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Feist or Famine - American Database Copyright as an Economic Model for the European Union

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FEIST OR FAMINE – AMERICAN DATABASE COPYRIGHT AS AN ECONOMIC MODEL FOR THE EUROPEAN UNION

I. INTRODUCTION

The copyright laws of the United States and the European Union have become key forces in the international competition for market share in one of the most dynamic sectors of the world economy. The United States and the European Union have embarked on divergent regimes for the copyright protection of computer databases. The aim of European Union law is to protect local database developers by granting them ownership of the data collected in their compilations.[1] In contradistinction, the aim of United States law is to maximize market efficiency by protecting only creative selection and arrangement of data and leaving the underlying facts free for the taking.[2]

At the center of the division between the two regimes is a basic provision of United States copyright law; the "thin" protection granted to the facts in a data compilation.[3] The protection is "thin" because the compiler of a database can only gain copyright for the creative way in which he has organized the data he collected; he does not, however, gain any protection for the effort, or "sweat of the brow," he has invested in the collection. No matter how many thousands of hours or millions of

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1. Proposal for a Council Directive on the Legal Protection of Databases, COM(92)24 final § 3.2.8, at 25 [hereinafter Proposed Directive].

2. Yale Brownstein, *Economics of Property Rights as Applied to Computer Software and Databases* (a study commissioned by the Congressional Commission on New Technological Uses of Copyright (CONTU)), *in* 4 COPYRIGHT, CONGRESS AND TECHNOLOGY: THE PUBLIC RECORD 1-21 (Nicholas Henry ed., 1980).

3. A "compilation" is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works. 17 U.S.C.S. § 101 (1978). The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, and does not imply any exclusive right in the preexisting material. "The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material." 17 U.S.C. § 103(b) (1988).

dollars are spent gathering data, traditional copyright law grants only a "thin" copyright in the creative organization and always leaves the facts collected free to be used by someone else.

The United States copyright approach to data compilations adheres to the creative selection approach. The Copyright Act of 1976 was interpreted definitively in the context of data compilations by a unanimous decision of the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Co.*[4] In an opinion by Justice O'Connor, the Court held that alphabetical listings in a telephone book did not contain the minimum level of creativity required for copyright. The *Feist* Court explicitly rejected the "sweat of the brow" proposition that the creator of a data compilation such as a telephone book should be economically rewarded for his effort regardless of the creativity it exhibits.[5]

In contrast, the European Union has abandoned the fact/expression distinction for data compilations. In order to spur domestic development of computer databases, the "sweat of the brow" doctrine is at the heart of the Commission of the European Communities' Proposal for a Council Directive on the Legal Protection of Databases (Proposed Directive).[6] Unlike *Feist,* which covers all compilations, the Proposed Directive is specifically targeted to computer databases. The Proposed Directive contains a two-tiered approach to database copyright.[7] The first tier grants a copyright in creative selection and arrangement, which is largely consistent with existing international copyright law as embodied in the Berne Convention,[8] and consequently with United States law as articulated in *Feist.*[9] The second tier, however, is a sui generis provision which prohibits unfair extraction or copying of the facts in an

4. 499 U.S. 340 (1991).

5. *Id.* at 351-55.

6. Proposed Directive, *supra* note 1. (Prior to the ratification of the Maastricht Treaty in 1993, the European Union was known as the European Communities. Titles of documents prior to 1993 bear the previous name.).

7. *Id.* at 34.

8. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1986, as revised at Paris, July 24, 1971, 102 Stat. 2853, 828 U.N.T.S. 221, *excerpts reprinted in* ALAN LATMAN ET AL., COPYRIGHT FOR THE NINETIES app. at 135 (1992).

9. *Feist,* 499 U.S. at 340.

otherwise unprotected work.[10] While the Commission asserts that such an approach does not extend a copyright to facts,[11] in actuality it has the effect of granting to the original compiler a limited "ownership" of the facts.

The drafters of the Proposed Directive appear to be interested in increasing the European share of a market central to the economic development plans of most industrialized nations. Intellectual property from movies to microchips is the engine driving United States foreign trade at the expense of many of her staunchest competitors. In 1990, the United States enjoyed a $12.6 billion trade surplus in copyright and patent license transactions; it was the only G-7[12] nation to run a surplus.[13] In the same year, worldwide revenue in online databases was just over $9 billion.[14] Though just a small segment of the larger intellectual property market, the database industry is among the fastest growing.[15] While European database developers produced almost half the world total of databases, they accounted for only one quarter of the total revenue. This is because nonprofit producers (governments) still produce the majority (fifty-four percent) of European databases, whereas American databases are produced largely by the private sector (seventy-two percent).[16]

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10. Proposed Directive, *supra* note 1, §§ 5.3.6, 5.3.7., at 35.

11. *Id.*

12. The G-7 is the group of the world's seven richest industrial nations. The G-7 are: Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

13. *Policing Thoughts,* THE ECONOMIST, Aug. 22, 1992, at 55, 56.

14. Brief of the Information Industry Association and ADAPSO, the Computer Services Industry Association, Inc. as *Amicus Curiae* in Support of Neither Party at 21 n.17, Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991) (No.89-1909) (citing U.S. DEP'T OF COMMERCE, 1990 INDUSTRIAL OUTLOOK (1990)) [hereinafter *Amicus* Brief].

15. Proposed Directive, *supra* note 1, § 1.2, at 3.

16. *Id.*, § 2.1.6, at 7. The Information Technology Association of America (formerly ADAPSO) included the following nonexhaustive list of examples of private sector data compilations in its amicus curiae brief in *Feist*:

> *Financial Information Databases.* The stock quotation "IBM 108 3/8 1 1/8" may not be protectible by copyright. But the collection and assembly of this and many other similar statements, and their arrangement in any of a wide variety of ways, can satisfy the criteria for protection as a compilation. Examples range from the familiar stock tables or earnings reports in the financial pages of the daily newspaper to customized data subsets based on the industry sector, geography, enterprise size or other factors. Financial databases, whether historical "snapshots" of corporate

This Note will argue that the European Union's approach to database protection is anticompetitive and inefficient. While it may help European database developers in the short term by shielding them from competition, the European Union's treatment will slow the growth of a vital industry in the long term. In contrast, this Note will demonstrate that the American scheme ensures a more efficient market for data, allowing faster growth in a less regulated market. Part II of this Note will place copyright law in an economic context. Part III will survey the copyright protection afforded data compilations in the United States and the European Union. Part IV will trace the development cycle of a computer database and apply the legal principles of the respective regimes to each stage of the cycle. Within the framework of the development life cycle, this Note will argue that United States copyright law as it relates to data compilations is the optimum policy alternative for growth of an efficient market. By contrast, it will become clear

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financial performance or systems that reflect current trading, are today indispensable tools for investors, regulators and participants in all financial markets.

Credit Reporting Systems. Each business day, hundreds of thousands of business decisions are made on whether to grant credit to an individual or company seeking it. The factual basis for these determinations is drawn from copyrightable compilations of credit data. The data themselves—factual statements concerning credit history—often are not individually eligible for copyright protection.

Demographic Databases. In these compilations, uncopyrightable data items on defined categories of people are collected and arranged in a variety of ways. The data consist of factual statements about subjects ranging from buying habits to neighborhood traffic patterns, from property tax records to stated political affiliations. The resulting databases play a dominant role in marketing, fundraising, and planning decisions of incalculable significance.

Bibliographic Databases. Researchers and students worldwide rely upon compilations ranging from traditional card catalogs to computerized systems of references to medical, scientific or legal literature (for example, SHEPARD's citations). While some of these databases include expository summaries or abstracts of the contents of the works indexed, even those limited to catalog number, author, title, publisher and similar factual information are protectible as compilations.

Economic and Industrial Databases. These compilations assemble and present statistical data on housing and construction, trade, manufacturing, agriculture, natural resources, health transportation, and other quantifiable aspects of economic and social activity. These databases underpin momentous decisions made every day at all levels of business and government.

Amicus Brief, supra note 14 at 8-9.

that the European Union's Proposed Directive is geared toward the profit interests of local database compilers at the expense of global macroeconomic gain.

This Note will not discuss copyright theory's usual concern with the moral (or natural) rights of the author to own what he has produced. Both regimes are principally concerned with the proper level of economic protection for both the supplier and the consumer of databases. The United States, though recognizing moral rights in some contexts, has effectively eliminated these concerns from the discussion of compilations in both case and statutory law. Similarly, while many of the European Union member states recognize moral rights, because such rights are thought not to distort competition between states, the supranational laws of the Union in this context are silent on the subject.[17]

Additionally, this note will not address the debate over whether copyright is the proper protection for databases at all. A vocal chorus of critics argues that copyright is not the appropriate regime for the protection of computer databases.[18] These critics believe that the analogy between data compilations and databases is strained at best. The problem is that any protection granted to a database by virtue of its organization would simply be too difficult to disentangle from the protection granted to the underlying computer program. Although this argument is compelling in many respects, both the United States and the European Union have, for the foreseeable future, settled on copyright as the protection for both databases and data compilations.

