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Intellectual Property and Contract Law for the Information Age: Foreword to a Symposium

Pamela Samuelson†

INTRODUCTION

Article 2B of the Uniform Commercial Code¹ (Article 2B) is a recently drafted model law that aspires to provide a standard set of rules

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- † Professor of Law and of Information Management, University of California, Berkeley. The Articles and Comments contained in this Symposium were presented at a conference entitled "Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce." The Conference was convened by the Berkeley Center for Law & Technology, and it took place at the University of California, Berkeley, on April 23-25, 1998. I wish to give special thanks to Laurel Jamtgaard, Mark A. Lemley, and Pat Murphy for their critically important roles in organizing the Conference. I am also deeply grateful both to the John and Mary R. Markle Foundation and to Wilson, Sonsini, Goodrich & Rosati for their generous support of the Conference; to the speakers at the Conference who provided so much food for thought; to the volunteers who did so much to get out information about the Conference and otherwise make the event go smoothly; and to the editors of the California Law Review and the Berkeley Technology Law Journal for their cooperation and support of the Conference, and for making the written Symposium a product of which we can all be proud. I also wish to thank my research assistant Peter Huang for his invaluable assistance in preparing this Foreword.
- 1. As of this writing, the most recent draft of Article 2B is dated August 1, 1998. [All versions of Article 2B are available on the Internet. See National Conference of Commissioners on Uniform State Laws, Drafts of Uniform and Model Acts Official Site (last modified Sept. 2, 1998) http://www.law.upenn.edu/library/ulc/ulc.htm. The Official Site offers the Article 2B drafts in several file formats, among which the pagination is inconsistent. In this Foreword and throughout this issue of the California Law Review, page references are to the pages as they are numbered in the Acrobat PDF file format. Only the prefaces to the drafts are cited by page number; all other material

that will regulate transactions in information products and services. It therefore seeks to do for the information economy what Article 2 of the current Uniform Commercial Code (U.C.C.) has done for the manufacturing economy and commerce in goods.² Article 2B may soon be submitted to state legislatures for enactment into state law.³ Future United States proposals for global electronic commerce rules might also be based on its rules.⁴ Article 2B could thus become the world's preeminent law regulating transactions in information.

is cited by section number. The draft of August 1, 1998, has no page numbers in its on-line versions, and therefore the preface of that draft is cited without page references. Ed.]

2. The Preface to Article 2B begins with the following epigraph:

The UCC has given parties in traditional sales of goods a well-understood legal framework to establish contract formation, terms, and enforcement rights. It is timely now to adapt this framework to the digital era and to the new information products and services that will increasingly drive Global Electronic Commerce.... Article 2B can be a strong first step toward a common legal framework for digital information and software licenses.

U.C.C. art. 2B Preface (Draft, Aug. 1, 1998) (quoting Letter from CSPP (a coalition of eleven major manufacturing companies) (Nov. 19, 1997)) (alteration in original). See also Raymond T. Nimmer, U.C.C. Revisions: Article 2 in the Information Age, in Intellectual Property Law Institute, 1995, at 1005, 1007 (PLI Pats., Copyrights, Trademarks & Literary Prop. Course Handbook Series No. G-416, 1995), available in Westlaw, PLI database, 416 PLI/Pat 1005 ("Article 2 of the Uniform Commercial Code (UCC) comprises the basic and most influential contract law of our country."). See generally U.C.C. art. 2 (1995) (providing a standard set of commercial law rules). Article 2 of the U.C.C. has promoted the growth of larger and more national markets for the manufacturing economy. See Fred H. Miller, The Uniform Commercial Code: Will the Experiment Continue?, 43 MERCER L. Rev. 799, 808 (1992) (noting the U.C.C.'s "substantive excellence" and discussing its success in promoting national uniformity). In doing so, Article 2 has heen supplemented by Article 2A, which sets forth rules for leases of goods. See generally U.C.C. art. 2A (1995) (providing standardized rules for leases of goods).

