2d Cir. 1922).
- 62. A work is sufficiently copyrightable under the "sweat of the brow" or "industrious collection" theories due to the amount of labor involved in database research and design. See Jeweler's Circular Publ'g Co. v. Keystone Publ'g Co., 281 F. 83, 88 (2d Cir. 1922). But see Feist Publications, Inc. v. Rural Tele. Serv. Co., Inc., 499 U.S. 340, 353 (1991) (rejecting the sweat of the brow theory).
- 63. CONTU Report, *supra* note 58, at 42 n.171 (citing Leon v. Pacific Tel. & Tel. Co., 91 F.2d 484 (9th Cir. 1937); *Jeweler's*, 281 F. at 88; New York Times Co. v. Roxbury Data Interface, Inc., 434 F. Supp. 217 (D.N.J. 1977)).
 - 64. CONTU Report, *supra* note 58, at 38. The CONTU report states that: [d]ictionaries, encyclopedias, and tables of numeric information are all forms of data bases [sic] which long antedate the computer, and for which copyright protection has been and will continue to be available under the copyright law. . . . This entitlement to copyright is not diminished by the fixation of the data base in a medium requiring the intervention of a computer to communicate its information content. Accordingly, a data base, whether printed in traditional hard copy or fixed in an electromagnetic medium, is protected by copyright under the terms of the new law.

Id. (footnotes omitted); see also Gerard J. Lewis, Jr., Comment, Copyright Protection for Purely Factual Compilations under Feist Publications, Inc. v. Rural Telephone Service Co.: How does Feist Protect Electronic Data Bases of Facts?, 8 SANTA CLARA COMPUTER & HIGH TECH. L.J. 169, 197 (1992).

- 65. See supra note 19 and accompanying text.
- 66. Lewis, *supra* note 64, at 197.
- 67. See Feist Publications, Inc. v. Rural Tele. Serv. Co., Inc., 499 U.S. 340, 344 (1991). "Section 102(b) is universally understood to prohibit any copyright in facts." *Id.* at 356. "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b) (1994). See also Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 556 (1985)

Consequently, although the "compilation" of facts may be original under a sufficient showing of arrangement or selection, the individual facts comprising the compilation are not copyrightable. To establish that a compilation falls within the scope of copyright protections it must meet three criteria: (1) fixation in a tangible medium; (2) expression; and (3) originality.⁶⁸ For a database, this would include (1) fixation of the database application on diskette or CD-ROM; (2) a selection of facts representing an expression of the author; and (3) a modicum of originality exhibited via database arrangement.⁶⁹

B. The Scope of Copyright Protection: Limitations on the Owner's Exclusive Rights

Copyright in a compilation grants certain exclusive rights to the author of the work. The Work, in the interest of balancing protection of the owner's creative rights with public access to the work, the Copyright Act limits an owner's rights. For example, libraries retain special reproduction rights in a copyrighted work. Another limitation to the owner's exclusive rights is the "first sale doctrine." Under this doctrine, once an author sells a copy of the work, she relinquishes control of the work and may not dictate the terms of its further disposition or transfer. Hence, the "first sale" doctrine, despite the potential

("[n]o author may copyright his ideas or the facts he narrates").

- 68. 17 U.S.C. § 102(a) (1994). Section 102 provides that "[c]opyright protection subsists, . . . in original works of authorship fixed in any tangible medium of expression. . . ." See also Timothy D. Howell, Comment, Intellectual Property Pirates: Congress Raises the Stakes in the Modern Battle to Protect Copyrights and Safeguard the United States Economy, 27 St. Mary's L.J. 613, 631 n.49 (1996) (citing 1 Paul Goldstein, Copyright: Principles, Law and Practice § 1.3, at 24-5 (1989)) ("[T]he work must be original in the sense that it was not copied from some other source; the work must consist of 'expression' and not just 'ideas'; and, the work must be embodied in a tangible medium of expression, specifically a 'copy' or 'phonorecord."").
- 69. See also WILLIAM F. PATRY, THE FAIR USE PRIVILEGE IN COPYRIGHT LAW 517-18 (2d ed. 1995) (footnotes omitted). To constitute an original work of authorship, a database must be "(1) an independent collecting and assembling of particular preexisting material or data (2) from which a selection, coordination, or arrangement is made (3) in such a way that the resulting work as a whole 'possesses at least some minimal degree of creativity." *Id.*
- 70. Among some of the rights afforded the copyright owner in section 106 of the Copyright Act: the right to reproduce the copyright work; to prepare derivative works based upon the copyrighted work; and, distribute copies of work through "sale or other transfer of ownership, or by rental, lease, or lending." 17 U.S.C. § 106(3) (1994). See 17 U.S.C. § 106 for a full listing of the owner's exclusive rights in a copyrighted work.
 - 71. 17 U.S.C. §§ 107-121 (1994).
 - 72. Id. § 108.
 - 73. Id. § 109.
- 74. Id. The first sale doctrine provides in pertinent part that "the owner of a particular copy ... lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy." Id.

risk of copyright infringement, allows an enduser to lend computer software to friends for evaluative purposes or to sell the software to a third party.

One of the most extensive limitations on the use of a copyrighted work is found in § 107: fair use. A defendant may assert that his use of the copyrighted work was fair by applying the four factors defined in § 107:76

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit 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.⁷⁷

The preamble, however, to § 107⁷⁸ indicates that these fair use factors are not exhaustive.⁷⁹ Courts have applied other factors to determine fair use which Congress condoned in its 1992 amendment of § 107.⁸⁰ As such, courts have applied additional factors such as "defendant's good faith or lack thereof" or "wrongful denial of exploitative conduct towards the work of another" to determine fair use of a copyrighted work.⁸¹ Yet, when a court applies the fair use doctrine to compilations, it may only assess the amount and substantiality of the *protectable* portions used; thus, after *Feist*, this leaves only the "selection or arrangement" of the work—the unprotectable content (facts) may not be considered.⁸²

Finally, § 301 of the Copyright Act⁸³ calls for preemption of a state law that grants "rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by § 106 in works of authorship that . . . come

^{75. 17} U.S.C. § 107. Fair use is a codification of judicial doctrine. See PATRY, supra note 69, at 413. "Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies . . . , for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright." 17 U.S.C. § 107.

^{76.} Id.

^{77.} Id.

^{78.} Id.

^{79.} PATRY, *supra* note 69, at 568. "The preamble to Section 107 uses the phrase 'including such,' the term 'such as,' and the word 'include' The listing of fair use purposes and factors is thus 'not intended to be exhaustive." *Id.* (quoting Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985)).

^{80.} *Id.* (quoting H.R. REP. No. 836, at 9-10 (1992)).

^{81.} Id. at 568-89.

^{82.} *Id.* at 518. This secures the protection of originality while leaving the facts contained in the compilation in the public domain. In a database, the court may assess the fair use of the arrangement but not of the facts themselves. *Id.*

^{83. 17} U.S.C. § 301 (1994).

C. Advancing the Goals of Copyright

By enacting the copyright provisions, Congress met the goals of the Constitutions's Copyright Clause. The fundamental policy behind the Copyright Clause is best represented in *Mazer v. Stein*: "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.'" The Copyright Clause also serves to reward the public. After a period of time, the Copyright Act vests the public with rights to the work unencumbered by copyright infringement laws.

- 84. 17 U.S.C. § 301(a) (1994).
- 85. National Car Rental Sys., Inc. v. Computer Assoc. Int'l, Inc., 991 F.2d 426, 428 (8th Cir. 1993) (quoting Harper & Row, Publishers, Inc. v. Nation Enters., 723 F.2d 195, 200 (2d Cir. 1983). See also III PAUL GOLDSTEIN, COPYRIGHT §15.12.1 (2d ed. 1996) (adding a third element: fixation in a tangible medium).
 - 86. GOLDSTEIN, *supra* note 83, § 15.12.1 n.4.
- 87. 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT, § 1-01[B][1], at 1-15 (2d ed. 1996) [hereinafter NIMMER]. Nimmer asserts that if other elements "are required instead of, or in addition to, the acts of reproduction, performance, distribution or display," then the state created right may not be preempted. See also Harper & Row, Publishers, Inc. v. Nation Enters., 501 F. Supp. 848 (S.D.N.Y. 1980), aff'd, 723 F.2d 195 (2d Cir. 1983), rev'd on other grounds, 471 U.S. 539 (1985) (Second Circuit court found that the state law was not preempted because the equivalent rights test was not satisfied given the extra elements found in the conversion and interference with contractual relations claims).
 - 88. National Car Rental, 991 F.2d at 431.
 - 89. 347 U.S. 201, 219 (1954).
- 90. Kemp, *supra* note 52, at 89. "The idea is that the public good is served by protecting creators in their intellectual property." *Id.* at 89 n.15.
- 91. 17 U.S.C. § 302(a) (1994). Section 302 generally provides that the copyright protection "endures for a term consisting of the life of the author and fifty years after the author's death." *Id.* For works created within the scope of employment (a "work made for hire"), the public acquires rights to the work after a period of seventy-five years from date of publication or 100 years after the work is created, "whichever expires first." 17 U.S.C. § 302(c) (1994).

"The primary objective of copyright is not to reward the *labor* of authors, but '[t]o promote the Progress of Science and useful Arts.""

To this end, the Copyright Act reserves "facts" for the public domain, allowing authors to create and build upon them so as to enrich the public. "[C]opyright does not prevent subsequent users from copying from a prior author's work those constituent elements that are not original—for example . . . facts, or materials in the public domain—as long as such use does not unfairly appropriate the author's original contributions."

The Copyright Act serves to protect this building block approach "without impeding the public's access to that information which gives meaning to our society's highly valued freedom of expression."

