

DATABASE PROTECTION: NATIONAL AND INTERNATIONAL ATTEMPTS TO PROVIDE LEGAL PROTECTION FOR DATABASES

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A popular Government, without popular information, or the means of acquiring it, is but a Prologue to a Farce or a Tragedy; or, perhaps both. Knowledge will forever govern ignorance: And a people who mean to be their own Governors, must arm themselves with the power which knowledge gives.¹

I. INTRODUCTION

Originally, databases primarily existed on paper.² Over the past thirty years, several American-initiated technological advances resulted in a new database medium. In the 1960s, the evolution of commercial computers³ resulted in the development and use of com-

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1. Letter from James Madison to W. T. Barry (Aug. 4, 1822), in 9 THE WRITINGS OF JAMES MADISON 103 (Gaillard Hunt ed., 1910).

2. See Ralph C. Losey, Practical and Legal Protection of Computer Databases (visited Apr. 14, 1998) <<http://seamless.com/rcl/article.html>>. Even with the advent of electronic databases, some databases still primarily exist on paper. Examples of paper-based databases still used today include phone books, reference tables, and television directories. See id.

3. In 1964, IBM introduced the standard institutional mainframe computer. See History of Computers and The Internet (visited May 20, 1998) <<http://www.plcmc.lib.nc.us/online/links/comphist.htm>> [hereinafter History Site].

puter databases, commonly referred to as "electronic databases."⁴ The use of electronic databases allows information to be accessed, manipulated, and used much faster than paper-based databases. In the mid-1980s, computer technology advanced to the point that computers became economical for household use.⁵ Thus, with more people using computers, the economic value of electronic databases has increased.⁶

The 1990s will be remembered as the birth decade for the information superhighway, commonly referred to as the Internet.⁷ By using a modem-equipped computer, and for no or a small fee, an individual can easily browse the information highway for facts ranging from box scores from last night's sporting events⁸ to the latest medical news about Alzheimer's disease.⁹

With computers and the Internet, the task of collecting, managing, and relocating huge amounts of data at one time has been simplified.¹⁰ Using these technologies in unison, individuals from one country can extract segments of an electronic database that is created and maintained in another country, craft their own specialized database, and then electronically provide their new database to the world.¹¹ Such copying could violate the copyright protections afforded to the original database.¹²

As database technology continues to progress, database owners¹³ contend that laws protecting and promoting the economic value of

4. Electronic databases are collections of information stored so that they can be selectively searched and the desired information retrieved using a computer. See Losey, *supra* note 2.

5. See History Site, *supra* note 3; see also *ACLU v. Reno*, 929 F. Supp. 824, 831 (E.D. Pa. 1996), *aff'd*, 117 S. Ct. 2329 (1997).

6. See 142 CONG. REC. E890-04 (daily ed. May 23, 1996) (statement of Rep. Moorhead).

7. The Internet is not a single physical entity. It is actually a worldwide network of interconnected small computer networks. For a complete explanation of the Internet, see *ACLU*, 929 F. Supp. at 831-39. The Internet was developed from the Department of Defense's Advanced Research Project Association Network (ARPANET). See *id.* ARPANET evolved to become known as the DARPA Internet and finally just Internet, when it expanded for civilian use. See *id.*; see also Losey, *supra* note 2.

8. See Sportline USA (visited Apr. 14, 1998) <<http://www.sportline.com>>.

9. See Alzheimers.com (visited Apr. 14, 1998) <<http://www.alzheimers.com/site>>.

10. See J. H. Reichman & Pamela Samuelson, *Intellectual Property Rights In Data?*, 50 *VAND. L. REV.* 51, 64 (1997).

11. See *id.*

12. See, e.g., *Playboy Enter., Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993) (finding that the unauthorized use of Playboy's photographs was a copyright infringement).

13. "Database owner" refers to the person, natural or legal, who has legal title to a database. A database owner can be the original compiler of a database or a subsequent owner. Even though the legislation that is the subject of this Comment uses different terms for a database owner, the terms used are similar to the general definition of "database owner." See *infra* Parts II.B.1, III.B, IV. Examples of database owners include West Publishing Co., LEXIS-NEXIS, and the Information Industry Association. The Information Industry Association is comprised of such companies as Thomas Business Informations,

databases have failed to advance at the same rate.¹⁴ Database owners further claim that more legal protection of databases is needed because of the substantial time, money, and effort expended developing databases,¹⁵ and the increasingly less expensive means of copying and disseminating them.¹⁶ Without better laws to protect databases, their quality will deteriorate because fewer individuals will expend the time and money to develop new and improved databases.¹⁷ If the quality deteriorates, both the U.S. economy and science will suffer.¹⁸

Those opposed to stronger database protection¹⁹ claim that those arguing for new laws have not provided sufficient evidence proving that there is a problem warranting a legislative solution.²⁰ As evidenced by the already thriving U.S. database industry, these opponents also claim that the existing legal, contractual, and technological protections are adequate.²¹ In light of the "quick fix" legislation proposed in the past,²² these opponents also believe that any new legislation must be carefully considered to avoid any unintended negative consequences.²³ A final concern, primarily from the scientific community, is that new legislation may impact the policy of full and open access to data that the U.S. has pursued internationally.²⁴

On March 11, 1996, the European Union (EU), seeing a need for more protection, promulgated Directive 96/9 Concerning the Legal Protection of Databases,²⁵ to provide copyright-like protection²⁶ to da-

McGraw-Hill Companies, NASDAQ Stock Market, GTE Directories Corp., and the Dow Jones Co. See IIA's Board of Directors (visited Jan. 2, 1997) <<http://www.infoindustry.org/presbrd/iiboard.htm>>. Throughout the remainder of this Comment, the term "database owners" is used to include database owners, database developers, and any other entity supporting the view that a sui generis right in databases is needed.

14. See Barry D. Weiss, *Barbed Wires and Branding in Cyberspace: The Future of Copyright Protection*, in UNDERSTANDING BASIC COPYRIGHT LAW 1996 397, 399 (PLI Pats., Copyrights, Trademarks, and Literary Prop. Handbook Series No. 450, 1996).

15. See U.S. COPYRIGHT OFF., REPORT ON LEGAL PROTECTION FOR DATABASES 67 (1997), available at <<http://lweb.loc.gov/copyright/more.html#rpt>> [hereinafter U.S. COPYRIGHT REPORT]; see also U.S. Industry Needs Legislation to Protect Investment in Databases (visited Dec. 12, 1996) <<http://www.infoindustry.org/ppgrc/prc/prdoc001.htm>>.

16. See U.S. COPYRIGHT REPORT, *supra* note 15, at 67.

17. See *id.*; see also 142 CONG. REC. E890-04 (daily ed. May 23, 1996) (statement of Rep. Moorhead).

18. See U.S. COPYRIGHT REPORT, *supra* note 15, at 67.

19. Opponents include the American Association for the Advancement of Science, the Library of Congress, the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. See *Proposals to Regulate the Public's Rights to Use Information Stored in "Databases"* (visited Apr. 14, 1998) <<http://www.publicdomain.org/database/database.html>>.

20. See U.S. COPYRIGHT REPORT, *supra* note 15, at 68.

21. See *id.*

22. See *infra* Part III.B.

23. See U.S. COPYRIGHT REPORT, *supra* note 15, at 68. Such negative consequences could include increased limitations or costs to access data. See *id.* at 68-69.