- 3. As of this writing, neither the National Conference of Commissioners on Uniform State Laws (NCCUSL) nor the American Law Institute (ALI) has formally approved a draft of Article 2B. As of March 26, 1998, the ALI Ad Hoc Committee on U.C.C. Article 2B considered that the text of the Article needed "significant revision." See Letter from Geoffrey C. Hazard to Gene N. Lebrun, President, NCCUSL, and Charles Alan Wright, President, ALI (Mar. 26, 1998) (memorializing discussion of March 18, 1998 among the ALI Ad Hoc Committee on Article 2B) (visited Sept. 19, 1998) http://www.softwareindustry.org/issues/guide/docs/ghmar98.html>. The ALI has tentative plans to submit a final draft to a vote by its membership on May 19, 1999, and NCCUSL will consider a final draft at its Annual Meeting in the summer of 1999. According to a joint press release, the two organizations "are committed to working together toward its completion so that Article 2B will be available for introductions and adoptions in state legislatures in 2000." NCCUSL and ALI Announce Schedule for Completion of Uniform Commercial Code Article 2B: Licensing (visited Sept. 19, 1998) http://www.law.upenn.edu/library/ulc/ucc2b/2breleas.htm. However, on September 10, 1998, Jack Valenti on behalf of the Motion Picture Association of America, along with presidents and CEOs of five other copyright industry organizations, wrote a letter urging the AL1 to table the Article 2B project, characterizing the draft as "fatally flawed in its fundamental premise that all transactions in 'information' may be governed by a single set of contractual rules." Letter from Jack Valenti, President and CEO, Motion Picture Association of America, et al., to Carlyle C. Ring, Jr., Chairman, NCCUSL Article 2B Drafting Committee, and Geoffrey Hazard, Jr., Director, American Law Institute 1 (Sept. 10, 1998) (on file with author). This will likely mean that the scope of Article 2B will be curtailed, even if the project is not tabled.
- See WILLIAM J. CLINTON & ALBERT GORE, JR., A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE § 3 (1997), available at http://www.iitf.nist.gov/eleccomm/ecomm.htm (visited Sept.

Transactions in information comprise a significant portion of both the national and the international economies. According to the Clinton administration's A Framework for Global Electronic Commerce, the United States exports well over \$40 billion worth of information products and services every year.⁵ Internet commerce alone could total tens of billions of dollars by the end of the century.⁶ Given the volume of the commerce that Article 2B would regulate, its effect on national and international economies could be profound.

The task of drafting a model law to govern transactions in information is daunting for a number of reasons. First, a wide array of industries engage in information transactions, which makes meeting their varied needs difficult. Article 2B would affect the divergent transactions into which these industries enter, such as the licensing of computer software and trade secrets,7 contracts between writers and their publishers,8 and database access agreements.9 Parties to each of these types of transactions have different historic licensing practices and assumptions. 10 For example, trade secret licensors are concerned principally with ensuring that licensees maintain strict controls over leakage of the licensors' information. 11 In contrast, writers are more concerned with getting credit for their work and ensuring that derivative market segments are available for licensing the reuse of that work.¹² Differences in how information is licensed flow from the different purposes of these licensors. Finding common threads in these transactions from which to weave a set of uniform rules is a considerable challenge.

Second, many of the market assumptions upon which Article 2B's drafters relied necessarily rest on risky predictions about the future of information age commerce. Article 2B would apply not only to commerce occurring in mature markets, but also to forms of electronic

^{19, 1998).} The President's announcement of the release of this report appears in Memorandum on Electronic Commerce, 33 WEEKLY COMP. PRES. Doc. 1006 (July 7, 1997).

^{5.} See CLINTON & GORE, supra note 4 (Background section).

[.] See id.

^{7.} See Rochelle Cooper Dreyfuss, Do You Want to Know a Trade Secret? How Article 2B Will Make Licensing Trade Secrets Easier (But Innovation More Difficult), 87 CALIF. L. REV. 191 (1999).

^{8.} See Jane C. Ginsburg, Authors as "Licensors" of "Informational Rights" Under U.C.C. Article 2B, 13 BERKELEY TECH. L.J. (forthcoming Dec. 1998).

^{9.} See Joel Rothstein Wolfson, Contract and Copyright Are Not at War: A Reply to "The Metamorphosis of Contract into Expand," 87 CALIF. L. Rev. 79 (1999).