These policies apply to compilations and computer databases. "Maximization of public access to information contained in automated data bases [sic] is . . . a significant goal of [the] national information policy." Further, encouraging database development for dissemination to the public supports the underlying policies of the Copyright Act. However, "[t]here is an inherent conflict in the competing interests of the author and the public. Protecting the rights of the author could be detrimental to the public's interest in access to the work of authorship." The Copyright Act "seeks to balance these potentially conflicting interests." The delicate balance of encouraging database development for the benefit of the public has in some respects become skewed in favor of public access. Database development comes with significant costs

- 94. Harper & Row, Publishers, Inc. v. Nation Enters., 723 F.2d 195, 202 (2d Cir. 1983).
- 95. CONTU Report, *supra* note 58, at 38 n.159 (citing REPORT TO THE PRESIDENT OF THE UNITED STATES ON NATIONAL INFORMATION POLICY 70 (1976)).
- 96. CONTU Report, *supra* note 58, at 38. The report encourages the registration of the compilation work so as to make the public aware of these works and gain access to its useful information.
 - 97. Kemp, *supra* note 52, at 89.
 - 98. Id

^{92.} Feist Publications, Inc. v. Rural Tele. Serv. Co., Inc., 499 U.S. 340, 349 (1991) (quoting U.S. CONST. art. I, § 8, cl. 8) (emphasis added). The Court reasoned that this underlying policy assures the author protection of his expression but also encourages other authors to "build freely upon the ideas and expressions conveyed by a work." *Id.* at 350.

^{93.} Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 548 (1985). The court in *Vault v. Quaid* directs this underlying policy toward computer technology: "After acknowledging the importance of balancing the interest of proprietors in obtaining 'reasonable protection' against the risks of 'unduly burdening users of programs and the general public' . . . [CONTU] recommended the repeal of section 117. . . and the enactment of a new section 117 which would proscribe the unauthorized copying of computer programs but permit a 'rightful possessor' of a program to make or authorize the making of another copy" Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 259-60 (5th Cir. 1988) (footnotes omitted).

^{99.} The lower court in *ProCD* left the database unprotected: "the Select Phone™ listings themselves are uncopyrightable." ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 647 (W.D. Wis. 1996), overruled by ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (also finding database uncopyrightable pursuant to *Feist*.).

both to the developer and the public.¹⁰⁰ Without database protection, the developer might be discouraged from compiling comprehensive repositories of information—to the detriment of the public. The reduction in the available repositories would negatively impact the "Progress of Science and useful Arts."¹⁰¹ Therefore, the balance should be restored in line with the policies set forth by the courts, Congress and the Constitution.

III. THE STATE OF DATABASE PROTECTION UNDER COPYRIGHT LAW

Copyright protection for databases has weakened. The Supreme Court's decision in *Feist* eroded database protection when it refuted the "sweat of the brow" theory. ¹⁰² Even though the Seventh Circuit in *ProCD* ultimately protected the database, the court did so outside the confines of copyright law. ¹⁰³ Database developers have relied upon state contract law to protect their valuable investment and, in the Seventh Circuit at least, this reliance was well placed.

Ironically, the same result could have been reached in *Feist* without eliminating the "sweat of the brow" theory. The Court could have applied the fair use doctrine—a long standing judicially-created device to protect both creators and users of copyrighted works. ¹⁰⁴ Feist Publications copied a nominal amount of data from the Rural directory to supplement Feist's area-wide directory. ¹⁰⁵ This would constitute a fair use because "[t]he only material Feist took from Rural's white pages were raw facts which were themselves uncopyrightable [M]erely using [these raw facts] as a reference work could easily suffice as fair use under § 107 of the Copyright Act." ¹⁰⁶

After Feist, however, only the selection and arrangement theory remain to protect an electronic database. A database designer must creatively select and arrange the data to secure copyright protection in this investment. In light of Feist, the ProCD court, in passing, noted that the SelectPhoneTM database was not copyrightable. However, a more extensive analysis might have revealed

^{100.} ProCD argued that "it is unfair and commercially destructive to allow [Zeidenberg] to take the information [ProCD] assembled with a significant investment of time, effort and money and use it for commercial purposes without paying any compensation. . . ." *ProCD*, 908 F. Supp. at 646.

^{101.} U.S. CONST. art. I, sec. 8, cl. 8. See Paul J. Heald, The Vices of Originality, 1991 SUP. CT. REV. 143, 152 (1991).

^{102.} Feist Publications, Inc. v. Rural Tele. Serv. Co., 499 U.S. 340, 349 (1991).

^{103.} *ProCD*, 86 F.3d at 1455.

^{104.} See supra note 75 and accompanying text.

^{105.} Feist, 499 U.S. at 343. The Court noted that Feist only selected 1309 listings (four of which were dummy listings) of Rural's 7700 listings. *Id.* at 343-44. This constituted seventeen percent of Rural's factual listing.

^{106.} Heald, supra note 99, at 147 (footnotes omitted).

^{107.} See Feist, 499 U.S. at 362 and supra note 25 and accompanying text.

^{108.} *ProCD*, 86 F.3d at 1449. Presumably, the court did not pursue this analysis as the *Feist* decision found that white pages were uncopyrightable because they lacked the requisite originality

that SelectPhoneTM could have been protected under the "selection" and "arrangement" criteria which Feist upheld.¹⁰⁹ The court alludes to such protection: "[w]e may assume that this database cannot be copyrighted, although it is more complex, contains more information (nine-digit zip codes and census industrial codes), is organized differently, and therefore is more original than the single alphabetical directory at issue in [Feist]."¹¹⁰ The selection and arrangement of the ProCD database met the "modicum of creativity" required to find originality in the work.¹¹¹ Assuming originality in the database, the court might have found that Zeidenberg copied a substantial amount of the database arrangement, thereby infringing ProCD's copyright.¹¹² However, instead of copyright, the ProCD court protected the database through a shrinkwrap license—contract law.¹¹³

A competitive database requires the developer to provide an all-inclusive repository of information. In turn, the enduser "selects" only that information pertinent to his research. A comprehensive database therefore, penalizes the developer because the *selection* element is not met due to the all-inclusiveness of the data. Although the *arrangement* of the database qualifies the work for copyright protection, extensive protection of the entire database—the facts—is lacking. Only the arrangement is protected and not the data comprising the database. A competitor can then take the data by simply "rearranging" the facts in a new compilation. Yet, this is the very thing the database vendor seeks to protect—the electronic compilation of facts; therein resides the company's exhaustive and expensive research.

To protect electronic databases from misappropriation, the facts need protection. However, "[t]he most fundamental axiom of copyright law is that

required by the Constitution. *Feist*, 499 U.S. at 362-63. The ProCD database represents an electronic version of the white pages.

- 109. Feist, 499 U.S. at 362. Some commentators have asserted that electronic databases would still benefit from copyright protection as the arrangement of the database would sufficiently satisfy the originality requirement for copyrighted compilations. See, e.g., Litman, supra note 30, at 609 ("Unlike white pages directories, computer databases are surely sufficiently original to merit copyright protection"); Lewis, supra note 64, at 205 ("The selection theory is well-suited for electronic data bases because it reflects the intrinsic value of databases and the selection process used to create and update data bases."). But see Hayden, supra note 30, at 219 (author asserts the Feist standard of selection and arrangement is difficult to apply to computer databases given their comprehensiveness in data selection).
 - 110. *ProCD*, 86 F.3d at 1449 (emphasis added).
 - 111. Feist, 499 U.S. at 346.
- 112. Zeidenberg copied the entire SelectPhone™ database to the Internet for his customers to access. *ProCD*, 86 F.3d at 1450. This would constitute the copying of the arrangement, hence, the creativity of ProCD developers.
 - 113. *ProCD*, 86 F.3d at 1449.
- 114. Litman, *supra* note 30, at 609. "[A] competitor would be infringing no copyright if it simply stole the data and left the base." *Id.* (footnote omitted).
 - 115. Professor Ginsburg characterizes comprehensive databases as "low authorship works."

'[n]o author may copyright his ideas or the facts he narrates.'" However, the lack of protection for these facts within an electronic database may lead to low incentives for creating beneficial works. In the end, the public suffers. Therefore, the goal of copyright reform for compilations should center around "maximiz[ing] public welfare through a coherent system of incentives."

The goal of the Copyright Act and the Copyright Clause seeks to "promote" the creation of works. Feist, by eroding database protection, discourages the creation of such useful tools. 119 The technology industry has therefore attempted to strengthen database protection through other avenues—the shrinkwrap license. Fortunately, for ProCD, a sympathetic court enforced ProCD's shrinkwrap license resulting in an exclusive right to the database. Such exclusive rights, while protecting the developer (creator), interfere with the rights of endusers. Shrinkwrap licenses and other methods of database protection have emerged as a result of eroding copyright protection for databases. However, alternative methods must continue to honor the underlying policy of the Constitution: the promotion of "Science and useful Arts."

IV. AN ANALYSIS OF VARIOUS EFFORTS TO REFORM DATABASE PROTECTION

A. Shrinkwrap Licenses and the Copyright Act

Prior to the 1980 Copyright amendment, copyright protection for software programs was as uncertain as database protection is today. To advance an

Low authorship works are "personality-deprived information compilations such as directories, indexes and data bases [sic]." Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1866 (1990).

- 116. Feist, 499 U.S. at 344 (citing Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 556 (1985).
- 117. See generally Robert C. Denicola, Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works, 81 COLUM. L. REV. 516 (1981) (contending that low protection leads to low incentives which would deplete the level of works available to the public and therefore advocates rewarding industrious efforts in compiling low authorship works); Ginsburg, supra note 113 (concluding that the lack of protection of low authorship works would lead to low incentive to create such works and therefore less variety of low authorship works). But see Litman, supra note 30, at 646 (Professor Litman rejects statutory provisions which protect facts within compilations. She argues that the only "legitimate justification for conferring statutory protection on facts is ensuring that public access to factual compilations is enhanced."); Raymond T. Nimmer, Information Age in Law: New Frontiers in Property and Contract, 68 N.Y. St. B. J. 28 (1996) (the author recognizes that "[a] balance must exist between private control . . . and public access or use"); L. Ray Patterson & Craig Joyce, Monopolizing the Law: 'The Scope of Copyright Protection for Law Reports and Statutory Compilations, 36 UCLA L. REV. 719 (1989) (contending that low authorship works are overprotected allowing public domain materials to be monopolized by authors who compile facts).
 - 118. Heald, supra note 99, at 154.
 - 119. See generally Ginsburg, supra note 113; Heald, supra note 99.

appearance of protection, the software industry developed the "shrinkwrap license." Under a shrinkwrap license, for example, an enduser agrees to use the software on his system only and to refrain from copying the software. Such licenses projected the image of copyright protection in the electronic work.