24. See *id.* at 69.

25. See Council Directive No. 96/9/EC, O.J. L 77/20 (1996) [hereinafter Directive].

tabases. The term used in the Directive for this copyright-like protection is "sui generis right."²⁷ This protection, however, is only afforded to developers whose countries provide similar reciprocal rights to databases developed by EU citizens and companies.²⁸ Since present U.S. law does not provide reciprocal rights, the 104th United States Congress evaluated a bill, the Database Investment and Intellectual Property Antipiracy Act (House Bill 3531)²⁹ that was to provide similar database protection in the U.S. Unfortunately for database owners, House Bill 3531 died in committee;³⁰ however, the 105th Congress is likely to introduce a similar bill because databases developed in the U.S. are now unprotected in the EU due to the Directive's reciprocity requirement.³¹

A worldwide effort is also underway to provide a sui generis right to databases. In the first government-level meeting of the World Intellectual Property Organization (WIPO)³² in twenty-five years, representatives from over 180 countries met in December 1996 to negotiate three new international copyright protection treaties specifically addressing advances in technology.³³ One of the proposals originally scheduled for negotiations, the Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases (WIPO Proposal),³⁴ provided a sui generis right to databases.³⁵ Due to opposition, WIPO delayed negotiations on this proposal until later in 1997.³⁶ At its Governing Bodies meeting on March

26. This is a non-copyright form of legal protection intended to supplement traditional copyright laws. See 142 CONG. REC. E890-04 (daily ed. May 23, 1996) (statement of Rep. Moorhead).

27. "Sui generis" means "of its own kind or class." BLACK'S LAW DICTIONARY 1434 (6th ed. 1990).

28. See Directive, *supra* note 25, art. 11.

29. See H.R. 3531, 104th Cong. (1996).

30. See Treaties: WIPO Delegates Agree on Two Treaties, 53 P.T.C.J. 145, 146 (1997).

31. See *id.*; see also Julius J. Marke, Database Protection Acts and the 105th Congress, N.Y.L.J., Mar. 18, 1997, available at <<http://www.ljextra.com/copyright/0318dbase.html>>. For further discussions on recent developments, see *infra* Part III.B.

32. The World Intellectual Property Organization (WIPO) is a specialized United Nations coordinating body for international patents, trademarks, and copyrights. See Copyright Talks Try to Take Byte out of Piracy, ST. LOUIS POST-DISPATCH, Dec. 3, 1996, at A1.

33. See *id.* The WIPO Conference was held in Geneva, Switzerland. See *id.*

34. See Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases to be Considered by the Diplomatic Conference, CRNR/DC/6, Aug. 30, 1996, available at <<http://www.acm.org/usacm/copyright/>> [hereinafter WIPO Proposal].

35. Three separate treaties were scheduled for negotiations. In addition to the treaty increasing copyright-like protection to databases, a second treaty proposes updates to the laws protecting literary and artistic work. The third treaty focuses on increasing protection of music and recordings. See An Eye on Geneva, WASH. POST, Dec. 7, 1996, at A24. The two other treaties were accepted. See Treaties: WIPO Delegates Agree on Two Treaties, *supra* note 30.

36. See Treaties: WIPO Delegates Agree on Two Treaties, *supra* note 30; see also Lisa H. Greene & Steven J. Rizzi, Database Protection Developments: Proposals Stall in the United States and WIPO, 9 No. 1 J. PROPRIETARY RTS. 2, 6 (1997) (quoting Commissioner

20 and 21, 1997, WIPO convened a "committee of experts," which met September 10 through 12, 1997.³⁷ Instead of the present WIPO proposal, the Committee considered a first draft of a new treaty, "a Treaty on Intellectual Property in Respect of Databases."³⁸ Over ninety countries and numerous intergovernmental and non-governmental organizations attended the September committee meeting.³⁹ The meeting culminated in a preliminary list of questions and aspects to consider for a sui generis right treaty.⁴⁰ WIPO will make available all collected comments by the end of June 1998 and an analysis summarizing the information will follow the comments.⁴¹

This Comment examines the sui generis right segments of the Directive, House Bill 3531, and the WIPO Proposal. Part II briefly explains and analyzes the significance of a European Union directive and its purpose. Part III reviews the present U.S. policy on database protection, case law, and proposed legislation. Part IV provides general background information on the WIPO Proposal. Part V reviews the database protection currently available, potential constitutional encumbrances to expanding protection through legislation, and two legislative options. Part VI concludes that Congress should not create new legislation at this time.

II. THE EUROPEAN DIRECTIVE ON THE LEGAL PROTECTION OF DATABASES

A. The Weight of a European Union Directive

The EU was created to establish a single, integrated market, allowing the free movement of goods through the establishment of

of Patents and Trademarks, Bruce Lehman, who noted that database protection "dropped out" of the deliberations following objections "from almost all countries of the world").

37. See WIPO, Preparatory Work on a Treaty Concerning Intellectual Property in Databases (visited Apr. 14, 1998) <http://www.wipo.org/eng/document/govbody/wo_gb_ab_/ab30_3.htm>.

38. *Id.*

39. See WIPO, Information Meeting on Intellectual Property in Databases § I (visited Apr. 14, 1998) <http://www.wipo.org/eng/meetings/infdat97/db_im_6.htm>.

40. See *id.* The questions and aspects to consider are:

- the need for such a system of protection;
- definitions of necessary concepts, such as 'database';
- the protected subject matter;
- the rights that should be granted;
- the scope of protection;
- determination of the beneficiary or holder of the rights;
- duration of the rights;
- exceptions in favor of, e.g., scientific and educational activities;
- principles of operation, such as national treatment or reciprocity; and
- means of enforcement and means for acquiring the proof of infringement.

Id. § IV.

41. See *id.* The analysis is scheduled for release by September 1998.

common economic and legal policies.⁴² One form in which these policies are communicated to member states is through a directive. A directive is considered a secondary community law⁴³ that is binding on the member states but which requires implementation by the enactment of a domestic law in each member state within a specified time period.⁴⁴

With respect to intellectual property protection, the EU has concentrated on two goals: establishing greater protection for intellectual property in order to promote creative and intellectual development;⁴⁵ and supporting the underlying EU objective of promoting the free movement of goods within the EU.⁴⁶ The Directive is one of several directives promulgated to meet these objectives.⁴⁷

B. Analysis of the Directive

On January 29, 1992, the European Commission announced a proposal for a directive granting legal protection to databases.⁴⁸ As finally adopted on March 11, 1996, the Directive covered both electronic and paper-based databases.⁴⁹ The Directive became effective January 1, 1998.⁵⁰ It consists of four chapters: chapter one addresses the scope of the Directive, chapter two addresses the copyright provisions, chapter three addresses the sui generis right provisions, and chapter four addresses common provisions. Chapters two and four

42. See Paul H. Vishny et al., *European Union Law: An Introduction*, SB04 ALI-ABA 1 (1996).

43. Other forms of secondary European legislation include regulations, decisions, recommendations, and opinions. See Fabio Marino, *Database Protection in the European Union* (visited Apr. 14, 1998) <<http://www.gelso.unitn.it/card-adm/Review/Students/Marino1.html>>. These forms of legislation are considered Secondary European legislation because their authority is established in the Primary European legislation. The Primary European legislation consists of the three treaties that established the EU. The first treaty was the 1957 Treaty of Rome. See Vishny, *supra* note 42, at 3. The goal of the Treaty of Rome was to create an integrated free market that allowed the free movement of goods, individuals, and capital. However, the goals were not fully reached. Subsequently, the Treaty of Rome was amended twice. The first amendment occurred with the signing of the second treaty, the Single European Act of 1987. See *Single European Act, 1987 O.J. (L 169) 1*. This treaty mandated the elimination of physical, technical, and fiscal barriers by 1992. The second amendment occurred with the signing of the third treaty, the Treaty on European Union, in 1992. See *Treaty on European Union, Feb. 7, 1992, 1992 O.J. (C 224) 1, 1 C.M.L.R. 719 (1992)*. In addition to referencing the member states as the European Union, this treaty established the four governmental institutions, a European system of central banks, and a staged achievement of economic and monetary union. See *id.*

44. See Marino, *supra* note 43, at 2.

45. See generally Vishny, *supra* note 42; Marino, *supra* note 43.

46. See generally Vishny, *supra* note 42.

47. See, e.g., *Directive on the Legal Protection of Software Programs, 91/5 O.J. (L 122) [hereinafter Software Protection]*.