^{10.} After representatives of the patent and trademark licensing communities communicated with the drafters of Article 2B regarding the representatives' concerns about Article 2B's potential to disrupt standard licensing practices for patents and trademarks, the drafters omitted these transactions from the scope of Article 2B. See U.C.C. § 2B-104(2) (Draft, Aug. 1, 1998) (providing exemptions for patent and trademark licensing not associated with a license otherwise covered by Article 2B); id. § 2B-104 reporter's note 3 (explaining that part of the basis for these exemptions is the "many different assumptions and standard practices" of such industries).

^{11.} See James Pooley, Trade Secrets 8-2, 8-51 to 8-53 (1997).

^{12.} See Ginsburg, supra note 8, at 36.

commerce that are immature, emerging, or yet to be developed.¹³ Article 2B anticipates, for example, marketplaces in which electronic agents representing prospective licensors and licensees of information will meet in cyberspace and form enforceable contracts by exchanging messages on acceptable terms and conditions.¹⁴ It is far from clear, however, that electronic agent technology will be the major means by which electronic contracts will be formed in the future.¹⁵ The immaturity of the markets that Article 2B would regulate and the immaturity of the information technologies that will enable such markets to flourish contribute to the difficulties involved in drafting an adaptable, technology-neutral set of rules. Any legal rules that depend on the state of an existing technology—or anticipate the widespread use of a technology that is currently immature—risk becoming obsolete.¹⁶

Third, Article 2B must successfully mesh with intellectual property law, which is itself a complex body of law that regulates many aspects of transactions in information. A successful mesh will not be easy, in part because Article 2B would allow for the enforcement of contractual restrictions in mass-market transactions that previously would have been unenforceable, either as a matter of contract law or as a matter of intellectual property law.¹⁷ In particular, Article 2B would validate "shrinkwrap licenses" as a matter of state contract law.¹⁸ "Shrinkwrap licenses" are pre-printed forms, self-designated as "licenses," that appear under the plastic wrap of a box, or inside a box of prepackaged software. While the software industry often uses shrinkwrap licenses in its mass-market transactions, contract cases generally have held that such

^{13.} See Michael Fromkin, 2B as Legal Software for Electronic Contracting—Operating System or Trojan Horse?, 13 BERKELEY TECH. L.J. (forthcoming Dec. 1998).

^{14.} See U.C.C. § 2B-204 (Draft, Aug. 1, 1998). Article 2B defines "electronic agent" as "a computer program or other automated means used by a person to independently initiate or respond to electronic messages or performances on behalf of that person without review by an individual." Id. § 2B-102(a)(19). Such contracts would be enforceable "if the interaction results in the electronic agents' engaging in operations that confirm or indicate the existence of a contract." Id. § 2B-204(1). This rule would apply "even if no individual was aware of or reviewed the agent's actions or their [sic] results." Id. § 2B-204(4).

^{15.} See James R. Davis, Remarks at the Berkeley Center for Law & Technology's Conference, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce (Apr. 25, 1998); see also Froomkin, supra note 13.

^{16.} For example, when Congress enacted a new form of legal protection for semiconductor chips, it decided to protect "mask works" with which semiconductors were manufactured during the 1980s. As a result, the Semiconductor Chip Protection Act, 17 U.S.C. §§ 901-914 (1994), has become obsolete. See, e.g., Morton D. Goldberg, Semiconductor Chip Protection as a Case Study, in GLOBAL DIMENSIONS OF INTELLECTUAL PROPERTY RIGHTS IN SCIENCE AND TECHNOLOGY 329, 323 (Mitchel B. Wallerstein et al. eds., 1993).

^{17.} See, e.g., Mark A. Lemley, Beyond Preemption: The Law and Policy of Intellectual Property Licensing, 87 CALIF. L. REV. 111, 119-21 (1999).

^{18.} See U.C.C. § 2B-208 (Draft, Aug. 1, 1998).