1. Case Law Interpretations of Shrinkwrap Licenses.—Recognizing the limitations of copyright law, ProCD protected its database through the use of a shrinkwrap license. ProCD included an electronic shrinkwrap license to which Zeidenberg assented before using the database application. While the district court in ProCD followed judicial precedent in holding the shrinkwrap license unenforceable, the Seventh Circuit reversed this holding and further held that the shrinkwrap license was not preempted by the federal Copyright Act. 126

Only three lower courts have addressed the enforceability of shrinkwrap licenses. ¹²⁷ In a battle of the forms case, the Third Circuit held that a shrinkwrap license may not modify the terms of a previous contract. Thus, as a matter of contract law, the shrinkwrap license was unenforceable. ¹²⁸ Similarly, in *Arizona Retail Systems, Inc. v. The Software Link, Inc.*, a district court held the shrinkwrap license unenforceable because its terms included "additional terms" which "materially altered" the contract without the express acceptance of the party. ¹²⁹ In 1988, the Fifth Circuit concluded that a shrinkwrap license, although

^{120.} These licenses are sometimes referred to as "box top" licenses but serve the same purpose as shrinkwrap licenses.

^{121.} Some commentators classify shrinkwrap licenses as "contracts of adhesion" because they "deprive the purchaser of important rights which he has not relinquished voluntarily." Page M. Kaufman, Note, *The Enforceability of State "Shrink-Wrap" License Statutes in Light of* Vault Corp. v. Quaid Software, Ltd., 74 CORNELL L. REV. 222, 235 (1988).

^{122.} Today, an electronic version of the shrinkwrap license has evolved where the vendor creates a separate "licensing" screen which informs the user of the license to which the user much assent before using the product. See, e.g., ProCD, 86 F.3d at 1450.

^{123.} ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 650 (W.D. Wis. 1996). "Before marketing SelectPhone™, plaintiff recognized the potential limitations of copyright law and included an agreement in the software package that sought to impose limitations concerning the distribution and use of the telephone listings." *Id.*

^{124.} This electronic license was duplicated in detail in the user manual. *ProCD*, 86 F.3d at 1450.

^{125.} *ProCD*, 908 F. Supp. at 644. The district court held that the shrinkwrap license was unenforceable and preempted by copyright law. *Id*.

^{126.} *ProCD*, 86 F.3d at 1455.

^{127.} See Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91 (3d Cir. 1991); Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255 (5th Cir. 1988); Arizona Retail Sys., Inc. v. The Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993).

^{128.} Step-Saver, 939 F.2d at 105. The court applied U.C.C. § 2-207 to determine that disclaimers of warranty and liability (contained in the license) between a software developer and a value-added retailer were additions to the contract which materially altered the agreement and therefore could not be incorporated in the contract. *Id.*

^{129.} Arizona Retail, 831 F. Supp. at 764-66. This case opened the shrinkwrap license door

compliant with the state's Software License Act, was preempted by federal copyright law and therefore unenforceable.¹³⁰

Notwithstanding prior decisions, the Seventh Circuit broke new ground by enforcing the restrictive license in *ProCD*. ¹³¹ Judge Easterbrook afforded ProCD rights it did not have under copyright law. ¹³² Under *Feist*, the court concluded

slightly by acknowledging the validity of shrinkwrap licenses when accompanied by a software evaluation diskette. The court held that if Arizona Retail "requested an evaluation diskette and then, by keeping the live disk, agreed to purchase the copy of [the software] that accompanied the evaluation diskette after evaluating [the software], the license agreement applies to the initial transaction. Under such facts, the contract was . . . formed . . . after [Arizona Retail] opened the shrink wrap [sic] on the live version of [the software] which [Arizona Retail] had notice would result in a contract being formed." *Id.* at 763.

- 130. Vault Corp., 847 F.2d at 270. The Software License Act limited the user's right to reverse engineer the software. Id. at 257 n.2. See infra note 157 and accompanying text.
- 131. *ProCD*, 86 F.3d at 1450. The license in *ProCD* limited the use of the database application to "non-commercial" purposes. *Id.* The license, which appeared on the screen when the enduser accessed the software program, contained the following information:

The listings on this product are licensed for authorized users only. The user agreement provides that *copying of* the software and *the data* may be done only for individual or personal use and that distribution, sublicense or lease of the software or the data is prohibited. . . .[Y]ou will not make the Software or the Listings in whole or in part available to any other user in any networked or time-shared environment, or transfer the Listings in whole or in part to any computer other than the computer used to access the Listings.

ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 645 (W.D. Wis. 1996) (emphasis added).

132. "[W]hile contractual provisions can be helpful in determining the scope of a creator's proprietary interest in software, a 'license' of computer software that is nothing more than a disguised sale should not be enforceable as a 'back door' way of expanding the Copyright Act's protection." Thomas Lee Hazen, Contract Principles as a Guide for Protecting Intellectual Property Rights in Computer Software: The Limits of Copyright Protection, the Evolving Concept of Derivative Works, and the Proper Limits of Licensing Arrangements, 20 U.C. DAVIS L. REV. 105, 112 (1986). See also Kaufman, supra note 119, at 224 (asserting that shrinkwrap licenses should remain unenforceable as they "purport to grant rights that are either equivalent to or in direct conflict with rights granted under the Copyright Act"). Another commentator suggests that shrinkwrap licenses modify copyright law in several ways (evaluating the Vault v. Quaid licensing agreement):

[1] [T]he license prevents the user from selling or otherwise disposing of that particular copy of the software. This conflicts with the "first sale" doctrine in copyright law, which (with some statutory restrictions on renting and lending in the case of computer software) allows purchasers of a particular copy of a work to give or sell that copy to another. [2] [T]he license prevents the user from copying, modifying, translating, or converting the program for any purpose. This provision at least potentially conflicts with section 117 of the Copyright Act.... [3] [T]he license provides that the user may not "decompile or disassemble" the program for any purpose. This provision conflicts with the majority rule in copyright law that users may "reverse engineer" computer

that ProCD did not have copyright protection in the database.¹³³ Nonetheless, the enforcement of the shrinkwrap license afforded ProCD exclusive rights in the database. The court effectively (1) extended database protection by preventing the enduser from copying the database application; (2) by-passed copyright's first sale doctrine; (3) permitted an ambiguous acceptance of contract terms following the purchase of a product; and, (4) ignored the doctrine of fair use.¹³⁴

Unlike copyright law, the shrinkwrap license prohibited the user from copying the data contained in the database or from leasing the application. The ProCD license prohibited the lease or other disposition of the database application to another party which is in direct conflict with the first sale doctrine of copyright law. Prohibiting copying of the database application may interfere with the Copyright Act's "fair use" doctrine, especially if the database were used for educational purposes. The ProCD shrinkwrap license secured protection in the raw data whereas copyright law does not protect facts contained in a compilation. Hence, although *ProCD* successfully protected the database, it did so at the expense of the enduser's rights—rights which copyright law protects.

Further, the Seventh Circuit, by enforcing the shrinkwrap license, endorsed the use of ambiguous terms for contract acceptance after the purchase of a product. Relying on section 2-204(1) of the Uniform Commercial Code, the court found that ProCD, as "master of the offer," displayed its license terms on the screen and "invited" acceptance by requiring the buyer to perform a certain act—pressing "Enter"—before proceeding. Although the buyer had notice of

programs when necessary to have access to unprotected ideas contained in those programs.

Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1246-47 (1995).

- 133. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996).
- 134. See generally id. at 1447.
- 135. ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 645 (W.D. Wis. 1996). See *supra* note 132 for the pertinent text of the ProCD license agreement.
- 136. See 17 U.S.C. § 109(a) (1994). "The rightful owner of a copy of a copyrighted work has the right to sell that copy, but nothing more." Hazen, supra note 130, at 112. Professor Hazen further asserts that the computer industry relies on licensing agreements to avoid the first sale doctrine. Id.
 - 137. See 17 U.S.C. § 107 (1994).
 - 138. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 556 (1985).
- 139. Some courts have held that a shrinkwrap license is unenforceable as a matter of contract law because the user has not assented to the terms prior to the purchase of the product. *See, e.g.*, Step-Saver Data Sys., Inc. v. Wyse Tech., Inc., 939 F.2d 91 (3d Cir. 1991); Arizona Retail Sys. v. Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993).
- 140. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1452 (7th Cir. 1996). "[U.C.C.] § 2-204(1) [states that] '[a] contract for sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract'.

 . ProCD proposed a contract that a buyer would accept by using the software after having an

a restrictive license because the packaging displayed such a warning, the explicit terms of the license were unknown to the buyer until he purchased the product. However, the court reasoned that "ProCD extended an opportunity to reject [the product] if a buyer [found] the license terms unsatisfactory." Ultimately, Judge Easterbrook construed the U.C.C. in such a manner so as to grant protection in the ProCD database.

2. The U.C.C. Draft and Its Interpretation of Shrinkwrap Licenses.—The American Law Institute (ALI) along with the National Conference of Commissioners on Uniform State Laws Committee supports Judge Easterbrook's rationale in its new draft section of the Uniform Commercial Code ("U.C.C."), section 2B-308, entitled "Mass Market Licenses." Section 2B-308 of the draft validates shrinkwrap licenses. Pursuant to section 2B-308, if the buyer assents to the terms in a manner prescribed by the licensor, the shrinkwrap license is enforceable. In ProCD, simply selecting "OK" from the screen displaying key

opportunity to read the license at leisure. This Zeidenberg did. He had no choice, because the software splashed the license on the screen and would not let him proceed without indicating acceptance." *Id.* (emphasis added).