48. See *Commission Proposal for a Council Directive on the Legal Protection of Databases, 1992 O.J. (C 156) 4*.

49. See *id.* art. 1.

50. See *Directive, supra* note 25, art. 16.

are outside the scope of this Comment and will not be addressed herein.

1. Chapter I: The Scope of the Directive

Chapter I consists of two articles: article one defines “database,” and article two addresses the limitations of the Directive. In article one, a database is defined as “a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.”⁵¹ This database definition is broad and provides much room for interpretation. The medium where a database resides is not specified. Thus, arguably any embodiment of a database receives protection. For example, suppose that a non-subscriber to a cable system that carries CNN’s Headline News views this station to obtain the results of last night’s baseball games from the “sports ticker.”⁵² This is a televised set of facts. Under the Directive’s definition, this is a database, which receives the protections established by the Directive.

The database definition is also broad enough to provide protection to any sort of compilation. Following this interpretation, fiction, non-fiction, educational and any other types of books are also protected. Non-verbal and non-numerical compilations receive the Directive’s protection as well. By not providing boundaries on the medium, apparently any compilation, broadcast or not, is protected under the Directive.

2. Chapter III: Sui Generis Right

Chapter III, which includes articles seven through eleven, is the most controversial section of the Directive. The EU established the sui generis right to protect non-copyrightable database contents.⁵³ The protection provided by the Directive is not conditioned on any creative or unique contribution of a database owner. Instead, article seven provides that a database owner must prove:

that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the

51. *Id.* art. 1. The Directive excludes from the definition of “database” computer programs used in making or operating databases. See *id.* Such programs are already protected by the Council Directive on the Legal Protection of Computer Programs. See *Software Protection*, *supra* note 47.

52. The Cable News Network (CNN) televises sports scores at the bottom of the television screen during its transmitted news casts. CNN designated this the “sports ticker.”

53. See Directive, *supra* note 25, Introduction.

whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database.⁵⁴

Besides not requiring any level of creativity, this passage is wrought with vague terms. For example, "qualitatively and/or quantitatively" is not defined in the Directive. Also, the Directive does not provide guidelines for determining a "substantial investment." Even though "extraction" is defined in House Bill 3531 and the WIPO Proposal, "extraction and/or re-utilization" is not defined in the Directive.⁵⁵ The limits on these terms and the Directive will remain unknown until the European courts apply the domestic versions of the Directive which will eventually be drafted.

Article 8 delineates the rights and obligations of lawful database users. A lawful database user is allowed to "extract and/or re-utilize" only the parts of a database authorized by the database owner.⁵⁶ Article 9 establishes the exceptions to the *sui generis* right. Member states may allow extraction of non-electronic databases for "private purposes."⁵⁷ However, "private purposes" are not defined. Database extraction for teaching or scientific research is allowed only if proper credit is given and the use has a non-commercial purpose.⁵⁸ Moreover, the Directive does not address non-scientific research such as historical research. Thus, some member states may protect such uses while others may not.⁵⁹

Article 10 defines the length of the *sui generis* right protection. The *sui generis* right runs for fifteen years beginning January 1 of the year following the date on which the database is completed.⁶⁰ However, if a database is not made available to the public when first completed, the protection period begins anew for fifteen years from January 1 of the year following the date when the database is first made available to the public.⁶¹ If a database is "substantially" modified, the fifteen-year protection begins anew for each new database that results. Unfortunately, the Directive fails to adequately define "substantially."⁶² Because a database is viewed as a singular item, the new protection period covers both the existing and modified sections of the database.⁶³

54. *Id.* art. 7.

55. See *infra* notes 121, 140 and accompanying text.

56. Directive, *supra* note 25, art. 8, § 1.

57. *Id.* art. 9.

58. See *id.*

59. Each member state is responsible for promulgating laws under the directive. See *supra* Part II.A.

60. See Directive, *supra* note 25, art. 10.

61. See *id.* § 2.

62. A substantial change to restart the 15 years is "the accumulation of successive additions, deletions or alterations" in respect to the contents of a database, resulting in the substantial modification of all or part of the database. *Id.* § 3.

63. See *id.*

Depending on how EU courts define "substantially," a database could have *sui generis* protection forever. Suppose that Company A releases a database to the public and updates one specific segment every thirteen years. Based on the Directive, this database's fifteen year protection begins anew with each "substantial" update. If Company B wants to "extract" the unaltered segments, the Directive prohibits Company B from using these original segments as long as Company A continues to update the segment identified as "substantially updated."

Article eleven includes the *sui generis* right's reciprocity requirement. This requirement is the reason why the U.S. Congress is considering passing similar legislation.⁶⁴ Only individuals and companies who are nationals or residents of countries that have adopted protection laws in accordance with a member state's law are granted protection.⁶⁵ A non-EU nation that does not have similar database protection rights does not receive a *sui generis* right for databases developed by its citizens and companies.⁶⁶

The Directive could significantly hurt attempts by the United States to provide full and open access to data for scientific research.⁶⁷ This issue is not addressed by the Directive. Thus, a database owner may deny a third party the right to use segments or all of an existing database to develop a better database, even if the third party is willing to pay a fee. Suppose that several years ago Historian A developed a database containing an analysis of weather conditions during wars throughout history. Now, Historian B wants to advance this database by creating one which includes an analysis of the weather's effect upon technology used during all previously fought wars. Despite Historian B's willingness to pay a licensing fee, Historian A refuses to allow Historian B to use the original database. The Directive does not provide Historian B any legal recourse.

Thus, under the Directive, when an individual collects information, however simple or generally known, she obtains legal protection after placing the information into a database. If another individual wants to extract a part of the database, the original collector may allow, request a fee, or refuse to allow the extraction.⁶⁸ However, suppose the original collector is a citizen from a country which does not provide a reciprocal *sui generis* right for databases and the individual desiring to extract is from an EU country. This second individual may do so without any repercussions from the Directive.

64. See Greene & Rizzi, *supra* note 36, at 3. Commissioner Lehman acknowledged that once the Directive becomes law in 1998, American databases lack protection in Europe. See *id.* at 7.