"licenses" are *proposals* for amending a contract of sale that was formed when a consumer paid for the software at the store, 19 not *part* of the contract of sale to which the consumer assented when he or she opened the shrinkwrap. Courts therefore generally hold that the terms contained in such shrinkwrap licenses are unenforceable because the consumer never assented to them. 20 Even when state law expressly validates shrinkwrap licenses, federal courts have sometimes refused to enforce license terms that would interfere with federal intellectual property purposes and policies. 21 Some commentators expect, however, that under an Article 2B regime, these licenses and the terms contained therein would override intellectual property rules that would otherwise apply. 22

The drafters of Article 2B recognize the potential for conflict between federal law and Article 2B licenses and have announced a "neutral" stance toward federal preemption issues.²³ Some commercial law specialists have predicted that Article 2B will entirely displace intellectual property law.²⁴ Even if these predictions are not borne out, Article 2B is likely to have a substantial impact on intellectual property law and transactions in information products and services.

Although Article 2B has been subjected to intense scrutiny in the hothouse of the drafting committee, there has been relatively little investigation of the intersection between Article 2B and intellectual property law.²⁵ Hundreds of years of regulating transactions in information has provided intellectual property law with some collective economic and social wisdom that the drafters of Article 2B would do well to contemplate, especially as that wisdom pertains to the protection of societal

^{19.} See, e.g., Step-Saver Data Sys. v. Wyse Tech., 939 F.2d 91, 103 (3d Cir. 1991).

^{20.} See, e.g., id. at 104. But see ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996) (enforcing a shrinkwrap license). The Seventh Circuit is the only circuit to have held such licenses enforceable.

^{21.} See Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 270 (5th Cir. 1988) (holding contractual restrictions on back-up copying and reverse-engineering unenforceable because of interference with federal copyright policy).

^{22.} See, e.g., Wolfson, supra note 9, at 88.

^{23.} See U.C.C. art. 2B Preface (Draft, Aug. 1, 1998). Commentators have also recognized the potential for conflict between federal intellectual property policy and state contract law. See, e.g., Niva Elkin-Koren, Copyright Policy and the Limits of Freedom of Contract, 12 Berkeley Tech. L.J. 93, 102 (1997); Robert P. Merges, The End of Friction? Property Rights and Contract in the "Newtonian" World of On-Line Commerce, 12 Berkeley Tech. L.J. 115, 120-27 (1997). Some commentators also question Article 2B's professed neutrality on preemption issues. See, e.g., Lemley, supra note 17, at 118 n.14; David F. McGowan, Free Contracting, Fair Competition, and Draft Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality," 13 Berkeley Tech. L.J. (forthcoming Dec. 1998); David Nimmer et al., The Metamorphosis of Contract into Expand, 87 Calif L. Rev. 17 (1999).

^{24.} See, e.g., Maureen A. O'Rourke, Copyright Preemption After the ProCD Case: A Market-Based Approach, 12 Berkeley Tech. L.J. 53, 77-80 (1997).

^{25.} Few articles have investigated the relationship between intellectual property policy and the restrictions contained in software shrinkwrap licenses. See, e.g., Mark A. Lemley, Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev. 1239 (1995); O'Rourke, supra note 24.

interests in ongoing innovation. It is arguable that the drafters of Article 2B have not paid enough attention to that wisdom.

Recognizing the importance of successfully managing the intersection between Article 2B and intellectual property law, the Berkeley Center for Law & Technology hosted a conference on April 23-25, 1998, to consider the implications of Article 2B for intellectual property law, commercial transactions in information, and electronic commerce. The Conference featured presentations by intellectual property and commercial law scholars, economists, technologists, representatives of various information industries, and attorneys specializing in information industry transactions. ²⁷

The Articles and Comments contained in this Symposium, along with those contained in a companion issue of the *Berkeley Technology Law Journal*, were presented at the Berkeley Conference. These papers offer guidance for several audiences and purposes: the drafters of Article 2B as they refine their product for final approval and adoption into state law; state legislatures and courts as they consider and attempt to interpret Article 2B's provisions; policymakers attempting to build global consensus on contract rules for an information economy that is far less dependent on territorial bounds than was the manufacturing economy; and practicing lawyers dealing with the implications of Article 2B for their own and their clients' businesses. What follows is a brief synopsis of the themes and major contentions developed in these papers.

^{26.} The official name of the Conference is "Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce." The following organizations were co-sponsors of the Conference: the American Law Institute; the Information Technology Association of America; Continuing Legal Education of the Bar of California; the Business and Law Section of the California State Bar Association; the School of Information Management and Systems at the University of California at Berkeley; the Institute of Management, Innovation, and Organization of the Haas School of Business at the University of California at Berkeley; and the Fisher Center for Management and Information Technology of the Haas School of Business at the University of California at Berkeley.