- 141. *Id.* at 1450. It is this process which commentators find disturbing. One commentator identifies two major problems with enforcing shrinkwrap licenses: "[1] that consideration has passed before the license terms are placed before the user, and [2] there is an ambiguous act of acceptance by the user to the license terms." Joel Rothstein Wolfson, *Information Transactions on the Information Superhighway: It's Not Just Software Law Anymore*, 6 NO. 11 J. PROPRIETARY RTS. 2 (November 1994).
- 142. *ProCD*, 86 F.3d at 1452-53. The court applied section 2-606 of the U.C.C., which defines "acceptance of goods" as support for its reasoning. Any buyer who is dissatisfied with the terms of the agreement "can prevent formation of the contract by returning the package, as can any consumer who concludes that the terms of the license make the software worth less than the purchase price." *Id.* at 1452. *See also* Hill v. Gateway 200, Inc., 105 F.3d 1147, 1148-49 (7th Cir. 1997) (Easterbrook maintains that parties agree to all the terms of a contract "in a box" if a party has an opportunity to accept or return the product).
- 143. Henry Beck, *Uniform Commercial Code Article 2B—Licenses*, 478 PLI/PAT. 103, 174 (1997) [hereinafter U.C.C. Draft]. This article contains the body of the U.C.C. Draft Article 2B with Reporter's notes. A copy of the applicable "Mass Market Licenses" section (§ 2B-308), as of the publication of this Note, is replicated in the Appendix. The U.C.C. Draft defines a mass market license as follows:

a standard prepared for and used in a retail market for information which is directed to the general public as a whole under substantially the same terms for the same information, if the licensee is an end user and acquired the information in a transaction under terms and in a quantity consistent with an ordinary transaction in the general retail distribution. The term includes consumer contracts.

Id. 2B-102(a)(25).

144. Id.

145. *Id.* at 174. "[A] party adopts the terms of a mass market license if, the party agrees or manifests assent to the mass market license before or in connection with the initial use of or access to the information." *Id.* (citing § 2B-308(a)).

license terms would have been sufficient to manifest assent under section 2B-308 rendering the shrinkwrap license enforceable.

The Drafting Committee characterizes the shrinkwrap license as a standard from contract and, as such, the shrinkwrap license must comply with standard procedures outlined in section 2B-307.¹⁴⁶ Thus, the licensee manifests assent through his signature or conduct. The Committee defines "manifest assent" as an opportunity to review the license agreement before assenting to the terms of the license.¹⁴⁷ The electronic license agreement in *ProCD*, for example, presented the enduser with an opportunity to review the pertinent terms of the agreement prior to acceptance.¹⁴⁸ This is not the only safeguard available to the purchaser of a product with a shrinkwrap license. If a term in the license causes undue surprise or deviates from industry standards, that term is unenforceable regardless of consent.¹⁴⁹

- 146. *Id.* at 172 (citing § 2B-307(a)). As of the publication of this Note, section 2B-307 reads in its entirety as follows:
 - (a) Except as otherwise provided in subsection (c) and Sections 2B-308 and 2B-309, a party adopts the terms of a record, including a standard form, if the party agrees to or manifests assent to the record before or in connection with the initial use of or access to the information. If agreement or assent to a record does not occur by that time, but the parties commence performance or use the information with the expectation that their agreement will be later represented in whole or in part by a record that the party has not yet had an opportunity to review or that has not yet been completed, a party adopts the terms of the later record if the party agrees to or manifests assent to that record.
 - (b) A term adopted under subsection (a) becomes part of the contract without regard to the knowledge or understanding of the individual term by the party assenting to the record whether or not the part read the record.
 - (c) A term of a record which is unenforceable for failure to satisfy a requirement of another provision of this article, such as a provision that expressly requires use of conspicuous language or manifested assent to the term, is not part of the contract.
 - 147. *Id.* at 174-75.

This concept adopts procedural safeguards allowing the party bound by the standard form an opportunity to review terms and to reject the contract if the terms are not acceptable. The two safeguards are in the concept of "opportunity to review" (see 2B-114) and "manifests assent" (see 2B-113). Under these definitions, a party cannot manifest assent to a form or a provision of a form unless it has had an opportunity to review that form before being asked to react.

Id.

- 148. ProCD v. Zeidenberg, 86 F.3d 1447, 1452 (7th Cir. 1996).
- 149. See U.C.C. Draft, supra note 141, at 174 (citing § 2B-308(b)(1)). Section 2B-308(b) provides in relevant part:
 - [A] term does not become part of the contract if the term creates an obligation or imposes a limitation which: (1) the party proposing the form should know would cause an ordinary and reasonable person acquiring this type of information and receiving the

Although assenting to terms in a contract before review is a significant issue presented by shrinkwrap licenses, the most disturbing issue is its direct interference and conflict with federal copyright law. Opponents of this provision are concerned with diminished user's rights resulting from shrinkwrap license enforcement. They support the addition of a provision that provides for the abatement of any terms in the contract that are inconsistent with copyright law. Others maintain that such incorporation of copyright law into contract law is illadvised. These advocates mention that Copyright's preemption clause and fair use doctrine equip the judiciary with adequate tools that can address these concerns. However, the preemption clause and fair use doctrine were scantily applied in *ProCD* affording protection that would not otherwise be afforded a database under copyright law.

Shrinkwrap licenses are typically designed to limit the user's rights to the database application which copyright law would permit—for example, limiting the duplication of data within the database. Consequently, the Committee has offered a form of database protection outside the realm of copyright law. In *ProCD*, the shrinkwrap license protected the database from commercial copying which is essentially protection against unfair competition. Database developers are concerned with a commercial user copying their work and developing a competing product at a lower cost. This is what shrinkwrap licenses ultimately seek to prevent. However, the U.C.C. Draft jeopardizes the

form to refuse the license if that party knew that the license contained the particular form"

Id.

- 150. Copyrights: ALI Votes That New UCC Provision Must Be Consistent with Copyright Act, BNA Patent, Trademark & Copyright Law Daily, June 6, 1997, at D2 (opponents are concerned with the ability of this provision to contract copyright rights away as well as the loss of rights the education and library sectors enjoy under copyright law).
- 151. Copyright: ALI Wants Law on Information Licensing to Include Current Copyright Statute, BNA Patent, Trademark & Copyright Law Daily, May 22, 1997, at D3. The proposed provision provides that a "term that is inconsistent with 17 U.S.C. Section 102(b) or with the limitations on exclusive rights contained in 17 U.S.C. Section 107-112 and 117 cannot become part of a contract under this [Mass Marketing license] section." Id.
 - 152. *Id*.
 - 153. Id.
- 154. Understanding the ease at which electronic works can be copied and misappropriated, CONTU assessed the value of unfair competition laws.

The common law doctrine of unfair competition of the misappropriation variety is based upon the principle that one may not appropriate a competitor's skill, expenditure, and labor. . . . While there is a small body of federal unfair competition law, it is largely a state doctrine with the same lack of national uniformity that besets trade secrecy. Although unfair competition may provide relief ancillary to copyright in certain situations, its scope is not as broad, and it seems unlikely that it alone could provide sufficient protection against the misappropriation of programs.

CONTU Report, supra note 58, at 18.

delicate balance between protecting an author's right (misappropriation) and the public's right to access information in a work. Can traditional judicial doctrines of fair use or copyright preemption retain the balance sought by the founders of the Constitution?

3. An Analysis of Preemption and Shrinkwrap Licenses.—Although shrinkwrap licenses may provide database protection under contract law, § 301 of the Copyright Act preempts such licenses. Many law review articles support the unenforceability of shrinkwrap licenses for precisely this reason. While some courts wrestle with the contractual implications of shrinkwrap licenses, others carefully construe the shrinkwrap license under federal preemption. Vault Corp. v. Quaid Software Ltd. 159 is the most notable case addressing the preemption issue and shrinkwrap licenses.

Vault created a copy protection program ("Prolock") designed to prevent the unlawful copying of software by "locking" the protected software. In other words, a software developer could use Prolock to prevent his software from being copied. Vault sold Prolock under a shrinkwrap license which prohibited the reverse engineering of the software. Nonetheless, Quaid purchased the software and reverse engineered the package to unlock the "locking" function. Quaid's product, which disabled Prolock, was sold as "Ramkey." 162

^{155.} See 17 U.S.C § 301 (1994).

^{156.} See, e.g., David A. Einhorn, Box-Top Licenses and the Battle-of-the-Forms, 5 SOFTWARE L.J. 401 (1992); Gary W. Hamilton and Jeffrey C. Hood, The Shrink-Wrap License—Is It Really Necessary?, 10 No. 8 COMPUTER LAW. 16 (1993); Hazen, supra note 130; David A. Rice, Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering, 53 U. PITT. L. REV. 543 (1992); Karen Puhala, Note, The Protection of Computer Software Through Shrink-Wrap License Agreements, 42 WASH. & LEE L. REV. 1347 (1985). But see Robert W. Gomulkiewicz and Mary L. Williamson, Article: A Brief Defense of Mass Market Software License Agreements, 22 RUTGERS COMPUTER & TECH. L.J. 335 (1996); Robert P. Merges, Intellectual Property and the Costs of Commercial Exchange: A Review Essay, 93 MICH. L. REV. 1570 (1995).

^{157.} See, e.g., ProCD v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996); Arizona Retail Sys., Inc. v. The Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993).

^{158.} Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255 (5th Cir. 1988).

^{159.} *Id*.

^{160.} Id. at 256.

^{161.} *Id.* at 256-57. The process of reverse engineering is complicated. Computer programs consist of source code (COBOL, FORTRAN...) which programmers are trained to understand. The source code is translated into "object code," or machine-readable language. "Reverse engineering, as the name implies, involves going backwards from a finished product and determining how the program works. One method of reverse engineering involves the use of disassemblers, which allow someone to convert object code into a form more easily read by humans [source code]." Sega Enter. Ltd. v. Accolade, Inc., 785 F. Supp. 1392, 1394-95 (N.D. Cal. 1992), aff'd in part, rev'd in part, 977 F.2d 1510 (9th Cir. 1992).

^{162.} Vault, 847 F.2d at 257.