65. See Directive, *supra* note 25, art. 11, § 2.

66. See *id.* § 1.

67. See *supra* note 24 and accompanying text.

68. See Directive, *supra* note 25, art. 5.

III. DATABASE PROTECTION IN THE UNITED STATES

A. Recent U.S. Cases Considering Database Copyright Protection

In 1991, the U.S. Supreme Court decided *Feist Publications, Inc. v. Rural Telephone Service Co.*⁶⁹ Rural Telephone Co. (Rural) was a local phone company that published a white-pages phone book for the area it serviced.⁷⁰ Feist Publications (Feist) published a directory covering Rural's service area and several others.⁷¹ After being refused a license to Rural's directory, Feist copied Rural's directory without permission.⁷² Even though both the district and circuit courts found Feist liable for copyright infringement, the Supreme Court reversed.⁷³ The Supreme Court rejected the "sweat of the brow" doctrine,⁷⁴ determining that protection is only possible if the collection involves independent creation and originality in its compilation.⁷⁵ The Court commented that facts are not created, but only discovered;⁷⁶ therefore, copyright protection was not obtainable.⁷⁷ In other words, copyright protection of factual compilations is quite thin; for a compilation of facts to receive copyright protection, the database creator must use a minimum degree of originality and creativity when selecting and arranging the data.⁷⁸

The interpretation of Feist today is that "some fact compilations are so devoid of originality as to fall without" protection.⁷⁹ Since Feist, lower court decisions appear to generally follow its ruling. However, even while following Feist, two federal circuits have taken two different approaches.

In the Eleventh Circuit, a database is evaluated based on how information is selected and organized. For example, in *Bellsouth Adver-*

69. 499 U.S. 340 (1991).

70. See *id.* at 342.

71. See *id.* at 342-43.

72. See *id.* at 343.

73. See *id.* at 344, 364.

74. The classic formulation of this doctrine is articulated in *Jeweler's Circular Publishing Co. v. Keystone Publishing Co.*, 281 F. 83, 88 (2d Cir. 1922), which concluded that a right to copyright protection of a book where labor was expended does not depend on whether the materials that make up the book consist of matters that "show literary skill or originality, either in thought or in language, or anything more than industrious collection."

75. See *Feist*, 499 U.S. at 346. The Court concluded that originality required two components, "independent creation plus a modicum of creativity." *Id.*

76. See *id.* at 347, 350 ("Facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted.")

77. See *id.* at 350.

78. See *id.* at 345 ("[T]he requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be." (citation omitted)).

79. MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 3.04(B)(2) (1996).

tising & Publishing Corp. v. Donnelley Information Publishing, Inc.,⁸⁰ the Eleventh Circuit decided that a phone book's yellow pages did not have the minimum level of creativity required for copyright protection.⁸¹ Bellsouth prepared, published, and distributed a business yellow pages telephone directory for the Miami area.⁸² The subscribers were listed alphabetically under one or more headings.⁸³ Donnelley began soliciting businesses for placement in its own telephone directory for the same area.⁸⁴ Using Bellsouth's directory, Donnelley created a database of the names, addresses, telephone numbers, business types, and unit advertising of Bellsouth's subscribers.⁸⁵

The Eleventh Circuit decided that although Bellsouth's directory required "somewhat more organization and arrangement than the white pages directory considered in *Feist*," the grouping under certain headings was not original but dictated by the standard industry practice.⁸⁶ The court also concluded that the method used to collect listings for its directory did not justify providing protection.⁸⁷ In reaching this decision, the court considered the elements of selection, arrangement, and coordination as they appeared in the work as a whole.⁸⁸

The Eleventh Circuit eventually reached a similar decision in *Warren Publishing, Inc. v. Microdos Data Corp.*⁸⁹ Warren Publishing compiled and published an annual printed directory called the *Television & Cable Factbook*.⁹⁰ The *Factbook* contained information about all cable television systems in the nation.⁹¹ Microdos developed an electronic compilation of the nation's cable television systems.⁹² The district court found that Warren Publishing could not claim copyright protection for its data field format or the facts entered into the data fields.⁹³ However, the court found that Warren Publishing's principal community system used in selecting which systems to include was copyright protected.⁹⁴ Since Microdos failed to prove it obtained its

80. 999 F.2d 1436 (11th Cir. 1993) (en banc).

81. See *id.*

82. See *id.* at 1438.

83. See *id.*

84. See *id.*

85. *Id.* at 1439.

86. *Id.* at 1442.

87. See *id.* at 1441 (stating that the acts of selecting locations to list are not acts of authorship).

88. See *id.* at 1438.

89. 115 F.3d 1509 (11th Cir.), cert. denied, 118 S. Ct. 397 (1997).

90. See *id.* at 1511.

91. See *id.* at 1512. The type of information contained included cable system companies' names, addresses, telephone numbers, number of subscribers, channels offered, prices of services, and types of equipment used. See *id.*

92. See *id.*

93. See *id.* at 1513.

94. See *id.* at 1514.

information from a source other than the Factbook, the court found for Warren Publishing and granted a permanent injunction.⁹⁵

In its first review of the case, the Eleventh Circuit affirmed the district court's decision.⁹⁶ The circuit court had distinguished the Warren case from *Bellsouth*, concluding that the method used by a publisher to select communities for a directory of cable television systems was sufficiently creative and original enough to receive copyright protection.⁹⁷ Unlike *Bellsouth*, in which existing internal files were the source of the telephone directory, in Warren Publishing the data came from "an external universe of existing material drawn from the industry and not itself precisely contoured, and presented and listed in various forms by various compilers."⁹⁸ When the court finally reheard the case en banc, it reversed the district court's opinion by concluding that Microdos "copied no original selection, coordination, or arrangement of Warren's factual compilation."⁹⁹ Thus, Warren was not entitled to copyright protection.¹⁰⁰

The Second Circuit took a different approach in analyzing database cases under *Feist* through a selective application of the merger doctrine.¹⁰¹ In *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*,¹⁰² the Second Circuit found for the publisher, Maclean. Maclean published the *Official Used Car Valuations* book (the "Red Book"), a guide published every six weeks predicting used car values for various regions of the U.S.¹⁰³ CCC provided used car values through an on-line service.¹⁰⁴ In developing its database, CCC used large parts of the Red Book, but provided the information in various forms to its customers.¹⁰⁵ The district court granted summary judgment for CCC and McLean appealed.¹⁰⁶ At the circuit court, CCC claimed that, because of the merger doctrine,¹⁰⁷ the Red Book was not protected by copyright.¹⁰⁸ The court found for Maclean because its valuation information was not fact but, rather, opinion, which is protected by copyright laws.¹⁰⁹ The court believed that the application of

95. See *id.*

96. See *Warren Publ'g, Inc. v. Microdos Data Corp.*, 52 F.3d 950, 951 (11th Cir.), vacated en banc, 67 F.3d 276 (11th Cir. 1995).

97. See *id.* at 954.

98. *Id.*

99. *Warren*, 115 F.3d at 1520-21.

100. See *id.*

101. See *infra* note 75 and accompanying text.

102. 44 F.3d 61 (2d Cir. 1994).

103. See *id.* at 63.

104. See *id.* at 64.

105. See *id.*

106. See *id.*

107. The merger doctrine does not allow an idea which is expressed to receive protection. See *id.* at 71.

108. See *id.* at 73.

109. See *id.*

the merger doctrine would make copyright law illusory.¹¹⁰ Thus, this result was possible because the facts and ideas were “infused with the author’s taste or opinion”¹¹¹ rather than just the presentation of the information.

B. The Database Investment and Intellectual Property Antipiracy Act of 1996

On May 23, 1996, former Representative Carlos J. Moorhead¹¹² introduced the Database Investment and Intellectual Property Antipiracy Act of 1996, House Bill 3531.¹¹³ The stated objective of House Bill 3531 was to promote the continued investment in developing and producing databases and preventing the pirating of databases.¹¹⁴ House Bill 3531 died in the Judiciary Committee when the 104th Congress concluded.¹¹⁵ House Bill 3531 provided that a database receives legal protection 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.¹¹⁶

Several terms used in this definition are broad and ambiguous. For example, “‘Database’ means a collection, assembly or compilation, in any form or medium now or later known or developed, of works, data or other materials, arranged in a systematic or methodical way.”¹¹⁷ Based on this definition, examples of databases include a phone book, the previously mentioned CNN “sports ticker,”¹¹⁸ history or math books, literary works, and musical works. This definition also does not require a level of creativity as did the Feist ruling.¹¹⁹

House Bill 3531 would prohibit the “extract[ion], use or reuse [of] all or a substantial part, qualitatively or quantitatively, 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.”¹²⁰ Even though the bill attempts to

110. See *id.*

111. *Id.* at 71.