^{27.} The Conference has an Internet site. See Berkeley Center for Law & Technology, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce (visited Sept. 19, 1998) http://www.sims.berkeley.edu/belt/events/ucc2b/». For a complete listing of speakers and their affiliations, see Conference Participants (visited Sept. 19, 1998) http://www.sims.berkeley.edu/belt/events/ucc2b/bio.html».

^{28.} Symposium, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce, 13 Berkeley Tech. L.J. (forthcoming Dec. 1998).

I "THE METAMORPHOSIS OF CONTRACT INTO EXPAND"29

Contract and copyright law may have lived in harmony for centuries, but as David Nimmer and his colleagues Elliot Brown and Gary Frischling colorfully assert, this "harmony is not the end of the symphony." Nimmer says that contract law works best when it complements copyright law to enable the successful exploitation of copyrights. Copyright doctrine also looks to contract law for answers to questions of copyright significance, such as who is an "employee" for the purposes of determining ownership rights in an original work under copyright's work-made-for-hire doctrine. While Nimmer praises Article 2B for addressing many commercially important questions on which prior licensing law has regrettably been silent, 2 he views Article 2B as "an unwelcome meddler" insofar as it aspires to protect the interests of copyright proprietors and insofar as it enables licensors to disrupt the "delicate balance" long embodied in copyright law.3

Nimmer's quarrel is not so much with the enforceability of mass-market shrinkwrap licenses as a matter of state contract law, although he notes that several federal cases have refused to enforce license restrictions of the sort Article 2B would ratify.³⁴ Nimmer's quarrel is instead with the drafters of Article 2B's apparent indifference to the prospect of information industries using mass-market licenses to undermine user rights and other federal copyright policies.

Nimmer also questions whether the drafters of Article 2B are really as neutral on the subject of federal preemption as they profess.³⁵ "[T]he draft," he says, "is only 'neutral' where it chooses to be."³⁶ Article 2B's selective neutrality "suffers from precisely the same shortcoming of political neutrality in response to real-world conflict: it *de facto* favors those with concentrated interests and large financial resources and thus tacitly invites abuses."³⁷ Given that Article 2B makes difficult policy choices about other important issues, for example, favoring the contraction of user rights over the public's right to make fair use of

^{29.} Nimmer et al., supra note 23.

^{30.} Id. at 22. David Nimmer is the co-author, along with his now-deceased father Melville B. Nimmer, of a well-known copyright treatise, Nimmer on Copyright. For the sake of simplicity, the text of this Foreword will refer to Nimmer alone as author of The Metamorphosis of Contract into Expand.

^{31.} See Nimmer et al., supra note 23, at 25.

^{32.} See id at 21.

^{33.} Id. at 22.

^{34.} See id. at 47.

^{35.} See id. at 69-72.

^{36.} Id. at 70.

^{37.} Id. at 71

materials,³⁸ Nimmer thinks that it should also say something substantive about federal intellectual property policy preemption.³⁹

In addition, Nimmer takes aim at the chief precedent upon which the anti-preemptionists among Article 2B's proponents will rely, which is Judge Frank Easterbrook's analysis of copyright preemption in *ProCD*, *Inc. v. Zeidenberg.*⁴⁰ Nimmer argues that Judge Easterbrook not only misinterpreted the copyright preemption provision his opinion addresses, but that he also ignored the "conflict with federal law" line of copyright preemption cases.⁴¹ Relying on this important line of cases, Nimmer argues that federal preemption is the appropriate response to contracts that purport to recalibrate and defeat the copyright balance.⁴² Nimmer also offers an analytical framework to help determine when contract terms should be preempted.⁴³

Π

"THE PRIVATIZATION (OR 'SHRINK-WRAPPING') OF AMERICAN COPYRIGHT LAW" AND "CONTRACTS AND COPYRIGHT ARE NOT AT WAR"45

As eloquent as Nimmer is in articulating his position, he surely would admit that he was not the first copyright scholar to raise concerns about Article 2B's potential to disrupt the copyright balance. Professor Charles McManis was an early champion of these concerns. During an American Law Institute (ALI) oversight meeting about Article 2B in the spring of 1997, McManis made a motion to recommend an amendment to the mass-market license provision of Article 2B.46 This motion would have made it clear that Article 2B licenses could not be used to override fair use or other specified copyright policies limiting the rights of copyright owners.47 In his Comment, McManis further elucidates his

^{38.} See id.