Notwithstanding its compliance with the Louisiana Software License Act,¹⁶³ the Fifth Circuit held the shrinkwrap license unenforceable because federal law preempted this state law.¹⁶⁴ The court's conclusion that a state could not expand the rights of authorship granted by the copyright law has been followed in subsequent cases.¹⁶⁵

Interestingly, Vault did not apply § 301 of the Copyright Act but relied instead upon Supremacy Clause preemption. Section 301 of the Copyright Act calls for preemption if (1) the work falls within the subject matter of copyright as defined in §§ 102 and 103 of the Copyright Act; and (2) the state right granted is "equivalent" to one or more rights granted by § 106 of the Copyright Act. Section 301 expressly declares Congress' intent: to preempt state law where "equivalent" rights to copyright are extended. The court in Vault, however,

163. Id. at 268-70 (citing LA. REV. STAT. ANN. §§ 51:1961-1965 (West 1987)).

164. Id. at 270.

The provision in Louisiana's License Act, which permits a software producer to prohibit the adaptation of its licensed computer program by decompilation or disassembly, conflicts with the rights of computer program owners under § 117 and clearly 'touches upon an area' of federal copyright law. For this reason, and the reasons set forth by the district court, we hold that at least this provision of the Louisiana's License Act is preempted by federal law, and thus that the restriction in Vault's license agreement against decompilation or disassembly is unenforceable.

Id.

- 165. See, e.g., SQL Solutions, Inc. v. Oracle Corp., No. C-91-1079 MHP, 1991 MP, 1991 WL 626458 (N.D. Cal. Dec. 18, 1991); Wolff v. Institute of Elec. & Elecs. Eng'rs., Inc., 768 F. Supp. 66 (S.D.N.Y. 1991).
- 166. Vault, 847 F.2d at 269-70 (5th Cir. 1988). Some commentators criticize the court's reliance on the Supremacy Clause. See, e.g., Gary H. Moore & J. David Hadden, On-Line Software Distribution: New Life for 'Shrink-wrap' Licenses?, 13 No. 4 COMPUTER LAW. 1, 5 (1996) (citing Sears, Roebuck v. Stiffel Co., 376 U.S. 225, 229 (1964)) (the authors assert that the problem with the Vault v. Quaid decision is that it is "not based on § 301 of the Copyright Act" and instead "relied on the 1964 Supreme Court case Sears, Roebuck v. Stiffel Co. for the proposition that 'when state law touches upon the area of [patent or copyright statutes], it is 'familiar doctrine' that the federal policy 'may not be set at naught, or its benefits denied' by the state law." Id. The authors further assert that "[t]he existence of § 301. . . makes suspect Vault's reliance on patent law preemption cases, since the Patent Act, unlike the Copyright Act, contains no such explicit preemption [sic] provision." Id.).
- 167. See supra note 82 and accompanying text. Constitutional preemption generally permits three types of preemption: (1) the state statute directly conflicts with a federal statute; (2) Congress may "preempt the field;" and (3) the state law stands "as an obstacle" to Congressional objectives and purposes. See Lemley, supra note 130, at 1269-70.
- 168. One commentator agrees that the "federal right to copy unprotected subject matter can be contractually waived by the purchaser." D.C. Toedt, *Shrinkwrap License Enforceability Issues*, 453 PLI/PAT. 613, 627 (1996). However, the state law supporting such licenses, or contracts, has the

effect of permitting the vendor to impose restrictions on the purchaser's 'federal right

applied a constitutional analysis declaring that federal copyright law preempted the state statute and avoided basing its preemption decision on § 301 of the Copyright Act. It is unclear as to the court's reason for applying Supremacy Clause preemption before § 301 copyright preemption. Perhaps the court found the breadth of § 301 copyright preemption unclear, and therefore relied on Supremacy Clause preemption. Or, in the alternative, the court believed that the state cause of action passed the copyright preemption test and subsequently applied Supremacy Clause preemption. In either case, the courts have consistently failed to effectively construe and rely upon § 301 copyright preemption when analyzing the enforceability of shrinkwrap licenses.

The "equivalent right" element of Copyright preemption is the crucial element in determining whether copyright law preempts elements in a contract or license. Software programs and databases are subject matter covered by the Copyright Act; hence, it is this second element of copyright preemption which consumes most of the analysis when determining copyright preemption. Nimmer characterizes the equivalent right element as consisting of an "extra element" test. The extra element test was applied in *Harper & Row*. The court required "a qualitative difference between the asserted right and the exclusive right under the [Copyright] Act" and concluded that the state law cause of action

to copy' unprotected subject matter without clear pre-purchase post-purchase notice of those restrictions. As a result, the state law is preempted by the Supremacy Clause as 'stand[ing] as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.'... by interfering with the federal scheme permitting the public to copy unprotectable subject matter.

Id. at 628.

- 169. Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 269 (5th Cir. 1988). However, the court concluded that Vault's shrinkwrap license, which prohibited the decompilation of the software, directly conflicted with § 117 of the Copyright Act and therefore preempted the statute as it "clearly 'touche[d] upon an area' of federal copyright law." *Id.* at 270.
- 170. Kemp, *supra* note 50, at 119. "However explicitly Congress provided for preemption in section 301, the breadth of its application is in no way clear." *Id*.
- 171. *Id.* at 96-97. "[A] state cause of action that passes the section 301 preemption doctrine may still be subject to preemption if it conflicts with the federal purpose, under the Supremacy Clause of the United States Constitution." *Id.*
- 172. Note that "equivalent right" captures both a broad or narrow interpretation of the right involved. Nimmer asserts that irrespective of the created rights restriction on copyrights, "[t]he preemption of rights under State law is complete . . . even though the scope of exclusive rights given the work under [Copyright Act] is narrower than the scope of common law rights in the work might have been." NIMMER, § 1.01[B][1], supra note 85, at 1-11 (citing H.R. Rep. No. 101-514, 101st Cong. 2d Sess. 21 (1990)). Therefore, in Vault, for example, where the software developer sought to restrict rights to its software package, such a restriction constitutes an "equivalent" right under the Copyright Act and should be preempted.
 - 173. See supra note 85 and accompanying text.
- 174. Harper & Row, Publishers, Inc. v. Nation Enters., 723 F.2d 195 (2d Cir. 1983), rev'd on other grounds, 471 U.S. 539 (1985).

did not "establish qualitatively different conduct on the part of the infringing party, nor a fundamental nonequivalence between the state and federal rights implicated."¹⁷⁵

This extra element test applies to breach of contract claims such as those asserted by vendors of shrinkwrap licenses. If the user breaches the terms of the license, a breach of contract claim is filed and a court must establish whether such a claim is "qualitatively" different from a claim in copyright infringement. 176 For example, in National Car Rental System, Inc. v. Computer Associates International, Inc., a software developer's licensing agreement restricted the use of its computer programs to the processing of the purchaser's The purchaser subcontracted its data processing department to a computer consulting company. All parties agreed that the consulting company could use the licensed software to operate the purchaser's computer systems. 178 The software developer asserted the purchaser made an unauthorized copy of the programs by allowing the computer consulting company to process third-party data.¹⁷⁹ The Eighth Circuit held that the breach of contract claim was not preempted because "the alleged contractual restriction on [the purchaser's] use of the licensed programs constitutes an extra element in addition to the copyright rights making this cause of action qualitatively different from an action for copyright."180 Thus, National Car "stands for the proposition that a breach of contract action is qualitatively different from a claim on copyright infringement when the right or obligation being enforced would not exist but for the parties' agreement."181

Unlike the licensing agreement in *National Car*, however, shrinkwrap licenses are not negotiated contracts. Under a shrinkwrap license, the parties do

^{175.} Id. at 201.

^{176.} See supra note 86 and accompanying text. Courts have wrestled with this application in breach of contract claims. See Wolff v. Inst. of Elec. & Elecs. Eng'rs, Inc., 768 F. Supp. 66 (S.D.N.Y. 1991) (holding that where the act which caused the breach of contract is the same act which would trigger a claim in copyright infringement, the breach of contract claim is preempted). But see National Car Rental Sys., Inc. v. Computer Assoc. Int'l, Inc., 991 F.2d 426 (8th Cir. 1993) (reversing the district courts' finding of preemption).

^{177.} National Car, 991 F.2d at 427-28.

^{178.} Id. at 428.

^{179.} Id.

^{180.} *Id.* at 431. The court further concluded that "the contractual restriction on use of the programs constitutes an additional element making this cause of action not equivalent to a copyright action." *Id.* at 432.

^{181.} Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 521 (1995) (emphasis added). Professor O'Rourke suggests that the bargaining which occurs in negotiated contracts provides the extra element required to satisfy the "equivalent" rights test of § 301. *Id.* at 522. Yet, as far as standard form contracts are concerned, as the U.C.C. Draft indicates, the mutual assent through conduct may also constitute the extra element necessary to avoid preemption. *Id.* at 530-31; *see also* U.C.C. Draft, *supra* note 141, at § 2B-308.

not confer and come to an agreement on the terms of the contract limiting usage rights. Thus, this lack of negotiation, or bargaining, does not satisfy the extra element test as applied in *National Car*. Therefore, the extra element of "party agreement," established in *National Car*, forecloses similar application to shrinkwrap licenses.¹⁸²

Instead, Judge Easterbrook considered and relied upon market conditions to determine shrinkwrap license enforceability under the rubric of a § 301 preemption analysis. ProCD asserted that contracts of "private ordering" were "essential to the efficient functioning of markets." Easterbrook focused on the value of ProCD's database to the marketplace and described the theory and justification of price discrimination between commercial and non-commercial products. Yet, unlike *Vault v. Quaid*, which omitted a section 301 "equivalent rights" analysis, Judge Easterbrook applied the equivalent rights test in his preemption analysis. The court in *ProCD* held that rights created by contract, presumably even if not negotiated, are not "equivalent to any of the exclusive rights within the general scope of copyright." 186

Copyright law forbids duplication, public performance, and so on, unless the person wishing to copy or perform the work gets permission; silence means a ban on copying. A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create "exclusive rights." Someone who found a copy of SelectPhoneTM on the street would not be affected by the shrinkwrap license—though the federal copyright laws of their own force would limit the finder's ability to copy or transmit the application program.¹⁸⁷

The Seventh Circuit did not apply the extra element test, but instead compared copyright preemption to another federal preemption clause involving airline carriers. The court borrowed the reasoning in *American Airlines, Inc.* v. Wolens which concluded that "[t]erms and conditions offered by contract

^{182.} O'Rourke, *supra* note 179, at 522-23. Yet, when such limiting provisions are found in non-negotiated, standard form licenses, such as shrinkwrap licenses, "the argument for nonpreemption of breach of contract actions is more tenuous." However, Professor O'Rourke concedes that in either case, the court should "make a deeper inquiry into market conditions before making the preemption decision." *Id*.