II. COPYRIGHT IN AN ECONOMIC CONTEXT

Copyright is a property right rooted in the ancient recognition that the free market, if left unregulated, would not sufficiently compensate the creative expression of new ideas. Copyright is one of the earliest statutory rights to receive widespread acceptance.[19] The market does not reward expression

17. Green Paper on Copyright and the Challenge of Technology, COM(88)172 final § 1.4.9, at 7 [hereinafter Green Paper].

18. For a survey of this argument, see Leo J. Raskind, *Assessing the Impact of Feist*, 17 U. DAYTON L. REV. 331 (1992).

19. The Statute of Anne, 1710, 8 Anne ch. 19 (Eng.), was the first statute to specifically recognize the rights of authors and is the statutory basis for all legis-

absent copyright because once a work is printed or otherwise disseminated, the author enjoys no physical control over it. A work can be copied and reproduced such that the author not only loses control over the actual words he has written or picture he has painted, but also over any profit which might be earned from a purchase of copies of the work.[20] This makes private investment in the authoring and production of a work a very unattractive business absent some legal protection.[21]

In a desire to reward the author, and hence encourage production of new works, copyright essentially grants the author a monopoly over the reproduction and dissemination of his creative expression for a limited period of time.[22] Thus, copyright is also a tax to society, because the author may set any price he chooses for the work, though the work faces potential substitution if the price is too high and buyers opt instead for other, similar works. Competitors are prohibited from copying expressions without the author's consent. To produce new works, competitors must pay to license, or they must start from scratch.[23] Hence the public may be burdened by higher prices or limited access to the copyrighted work.[24] Copyright thus establishes a tax on readers, publishers, and competitors for the purpose of rewarding writers.[25] In order to protect the copyright holder while mitigating the burden of his monopoly on his competitors and customers, the protection is limited to creative expression for a specific period of time. In contrast, if the purpose of copyright were solely to reward the author, copyright would be absolute in duration and scope. The limit is important because the purpose of copyright is not solely to reward the author, but rather to induce production at the min-

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lation on copyright both in the United States and abroad. ALAN LATMAN ET AL., COPYRIGHT FOR THE NINETIES 1 (Robert A. Gorman & Jane C. Ginsburg eds., 3d ed. 1989) (citing JAMES RANSOM, THE FIRST COPYRIGHT STATUTE (1956)).

20. Alfred C. Yen, *The Legacy of Feist: Consequences of the Weak Connection Between Copyright and the Economics of Public Goods*, 52 OHIO ST. L.J. 1343, 1364 (1991).

21. *Id.* at 1367.

22. Brownstein, *supra* note 2, at 9.

23. *See* Yen, *supra* note 20, at 1365.

24. *Id.*

25. According to one early commentator, "the tax is an exceedingly bad one; it is a tax on one of the most innocent and most salutary of human pleasures." LATMAN ET AL. *supra* note 19, at 16 (quoting 1841 speech in House of Commons by Macauley, in 8 WORKS 201 (Trevelyan ed., 1879)).

imum possible cost to society.[26] The law, by limiting the ownership of data, thus favors its free movement and therefore contributes to the general progress of society.

In contrast, the policy behind the sui generis protection in the European Union's Proposed Directive is intended to maximize profit in information services for European providers of information services.[27] This policy choice is not rooted solely in economics; European law also recognizes a moral right to intellectual property which is absent in United States law.[28] Fundamentally, however, the Proposed Directive is intended to favor European database publishers at the expense of their customers and non-EU competitors.[29]

III. AN OVERVIEW OF COPYRIGHT PROTECTION FOR DATABASES IN THE UNITED STATES AND EUROPEAN UNION

A. *United States Law*

United States copyright law, as it relates to data compilations, can be divided broadly into the period before and the period after the Supreme Court's decision in *Feist Publications v. Rural Telephone Service Co.*[30] Prior to *Feist,* circuit courts were split as to whether creative selection and arrangement of facts were the only protectible elements of a compilation, or whether the author's effort in compiling the data should be considered, and protection granted based on the "sweat of the

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26. *See* Yen, *supra* note 20, at 1365.

27. Proposed Directive, *supra* note 1, § 1.1, at 2.

28. Briefly, the moral right theory of copyright is rooted in the economic philosophy of John Locke, who wrote that a person should own a work simply by virtue of the fact that he or she created it. While American law has embraced this concept in certain cases, it is not the law as expressed in *Feist. See* Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property,* 102 YALE L.J. 1533 (1993); *see also* Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession,* 51 OHIO ST. L.J. 517 (1990).

While moral rights were considered an important general consideration in the drafting of the Proposed Directive, the authors of the EU law reasoned that as all member states are adherents to the Berne Convention "a certain fundamental convergence of their law had already been achieved." More specifically, "differences in national approaches to the authors' moral rights . . . do not in general produce situations which need to be addressed by the Community." Green Paper, *supra* note 17, § 1.4.9, at 7.

29. Green Paper, *supra* note 17, § 1.3.3, at 4.

30. 499 U.S. 340 (1991).

brow." *Feist* resolved the circuit split by coming down emphatically on the side of a strict creativity requirement. This requirement represented a fairly dramatic narrowing of the scope of protection for data compilations and computer databases.[31]

Although *Feist* represents a decisive consolidation of United States law on the topic, it must be considered in light of several other elements. First, in order to understand the tone and intent of the *Feist* court, one must consider the constitutional roots of the creativity requirement and the concerns of the Framers. Second, the nature of the circuit split leading to *Feist* dictated much of the decision's language. Third, the 1976 Copyright Act contains statutory provisions which clarified a number of areas and substantially strengthened the argument for the creativity requirement. Fourth, the contours of the creativity requirement as articulated in *Feist* must be examined. Finally, two cases are offered to illustrate how *Feist* is interpreted by lower courts. One case recently decided by the Court of Appeals for the Eleventh Circuit, *Bellsouth Advertising Co. v. Donnelly*,[32] offers great insight into the difficulties faced in applying copyright law to databases, simultaneously showing that the creativity requirement is an appropriate and durable analysis when applied to emerging information technology. A second case, *Key Publications v. Chinatown Today*,[33] is illustrative of circumstances found to satisfy the narrow creative selection and arrangement standard articulated in *Feist*.

1. The Roots of the Creativity Requirement

The basis of the creativity requirement for copyright protection lies in the United States Constitution.[34] The argument that creativity and originality are inherent in the notion of authorship stems from the Copyright Clause.[35] Because the

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31. *See generally* Raskind, *supra* note 18.

32. 999 F.2d 1436 (11th Cir. 1993).

33. 945 F.2d 509 (2d Cir. 1991).

34. "The Congress shall have Power . . . To 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.

35. The Copyright Act of 1976 states:

> Copyright protection subsists, in accordance with this title, in original

Constitution grants Congress the power to provide copyright protection only to authors, only creative expression is protected.[36] This limit also ensures that facts are not copyrightable.

Two cases from the late nineteenth century stand as the foundation of the creativity requirement in modern United States law: *The Trade-Mark Cases*[37] and *Burrow-Giles Lithographic Co. v. Sarony*.[38] In *The Trade-Mark Cases* the Supreme Court determined that for a work to be termed a writing entitled to protection, "originality is required."[39] The Court stated that:

> while the word "writings" may be liberally construed, as it has been, to include original designs for engraving, prints, &c., it is only such as are *original*, and are founded in the creative powers of the mind. The writings which are to be protected are *the fruits of intellectual labor*, embodied in the form of books, prints, engravings, and the like.[40]

Similarly, the *Burrow-Giles* Court emphasized the indispensable importance of creativity to copyright. The Supreme Court wrote that copyright protection should only be afforded to the "original intellectual conceptions of the author."[41] The Court challenged authors alleging infringement to prove the "existence of those facts of originality, of intellectual production, of thought, and conception . . . ."[42]

More recent courts have amplified the creativity requirement and its role in United States copyright law. The decisions

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> works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories: (1) literary works . . . .

17 U.S.C. § 102(a) (1988).

Furthermore, "[t]he subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully." 17 U.S.C. § 103(a) (1988).

36. MELVILLE B. NIMMER & DAVID NIMMER, 1 NIMMER ON COPYRIGHT § 1.03(A) (1994).

37. 100 U.S. 82 (1879).

38. 111 U.S. 53 (1884).

39. 100 U.S. at 94.

40. *Id.*

41. 111 U.S. at 58.

42. *Id.* at 59-60.

pay particular attention to the balance that must be established between ensuring the author's incentive to produce and the sufficiently free flow of information in order to promote the advancement of useful knowledge. For example, in *Sony Corp. of America v. Universal City Studios, Inc.*,[43] the Court reiterated the proposition that copyright is a limited grant intended to motivate the creative activity of authors on one hand, while ensuring the free flow of ideas on the other.[44]

2. The Split in the Federal Circuits Prior to *Feist*

Although the modern creativity requirement has a strong pedigree in United States copyright jurisprudence, it has not always been the consensus position. On the contrary, all but two circuits long held that, for reasons of basic moral equity and encouragement of author production, the effort of an author or compiler should be considered in the copyright analysis.