^{39.} See id. at 69-70.

^{40. 86} F.3d 1447 (7th Cir. 1996). Judge Easterbrook regarded Zeidenberg as having agreed to abide by the "home use" restriction in the license accompanying the CD-ROM of telephone directory listings that Zeidenberg purchased. See id. at 1454. In Judge Easterbrook's view, breach of that agreement by uploading the listings to a website distinguished ProCD's contract claim against Zeidenberg from a copyright claim. See id. at 1454-55.

^{41.} Nimmer et al., supra note 23, at 41.

^{42.} See id. at 58-59.

^{43.} See id. at 63-68.

^{44.} Charles R. McManis, *The Privatization (or "Shrink-Wrapping") of American Copyright Law*, 87 CALIF L. REV. 173 (1999). Professor McManis's Comment was originally prepared as commentary on Professor Lemley's Article, *supra* note 17. However, the substance of the McManis Comment is more directly relevant to the Nimmer Article and the Wolfson Comment. Thus, this Foreword discusses the McManis Comment with the Nimmer Article and the Wolfson Comment.

^{45.} Wolfson, supra note 9.

^{46.} See McManis, supra note 44, at 176.

^{47.} See id. at 176-77.

concerns about the phenomenon to which the title of his Comment— The Privatization (or "Shrink-Wrapping") of American Copyright Law—so pointedly hints.⁴⁸

McManis notes that there is nothing in Article 2B that would prevent book publishers and other content providers from using techniques similar to the *ProCD* shrinkwrap license to obtain waivers of user rights under copyright law.⁴⁹ He regards Article 2B as currently inviting copyright owners to "have their cake and eat it too" at the expense of consumers.⁵⁰ Both McManis and Nimmer find this result unacceptable.⁵¹

In contrast, Joel Wolfson, Associate General Counsel at Nasdaq, criticizes both the Nimmer proposal and the McManis Motion.52 Wolfson fears that both proposals would have unintended ill consequences for some of today's leading information industries.⁵³ He points out that much of the valuable information being traded in commerce consists of data compilations that cannot be protected by copyright law in the aftermath of the Supreme Court's decision in Feist Publications, Inc. v. Rural Telephone Service Co.54 According to Wolfson, leading information industries can now protect their data from misappropriation only by using standard form contracts,55 which he thinks that the Nimmer and McManis proposals would effectively nullify.⁵⁶ Wolfson argues that such nullification would threaten the viability of leading information industries, especially given Congress' inaction on both the Collections of Information Antipiracy Act⁵⁷ and similar legislation that would adopt a European-inspired form of intellectual property protection for the contents of databases.58

^{48.} See id. at 177-86.

^{49.} See id. at 173-74.

^{50.} Id. at 176.

^{51.} See id. at 186-87; Nimmer et al., supra note 23, at 22.

^{52.} See Wolfson, supra note 9, at 80-83. While Wolfson criticizes both the Nimmer proposal and the McManis motion, be seemingly sympathizes with their underlying concerns. See id. at 104.

⁵³ See id at 80

^{54. 499} U.S. 340 (1991) (holding that white page listings of telephone directories lack sufficient originality in the selection and arrangement of data elements to qualify for federal copyright protection).

^{55.} See Wolfson, supra note 9, at 88-93.

^{56.} See id. at 91.

^{57.} See id. at 110; see also H.R. 2652, 105th Cong. (1998). This Bill has passed the House of Representatives, see 144 Cong. Rec. H3404 (daily ed. May 19, 1998) (recording passage), but as of this writing, no such bill has been passed by the Senate.