112. Repub., Cal.

113. See H.R. 3531, 104th Cong. (1996).

114. See *id.*

115. See Greene & Rizzi, *supra* note 36, at 3, 5.

116. *Id.* (quoting H.R. 3531, 104th Cong. § 3(a) (1996)).

117. H.R. 3531, 104th Cong. § 2 (1996).

118. See *supra* note 52 and accompanying text.

119. See *supra* notes 69-78 and accompanying text.

120. H.R. 3531, 104th Cong. § 4(1) (1996).

define “use,” “reuse,” and “extraction,” these definitions include vague terms. For example:

“Extraction” means the permanent or temporary transfer of all or a substantial part of the contents of a database or of a copy or copies thereof. Such transfer may be to an identical or different medium, and by any means or in any form, now or later known or developed.¹²¹

This definition does not specify how to determine “a substantial part” of a database. Instead, House Bill 3531 would define “insubstantial part” as any part of a database “whose extraction, use or reuse does not diminish the value of the database.”¹²² The “insubstantial part” definition does not go far enough because it does not address how to value a complete database or segments of a database. As another example, “‘use’ and ‘reuse’ means making available all or a substantial part, qualitatively or quantitatively, of the contents of a database.”¹²³ However, the term “qualitatively or quantitatively” is not defined.

Using House Bill 3531’s language, suppose Manufacturer Q sells a poorly perfected computer game that has a thoroughly developed database. Manufacturer X develops the best-selling computer game but does not develop a quality supporting database. Manufacturer X decides to use parts of Manufacturer Q’s database to enhance its own database. Should the value of Manufacturer Q’s database depend upon the “qualitative or quantitative” parts used by Manufacturer X, or should the value depend upon the complete database as used in Manufacturer Q’s application?

Section three identifies the databases protected by House Bill 3531. All databases, except those developed by a governmental entity, are protected if they are used in commerce.¹²⁴ Even though House Bill 3531 excludes databases developed by the government, database owners who obtain their database contents from a governmental entity are protected.¹²⁵ If another database owner wants to get the information, he must either seek permission from the original collector to remove it from the already-developed database or “reinvent the wheel” by collecting the information from the government. The original collector might require a fee to extract parts of her database or prohibit any use of it at all. Suppose that A developed a database of information collected by the Department of Defense. If B, an unauthorized user of A’s database, wanted to get this same information and A refused to provide it, even for a fee, B must obtain the information from the Department of Defense instead of from A’s data-

121. *Id.* § 2.

122. *Id.*

123. *Id.*

124. See *id.* § 3. The use in commerce may be either public or commercial. See *id.*

125. See *id.*

base. Unlike the Directive, House Bill 3531 does not provide an exception for personal or scientific uses.¹²⁶ Thus, for example, suppose a researcher is close to developing a cure for AIDS and wanted to pay a fee to use segments of a database which may hold the final keys to a solution. If the owner of this database refuses, the researcher must attempt to recreate the original database from scratch, assuming, of course, that the original information is still available.

Section six establishes the term of protection as twenty-five years from January 1 following the date that the database is placed into commercial use or made available to the public, whichever is earlier.¹²⁷ Since House Bill 3531 considers a database as a single entity, a significant change to a database restarts the protection period for both the new and old sections of the database.¹²⁸

Section ten contains a significant difference from the Directive. Section ten prohibits technologies designed and developed specifically to defeat database protection systems.¹²⁹ However, "to defeat database protection systems" is vague. If House Bill 3531 were limited to electronic databases, only electronic devices or programs designed specifically to copy segments of a database would be prohibited. However, because House Bill 3531 included protection of paper-based databases,¹³⁰ using scissors to cut out the "K" listings in a phone book would be an illegal act, especially if the scissors were specifically purchased for that purpose.

Even though House Bill 3531 did not pass, Congress is still interested in database protection legislation. In an attempt to fully analyze the need for a new database protection law, Senator Orrin Hatch¹³¹ asked the Copyright Office to prepare a report on the subject.¹³² After a series of meetings considering arguments for and against new legislation, the Copyright Office issued a neutral report in August 1997.¹³³ Based on this report, new legislation is expected to be introduced in Congress soon.¹³⁴

126. See *supra* notes 57-59 and accompanying text.

127. See H.R. 3531, 104th Cong. § 6 (1996).

128. See *id.*

129. See *id.* § 10.

130. See *supra* notes 117-19 and accompanying text.

131. Repub., Utah.

132. See U.S. COPYRIGHT REPORT, *supra* note 15, at 2. The report includes an overview of past and present domestic and international laws for database protection, descriptions of the existing industry database protection methods and Copyright Office registration practices for databases, and issues raised during the series of meetings. See *id.*

133. See *id.*

134. See Marke, *supra* note 31.

IV. THE WORLD INTELLECTUAL PROPERTY ORGANIZATION'S PROPOSAL

Since both House Bill 3531 and the Directive were used to draft the WIPO Proposal,¹³⁵ the WIPO Proposal includes many of the previously mentioned deficiencies.¹³⁶ For example, the WIPO Proposal provides protection to “any database that represents a substantial investment in the collection, assembly, verification, organization or presentation of the contents of the database.”¹³⁷ Based on the definition of “database,” this protection is broad. Article two defines “database” as “a collection of independent works, data or other materials arranged in a systematic or methodical way and capable of being individually accessed by electronic or other means.”¹³⁸ The definition does not contain a level of creativity requirement. A comment to the “database” definition allows the following to be termed databases: “collections of literary, musical, or audiovisual works or any other kind of works, or collections of other materials such as texts, sounds, images, numbers, facts, or data representing any other matter or substance.”¹³⁹ Not only does this definition extend beyond intellectual property areas, the WIPO Proposal limits judicial interpretation in deciding what is a database.

Similar concerns with using broad definitions also exist for the terms “extraction,” “substantial investment,” “substantial part,” and “utilization.” For example, article three states that “[t]he maker of a database eligible for protection . . . shall have the right to authorize or prohibit the extraction or utilization of its contents.”¹⁴⁰ Similar to the language in House Bill 3531, “extraction’ means 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,”¹⁴¹ and “substantial part’ . . . means any portion of the database, including an accumulation of small portions, that is of qualitative or quantitative significance to the value of the database.”¹⁴² As was the case with House Bill 3531, no factors for determining a database’s value are provided.¹⁴³

The WIPO Proposal provides protection for twenty-five years and fifteen years.¹⁴⁴ The two alternatives coincide with House Bill 3531’s twenty-five-year protection period and the Directive’s fifteen-year

135. See WIPO Proposal, *supra* note 34, at 2-3.

136. See *supra* Parts II.B., III.B.

137. WIPO Proposal, *supra* note 34, art. 1(1).

138. *Id.* art. 2(i).

139. *Id.* art. 2.02.

140. *Id.* art. 3(1).

141. *Id.* art. 2(ii).

142. *Id.* art. 2(v).