The division began in the Second Circuit in 1922 when the court of appeals asserted that the compiler of a directory of trademarks should be rewarded for his industrious collection.[45] Advancing what was essentially a moral rights argument,[46] the court held in *Jeweler's Circular Publishing Co. v. Keystone Publishing Co.* that the directory merited copyright protection and that a competing directory copied from the original compilation was an infringement.[47]

Fifteen years later, the Ninth Circuit affirmed the rationale of *Jeweler's Circular* in *Leon v. Pacific Telephone & Telegraph Co.*[48] Although the allegedly infringing telephone directory inverted the organization of plaintiff's San Francisco Bay Area telephone directory by organizing listings by phone num-

43. 464 U.S. 417 (1989).

44. *Id.* at 429.

45. Jeweler's Circular Publishing Co. v. Keystone Publishing Co., 281 F. 83 (2d Cir. 1922), *cert. denied,* 259 U.S. 581 (1922).

46. The court stated:

> The man who goes through the streets of a town and puts down the names of each of the inhabitants, with their occupation and their street number, acquires material of which he is the author. *He produces by his labor a meritorious composition, in which he may obtain a copyright, and thus obtain the exclusive right of multiplying copies of his work.*

Id. at 88 (emphasis added).

47. *Id.* at 83.

48. 91 F.2d 484 (9th Cir. 1937).

ber instead of name, it was held to infringe plaintiff's copyright. The court held that a valid copyright could be granted based on the original compiler's labor and investment.[49] After these two cases, many federal courts entertained the "sweat of the brow" theory. Most of these "sweat" holdings do not stray far from the basic premise that hard work, no matter how routine, should be rewarded.[50]

While the circuit courts remained divided until *Feist,* as an indication of the growing movement against the "sweat" doctrine both the Second and Ninth Circuits later changed their minds and reversed earlier "sweat" holdings. The Second Circuit, since *Jeweler's Circular,* has continued to reject the "sweat" theory as too restrictive of the public's access to information. In an illustrative case, *Financial Information Inc. v. Moody's Investors Service, Inc.,*[51] the court held that to "grant copyright protection based merely on the 'sweat of the author's brow' would risk putting large areas of factual research material off limits and threaten the public's unrestrained access to information."[52] The Ninth Circuit, which had encouraged acceptance of the "sweat" doctrine in *Leon,* helped speed the doctrine's demise in *Worth v. Selchow & Righter Co.*[53] In *Worth,* the court explicitly rejected the reasoning of *Leon,* stating that "to the extent *Leon* suggests that research or labor is protectible, later cases have rejected that theory."[54]

While the Supreme Court formally healed the circuit split, a number of factors beyond the Second and Ninth Circuit reversals had already begun to work in that direction. Principally, the interesting and intellectually far-ranging work of the Commission on New Technological Uses of Copyrighted Work

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49. *Id.* at 487.

50. *See, e.g.,* Ill. Bell Tel. Co. v. Haines & Co., 905 F.2d 1081, 1086 (7th Cir. 1990) ("Everyone must do the same basic work, the same 'industrious collection.' A subsequent compiler is bound to set about doing for himself what the first compiler has done."), *vacated,* 499 U.S. 944 (1991); *see also* Hutchinson Tel. Co. v. Fronteer Directory Co., 770 F.2d 128 (8th Cir. 1985); Rural Tel. Serv. Co. v. Feist Publications, Inc., 663 F. Supp. 214 (D. Kan. 1987), *aff'd,* 916 F.2d 718 (10th Cir. 1990), *rev'd,* 499 U.S. 340 (1991). Among the most comprehensive treatments of the "sweat" doctrine is National Business Lists v. Dunn & Bradstreet, Inc., 552 F. Supp. 89 (N.D. Ill. 1982).

51. 808 F.2d 204 (2d Cir. 1986), *cert. denied,* 484 U.S. 820 (1987).

52. *Id.* at 207.

53. 827 F.2d 569 (9th Cir. 1987), *cert. denied,* 485 U.S. 977 (1988).

54. *Id.* at 573.

(CONTU) led to many of the amendments of the Copyright Act of 1976. The Act itself reaffirmed the role of the creativity requirement, paving the way for *Feist.*

3. CONTU and the Copyright Act of 1976

In enacting the Copyright Act of 1976, Congress sought to narrow the philosophical debate among the federal circuits that led to the split, and make the creativity requirement even more explicit.[55] Congress deleted the 1909 Copyright Act's reference to "all the writings of an author,"[56] and replaced it with "original works of authorship."[57] Congress stressed that it was simply clarifying an existing requirement.[58] The 1976 Act also specifically defined compilations as literary works that merited copyright protection if sufficiently original in selection and arrangement.[59]

It is important to note that the creativity requirement is not simply an untested relic of an era before computers. As part of the debate over the 1976 Act, Congress established the National Commission on New Technological Uses of Copyrighted Works (CONTU) to examine the copyright issues raised by computer and photocopier technologies. In preparation for the drafting of the 1976 Act, CONTU commissioned a series of ground-breaking studies into the fundamental economics of copyright as it relates to computer technologies. Many of these studies represented the first, and today still some of the most important, inquiries into pricing models for information, information customer behavior analyses and other cornerstone economic paradigms of the information market.[60]

The process of developing and presenting these economic studies was far from a sleepy academic conference. The process has been characterized as a "political brawl involving the redis-

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55. H.R. REP. NO. 1476, 94th Cong., 2d Sess., § 102, at 51 (1976), *reprinted in* 17 U.S.C.S. app. § 102, at 669 (1994).

56. *Id.*

57. 17 U.S.C. § 102(a) (1988).

58. "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." 17 U.S.C. § 102 (1988).

59. 17 U.S.C., § 101 (1978).

60. *See generally* 3-5 COPYRIGHT, CONGRESS AND TECHNOLOGY: THE PUBLIC RECORD, *supra* note 2.

tribution of political and economic power between haves and have-nots."[61] The brawl was between copyright "owners" and "users" and centered on who would control information as new technologies, such as photocopying and computers, made the man in the street a potential publisher.[62] The struggle has been cast in Marxian language, with the "exploited masses" of copyright users casting off their chains and becoming a "bourgeoisie" of small publishers.[63] Nevertheless, overly vivid language aside, CONTU was charged with deciding how the 1976 Act would fix the balance of power in copyright during the age of computers.

Although mediating fairly between the competing interests, CONTU kept the user firmly in mind. In examining databases, and finding them suitable for copyright protection,[64] CONTU defended the creativity requirement as the best way to mitigate the monopoly position of large original compilers. Consequently, the CONTU Final Report found, after examining other schemes, that copyright principles were flexible enough to provide effective regulation for databases without any sui generis protection.[65]

4. *Feist Publications, Inc. v. Rural Telephone Service Co.*[66]

a. The Facts of Feist

Rural Telephone Service Co. and Feist Publications, Inc. were competing publishers of yellow page directories. Rural Telephone Service Company, a certified public utility providing telephone service to several communities in northwest Kansas, was required by state law to issue an annual telephone directory. Rural published a typical directory consisting of white pages and yellow pages. The white pages listed residential customers in alphabetical order, and the yellow pages listed

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61. *Id.* Introduction, at x.

62. *Id.*

63. *Id.*

64. "Under the new law, a data base is a compilation and thus a proper subject for copyright." 5 COPYRIGHT, CONGRESS AND TECHNOLOGY: THE PUBLIC RECORD, *supra* note 2 at 77 [hereinafter CONTU Final Report].

65. Arthur Miller, *Copyright Protection for Computer Programs, Databases and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 981 (1993).

66. 499 U.S. 340 (1991).

business subscribers alphabetically by category and featured classified advertisements.[67] Feist Publications also published wide area telephone directories, but covered a much larger geographical area than normal white pages. These directories reduced the need to consult directory assistance or consult multiple listings.[68] Both companies' directories were distributed free of charge. The two companies competed fiercely for advertising revenue.[69]

The Feist directory in dispute covered eleven telephone service areas in fifteen counties. Of the eleven local telephone companies, only Rural refused to license its listings to Feist. Rural's refusal created a problem for Feist, as omitting the listings would have created a gap in its coverage of the region and would have made the directory less attractive to advertising customers. Unable to license Rural's listings, Feist used them without consent.[70]

Rural sued for copyright infringement in the District Court for the District of Kansas, claiming that Feist could not use the data contained in Rural's directories to compile competing directories.[71] Feist countered that it would be economically impractical for its employees to go door-to-door to collect the information themselves. They further argued that such an effort was, in any event, unnecessary because the copied information was beyond copyright protection.[72]

The district court granted summary judgment to Rural, stating that "courts have consistently held that telephone directories are copyrightable."[73] The court of appeals affirmed[74] and the Supreme Court reversed.[75]

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67. *Id.* at 342.
68. *Id.* at 343.
69. *Id.*
70. *Id.*
71. *Id.* at 344.
72. *Id.*
73. 663 F. Supp. 214, 218 (D. Kan. 1987). The court cited a string of lower court decisions.
74. 916 F.2d 718 (10th Cir. 1990).
75. 499 U.S. at 340.