^{58.} See European Parliament and Council Directive 96/9/EC of 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L77) 20 (creating a new form of intellectual property protection for the contents of databases); see also Jane C. Ginsburg, Copyright, Common Law, and Sui Generis Protection of Databases in the United States and Abroad, 66 U. Cin. L. Rev. 151, 171-76 (1997) (arguing for a new form of intellectual property protection for databases, such as that contained in the European database directive); J.H. Reichman & Paniela Samuelson, Intellectual Property Rights in Data?, 50 Vand, L. Rev. 51, 84-95 (1997) (criticizing the European database directive).

Wolfson also gives examples of situations in which it is reasonable for information providers to require licensees of their data to waive their fair use rights.⁵⁹ In addition, he suggests that Congress should provide any needed clarification about the supremacy of copyright policy regarding licenses of information under Article 2B.⁶⁰ Wolfson insists that it is inappropriate to use state contract law to define the boundaries of federal copyright policy.⁶¹

McManis contends that accepting his motion would not open the jaws of preemption as widely as Wolfson claims.⁶² As McManis points out, the Supreme Court has defined some domains in which state laws can protect information and information products.⁶³ Other domains are off-limits, either because Congress has acted in a manner that leaves no room for states to act in that arena, or because a particular state action would interfere with Congressional objectives.⁶⁴ McManis says that if the substance of his ALI motion became part of Article 2B, licenses regarding uses of information—such as those with which Wolfson is concerned—would "arguably [be] unaffected."⁶⁵

McManis also questions whether copyright policy issues that relate to contract law should be left entirely to Congress. According to McManis, state legislatures considering Article 2B—with or without amendments such as the McManis Motion—will be in the thicket of copyright policy making. Moreover, state courts will be unable to avoid copyright policy questions because disputes between licensors and licensees will present them directly. Since state legislatures and courts will inevitably have to deal with copyright policy issues, McManis argues that Article 2B's drafters should provide some guidance regarding the relationship of Article 2B to copyright law and policy.

^{59.} See Wolfson, supra note 9, at 88-93. For example, Dun & Bradstreet may limit the posting of credit reports in order to protect consumer privacy, even though this might be permissible as fair use. See id. at 92.

^{60.} See id. at 109-10.

^{61.} See id. at 110.

^{62.} See McManis, supra note 44, at 178-79.

^{63.} See, e.g., Aronson v. Quick Point Peneil Co., 440 U.S. 257 (1979) (enforcing a contract to pay royalties even though the patent was subsequently held invalid); Goldstein v. California, 412 U.S. 546 (1973) (upholding state sound recording anti-piracy legislation).

^{64.} See, e.g., Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 156-57 (1989) (striking down Florida "plug mold" statute because of its interference with the purposes of the federal patent law that leaves in the public domain those industrial designs that do not qualify for patent protection).

^{65.} McManis, supra note 44, at 177-78.

^{66.} See id. at 179-81.

^{67.} See id. at 179-80.

^{68.} See id. at 181.

^{69.} See id. at 182.

Ш

"BEYOND PREEMPTION:

THE LAW AND POLICY OF INTELLECTUAL PROPERTY LICENSING"70

As noted above, Nimmer, Wolfson, and McManis anticipate that the bulk of the action pertaining to the complex contract-intellectual property relationship will arise in the context of preemption challenges to the enforcement of contracts. Professor Mark Lemley, however, asserts that it will be necessary to go, as the title of his Article evocatively indicates, "[b]eyond [p]reemption." Lemley observes that Article 2B would encompass some forms of intellectual property protection—notably trade secrecy law—that derive from state, rather than federal, law. Since preemption arises only in cases in which there is a conflict between state and federal law, it provides no guidance for cases in which one state law conflicts with another.

Moreover, Lemley notes that the federal case law contains several discrete types of preemption and only copyright law has an explicit statutory provision regarding preemption.⁷⁴ He also suggests that the vagaries of court interpretations of that statutory provision are trouble-some.⁷⁵ Succinctly put, Lemley thinks that the law regarding the federal preemption of state intellectual property law and policy "is a mess."⁷⁶

Although Lemley expects case law to develop on Article 2B preemption issues, he does not think that preemption should be the sole point of inquiry regarding the intersection between Article 2B and intellectual property law and policy. Lemley explores other doctrines that might be used to challenge Article 2B licensing terms and to inject policy balances similar to the ones that now occur in intellectual property cases. One of the most promising of these doctrines is that of misuse. This doctrine has evolved over many decades as a way to keep owners of intellectual property rights from leveraging their government-granted monopoly rights in a manner that allows them to acquire unjustifiable advantages in dealings with customers or competitors. The misuse doctrine has been successfully applied in cases involving patent and copyright licensing, which augurs well for applying it to deter licensor overreaching.