143. See *supra* notes 116-23 and accompanying text.

144. See WIPO Proposal, *supra* note 34, art. 8.

protection period.¹⁴⁵ Similar to House Bill 3531 and the Directive, the WIPO proposal includes a provision that potentially results in perpetual protection if a database owner continues making “[a]ny substantial change to the database” within the present protection period.¹⁴⁶ Consistent with the previously mentioned legislation, “substantial” is not defined.

As included in House Bill 3531, but not in the Directive, the WIPO Proposal outlaws the importation, manufacture, and distribution of devices to defeat self-imposed database protection systems and the rights granted by the WIPO Proposal.¹⁴⁷ Like House Bill 3531, everything ranging from ripping or cutting pages from a phone book to create a unique phone directory, to developing sophisticated computer programs to illegally extract segments from encrypted electronic databases available over the Internet to subscribers, is included.

As discussed previously, the breadth of this provision arguably outlaws technology that has other purposes.¹⁴⁸ As also excluded in House Bill 3531, the WIPO Proposal does not grant exemptions for personal or scientific use. Without a clearly defined exemption for such uses, the WIPO Proposal hinders technical and medical developments.¹⁴⁹ By not addressing the issue of allowing full and open access to scientific data, the WIPO Proposal does not support the U.S. effort for worldwide acceptance of this policy.¹⁵⁰ As WIPO continues to develop a new database protection proposal, the U.S. should strive to include language allowing for full and open access to both scientific and non-scientific data. As both the economic and technological markets continue to become more global, this language may help lead to new technological and scientific developments.

145. See *id.* art. 8.01.

146. *Id.* art. 8(3).

Any substantial change to the database, evaluated qualitatively or quantitatively, including any substantial change resulting from the accumulation of successive additions, deletions, verification, modifications in organization or presentation, or other alterations, which constitute a new substantial investment, shall qualify the database resulting from such investment for its own term of protection.

Id.

147. See *id.* art. 10.

Contracting Parties shall make unlawful the importation, manufacture or distribution of protection-defeating devices, or the offer or performance of any service having the same effect, by any person knowing or having reasonable grounds to know that the device or service will be used for, or in the course of, the exercise of rights provided under this Treaty that is not authorized by the rightholder or the law.

Id. art. 10(1).

148. See *supra* notes 129-30 and accompanying text.

149. See generally Reichman & Samuelson, *supra* note 10.

150. See *supra* note 24 and accompanying text.

V. PROTECTION ALTERNATIVES

A. Non-Legislative Options

One of the arguments against new database protection legislation is that database owners have other means to protect their investments. These other means of protection include legal, technical, and business options. For example, database owners can restrict database use through contractual restrictions, technological protections, and by altering the structure of their databases to incorporate greater creativity.¹⁵¹

After Feist, database owners strengthened their contractual protections by restricting the manner in which the database is used.¹⁵² For example, databases accessed through the Internet may contain restrictions for downloading and redistributing the database's contents. West Publishing Company provides such restrictions in its licensing agreement, which is provided on a cover page each time information is printed from WESTLAW.¹⁵³ This agreement provides for limitations on uses of WESTLAW's database beyond the limitations mandated by existing laws.

Database licensing agreements have their limitations. Because the information does not physically reside with the database owner once copied, the database owner has no way to insure that the licensing agreement is honored. If the database owner does not become aware of the copying until a third-party gains possession, the third party is not bound by the licensing agreement.¹⁵⁴

A case showing promise for protection under licensing agreements is *ProCD v. Zeidenberg*.¹⁵⁵ In *ProCD*, ProCD developed a database consisting of millions of residential and commercial telephone directory listings.¹⁵⁶ It sold this database as a CD-ROM product and included a "shrinkwrap" licensing agreement¹⁵⁷ prohibiting unauthorized copying.¹⁵⁸ Zeidenberg purchased the product, incorporated ProCD's database into his own database, and provided this database

151. See U.S. COPYRIGHT REPORT, *supra* note 15, at 19.

152. See *id.* at 22.

153. See, e.g., WEST GROUP, *DISCOVERING WESTLAW: THE ESSENTIAL GUIDE* (7th ed. 1997). Its licensing agreement states in part: "No part of a WESTLAW transmission may be copied, downloaded, stored in a retrieval system, further transmitted or otherwise reproduced, stored, disseminated, transferred or used, in any form or by any means, except as permitted in the WESTLAW Subscriber Agreement or with West's prior written agreement." *Id.*

154. See, e.g., *ProCD v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996).

155. 86 F.3d 1447 (1996).

156. See *id.* The listing included the names, addresses, telephone numbers, zip codes and even industry codes. They were obtained from over 3000 telephone directories. See *id.*

157. A "shrinkwrap license" is an agreement that is commonly placed inside retail boxes containing CD-ROM discs. These boxes are wrapped in plastic or cellophane "shrinkwrap." See *id.* at 1449.

158. See *id.*

free over the Internet.¹⁵⁹ Zeidenberg claimed that copyright law preempted the licensing agreement.¹⁶⁰ The court did not agree. Instead, the court found the shrinkwrap license valid and enforceable under the Uniform Commercial Code.¹⁶¹

Another contractual option which could protect databases is to provide access based on a pricing tier method.¹⁶² This approach would require a password to access the data. To access a database under this system, a database owner may charge universities or research facilities one price, small for-profit businesses a higher price, and corporations still a higher price. Different rates may also be charged depending on the customer's projected usage plan.¹⁶³ This appears to work better for companies generally in the business of providing information. For organizations whose purpose is not solely to provide information, this approach is arguably impractical and too expensive to maintain.¹⁶⁴

Even though they sound promising, advanced technological protections, namely encryption, are not yet sufficiently developed.¹⁶⁵ For now, user-passwords are an option commonly used. Nevertheless, database owners believe that encryption is the preferred protection method.¹⁶⁶ Even when the technology is ready, some database owners believe that this method will not provide enough protection. For example, encryption cannot protect databases once the contents are printed.¹⁶⁷ Moreover, if database owners must resort to a technological solution, the cost of developing databases will increase.¹⁶⁸

A third option is for database owners to make the database more creative. This is accomplished by adding opinions, abstracts, or other non-fact specific information. For example, West Publishing has a copyright for its headnotes and synopses that are included with the

159. See *id.* at 1450.

160. See *id.*

161. See *id.* at 1455. But see *Vault Corp. v. Quaid Software, Ltd.*, 847 F.2d 255, 269 (5th Cir. 1988) (holding that a shrinkwrap license for computer diskettes that contained a software program which prohibited unauthorized duplication of programs placed on them was an unenforceable "contract of adhesion").

162. See U.S. COPYRIGHT REPORT, *supra* note 15, at 25.

163. See, e.g., An Explanation of Changes for westlaw.com (visited Apr. 6, 1998) <<http://www.westlaw.com/help>>. WESTLAW has over 30 plans that vary depending on the type and frequency of use that is anticipated. See *id.*

164. See U.S. COPYRIGHT REPORT, *supra* note 15, at 25 (noting that "some science agencies have found price differentiation impractical, since it can be more expensive for them to keep track of who is entitled to which price").

165. See *id.* at 26. Database owners believe that encryption is at least a year away. See *id.*

166. See *id.*

167. See *id.* at 27.

168. See *id.* Also increasing cost is the fact that dissemination of databases over the Internet will involve not only encryption, but also a licensing statement that the user must agree to prior to access. See *id.* at 26.

judicial opinions.¹⁶⁹ Even though such an addition does not create copyright protection for the judicial opinions themselves, it may deter copying.¹⁷⁰ If someone still decides to copy and, if the added copyright material is significantly integrated with the factual segments, separating the different types of information may not be cost effective. However, database owners contend that, as technology improves, extracting the desired data is now easier and cheaper than developing such a database.¹⁷¹

Another option is to develop a more creative method of putting the database together to meet the Feist minimum level of creativity requirement. For example, the West Group uses its key numbering system as a means of accelerating the research of judicial rulings. Database owners and even some end users do not favor creative database development.¹⁷² Database owners perceive that creativity will add costs to development, while end users do not want the additional, potentially irrelevant information.¹⁷³ Furthermore, there is no guarantee that this creative approach will actually yield copyright protection.