b. The Contours of the Creativity Requirement in Feist

In *Feist*, the Supreme Court addressed the copyrightability of an alphabetical telephone listing.[76] The Court held that the *sine qua non* of copyright is originality and that while the level of creativity required for a work to warrant copyright protection is extremely low,[77] an alphabetical listing of telephone subscribers did not meet that standard.[78] The Court noted that Rural Telephone's "selection, coordination and arrangement" of its White Pages were "entirely typical."[79] The White Pages were thus found to lack the creativity required to "transform mere selection into copyrightable expression."[80]

The *Feist* Court reminded those federal circuits which recognized sheer industry as a basis for copyright "that as facts do not owe their origin to an act of authorship,"[81] they were not copyrightable.[82] However, the Court recognized that a properly assembled group of them might be copyrightable:

> The distinction is one between creation and discovery: the first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence. To borrow from *Burrow-Giles*, one who discovers a fact is not its maker or originator. The discoverer merely finds and records.[83]

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76. *Id.* at 343-44.
77. *Id.* at 358.
78. *Id.* at 362.
79. *Id.*
80. *Id.*
81. At least one commentator has suggested that *Feist* is significantly flawed by the Court's failure to distinguish between authorship and originality. Professor Leo Raskind argues that by merging the two concepts: "[T]he Court leaves the readers of the opinion to speculate whether the ultimate inquiry is in the work produced or in the activity of producing it or some of each." Raskind, *supra* note 18, at 334.

It is curious that Professor Raskind should be troubled that the answer is "some of each." The nature of the fact or expression distinction dictates that there will always be a gray area around the extent to which selection of data is a form of creative expression, as it involves knowledge, judgement and skill. The *Feist* Court said simply that the creativity of the selection will be a component of the "authorship" quality of the final product. But no matter how deftly selected, the discrete facts themselves gain no protection. While this will certainly create the need to make often subtle distinctions between selection that is and is not sufficiently "original," these types of distinctions are inescapable in any area of copyright law.

82. *Feist*, 499 U.S. at 347.
83. *Id.* (citation omitted)

Thus, the Court accepted that some compilations would contain the requisite creativity to qualify for protection.[84] In fact, even a directory that contains no protectable creative expression could be copyrighted if it featured "original selection or arrangement."[85]

The aspect of *Feist* most alarming to database developers is the two natural conclusions drawn by the Court from its discussion of the creativity requirement. First is the recognition that the fact that a work is copyrighted does not mean that all the components of the work are protected. Instead, only the creative aspects are shielded from copying; the facts are free to anyone who wants them.[86] Second is the inescapable conclusion that even where a factual compilation does qualify for copyright, the protection afforded the work is thin;[87] the secondary compiler remains free to use the underlying data as long as he arranges it differently.[88]

Though alarming to database developers, the creativity requirement was meant, historically, to be a comfort to readers and users. The grant of a property interest in creative expression was seen as a way to reinforce the ferment of free speech. Consistent with the political philosophers of the day, the Framers viewed ownership of property, be it real or intellectual, as the strongest guarantee of a free citizenry.[89] The *Feist* court objected to "sweat of the brow" protection; a subsequent compiler would be forced to find all of the data independently only to arrive at the same result.[90] This type of protection, according to the Court, promoted precisely the type of wasted effort that the "proscription against the copyright of ideas and facts is designed to prevent."[91]

While recognizing the policy concerns underlying the creativity requirement as articulated by Jefferson and more mod-

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84. *Id.* at 348.
85. *Id.*
86. *Id.*
87. *Id.*
88. *Id.*
89. David Ladd, *The Harm of the Concept of Harm in Copyright*, 30 J. COPYRIGHT SOC'Y 421 (1983), *reprinted in* ALAN LATMAN ET AL., *supra* note 19, at 19-20.
90. *Feist*, 499 U.S. at 348-49.
91. *Id.* at 354 (quoting Rosemont Enter., Inc. v. Random House, Inc., 366 F.2d 303, 310 (2d Cir. 1966), *cert. denied*, 385 U.S. 1009 (1967)).

ern commentators, the *Feist* court was principally interested in adhering to the statutory provisions requiring creativity as set out in the 1976 Act. The Court, in defining a copyrightable "compilation" in a manner consistent with section 101 of the Act,[92] described three criteria for copyrightability of a compilation: "(1) the collection and assembly of pre-existing material, facts or data; (2) the selection, coordination, or arrangement of those materials; and (3) the creation, by virtue of the particular selection, coordination or arrangement of an 'original' work of authorship."[93] Based on these criteria, the Court concluded that some fact-based works would not be sufficiently original to meet the creativity standard.[94] In short, *Feist* re-established the importance of the creativity requirement and created a workable link in copyright law between the policy concerns of the Framers and the economic concerns of computer database developers.

5. Applying Feist: The Third Time is the Charm

Bellsouth Advertising and Publishing Corp. (BAPCO) v. Donnelley Information Publishing, Inc.[95] demonstrates the major difficulty in applying *Feist.* In three decisions centering on the standard of creativity required for the protection of the selection and arrangement of computer databases, the *Bellsouth* courts struggled over what exactly is copyrightable material.[96] The three decisions, one in the Southern District

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92. The 1976 Act defines a compilation in the context of copyrightability as 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.S. § 101 (1978); *see also supra* note 3.

93. *Feist*, 499 U.S. at 357.

94. *Id.* at 358.

95. 719 F. Supp. 1551 (S.D. Fla. 1988), *aff'd*, 933 F.2d 952 (11th Cir. 1991), *vacated and reh'g en banc granted*, 977 F.2d 1435 (11th Cir. 1992), *rev'd*, 999 F.2d 1436 (11th Cir. 1993).

96. Some commentators had suggested that the *Bellsouth* court was in fact clinging to a "sweat" doctrine post *Feist. See* Jane C. Ginsburg, *No "Sweat"? Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338, 352 (1992). While this is a difficult position to substantiate, as the court repeatedly stressed that it found Bellsouth's arrangement to have been sufficiently creative, it in fact appeared to be the case. *See Bellsouth*, 933 F.2d at 958. The fact that a finding of creativity is subjective often means the court can apply a "sweat" recognition of the developer's labor and ignore the creativity requirement.

of Florida and two in the Court of Appeals for the Eleventh Circuit, articulate the major difficulty in applying *Feist*: creativity is in the eye of the beholder. The cases also show, however, that *Feist* is an effective doctrine for the protection of databases.

Bellsouth was the publisher of the Greater Miami Yellow Pages directories. Donnelley sought to license the data in the Bellsouth Yellow Pages in order to produce a competing directory. When Bellsouth supplied the data under license, as it had to fifty-seven other competing publishers, Donnelley had it keyed into a computer database, along with the headings and categories developed by Bellsouth, in order to create not only a new directory, but also a sales contact sheet used to compete with Bellsouth's advertising space salespeople.[97]

In a motion for summary judgment before the district court, Bellsouth alleged copyright infringement and unfair competition as to the unlicensed sales lead sheets, among other causes of action. In its cross motion for summary judgment and opposition to Bellsouth's motion, Donnelley conceded that Bellsouth had a valid claim in the selection and arrangement of its data, but claimed that no copyright existed in the names and addresses that it had copied.[98] Donnelley also countersued, complaining that Bellsouth had violated the Sherman Act by effectively limiting competition for business directories in the Miami area.[99]

Oddly, the district court declined to state whether it was applying a "sweat of the brow" or creativity standard to the facts of the case. Instead, the court stated that while it preferred the selection and arrangement test, it was not clear which test the Eleventh Circuit had adopted in previous decisions.[100] The court continued: "It is clear however, that BAPCO's directory meets both tests."[101] Applying this somewhat muddled legal doctrine, the district court granted summary judgment to Bellsouth, holding that in creating the unlicensed sales leads, Donnelley had not simply copied the unprotected data, but had also reproduced "a format nearly identical

97. *Bellsouth Corp.*, 719 F. Supp. at 1553-54.
98. *Id.* at 1554-55.
99. *Id.*
100. *Id.* at 1557.
101. *Id.*

to that used by BAPCO."[102] It is not exactly clear how the court would have ruled had it applied a clear selection and arrangement analysis, and the decision often jumbles exactly what type of protection the court is granting and to what facet of the directory.

Following the Supreme Court's decision in *Feist* by just a few months, the court of appeals clearly applied the selection and arrangement standard in the first appeal.[103] Examining the creativity of the selection and arrangement of BAPCO's directory, the court found that BAPCO's selection of geographic boundaries for its directory, its use of a close date after which entries could not be changed prior to publication, and its creation of business classifications rendered the directory a unique arrangement of data.[104] The court then correctly applied *Feist*, holding that while the directory merited protection for the originality of its arrangement, "only the original format [was] protected, the bare information itself segregated from the compilational format [was] not protected."[105]

The Eleventh Circuit then turned its attention to whether Donnelley had appropriated enough of BAPCO's format to constitute illegal copying. The court found that Donnelley had appropriated the "essence of BAPCO's compilation."[106] The court of appeals affirmed the district court's finding of summary judgement for BAPCO.