^{183.} ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449-50 (7th Cir. 1996).

^{184.} Id. at 1455.

^{185.} *Id.* at 1449-50. Judge Easterbrook likened computer purchases to insurance purchases, airline ticket purchases and concert ticket purchases characterizing them as "[t]ransaction[s]... [where the] money precedes the communication of detailed terms." *Id.* at 1451.

^{186.} Id. at 1455.

^{187.} Id. at 1454.

^{188.} *Id.* (quoting 49 U.S.C. App. §1305(a)(1) (1988)) ("[This] federal statute preempts any state 'law, rule, regulation, standard, or other provision . . . relating to rates, routes, or services of any air carrier.").

Under this reasoning, a shrinkwrap license may reflect "private ordering" and should prevail over national directives in order to support efficient marketing systems. However, the court refined its ruling, maintaining that merely because a claim might fall under the auspices of a "contract," it did not automatically avoid § 301 preemption analysis. Some contracts could interfere with the national objectives of copyright law, but in *ProCD*, the shrinkwrap license did not interfere with copyright objectives. Whether a particular license is generous or restrictive, a simple two-party contract is not 'equivalent to any of the exclusive rights within the general scope of copyright' and therefore may be enforced."

ProCD marks a new era of shrinkwrap license enforcement. Certainly, this decision follows the course which the U.C.C. Drafting Committee has charted. 194 The court's rational, however, tends to interfere with copyright policy. When a shrinkwrap license grants or restricts rights which affect the public domain, copyright law should prevail. A court should assess the effect shrinkwrap license enforcement has upon the balance between the author's right and the public's right to access information. As such, the U.C.C. Drafting Committee should also recognize this balance and invalidate a shrinkwrap license if it purports to afford or restrict rights "equivalent" to the Copyright Act. 197

The shrinkwrap license serves as a crutch to database protection. The database developer seeks to protect against a commercial invasion of the work

^{189.} *Id.* at 1455 (quoting American Airlines, Inc. v. Wolens, 115 S. Ct. 817, 824-25 (1995)).

^{190.} Id. The court pointed to Wolens and National Car for support in this conclusion: "National Car Rental likewise recognizes the possibility that some applications of the law of contract could interfere with the attainment of national objectives and therefore come within the domain of § 301(a)." Id.

^{191.} Id. The court's comparative analysis found that § 301(a) and § 1305(a)(1) provide a similar function: they "prevent[] states from substituting their own regulatory systems for those of the national government." Id.

^{192.} *Id*.

^{193.} Id.

^{194.} The next version of the U.C.C. Draft is sure to cite to the *ProCD* decision in its Reporter's Notes section to support the Committee's position of the viability and enforceability of shrinkwrap licenses.

^{195. 17} U.S.C. § 301 (1994).

^{196.} See Lemley, supra note 130. The author contends that the federal intellectual property law is "sufficiently comprehensive" and "that no two parties should be allowed to alter or avoid some aspect of intellectual property law where the result is to disadvantage others who are not a party to the contract." *Id.* at 1291.

^{197.} *Id.* The author recommends a limitation for the U.C.C. Draft Mass Market License Section 2B-308: "a term does not become part of the license if the term . . . creates an obligation or imposes a limitation on the licensee that is inconsistent with federal intellectual property law, or that deprives the licensee of a right or privilege granted the licensee under federal intellectual property law." *Id.* at 1292.

which would lower development costs of the subsequent developer.¹⁹⁸ In essence, the database developer seeks an unfair competition law to protect the initial investment. The shrinkwrap license presumably serves as this protection. However, while it may protect the developer from commercial exploitation, it also limits endusers' rights—a non-commercial user.

What is actually sought is the protection of the first compiler's information—a "compulsory license." A compulsory license could provide the "appropriate balance[] between securing the commercial value of low authorship compilations on the one hand and promoting creation of and access to a wide variety of informational works on the other." Under a compulsory licensing scheme, the subsequent developer, seeking to use the initial developer's work, would request a license from the initial developer prior to using any information in the initial developer's database. The subsequent developer would pay a fee to the initial developer to use the information. Such a licensing scheme would provide sufficient protection to the database developer with significant investment in data compilation yet still afford the public access to derivative databases. ²⁰¹

Without assurance that the database is protected by copyright law or shrinkwrap licenses, the database developer might be reluctant to create comprehensive works.²⁰² This conflicts with the policy of motivating authors to

Maximum incentives might be afforded to data collection were the first gatherer of the dataset to receive exclusive control over any recombinations that might be made of information contained within the compilation; nonetheless, vesting this control in a single compiler would cut off public access to new informational works that could be generated from the data, but that the compiler declines to license. It is not a sufficient answer to reply that, once the copyright expires, anyone may freely revise the data; seventy-five years is a long time to suspend the public interest in the new combinations of gathered information.

201. Id.

^{198.} Hayden, *supra* note 30, at 240. "A developer's real concern is that a competitor will take the product of his efforts and use it to develop a competing product that, because of its reduced development costs, can be sold at a much lower price. Expansive protection . . . would simply prevent unjust enrichment by subsequent developers." *Id*.

^{199.} Ginsburg, *supra* note 113, at 1917. Professor Ginsburg advocates amending copyright law to "recognize the first compiler's rights over derivative versions of informational works, but would qualify those rights by compelling information providers to license rights to produce derivative compilations." *Id.* at 1916.

^{200.} *Id.* Professor Ginsburg provides the rationale for compulsory licensing supporting the balance between incentives and public access through an example of a database:

^{202.} Robert Gorman, Copyright Protection for the Collection and Representation of Facts, 76 HARV. L. REV. 1569 (1962); Heald, supra note 99, at 152 (citing William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 18 J. LEGAL STUD. 325 (1989); Jessica Litman, The Public Domain, 39 EMORY L.J. 965 (1990); Ginsburg, supra note 113); John S. Wiley Jr., Copyright at the School of Patent, 58 U. CHI. L. REV. 119 (1991).

create works for the public good.²⁰³ Thus, where does the database developer turn to get the assurance needed to motivate her to create databases the public seeks and which ultimately "promote the Progress of Science and useful Arts"?²⁰⁴

B. In Search of a Sui Generis Right for Database Protection

1. An International Solution to the Database Protection Dilemma.—Database protection through shrinkwrap licenses leaves the developer exposed to potential copyright preemption.²⁰⁵ Although the Seventh Circuit enforced a shrinkwrap license, if the other courts followed suit, the United States would be among the few countries in the Western world enforcing such licenses.²⁰⁶ Other countries either directly refuse to enforce shrinkwrap licenses or place restrictions on the effect of such licenses.²⁰⁷ However, restrictions lend themselves to uncertain database protection as well—the precise dilemma we face today. Hence, the database developer maintains limited legal protection. To improve database protection, some advocate the creation of a sui generis right.²⁰⁸

To encourage investment in database development, the European Community (EC) recently adopted the EC Database Directive creating a *sui generis* right protecting a database from "unauthorized extraction or re-utilization" of database contents.²⁰⁹ This directive creates a protective right outside the realm of member

^{203.} Heald, *supra* note 99, at 152-55.

^{204.} U.S. CONST. art. I, § 8, cl. 8.

^{205.} But c.f. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (court enforces shrinkwrap license and holds copyright preemption does not prevail).

^{206.} See Lemley, supra note 130, at 1253 n.54. The author asserts that only five countries enforce shrinkwrap licenses: Austria, Dominican Republic, Hong Kong, Korea, and Malaysia. Id.

^{207.} Id. at 1253 n.53. Some of these foreign countries will enforce shrinkwrap licenses if certain conditions are met. Id.

^{208.} For articles supporting the creation of *sui generis* right for database protection, see generally, Gross, note 52 (author argues that there is a need for sui generis legislation for software programs); Hayden, *supra* note 30 (argues current copyright law is ineffective for database protection and asserts that a *sui generis* right for such protection is necessary); Howell, *supra* note 68 (author supports development of supplemental legislation to protect databases against piracy; supports specifically the passage of the legislation which criminalizes piracy: the proposed Criminal Copyright Improvement Act of 1995); Teddy C. Kim, Note, *Taming the Electronic Frontier: Software Copyright Protection in the Wake of* United States v. Lamacchia, 80 MINN. L. REV. 1255 (1996) (arguing that criminal sanctions for piracy is "unworkable and undesirable" and that Congress should revise the current Copyright Act in order to protect digital technologies). *But see* Ginsburg, *supra* note 113 (Professor Ginsburg advocates the amendment of the Copyright Act in support of compulsory licensing for derivative works); Litman, *supra* note 30 (author is leery of advancing the need for a *sui generis* right under the Commerce Clause for protection of facts as it would potentially limit public access to this information).

^{209.} Paul Durdik, Ancient Debate, New Technology: The European Community Moves to Protect Computer Databases, 12 B.U. INT'L L.J. 153, 165 (1994) [hereinafter EC Database

countries' copyright law, that prevents "unfair use of database contents where significant cost and efforts were expended to create it." Under Feist, such cost and labor-based protection does not exist for a U.S. compilation. Perhaps in recognition of the limitations Feist imposes on U.S. technology companies, the EC Database Directive does not reciprocate protection unless the contracting country has similar protection for its national databases. This leaves United States technology companies vulnerable in the European Community.

In September 1995, the European Community submitted a discussion paper to the Committee of Experts of the World Intellectual Property Organization ("WIPO") on the *sui generis* right for database protection. Six months later, the European Community submitted their proposal for "international harmonization of the *sui generis* protection of databases" to WIPO.²¹² The WIPO Database Treaty's preamble asserts that the contracting parties

[r]ecognizing that databases are a vital element in the development of a global information infrastructure and an essential tool for promoting economic, cultural and technological advancement, [r]ecognizing that the making of databases requires the *investment of considerable human*, technical and financial resources but that such databases can be copied or accessed at a fraction of the cost needed to design them independently, [and] [d]esiring to establish a new form of protection for databases by granting rights adequate to enable the makers of databases to recover the investment they have made in their databases and by providing international protection in a manner as effective and uniform as possible. 213

The very preamble of the Database Treaty rejects *Feist* by resurrecting the "sweat of the brow" theory as does the EC Database Directive. Article 1 of the Database Treaty further asserts that

[the] [c]ontracting [p]arties shall protect any database that represents a substantial investment in the collection, assembly, verification, organization or presentation of the contents of the database. . . . The protection granted under this Treaty shall be provided irrespective of any

Directive]. The author points to the compulsory licensing provision which the EC Database Directive includes to avoid the monopolization of information compiled in these databases. *Id.* at 166.