Database owners have a recent case that supports their concerns. In *Matthew Bender & Co. v. West Publishing Co.*,¹⁷⁴ a court ruled that the creative changes made in a database did not rise to the level of copyright protection.¹⁷⁵ West Publishing claimed a copyright in the compilation of judicial decisions,¹⁷⁶ and pointed out several changes it made to the opinions as reasons why copyright protection was allowed. For example, West capitalizes the names or portions of the names that would be used in citing the case;¹⁷⁷ lists the docket number, the date argued and the date decided under the case name;¹⁷⁸ adds a "file line" that gives subsequent history, includes the names of the attorneys, corrects any misspellings or errors in either the form or substance of the opinion; fills in omitted citations not available at the time the original opinion is filed; and includes parallel citations.¹⁷⁹ The court evaluated all of these changes and even noted that West expends a considerable amount of time and money making

169. See *Matthew Bender & Co. v. West Publ'g Co.*, No. 94 Civ. 0589, 1997 WL 266972 *1 (S.D.N.Y. May 19, 1997).

170. But see *id.* Even though West invested time and money to supplement court opinions by adding, for example, parallel citations and attorney information, West still lost the case. See *id.*

171. See U.S. COPYRIGHT REPORT, *supra* note 15, at 67.

172. See *id.* at 22.

173. See *id.*

174. 1997 WL 266972 (S.D.N.Y. May 19, 1997).

175. See *id.* at *4.

176. See *id.* at *2.

177. See *id.* at *3-*4.

178. See *id.* at *3.

179. See *id.*

them.¹⁸⁰ However, “each of the changes that West makes to the cases it reports are trivial and, taken separately or collectively, they do not result in ‘a distinguishable variation’ of the opinion written by the court.”¹⁸¹

B. Constitutional Concerns

If Congress decides to pursue a legislative solution, it must be mindful of limitations imposed by the U.S. Constitution. The relevant constitutional provisions that Congress must consider are the Copyright Clause¹⁸² and the First Amendment.¹⁸³

The Copyright Clause states in part that “Congress shall 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.”¹⁸⁴ This clause prohibits any U.S. law from granting perpetual rights in a whole database.¹⁸⁵ As previously discussed, the renewable clauses in House Bill 3531 and WIPO could create perpetual rights, thereby violating this clause.¹⁸⁶ As long as the protection is not perpetual, Congress has the discretion to select a reasonable length for the protection period to last.¹⁸⁷

Based on the Supreme Court’s interpretation of the Copyright Clause in *Feist*, a minimum level of creativity is needed to receive legal protection.¹⁸⁸ Thus, arguably a purely factual database could not receive legal protection. As it has done with trademark law, which is not governed under the authority of the Copyright Clause, the Copyright Office has observed that Congress could possibly enact a database protection law under the authority of the Commerce Clause.¹⁸⁹ This possibility exists if the potential legislative protections are dif-

180. See *id.* at *4.

181. *Id.*

182. See U.S. CONST. art. I, § 8, cl. 8.

183. See *id.* amend. I.

184. *Id.* art. I, § 8, cl. 8.

185. See *id.* (“by securing for [a] limited time”).

186. See *supra* notes 127-28, 143-45 and accompanying text.

187. See NIMMER & NIMMER, *supra* note 79, § 1.05[A][1]. Congress increased copyright protection from 56 years after publication to the life of the author plus 50 years. See *id.*

188. See U.S. COPYRIGHT REPORT, *supra* note 15, at 107.

189. See *id.* After the Supreme Court’s ruling in *The Trademark Cases*, 100 U.S. 82 (1879), which held that trademark protection laws were not governed by the Copyright Clause because trademarks have different “essential characteristics” from inventions and writings and are the result of use instead of creation, trademark laws have been passed under the Commerce Clause and have gone unchallenged. See *id.* at 107-08. But see *Railway Lab. Exec. Ass’n v. Gibbons*, 455 U.S. 457, 468-69 (1982) (holding that Congress could not legislate under the Commerce Clause when the law violated the Article I Bankruptcy Clause). This case is distinguishable from *The Trademark Cases*, 100 U.S. 82 (1879). See U.S. COPYRIGHT REPORT *supra* note 15, at 108. Railway Labor may be the catalyst to strike down any far-reaching database protection law that Congress enacts. For a full discussion, see *id.* at 106-09.

ferent from copyright protection and are more in line with trademark law.¹⁹⁰

Because any database protection legislation could possibly affect how facts are communicated, potential First Amendment issues may arise. The Copyright Office recommends including in any proposed legislation an explicit clause clarifying that facts alone are not protected.¹⁹¹ This sort of clause is needed because, without it, database owners will attempt to use the new legislation to sue for facts copied from their databases, or the courts may strike down the legislation for violating the First Amendment.

C. Legislative Alternatives

If Congress decides to develop new database protection legislation, it will likely be based on either establishing a new property right or providing for some form of unfair competition.¹⁹² Database owners prefer creating a new property right.¹⁹³ If Congress decides to create a new property right, based on the critique of the Directive, House Bill 3531, and the WIPO, Congress must, at a minimum, develop better definitions for key terms, decide if the policy of full and open access to scientific information should continue,¹⁹⁴ and select an appropriate length for protection.

In developing better definitions for key terms, a narrow definition for "database" is needed. A possible definition is "a collection, assembly, or compilation of information in either electronic or paper-based format, arranged in a fashion requiring a level of creativity above a systematic or methodical fashion. The arrangement shall not be obvious, standard, or readily ascertainable by the intended market." As a means for imposing further limitations, the definition should include a list of items not considered a database, such as novels, mo-

190. See U.S. COPYRIGHT REPORT, *supra* note 15, at 108. Trademark law is grounded in the Commerce Clause whereas copyright law is based on the Patent and Copyright Clause of the Constitution. The original federal trademark laws were based on the Patent and Copyright Clause, but the Court declared them unconstitutional. See *TradeMark Cases*, 100 U.S. at 99. Following the Court's reasoning, all future trademark laws were based on the Commerce Clause. See *id.* at 97-99. A trademark can be granted for such things as a brand name, logo, shape, sound, smell, color, or any other non-functional but distinctive aspect of a product which helps to promote or distinguish it in the flow of commerce. See *Trademarks and Trademark Registration FAQs* (visited Oct. 2, 1997) <<http://www.bizfilings.com/tmrkfaq.htm>>. In contrast, copyright laws can protect the original works of expression, but not the unique name, title, shape, color, or any other trademark protected aspect of an item. See *id.*

191. See U.S. COPYRIGHT REPORT, *supra* note 15, at 109-10 ("If individual facts remain free to be used for purposes of expression, whether political, artistic or other, there may be little need from a First Amendment perspective to copy a substantial portion of an entire database.").

192. See *id.* at 88.

193. See *id.* at 90.

194. See *supra* note 24 and accompanying text.

tion pictures, any embodiment of musical recordings, and arrangements of art. Additionally, Congress should clarify what is not protected by adding a clause stating that the scope of the legislation does not impede laws regarding patents, trademarks, design rights, antitrust or unfair competition, trade secrets, access to public documents, and contracts.