While correctly applying *Feist* to *Bellsouth*, the decision did not end the life of the controversy in the Eleventh Circuit. Just over a year after it was decided, the Eleventh Circuit vacated the decision and agreed to rehear the case.[107] Sitting *en banc*, the court of appeals held that the acts of selection and arrangement, specified in the earlier appellate decision as meriting protection for originality, were in fact insufficiently creative to warrant such protection.[108] Because Donnelley conceded the validity of BAPCO's copyright at the trial court,

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102. *Id.* at 1559.

103. Bellsouth Advertising & Publishing Corp. v. Donnelley Info. Publishing, Inc., 933 F.2d at 952 (11th Cir. 1991).

104. *Id.* at 957-58.

105. *Id.* at 958.

106. *Id.* at 959.

107. Bellsouth Advertising & Publishing Corp. v. Donnelley Info. Publishing, Inc., 999 F.2d 1436 (11th Cir. 1992).

108. *Id.* at 1442.

the court of appeals decided whether Donnelley appropriated BAPCO's original selection, rather than whether the selection merited copyright protection in the first place.[109] The resulting analysis was identical: the selection and arrangement were insufficiently creative.

The court found that while yellow pages classifications were somewhat more elaborate than those rejected for protection in *Feist*, originality had to be resolved through comparison with other yellow pages. The court held that the classifications were no more than a "convention."[110] The court made an analogy to a Second Circuit case where the plaintiff had "exercised neither selectivity in what [it] report[ed] nor creativity in how [it] report[ed] it."[111] Furthermore, the court held that BAPCO's claim of copyright did not survive application of the merger doctrine.[112] Under the merger doctrine, "expression is not protected in those instances where there is only one or so few ways of expressing an idea that protection of the expression would effectively accord protection of the idea itself."[113] Because BAPCO's arrangement was the only way to organize a business directory, the organization had "merged" with the idea of a business directory, and thus was uncopyrightable.[114]

Taken collectively, the three *Bellsouth* decisions add significant detail to the rough topography of the creativity requirement sketched by the Supreme Court in *Feist*. The district court decision represents the confusion surrounding the appropriate doctrine prior to *Feist*. The first appellate decision demonstrates the way sympathy for the effort expended by the compiler will lead some courts to find creativity in anything. The second appellate decision exemplifies proper application of *Feist*'s creative selection rule. When compared with other similar works, the BAPCO directory simply did not stand out. It had no creative value-add that warranted government protection.

While *Bellsouth* illustrates the difficulties in applying *Feist*, another case demonstrates the type of selection that is in

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109. *Id.* at 1440-42.

110. *Id.* at 1442 n.13.

111. *Id.* at 1442 (quoting Victor Lalli Enters. v. Big Red Apple, Inc., 936 F.2d 671, 673 (2d Cir. 1991)).

112. *Id.*

113. *Id.* (quoting Kregos v. Associated Press, 937 F.2d 700, 705 (2d Cir. 1991)).

114. *Id.*

fact protected, and illustrates the fact that any assessment of creativity boils down to a highly subjective factual analysis and comparison to public domain materials. In *Key Publications v. Chinatown Today*,[115] the Second Circuit considered whether a combined directory of white and yellow pages for New York City's Chinese-American community exhibited sufficient creativity in the selection and arrangement of its listings to warrant copyright protection.[116] The *Key Publications* court held that because the publisher of the Key Directory excluded businesses that she did not think would stay in business very long, "such as certain insurance brokers, take-out restaurants and traditional Chinese medical practitioners,"[117] the selection indicated "thought and creativity."[118] Based on this analysis, the court found that the directory's selection and arrangement were copyrightable.

Taken together, *Feist* and its progeny require only a minimum standard of creativity. Many data compilations, however, will not be sufficiently creative to qualify. There is no escaping the conclusion that millions of dollars may be spent to create a work which will enjoy either no copyright protection, or at best, only thin protection. Although this treatment seems harsh, it is the most economically efficient legal regime. Yet the attempt to resolve this apparent inequity is at the heart of the European Union's Proposed Directive.

B. The European Community's[119] Proposed Directive on the Legal Protection of Databases

The European Community's Proposed Directive for the Legal Protection of Databases embodies the "sweat of the brow" doctrine. It lags behind the United States in database development because the Union took this position.[120] The strength of the Directive's approach is that it grants a property

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115. 945 F.2d 509 (2d Cir. 1991).
116. *Id.*
117. *Id.*
118. *Id.*
119. The European Community changed its name to the European Union in 1993. For the purpose of clarity, this Note uses "Community" in the title of the Proposed Directive, as this is how it appears in the actual title. "Union" is used in all other references.
120. *See* Proposed Directive, *supra* note 1.

interest to an author for the work he expended. Unlike the convolutions of *Feist,* the "sweat" doctrine is relatively straightforward as a legal principle. More interesting is its genesis in international law—both in the context of the Berne Convention and its legislative history within the Commission of the European Union.

1. The Proposed Directive in the Context of EU Law and the Berne Convention

In 1957, the Treaty of Rome [EEC Treaty][121] established the European Economic Community. Now the European Union, the group includes the following twelve member states: Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

The Union has its own institutions which make law pursuant to the Treaty of Rome. The Commission of the European Union, the Court of First Instance and the Court of Justice of the European Union hand down decisions and judgments in particular cases. The Commission proposes and the Council of Ministers issues directives to which the member states must conform their respective national laws. Union law as a whole, including the Treaty of Rome, case law and directives, controls how the intellectual property laws of each of the member states are to take effect in a wide range of cases.[122]

In cases of conflict with national law—common in the area of intellectual property[123]—EU law takes precedence. The Court of Justice established this principle in *Costa v. Enel.*[124] The holding was based on the court's interpretation of the second paragraph of article 5 of the Treaty of Rome which specifies that member states shall "abstain from any measure which could jeopardize the attainment of the objectives of the Treaty."[125] Thus EU law can have direct effect, without further legislative acts by the member states, not only on acts of

121. TREATY ESTABLISHING THE EUROPEAN ECONOMIC COMMUNITY [EEC TREATY] art. 1.

122. *See generally* 1 PAUL GELLER, INTERNATIONAL COPYRIGHT LAW AND PRACTICE § 1, at EEC-3 (1992).

123. *Id.* § 1(2)(a), at EEC-6.

124. Case 6/64, Costa v. E.N.E.L., 1964 E.C.R. 585, 1964 C.M.L.R. 425.

125. EEC TREATY art. 5.

the member states themselves, but on the rights and obligations of individual citizens under the states' respective national laws.[126] Although the direct effect of EU law on individuals is subject to some further analysis, intellectual property laws have generally been found to have this direct effect.[127]

In addition to the national courts of the member states, and the Court of Justice, the Commission of the European Union is empowered to investigate and make decisions concerning complaints under articles 85 and 86 which deal with distortion of competition and abuse of market position.[128] Thus, the Commission is typically involved where the complaint involves a member state's failure to conform its national laws to EU law.

Consequently, when it became effective on January 1, 1993, the Proposed Directive on the Legal Protection of Databases immediately superseded any member state's national law in existence at the time. Regardless of earlier strategies for database protection, the provisions of the Proposed Directive were passed into national law either actively by the national legislatures or passively through their adherence to the Treaty of Rome.

The Proposed Directive was enacted with the provisions of the Berne Convention for the Protection of Literary and Artistic Works[129] in mind.[130] The Berne Convention, which is administered by the World Intellectual Property Organization, is the principal multilateral codification of standards for the international protection of intellectual property. The effect of the Berne Convention on the laws of its adherents differ somewhat from country to country. For example, in the United Kingdom, which does not consider its treaty agreements to be

126. *See* Costa, 1964 E.C.R. at 585, 1964 C.M.L.R. at 425.

127. GELLER, *supra* note 122, § 1, at EEC-7.

128. EEC TREATY arts. 85-86.

129. Berne Convention for the Protection of Literary and Artistic Works, *supra* note 8.

130. *Id.* The initial Berne Act dates back to 1886 and was either partially or fully revised by the Berlin Act of 1908, the Rome Act of 1928, the Brussels Act of 1948 and the Stockholm Act of 1967. The Stockholm Act was ratified and its provisions put into effect by the Paris Act of 1971. While most EU member states are long time adherents to the Berne Convention, the United States did not accede until March 1, 1989. This was due largely to an unwillingness by Congress to alter the United States' unique copyright duration scheme. Geller, *supra* note 122, § 3, at INT-62-63.

self-executing, the grounds for copyright protection will be found wholly under national law. The applicable Berne Act serves only as an aid for construing national law.[131] It is important to remember that because most EU intellectual property law has direct effect on the national law of the member states, it will typically supersede the provisions of the Berne Convention.