^{210.} Barry D. Weiss, Barbed Wires and Branding in Cyberspace: The Future of Copyright Protection, 450 PLI/PAT. 397, 404 (1996).

^{211.} Id.

^{212.} Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases to be Considered by the Diplomatic Conference, World Intellectual Property Organization (WIPO), CRNR/DC/6, 6 (Aug. 30, 1996). http://www.loc.gov./copyright/wipo6.html [hereinafter WIPO Draft Database Treaty]. The European Community has been instrumental in the draft of the Database Treaty. Id. at 5.

^{213.} Id. at Preamble (emphasis added).

protection provided for a database or its contents by copyright or by other rights granted by Contracting Parties in their national legislation.²¹⁴

An additional provision of the Database Treaty allows "[t]he maker of a database ... [to] have the right to authorize or prohibit the extraction or utilization of its contents." Thus, the very extraction of data from a database, which took considerable human and technical resources to develop, would violate this treaty. Yet, even WIPO recognizes the treaty's potential conflict with copyright laws.

Article 12 [of the Database Treaty] deals with the relationship between the protection accorded under the proposed Treaty and existing or future rights and obligations. The protection granted under the proposed Treaty shall leave intact and shall in no way affect any "conventional" rights in the database or its contents.²¹⁶

The European Community has led the way in database protection reform. Now, the United States and other countries must decide if and how they intend to operate in the global technology industry. U.S. Internet and online service providers oppose the support of the WIPO Database Treaty because database protection issues have not been fully discussed domestically.²¹⁷ Others contend that it is premature to push an untested area of law into the international arena without having experienced the ramifications of database protection domestically.²¹⁸ WIPO agreed. In December 1996, WIPO held a Diplomatic

The protection accorded under this Treaty shall be without prejudice to any other rights in, or obligations with respect to, a database or its contents, including laws in respect of copyright, rights related to copyright, patent, trademark, design rights, antitrust or competition, trade secrets, data protection and privacy, access to public documents and the law of contract.

Id.

^{214.} *Id.* art. I.

^{215.} *Id.* art. III. The term "extraction" is defined as "the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form." *Id.* art. II.

^{216.} Id. art. XII (notes to Article 12). Article 12 reads:

^{217.} Copyrights: Clinton WIPO Treaty Proposals Meet with Significant Opposition, BNA PAT., TRADEMARK & COPYRIGHT L. DAILY, Sept. 23, 1996, at D2. Senator Orrin G. Hatch: "Congress will not wish to be in the position of having its hands tied by international developments on the basis of proposed legislation that has stalled precisely because it contains so many unresolved issues." Id. Professor Pamela Samuelson, professor of law and information management at the University of California at Berkeley, contends that the "administration's international proposals are aimed at partially preempting domestic discussion on contentious copyright issues." Id.

^{218.} *Id.* However, others have noted the EC Database Directive requires reciprocity "which means that any producer of databases not located in a European Union country would not be given protection unless the producer's home nation had comparable legislation in place." *Id.* The EC Database Directive generally provides for Member States to enact such legislation by 1998. EC

Conference in Geneva to discuss the WIPO Database Treaty proposal.²¹⁹ The Conference, proved that many countries "weren't ready to address" extending protection to the data in a database.²²⁰ The Conference concluded that further study of the proposed treaty was needed.²²¹ Hence, even the international community has come full circle demonstrating their uncertainty as to the best approach for electronic database protection.

2. A U.S. Proposal for Database Protection: The Intellectual Property Antipiracy Act.—Amending the Copyright Act for increased database protection may be prohibitive. Feist may have tied Congressional hands when it held that originality was not only a statutory requirement for determining copyrightability, but a Constitutional one as well. Although the Copyright Clause charges Congress with "increas[ing] public welfare by providing incentives for creation," the decision in Feist effectively "forbids [the] protection of labor, research, or industrious collection" thereby dampening the economic incentive to develop commercially viable databases. 223

One constitutional option remains. Congress can create *sui generis* database protection under the Commerce Clause.²²⁴ Since the Court prohibited protection of low authorship works under the Copyright Clause, evading *Feist* by resurrecting the sweat of the brow theory under the Commerce Clause might not gather much support.²²⁵ The Copyright Clause mandates the protection of

Database Directive, *supra* note 207, at art. 32, 33. However, Member States can apply for three to nine year delays in enacting such legislation. *Id.* This demonstrates some reluctance on the part of the very countries that proposed this international treaty evidencing uncertainty as to the best method of database reform.

- 219. Copyright Accords Guard Against Software Piracy, WALL ST. J., Dec. 23, 1996, at B6. 220. Id.
- 221. Lehman Calls WIPO Conference a Success; Attention now Turns to Treaty Ratification, BNA PATENT, TRADEMARK & COPYRIGHT LAW DAILY, Jan. 22, 1997, at D2. In asserting the need to further study database protection, Lehman noted that "it took six years to study the copyright treaties." *Id*.
- 222. Feist Publications, Inc. v. Rural Tele. Serv. Co., Inc., 499 U.S. 340, 351 (1991). Professor Heald suggests that "the familiar white pages are unprotected and Congress apparently can do nothing to render them protectable short of initiating a constitutional amendment." Heald, *supra* note 99, at 144.
- 223. *Id.* at 158. Professor Heald further contends that the Supreme Court in *Feist* clearly "locks Congress into . . . [providing] virtually no protection . . . [for] labor and research because the cost of such protection is simply too high." *Id.* at 159.
- 224. *Id.* at 168. Should Congress respond to *Feist* by protecting works through a "sweat of the brow" theory, Congress would have to "enact a broader unfair competition statute prohibiting the copying of any 'industrious collection." *Id.*
- 225. *Id.* at 175. Professor Heald also points out that enacting such legislation under the Commerce Clause could "pose[] serious difficulties because the Court made it clear in *Feist* that such protection would directly conflict with the purpose of the [Copyright] Clause. According to the Court, the clause not only tells us what may be protected, but what must remain in the public domain." *Id.* at 172.

original works of authorship; circumventing this originality requirement by enacting legislation under the Commerce Clause may be unconstitutional.²²⁶

Nonetheless, in May 1996, Representative Moorhead introduced the Database Investment and Intellectual Property Antipiracy Act of 1996 which proposed an amendment to Title 15 of the United States Code.²²⁷ The Database Investment Act prohibited the "extract[ion], use or reuse of all or a substantial part... of the contents of a database... that conflicts with the database owner's normal exploitation of the database or adversely affects the actual or potential market for the database..."²²⁸ The Act further proscribed the use of the extracted data in a market which "directly or indirectly" competed in the market from which the data was extracted.²²⁹ This act also provided an abridged version of fair use: "a lawful user of a database made available to the public or placed in commercial use is not prohibited from extracting, using or reusing insubstantial parts of its contents, qualitatively or quantitatively, for any purposes whatsoever."²³⁰ A limiting aspect of this section concerns the lack of fair use rights to libraries or the educational community.²³¹ The boldest provision, however, appears in section three of the Database Investment Act.

A database is subject to the Act if it is the result of a qualitatively or quantitatively substantial investment of human, technical, financial or other resources in the collection, assembly, verification, organization or presentation of the database contents, and (i) the database is used or reused in commerce; or (ii) the database owner intends to use or reuse the database in commerce.²³²

This adaptation advocated the protection of databases as a result of "industrious collection" in direct contravention to the *Feist* decision.²³³

The remedies against violations hereunder shall be without prejudice to any remedies under any copyright that may subsist in the database, any contents of the database, or

^{226.} Professor Heald analogizes such action under the Bankruptcy Clause. In 1980, Congress attempted to protect "employees of the bankrupt . . . Rock Island estate, and not [extend such protection] to other railroad bankruptcies" which violated the "uniform" requirement of the Bankruptcy Clause. A unanimous Court responded that Congress could not enact such legislation under the Commerce Clause to bypass the Bankruptcy Clause's requirement of uniformity. *Id.*

^{227.} H.R. 3531, 104th Cong., 2d Sess. (1996) [hereinafter Database Investment Act]. This bill is also available on the Internet at gopher://wgate.house.gov. The official title of this bill reads: A bill to amend title 15, United States Code, to promote investment and prevent intellectual property piracy with respect to databases.

^{228.} Database Investment Act, supra note 225, at § 4(a)(1).

^{229.} *Id.* § 4(b)(1).

^{230.} Id. § 5(a).

^{231.} See 17 U.S.C. §§ 107, 108 (1994) for fair use rights extended to libraries and the educational community. See supra notes 75 and accompanying text.

^{232.} Database Investment Act, supra note 225, at § 3(a) (emphasis added).

^{233.} However, in a section entitled "Relationship to Other Laws," this act expressly acknowledged *Feist*, copyright law, and shrinkwrap licenses. *Id.* § 9.

The bill could have threatened the delicate balance of rights in the author's work with its availability to the public. The incentive to create would prevail as the database developer would then have assurances that the information in the database would not be misappropriated in a commercial fashion to compete with their database creation.²³⁴ However, the same Act failed to adequately protect public access to the information in the developer's database—how much information could a student copy for use in a research project?²³⁵

The Database Investment Act died on the house floor at the end of the 104th session. The reluctance to extend protection to facts, as in Geneva, prevails in Congress. Such a monopolistic approach to data is undesirable. Even if Congress drafts a bill which does not threaten the balance between the rights of the author and the availability to the public, a Constitutional question remains: may Congress constitutionally overrule the *Feist* decision by enacting a statute under the Commerce Clause? The answer remains tenuous at best.