Even though developing a definition for "database" to narrowly define what is protected appears achievable, doing so for some of the other key terms needed in this type of legislation will not be as easy. For example, defining "substantial" in a way that courts will reach similar conclusions is harder. Suppose the definition is "any part or parts of a database, including an accumulation of small portions, which could by itself be marketed, sold, or rented and used in place of the original database." Under this definition, if an individual copies a segment of a database and later uses it to accidentally make a new discovery, has that individual violated the law when the old database could have worked just as well?

Regardless of the definitions developed, there are certain clauses that database protection legislation should include. For instance, exclusions for personal, scientific, and educational purposes are needed. These exceptions will assist in promoting full and open access to information for scientific research. The absence of the personal and educational use exceptions may impede how U.S. citizens presently use the wealth of information available over the Internet. Without such exceptions, the free flow of information may become impeded.

The period of protection should be firm. Thus, it should not allow a rollover in the length of protection if changes to the database are made. As proposed in House Bill 3531 and the WIPO Proposal, if changes are made in a database, the term of protection begins anew for the complete database. If the new database contains material which is the same in the old database, the protection period for this material should not rollover. Thus, when a database is updated, only the updates should receive a renewal of the protection period.

Database owners want more protection because technology is making it easier to copy databases.¹⁹⁵ If this is the case, why make the protection period twenty-five years or even fifteen years? A shorter period, somewhere between five to ten years, is all that is needed. A shorter period is more in line with the realization that new computer technology is outdated approximately every one or two years.¹⁹⁶

195. See *supra* notes 14-16 and accompanying text.

196. According to computer experts, new computer technology is outdated approximately every one or two years. See Frank Chiang, *Intel Everywhere* (visited Apr. 7, 1998) <<http://edie.cprost.sfu.ca/~aware/intel.html>>.

If Congress must enact new legislation, opponents of creating a new property right would prefer that it be based on some form of unfair competition.¹⁹⁷ They view the new property right approach as too difficult to legislate.¹⁹⁸ They would like to see the decision reached in *National Basketball Association v. Motorola, Inc.*¹⁹⁹ codified in federal legislation.²⁰⁰ In *NBA*, the NBA sued Motorola for providing real-time information about NBA games to consumers through a hand-held pager.²⁰¹ The NBA claimed numerous violations, including copyright infringement, unfair competition by misappropriation under New York law, false advertising under federal trademark law, and unlawful interception of communication under the federal Communications Act of 1934.²⁰² The court concluded that the NBA did not have a cause of action.²⁰³ In reaching this decision, the court stated that the NBA needed to show a sufficient competitive effect on the markets for its own products.²⁰⁴ When the court addressed the state law misappropriation claim, it presented the framework for an unfair competition database protection law. The court stated that protection under New York common law, without preemption, occurs if:

(i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant's use of the information constitutes free riding on the plaintiff's efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiffs; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened.²⁰⁵

Although there are problems with this approach,²⁰⁶ if developed properly, this type of legislation may work better than legislation that establishes a new property right. Developing this type of legislation will require preempting some state laws. For example, Congress must ensure that the law is applied uniformly throughout the U.S. Doing so will require uniform misappropriation laws. Congress should review all states' misappropriation laws, which are based on common law, and then create national legislation to preempt these laws.²⁰⁷

197. See U.S. COPYRIGHT REPORT, *supra* note 15, at 90.

198. See *id.* at 91-95.

199. 105 F.3d 841 (2d Cir. 1997).

200. See U.S. COPYRIGHT REPORT, *supra* note 15, at 90.

201. See *NBA*, 105 F.3d at 843.

202. See *id.* at 844.

203. See *id.* at 853-54.

204. See *id.* at 853.

205. *Id.* at 845.

206. See U.S. COPYRIGHT REPORT, *supra* note 15, at 83-84.

207. On October 9, 1997, the Collections of Information Antipiracy Act, House Bill 2652 was introduced into Congress. See H.R. 2652, 105th Cong. (1997). Based upon a mis-

VI. CONCLUSION

House Bill 3531 was developed for two reasons: to provide database owners a *sui generis* right for databases that contain purely factual information, and to provide the reciprocal rights that the EU requires as expressed in the Directive.²⁰⁸ The WIPO Proposal is an attempt at expanding a *sui generis* right for databases worldwide. Even though WIPO's goal of a worldwide treaty is commendable, House Bill 3531, the Directive, and the WIPO Proposal are flawed. They are drafted with several broad and ambiguous terms, they hinder the free flow of information, and their prerequisites for protection are based only on the time and effort in developing the database, no matter how minute, not the level of creativity involved.

Granted, as pronounced by the Supreme Court in *Feist*, U.S. law does not protect the efforts of database owners who develop new and improved databases where no level of creativity is applied. However, if Congress wants to enact legislation to provide for database protection in the form of a new property right, the legislation's scope must be narrower than House Bill 3531's scope. The new legislation must not infringe on the Copyright Clause or First Amendment of the Constitution. It must also include a codification of the *Feist* holding. Lastly, to maintain the flow of information that U.S. citizens are accustomed to, the new legislation must provide exemptions for personal, scientific, and educational uses.

Considering the reciprocal requirement stipulated in the Directive, some believe that legislating a new property right is the proper way to meet the Directive's requirement. Congress, however, should not allow this argument to persuade its decision. Once Congress decides upon the type of additional protection to provide databases, the U.S. should approach the EU and the various international trade organizations to first determine whether the reciprocity requirement is legal in light of existing treaties.²⁰⁹ The next step is to present the

appropriations concept, this bill makes individuals liable for taking one person's collection of gathered information and using it to compete with the original collector in a commercial market. See *id.* § 1201.

Any person who extracts, or uses in commerce, all or a substantial part of a collection of information gathered, organized, or maintained by another person through the investment of substantial monetary or other resources, so as to harm that other person's actual or potential market for a product or service that incorporates that collection of information and is offered by that other person in commerce, shall be liable

Id. This bill provides an exemption for not-for-profit educational, scientific, research, or news reporting purposes. See *id.* § 1202. House Bill 2652 would preempt state misappropriation laws. See *id.* § 1205(b).

208. See Greene & Rizzi, *supra* note 36, at 7 (quoting Commissioner Lehman).

209. Opponents to any new legislation argue that an EU directive which does not provide foreigners national treatment may violate trade laws and obligations under multilateral intellectual property treaties. See U.S. COPYRIGHT REPORT, *supra* note 15, at 86-88.

approach to WIPO as the possible basis for an international treaty. If the Directive is valid under present international laws, an additional step is for the U.S. to negotiate an agreement with the EU that is within the confines of the Constitution.

In considering the previously mentioned three options for protection,²¹⁰ Congress should not act by passing new legislation at this time. Database owners have means presently available to protect their investments. Even though database owners claim they are losing revenue, they have not provided proof of their losses. Moreover, they should present their losses after implementing all protection methods available—encryption, user-passwords, licensing agreements, and creative database development. While the initial costs of implementing all of these protective devices may raise the price of database development, in time they will be considered part of the cost of doing business.

If Congress feels compelled to act, any proposed law should include a clause allowing full and open access for personal, educational, and scientific uses, and a clause limiting the time frame for protection. As for its form, Congress should center the legislation's legal theory around the unfair competition test presented in *NBA*. Whichever approach Congress decides to pursue, it should attempt to balance the concerns of both database owners and users. Even though the *NBA* position is not exactly what database owners want, this approach, if developed correctly, should provide a proper balance between the opposing parties.

210. See *supra* Part V.