Additionally, the specific provisions to which each Berne Convention member adheres also varies from country to country, creating a byzantine network of international legal obligations. For example, France joined the Berne Act of 1886 and then adhered to all subsequent acts. Romania, on the other hand, joined the Convention under the Berlin Act, and now adheres to the provisions of the Rome Act. Needless to say, this system can lead to a relatively complex process of deciding what obligations are owed to fellow Berne adherents.

The administration of article 2(5) of the Convention, which mimics section 103(b) of the Copyright Act of 1976 by granting protection to compilation, is made somewhat easier by the fact that it was ratified by the Paris Act of 1971, the most recent round of revision. Specifically, article 2(5) provides:

> Collections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections.[132]

Thus, article 2(5) grants protection to collections of artistic and literary works where the selection and arrangement is sufficiently creative.

The Berne Convention did not, however, contemplate protection for electronic databases, and no specific protection is outlined. In the first tier of its two-tiered approach, the Proposed Directive seeks to fill this void by making explicit the protection of database compilations exhibiting sufficient creativity in selection and arrangement. The Proposed Directive must thus be seen not only in light of its express provisions,

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131. GELLER, *supra* note 122, § 3(b)(i), at INT-62.1 n.284.

132. Berne Convention for the Protection of Literary and Artistic Works, *supra* note 8, art. 2(5), *reprinted in* ALAN LATMAN ET AL., *supra* note 8, at 136.

but also in light of the international legislative context in which it was conceived. The supranational nature of the Union created the impetus for a common approach to databases where national laws differed on the issue. Similarly, the requirements for protection set by the Proposed Directive are largely reactions to the perceived strengths and weaknesses of the Berne Convention's creativity requirements for compilations.

2. The Evolution of the Proposed Directive

Debate on the Proposed Directive evolved over a period of several years. The debate centered on a single familiar issue with respect to compilations: how to protect the author's economic interest at the lowest cost to society. Two preliminary documents framed the debate: an initial Green Paper on Copyright and the Challenge of Technology,[133] which generally explored the issues in the copyright protection of databases; and finally, a Follow-Up to the Green Paper,[134] which was adapted into the text of the Proposed Directive.

The fundamental concerns of the Union member states as expressed in the Green Paper were fourfold. The first was to eliminate internal differences in member state law in order to create a single database market unsegmented by varied copyright regimes.[135] The second was to develop policies "at least as favourable to [European developers] as that enjoyed by their principal competitors in their home markets" in order to improve the competitiveness of the European economy.[136] The third was that intellectual property should enjoy a "fair return when exploited in non-Member States."[137] Finally, the authors recognized that in some areas "copyright protection without suitable limits can in practice amount to a genuine monopoly, unduly broad in scope and lengthy in duration."[138] As a result, the authors concluded that the interests of third-party competitors and the public at large must be considered in the

133. Green Paper, *supra* note 17.

134. Follow Up to the Green Paper on the Challenge of Technology, COM(90)584 final [hereinafter Follow Up to the Green Paper].

135. Green Paper, *supra* note 17, § 1.3.2, at 3-4.

136. *Id.* at § 1.3.3, at 4.

137. *Id.* at § 1.3.4, at 4.

138. *Id.* at § 1.3.5, at 5.

formulation of any additional copyright protections.[139]

With these general provisions firmly in mind, the authors of the Green Paper considered whether some protection should be afforded to data compilations which contained uncopyrightable data.[140] The Paper acknowledged that the Commission was considering measures to protect the data within a compilation, because the buying and selling of data within databases was a growth industry.[141] Eschewing any moral rights justification, the Paper states that such action would only be taken if it "were felt that the considerable investment which the compilation of a data base represents could best be served by copyright protection rather than by other means."[142]

In its Opinion on the Green Paper (Opinion),[143] the Commission's Section for the Industry, Commerce, Crafts and Services advised caution on the issue of sui generis protection.[144] However, the Opinion notes only that there is still a great deal of disagreement on the proper form of protection without offering any affirmative suggestions.[145]

Based on the reservations of the Opinion, the Commission held a hearing for interested parties to discuss the idea of sui generis protection for databases.[146] At the hearing, no support was expressed for sui generis protection.[147] Instead, most participants expressed the opinion that a criterion of originality compatible with the Berne Convention was the best approach.[148]

Given the concerns of the Commission on the dangers of monopoly, the cautious approach of the Opinion, and the results of the hearing generally opposing added protection, the adoption of the second tier of protection in the Proposed Directive is somewhat mysterious. The most likely explanation is concerted lobbying by large database compilers, such as the

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139. *Id.* at § 1.3.6, at 6.
140. *Id.* at §§ 6.4.4-6.4.6, at 212-13.
141. *Id.* at § 6.4.7, at 213.
142. *Id.* at § 6.6.2, at 215.
143. Opinion on the Green Paper on Copyright and the Challenge of Technology, 1989 O.J. (C 71) 9.
144. Green paper, *supra* note 14, at 13-14.
145. *Id.*
146. Follow Up to the Green Paper, *supra* note 134, § 6.2.1, at 18.
147. *Id.*
148. *Id.* at § 6.2.2 (13), at 20.

national telephone monopolies, seeking to protect their own interests.

3. The Provisions of the Proposed Directive

The Commission of the European Communities' Proposed Directive[149] is divided into two tiers. The first tier requires creative selection and arrangement in order to merit protection for compilations in a manner consistent with United States law and the Berne Convention. The second tier, however, departs from international convention and United States law by creating sui generis protection for the data contained in a compilation.

The first tier of protection established by the Proposed Directive is a benign effort to harmonize copyright protection for database compilations in a manner consistent with the protection granted by article 2(5) of the Berne Convention to literary or artistic collections.[150] The first tier grants protection to compilations exhibiting sufficient creativity in selection and arrangement. Thus, the first tier simply consolidates the law of the European Union around a standard to which the great majority of member states and the United States already adhere,[151] and explicitly extends this protection to computer databases.

In contrast to the harmonizing effect of the first tier of the directive, the second tier represents something of a departure from the approach of the vast majority of Berne Convention signatories by creating an ownership right in the underlying data. This ownership right allows the database developer to prevent the unauthorized extraction or re-use of the contents of a database for commercial purposes.[152] The developer thus owns the data he has compiled, regardless of the eligibility of

149. The Proposed Directive came into effect on January 1, 1993 and is binding on all member states. Proposed Directive, *supra* note 1, art. 13, at 74.

150. Proposed Directive, *supra* note 1, §§ 2.2.8, at 15; 2.2.9, at 15; 3.1.2, at 19; 3.1.10, at 21.

151. In most instances, EU member states had made no provisions for database protection in their national law. "There is relatively little case law even in the Member States with the most developed database industry. Isolated cases in the jurisprudence of other Member States are inconclusive as to the scope of protection." *Id.* at § 2.2.9, at 15.

152. *Id.* at art. 2(5), at 67.

the database for protection under the first tier.[153]

In order to mitigate the monopolistic effects of the ownership right, the Proposed Directive also requires that the original compiler issue licenses to secondary compilers.[154] This compulsory license is imposed when the database has been made publicly available and is the only source of a work or material.[155]

Although the Directive codifies a compulsory licensing scheme for data compilations for the first time, compulsory licensing has been ordered by the Commission and the Court of First Instance in other areas where compulsory licensing is required to fulfill the goals of Article 86 of the Treaty of Rome.[156] Article 86 provides a proscription against monopolistic activities and has been invoked to force compilers with a "dominant position" to license material to secondary compilers.

One of the most notable decisions concerning compulsory licensing, and one roughly analogous to the compilation scenario, concerned the licensing of television listings contained in T.V. guides. Both the Commission and the Court of First Instance[157] required that publishers holding copyrights in weekly listings of television programs license the rights to publish such listings to secondary compilers also seeking to publish

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153. *Id.*

154. *Id.* at § 8.1, at 50.

155. *Id.*

156. Article 86 provides:

> Any abuse by one or more undertakings of a dominant position within the Common Market or in a substantial part of it shall be prohibited as incompatible with the Common Market in so far as it may affect trade within the Member States. Such abuse may, in particular, consist in:
>
> (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
>
> (b) limiting production, markets or technical development to the prejudice of consumers;
>
> (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
>
> (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection to the subject of such contracts.

EEC TREATY, art. 86 (1957).

157. Case T-69/89, Radio Telefis Eireann (RTE) v. Commission, [1991] II E.C.R. 485, 4 C.M.L.R. 586 (Ct. First Instance 1991).

guides.[158] All of the orginal guide publishers were television companies operating in the United Kingdom and Ireland.[159] Parties wishing to publish weekly T.V. guides were "economically dependent" on these companies as suppliers.[160] Moreover, the data was useless once published on Sunday, and it was impossible for the secondary compiler to produce comprehensive guides from daily newspaper listings.