V. AN ANALYSIS OF ALTERNATIVE APPROACHES TO DATABASE PROTECTION

A. ALTERNATIVE I: The Shrinkwrap License

Shrinkwrap licenses perpetuate a false sense of reliance in database protection. Shrinkwrap licenses furnish database developers with a security blanket because they project an *illusion* of protection. Conversely, *ProCD* and the U.C.C. Draft, which uphold shrinkwrap license enforceability, provide additional assurances to the developer. Why then this false sense of security? Copyright preemption. Section 301 of the Copyright Act explicitly preempts attempts to create "equivalent" rights to copyright law.²³⁷

The U.C.C. Draft recognized that shrinkwrap licenses tend to expand or restrict rights that conflict with copyright law. Consequently, the drafters are currently debating a proposed amendment to U.C.C. 2B-308 that prevents a term inconsistent with copyright law from becoming part of the contract.²³⁸

the selection, coordination or arrangement of such contents. . . . Nothing in this Act shall restrict the rights of parties freely to enter into licenses or any other contracts with respect to databases or their contents.

Id. § 9(a) & (b).

234. Id. § 4.

- 235. Id. § 5. The Database Investment Act, for example, failed to provide fair use provisions for educational purposes. Id. Further, the Act acknowledged the "rights of parties freely to enter into licenses or any other contracts with respect to databases or their contents." Id. § 9(b). This is the type of legislation Professor Litman feared: protection of database rights at the expense of the public domain. Litman, supra note 200.
- 236. Lisa H. Greene & Steven J. Rizzi, Database Protection Developments: Proposals Stall in the United States and WIPO, 9 No. 1 J. PROPRIETARY RTS. 2, 5 (1997).
 - 237. 17 U.S.C. § 301 (1994).
- 238. Copyright, supra note 149, at D3. See also Lemley, supra note 130, at 1292 (proposing a similar amendment under an older draft of the mass market license section: "a term does not

Yet, even this provision does not remedy the fundamental issue of copyright preemption of shrinkwrap licenses. Congress explicitly included a preemption section in the Copyright Act instead of relying solely upon the Supremacy Clause. This further demonstrates Congress' intent to protect copyright laws without succumbing to agreements which arbitrarily expanded an owner's rights in a work. Therefore, when properly analyzed and applied, copyright preemption weakens the shrinkwrap license approach as a viable solution to database protection.

B. ALTERNATIVE II: A Sui Generis Right for Database Protection

A more viable alternative might include *sui generis* database protection under the Commerce Clause. This option would preserve copyright policies—creating incentives for database development while meeting public demands for access to large repositories of information. Moreover, this option supports the assertion that if the work would otherwise go uncreated, there is a need to protect it.²³⁹ Additionally, given the EC Database Directive, such works may go unprotected if reciprocal protection is not provided nationally.²⁴⁰

The issue, however, is whether such legislation can survive judicial scrutiny. The Commerce Clause grants to Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States. . . . "241 In response to international activities, Congress may assert its mandated right to create legislation to "regulate Commerce with foreign Nations." The EC Directive calls for reciprocal legislation protecting database investments.²⁴³ The EC, as well as database developers, seek legislation which would prohibit substantial extraction or re-use of the database. This would prevent a subsequent developer from misappropriating the work and marketing it in a similar market thereby adversely affecting the original developer's market potential. Without such protection, EC technology companies will be less likely to participate in the U.S. market while U.S. technology companies lose their viability in the global economy. This lack of availability and access to global electronic databases also disturbs the founders desire to provide the public with creative works to stimulate and foster progress. Hence, it is likely that sui generis database protection, responding to international commerce concerns, could survive judicial scrutiny.

This option provides two avenues for developing such protection: copyright laws or the protectionary provisions under *sui generis* legislation. Providing two avenues of protection to the technology industry is not a new development. For

become part of the license if the term: . . . creates an obligation or imposes a limitation on the licensee that is inconsistent with federal intellectual property law, or that deprives the licensee of a right or privilege granted the licensee under federal intellectual property law.").

- 239. Heald, *supra* note 99, at 152-55.
- 240. See supra note 209 and accompanying text.
- 241. U.S. CONST. art. I, § 8, cl. 3 (the Commerce Clause).
- 242. Id.
- 243. See supra note 209 and accompanying text.

example, software vendors may opt for protection pursuant to the Copyright Act, patent laws²⁴⁴ or trade secret laws.²⁴⁵ Although providing protection across two areas of federal law might appear unappealing, such direction has been taken in the past and may offer a viable alternative for the future.

Congress should consider including compulsory licensing as part of this new form of protection.²⁴⁶ The database developer seeks the protection of his exhaustive investment. A compulsory licensing provision could provide for protection of the first compilation of facts, but require subsequent developers to procure a license from the initial developer for commercial derivative databases.²⁴⁷ This option permits facts to remain in the public domain while promoting the development of future works.

Additionally, the *sui generis* right should elaborate on fair use rights to the work. Such a provision should extend fair use to the education and research communities. Further, a fair use provision could provide limitations on the abuse of database extraction. Such a provision should allow a lawful user of a commercial database to extract or reuse insubstantial amounts of data from the database. If the extracted data serves educational needs (e.g., library use, classroom copies or research use), and is not used to compete commercially with the database, such use should be deemed inconsequential. A fair use provision is best applicable "when the objectives of the . . . system would be frustrated rather than furthered by a finding of [misappropriation]."²⁴⁸

Given that the recent Database Investment Act died on the House floor, considerable study and discussion is needed to evaluate this sensitive area of law. Congress may again need to turn to a committee to assess the needs of both the technology industry and the general public to establish proper reform. In 1974, Congress established CONTU to address copyright issues with respect to technology which resulted in effective recommendations. Perhaps it is time for Congress to institute "CONTU II" to address similar protectionary needs in the database industry. Such a commission should assess the viability of developing a new *sui generis* right, with elements of fair use as well as preventive measures for commercial misappropriation. This would protect developers' rights in the works, the public domain, and the common enduser/consumer of electronic goods. This alternative could provide effective protection domestically and

^{244.} See generally Wayne M. Kennard, Obtaining and Litigating Software Patents and Protecting Software on the Internet, 444 PLI/PAT. 275 (1996).

^{245.} See generally Victoria A. Cundiff, Protecting Computer Software as a Trade Secret, 444 PLI/PAT. 7 (1996).

^{246.} See Ginsburg, supra note 113, at 1925. A similar approach is advocated through amendment of the Copyright Act to allow for compulsory licensure of low authorship works. *Id.* at 1927.

^{247.} *Id.* at 1924-27. "The effect of compulsory license is to grant open access to the covered material, subject to an obligation to pay the owner for the use. Compulsory licensing substitutes compensation for control over the copyrighted work." *Id.* at 1925.

^{248.} Denicola, supra note 115, at 524.

^{249.} See generally CONTU Report, supra note 58.

internationally without offending the fundamental principles of the Copyright Clause. The creation of a *sui generis* right offers the best viable alternative to database protection.

CONCLUSION

Database protection under copyright law has deteriorated. Today, users seek information that is presented in a more efficient manner; this has fueled the demand for access to databases. Copyright law has had difficulty keeping pace. Consequently, shrinkwrap licenses have increased as the prevalent method for database protection. Yet, given the copyright preemption provision, such methods are ineffective.

This Note supports the creation of a *sui generis* right for database protection. While such an approach develops and endures refinement and debate, database developers, in the interim, will have to rely upon current copyright laws. In so doing, developers could advocate fair use of their database to protect against commercial inequities or misappropriation.

In repairing database protection, careful consideration should be given to the underlying policies of copyright law that stem from the framers of the Constitution. Congress has a constitutional mandate to provide incentives to authors to create works for the benefit of the public. Moreover, reform must effectively balance the protection of copyrighted works with the public interest. This necessarily includes an assessment of this balance in a global economy. The European Community has recognized the need and has aggressively pursued a solution. The Executive Branch also recognizes the need to ensure better copyright protection of online materials: "[t]he [Intellectual Property and the National Information Infrastructure] report suggests that the Internet will not flourish if significant protection against theft and copyright abuse is not offered." Similarly, the database industry will not flourish if proper protection is denied. To encourage database development, an aggressive study and resulting legislation is needed in order to continue to further the "Progress of Science and useful Arts."

^{250.} The framers expressly granted to Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

^{251.} Denicola, *supra* note 115, at 519. "[T]his mandate embraces a tension between economic incentives to produce, which are provided through the recognition of exclusive rights, and unfettered access to creative works in order to maximize dissemination and to enable past inventiveness to serve as the foundation for future contributions." *Id*.

^{252.} ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 647 (W.D. Wisc. 1996) (citing Guy Alvarez, New Legal Issues on the Net, Am. LAW. 28, 29 (Dec. Supp. 1995)).

^{253.} U.S. CONST. art. I, § 8, cl. 8.

APPENDIX: U.C.C. Draft § 2B-308. Mass Market Licenses.

- (a) Except as otherwise provided in section and Section 2B-309, a party adopts the terms of a mass-market license if the party agrees or manifests assent to the mass market license before or in connection with the initial use of or access to the information.
- (b) Terms adopted under subsection (a) include all of the terms of the license without regard to the knowledge or understanding of individual terms by the party assenting to the form. However, except as otherwise provided in this section, a term does not become part of the contract if the term creates an obligation or imposes a limitation which:
 - (1) the party proposing the form should know would cause an ordinary and reasonable person acquiring this type of information and receiving the form to refuse the license if that party knew that the license contained the particular term; or (2) conflicts with the previously negotiated terms of agreement.
- (c) A term excluded under subsection (b) is part of the contract if the party that did not prepare the form manifests assent to the term or if, under the circumstances, the limitation or obligation in the term was clearly disclosed to the party before it agreed or manifested assent to the mass market license.
- (d) A term of a mass market license which is unenforceable for failure to satisfy a *175 requirement of another provision of this article, such as a provision that expressly requires use of conspicuous language or manifested assent to the term, is not part of the contract.
- (e) A mass-market license must be interpreted whenever reasonable as treating in a similar fashion all parties situated similarly without regard to their knowledge or understanding of the terms of the record.
- (f) A term that states a limitation that would be placed on the party by copyright or patent law in the absence of the term does not within subsection (b)(1).