Both the Commission and the Court held that they enjoyed dominant positions which gave rise to a monopoly over the market for television listings.[161] The Court found that the effect of exercising copyright in this case was to hinder all competition in the market for weekly listings, and was, as a result, violative of Article 86.[162] The Commission required the three organizations to supply others, on request, with advance program listings and to license publications of these listings.[163] Such licenses were to include a requirement to pay unspecified reasonable royalties. The Court upheld such relief.[164] The Court also held that the provisions of the Berne Convention recognizing exclusive rights to reproduce protected works were superseded by the interests of the Union in maintaining the freedom of competition established by the Treaty of Rome.[165]

While the broad antitrust implications of this case are unlikely to surface in cases concerning data compilations, the case demonstrates the time and expense required to administer compulsory licensing. Such appeals to the international bureaucracy and courts are likely to become commonplace under the Proposed Directive, increasing costs and decreasing the general availability of inexpensive, timely data.

158. *Id.* at 121
159. *Id.*
160. *Id.*
161. *Id.* at 122.
162. *Id.*
163. *Id.*
164. *Id.*
165. *Id.*

IV. COPYRIGHT AS AN ECONOMIC POLICY LEVER IN THE DATABASE DEVELOPMENT LIFE CYCLE: DIRECTING INVESTMENT TOWARD INNOVATION AND ENSURING THE MARGINAL-COST PRICING OF DATA

From cars to computers to guns, we now take it for granted that all manufactured goods are made from interchangeable parts. A single supplier will sell commodity nuts, bolts and brake shoes to automobile manufacturers. A host of personal computer makers build their machines from the same chip. British gunsmiths claimed 150 years ago that it was impossible to make something as precise as a gun from interchangeable parts; highly skilled craftsmen were required to file each component, at an enormous increase in cost. But Samuel Colt's small company ultimately dominated the world market for guns by eliminating the need for custom-developed parts.[166]

The revolution took place in manufacturing because standard interchangeable parts could be produced by a number of companies operating in a competitive market. From the parts manufacturer's perspective, costs were reduced because a single part could be sold to any number of finished product producers. From the finished product producer's perspective, costs came down because competitive bids could be solicited from a range of parts manufacturers.

This environment was a sharp contrast from a market in which the makers of customized parts could charge higher prices based on their protected market position. Their protected positions resulted from the cost and time associated with producing specialized parts for a single potential buyer. Competitors were reluctant to enter a market where they would be forced to start from scratch in order to service a single buyer who already had an entrenched relationship with the original developer of the part.

The same evolution from proprietary (produced by a single producer to fit a single assembly) to interchangeable (produced by multiple producers to fit mutliple assemblies) parts that revolutionized the production of goods must continue to work in the production of information. From legal databases to industrial specifications to names and addresses of telephone

166. *See generally* Paul Romer, *The Concept of Production is Being Re-Tooled,* THE ECONOMIST, Sept. 11, 1993, at 70.

subscribers to lists of registered trademarks, the market for electronic information will grow most quickly if the underlying data is free to subsequent compilers.[167] This will ensure a competitive market by eliminating the protected market positions of original database compilers. Competition flourishes when subsequent compilers are not forced to start their database by going out and rediscovering the same data. Buyers benefit as the price of databases lowers through competition. The database market benefits as more databases are sold at a lower price.

The kind of competitive market that will allow this evolution to continue is a market where the average long-term price of a database is as close as possible to the database's marginal cost.[168] The marginal cost of a good is the cost to the manufacturer (or author/publisher) of producing one additional unit.[169] In a perfectly competitive market, all firms are too small in relation to the overall market to affect price.[170] Thus, equilibrium for a profit-maximizing firm occurs where marginal cost equals the price set by the market.[171] In other words, where the cost of producing one additional unit is equal to the revenue earned from selling it. Market price does not rise above marginal cost in a competitive environment because no firm may charge more than another; any attempt by a single firm to raise prices results in a loss of sales as buyers opt for lower priced products. If the market price were to drop below a producer's marginal cost, he would not gain enough revenue from the sale of a unit to cover his expenses in producing it, and would ultimately be forced to drop out of the market.

In contrast to this competitive market scenario, a copyright in underlying data will lead to a market more analogous

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167. *See generally* JOHN K. GALBRAITH, THE NEW INDUSTRIAL STATE 10-18 (4th ed. 1986).

168. William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 327-28 (1989).

169. To simplify the analysis, one must ignore the distinction between costs incurred by the author and those incurred by the publisher. This simplification, however, eliminates a number of important issues concerning the relationship between author and publisher. *See id.* at 327.

170. W. BAUMOL & A. BLINDER, ECONOMICS: PRINCIPLE AND POLICY 64-69 (4th ed. 1988), *cited in* John Cirace, *A Synthesis of Law and Economics*, 44 SW. L.J. 1139, 1171 n.189 (1990).

171. *Id.*

to a monopoly. A monopoly is a market in which a seller may dictate supply, and hence price, because no alternative seller is available.[172] Buyers in these markets pay more than they would in a competitive market, and thereby inefficiently transfer resources to the monopolist.[173] In the context of databases, this situation is analogous to the market for custom gun parts in that once a compiler owns the data copyright, subsequent compilers will be reluctant to incur the costs of starting from scratch and entering a market already dominated by the original player. This leaves the orginal compiler in a protected market position in which he can charge monopolistic prices until a subsequent compiler can generate the same data from scratch.

This is not to say that in a competitive market every producer's price must always be equal to marginal cost. On certain occasions, a producer may invent an innovative new product with features that make it unique in the market at a specific point in time. During this "monopoly window" where the producer's product is unique, he may charge a price higher than other competitors who are bound to the marginal cost price. This higher price is not inefficient for two reasons. First, the higher price reflects the greater value of the product; if the product is not worth more, customers may opt to buy from lower priced competitors. Second, the "monopoly" price charged will only last for the limited period of time it takes for competitors to match the innovation and for prices to return to a marginal cost level in expectation of the next innovation. The pioneer's position is not protected by the copyright system; it is protected by his own ingenuity and the speed with which he brings a new product to market.

Given the efficiencies of a competitive market where long-term average price approaches marginal cost, the question for copyright policy makers is what form of protection should be granted to ensure investment in innovation of information products while allowing the commodity raw material, data, to move quickly and at low cost among suppliers of databases and between suppliers and customers. Assuming that the evolution of the database industry is analogous to the evolution of manu-

172. Cirace, *supra*, note 169, at 1173.
173. *Id.*

facturing industries, the lower costs of innovative production will increase competition and eliminate some competitors, the market will grow exponentially as less expensive, better products continue to attract new populations of customers. In order to evaluate the copyright options in light of these economic assumptions, it is illustrative to trace a database through its competitive life cycle,[174] and to compare the effects of United States and European law on the likely investment by the compiler and the resultant cost to the consumer at each juncture of the product life cycle. The resulting analysis demonstrates that while United States and European law would have similar effects on database protection, in most respects the two approaches differ in one critical area: the United States approach ensures that database developers are free to rely on an inexpensive and plentiful supply of data, while the European approach adds cost and promotes inefficiency.

A. Identification of New Markets

In a competitive environment, development of a copyrightable database usually begins with the identification of a market niche and potential customers. The compiler must assess the potential users' needs, capabilities, and preferences, and then locate and evaluate the sources of the facts that are to be compiled.[175]

United States and European Union law are identical in their protection at this early stage. Producers who successfully identify original categories of information that are useful to users in a new market would enjoy two protected positions. First, developers would enjoy a time-based monopoly for the period of time that their product was the only one on the market containing the new category. For example, a database developer offering information to retailers on food-buying trends of Latino customers in San Antonio could charge a premium price for the information as long as that developer was the only source. The amount of the premium would depend only on how well they had identified a market for the product. Second, both United States law after *Feist* and European Un-

174. The stages of database development are taken from the *Amicus* Brief, *supra* note 14, at 18-19.

175. *Id.* at 18.

ion law under the first tier of the Proposed Directive would recognize a copyright in that information product because it is based on the creative selection of data and creates an original category.[176] Copyright in creative selection and arrangement spurs investment in new products, as producers enjoy limited protection for their innovative category selection and organization.

Investment in market identification and category selection, not the ownership of data, is the proper source of advantage for a database in a competitive market. In a competitive market, developers of a novel format would gain copyright protection for that format, and set prices according to demand for their ingenuity. They would be released temporarily from the pressures of marginal cost pricing; as long as their product is either the first one available in the market or more ingenious than other available products, they can charge a premium price. This typically brief monopoly window is not, however, detrimental to the market because competitors may take the data and compete based on another novel format. The welfare of the market increases as consumers get better products through competition and developers get more customers because of the better products they are forced to develop to stay in business. Resources are not simply being transferred from customers to monopolists who are not driven to innovate. Consumers are paying higher prices because they perceive greater value in the innovative product they are purchasing.

B. Assessments of Multiple Data Sources

After a market for the data has been identified and useful categories of data developed, database developers must find sources of data to deliver to their customers. Occasionally, the required data may come from a single source. However, more often than not the data will come from multiple sources whose contents must be sampled and selected for usefulness in the particular database. For example, a demographic database may draw upon public sources, such as census data, property tax records, and voter registration files, as well as a wide variety of proprietary sources that contain data on the target group, such as purchasing patterns, or subscriptions to catalogs and

176. *See* Proposed Directive, *supra* note 1, § 3.2.2, at 22.

periodicals. Often, the effort of collecting the right data involves extracting a needle of fact from a haystack of irrelevant information.[177]

The cost-benefit analysis applied to the selection of data will differ depending on the legal regime. Under United States law, the cost-benefit analysis is relatively simple. Regardless of the originality in the the selection and arrangement of the sources, the underlying data in the work is free to anyone provided they do not take the format. Thus, an American compiler of a new database would simply take the best quality data and target it to his market, provided he was not infringing upon the original compiler's creative selection and arrangement.[178] Thus, the absence of copyright protection for data under the United States regime maximizes the power of market forces on databases that are already developed. Data is free because its marginal cost is zero. Absent transmission costs, it simply does not cost any more to deliver a completely developed database to the tenth subscriber than it cost to deliver it to the ninth. Profit is properly stripped from the ownership of underlying data.

Of course, while the data is free from copyright protection, many other mechanisms are available to protect it from competitors. Access to electronic information is, to a great extent, governed by contract.[179] Software algorithms can make it difficult to access information without agreeing on how the information will be disseminated and re-used. However, new distribution methods, such as on-line information gateways (the much ballyhooed Internet is a prime example) and easily portable compact disks containing vast compilations of material, are expanding access to parties who may not be in contractual privity with the database proprietors. These trends weaken contractual controls but should not shake the basic logic behind copyright protection limited to creative selection and arrangement.[180]

In contrast to the United States approach, the Proposed Directive's "neighboring rights" scheme grants certain protection to the basic data as well as providing for traditional copy-

177. *Amicus* Brief, *supra* note 14, at 18.
178. Feist Publications v. Rural Tel. Ser. Co., 499 U.S. 340 (1991).
179. *Amicus* Brief, *supra* note 14, at 21.
180. *Id.*

right for the creativity of the compilation.[181] The original compiler thus owns the facts he has compiled for a limited statutory period. This arrangement skews pricing because the artificial monopoly allows the original compiler to charge a price above what he would charge in a competitive scenario until another compiler develops the data from scratch.

The Proposed Directive purports to limit the inefficiencies of this artificial monopoly by compelling the original compiler to license his data to any developers of derivative compilations if his work was the only source of the data in question.[182] Proponents of such a sui generis regime modified by license point to its main advantage; it grants stronger protection to database developers while limiting their monopoly power by forcing the original compiler to make the work available to all who need to use it.[183] The license thus corrects the underprotection of data resulting from the creativity requirement by granting protection to the work of the initial compiler.[184] It also prevents the overprotection of information by giving access to secondary compilers.[185] As Columbia Law School Professor Jane Ginsburg points out: "compulsory licensing is an appropriate means of reconciling the warring goals of stimulating the production of information on the one hand, and ensuring its dissemination on the other."[186] Thus compulsory licensing embraces the "sweat of the brow" doctrine's recognition of the original compiler's right to profit.

Moreover, the mandatory licensing scheme also preserves the time-based advantage for original compilers by requiring licensing only for works offered to the public, not for data compilations still under development.[187] In the latter case, a compulsory license would eliminate any time advantage the original compiler might enjoy, and consequently, would erode the production incentive that the licensing scheme is designed to

181. "Neighboring rights" is often used interchangeably with the term sui generis to denote a type of protection unique to a certain category, in this case databases.

182. Proposed Directive, *supra* note 1, § 8.1, at 50.

183. *See* Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1926 (1990).

184. *Id.* at 1927.

185. *Id.*

186. *Id.*

187. Proposed Directive, *supra* note 1, § 8.1, at 50.

stimulate.

Even given its positive effect on database developers, the compulsory licensing scheme suffers from all the weaknesses inherent to government price regulation.[188] Price regulations are difficult to administer efficiently and, as a result, always lag behind the rapid progression of market forces. Artificial regulations also distort the beneficial effect of the law of supply and demand. Some producers would find the resulting prices lower than what they would pay for the license on the open market, thereby receiving a subsidy, while others would find the price artificially high and stay out of production where they might otherwise have entered.[189] In short, compulsory licensing exhibits many of the same "bad tax" characteristics as those exhibited in an absolute copyright monopoly. In addition, the potential for abuse of a compulsory licensing system by large compilers, such as telephone monopolies, is enormous. Because original compilers who enjoy protected status would be unlikely to easily grant licenses to secondary compilers, compelling such licensing would often be settled through long and costly civil litigation.

Finally, the second tier of protection under the Proposed Directive is anticompetitive because it is not reciprocal.[190] Non-EU database developers (principally American) will not be allowed to use the data developed by European developers protected by the directive. Moreover, American developers will face competition from European competitors operating in the United States under the provisions of *Feist,* which provides that data is free to all subsequent compilers. It remains an open question whether a European developer would be allowed to take the data of a non-EU developer and then gain an ownership interest in the copied data. Such a development could be highly injurious to both the marketplace and worldwide database suppliers because regardless of where databases are developed, many will be competing for the same global customers. Unfortunately, these unequal conditions will endure until bilateral agreements are worked out between the United States and the EU member states.[191]

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188. Ginsburg, *supra* note 181, at 1926.

189. *Id.*

190. Proposed Directive, *supra* note 1, § 5.1.3, at 31

191. This is not likely to happen quickly. Negotiations over intellectual property

Consequently, the European Union's sui generis protection of facts in a database is an anticompetitive and inefficient economic policy choice at this stage of the database development process. It is anticompetitive because it grants European database developers a property interest not enjoyed by their American counterparts. It is inefficient because it forces transaction costs on secondary compilers who must negotiate licensing terms with the original compiler. The prices demanded for the data will not always be based on the data's value on the market, but rather on a range of interests including the desire to maintain high profits and margins by excluding competitors from certain markets.

C. Preparing the Database for Market

Once data has been secured, either through original collection, licensing or the simple taking of unprotected data, depending on the legal scheme, the contents must be edited and refined for use in the new database and then blended into a presentation format. The goal is to organize and deliver the information in a way that enables the intended user to access needed information efficiently. Furthermore, most commercially significant databases are to some degree dynamic, requiring updating and revision either consistently or periodically.[192]

Here, the economic effects of the two regimes will be most apparent to end users. Under the United States system, the cost of the database, and its resulting competitive advantage will be concentrated in producing an innovative product. Because the only legally sustainable competitive advantage available under the United States system will be its creative selection and arrangement, this stage of the product cycle will be fertile ground for investment. Users will benefit as producers are forced to compete by creating more user-friendly systems, formatting databases more cogently, and by creating hardware and software tools that enhance the ability of users to gather and synthesize unrelated data.

The cost of a database under the European scheme, on the other hand, will be reflected in the cost of gaining access to

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protection have been some of the most contentious of the Uruguay round of the GATT. See *Policing Thoughts*, *supra* note 13.

192. *Amicus* Brief, *supra* note 14, at 19.

proprietary data. Because the original compiler owns the underlying data, the price charged for it will be a premium based on the lack of alternative sellers. For the potentially long period of time it will take competitors to either negotiate a licensing agreement or develop the data from scratch, the original compiler will have limited incentive to invest in more effective and easier-to-use products.

Clearly, the collection and assembly of information as well as the selection, coordination or arrangement of data are often extremely time consuming and expensive. The successful development and distribution of a database often depends on the solution of complex marketing problems. The process also calls for sophisticated knowledge of information science, the study of information seeking behavior, and of the details of storage and retrieval systems and computer programs. If the resulting compilation seems simple to the user, it is precisely because of the complex web of authorial activity that went into its design and execution.

In short, United States law recognizes that these complex factors are at the root of the competitive advantage of a compilation. The United States system rewards these important investments through the copyright protection of creativity. The European Union's Proposed Directive, on the other hand, will draw investment away from these strategic competitive features as EU developers struggle to compete at the less demanding stage of the original compilation of data.

V. CONCLUSION

The best argument for the United States copyright regime is that it most closely approximates a free market for data compilations with commodity data as the central feature. The price of a database will be set by its development cost and how well it has been designed through the various stages of the product development lifecycle. In contrast, the European scheme allows and sustains monopolies based on the original compilation of data. This scheme will allow original compilers to set monopoly prices limited only by inefficient compulsory licensing schemes.

The European Union's effort to protect domestic competitors now will be harmful to the market for databases in the short term and to the Europeans themselves in the long term.

In the short term, because data will be purchased or developed from scratch each time, the large number of works produced by EU developers will be expensive. In the long term, the Europeans will ultimately suffer as non-EU competitors accustomed to competing for global customers based on the quality of their product will become more and more difficult to beat in the marketplace. These competitors, hardened by the market and forced to innovate, will beat the Europeans on every price performance front. It would be far better for the Europeans to rely on their ingenuity and face the reality of the market now.

Ultimately, the division between the two regimes represents a dam over which information will not easily flow. More than perhaps any other commodity, data must be allowed to move without barriers in order to allow the world economy to grow in the most efficient manner possible. Consequently, rationalization of the two approaches to the copyright protection of computer databases should be an indispensable part of negotiations between the United States and the European Union, both in the multilateral GATT environment and in more focused bilateral talks.

Charles von Simson