^{70.} Lemley, supra note 17.

^{71.} Id. at 111

^{72.} See id. at 133.

^{73.} See id. at 146.

^{74.} See id. at 137-38; see also 17 U.S.C. § 301 (1994).

^{75.} See, e.g., Lemley, supra note 17, at 140.

^{76.} Id. at 115.

^{77.} See id. at 144-51.

^{78.} See id. at 151-71.

^{79.} See id. at 151-53.

^{80.} See id. at 152-58.

Like Nimmer and McManis, Lemley expects intellectual property policy to take on the flavor of a consumer protection statute as it relates to Article 2B.81 Lemley believes, however, that it is at least as important for intellectual property policy to ensure that Article 2B licenses do not stifle subsequent innovation that might build upon information licensed under Article 2B.82 While a contractual waiver of the right to reverseengineer a mass-marketed information product may seem to be of little interest to the ordinary consumer, Lemley argues that consumers will suffer in the long run if no one can reverse-engineer existing products or use the fruits of such knowledge to develop new products.83 Lemley says that "[i]ntellectual property rules may not always be pretty But they are at least an effort to arrive at the right balance of incentives—an effort that would never even be made were we to leave social ordering entirely in the hands of private parties."84 He argues that this balance would be upset by the enforcement of Article 2B licenses that bar reverse-engineering of mass-marketed information products.

IV

"Do You Want to Know a Trade Secret? How Article 2B Will Make Licensing Trade Secrets Easier (But Innovation More Difficult)"85

Professor Rochelle Cooper Dreyfuss raises very similar concerns about Article 2B's impact on the innovation policy underlying trade secrecy law. She observes that Article 2B's "concentration on exploitation leads to a somewhat cavalier dismissal of creative issues... [and may] frustrate innovation by undermining a core premise of federal innovation policy, namely, that information leaks: That is, knowledge flows inevitably into the domain of the public." Dreyfuss suggests that allowing appropriate leakage of information is as important to state trade secrecy law as it is to federal patent and copyright law. State

Dreyfuss expresses other concerns about some of Article 2B's implications for trade secrecy licensing. If patent licensing involves sufficiently different assumptions and practices from other licensing to warrant an exception from the scope of Article 2B, Dreyfuss asks why

^{81.} See id. at 171-72; McManis, supra note 44, at 175; Nimmer et al., supra note 23, at 23; see also Julie E. Cohen, Copyright and the Jurisprudence of Self-Help, 13 Berkeley Tech. LJ. (forthcoming Dec. 1998) (invoking copyright policy as a limitation on the use of technical means of enforcing contracts).

^{82.} See Lemley, supra note 17, at 170-71.

^{83.} See id. at 170; see also Lemley, supra note 25, at 1280-82.

^{84.} Lemley, supra note 17, at 171.

^{85.} Dreyfuss, supra note 7.

^{86.} See id. at 198-99.

^{87.} Id. at 198.

^{88.} See id. at 199.

this is not equally true for trade secrecy licensing.⁸⁹ She notes that Article 2B will cover virtually all licensing in trade secrets, but that the text of Article 2B adopts some rules that make no sense in relation to trade secrets, such as the rule requiring licensors to provide refund rights to licensees under some conditions.⁹⁰ Article 2B also invents a new vocabulary and introduces several key distinctions that will be unfamiliar and potentially troubling to trade secret licensing specialists.⁹¹ Moreover, Dreyfuss points out that the most central term of Article 2B—"information"—is defined in a manner that conflates concepts that have distinct meanings in trade secrecy and other intellectual property laws.⁹² She also observes that the explanatory notes to Article 2B contain curiously few references to trade secrecy statutes and cases involving trade secrecy licensing.⁹³ Dreyfuss attributes Article 2B's relative deafness to the sensitivities of trade secrecy law to the relatively late inclusion of trade secrecy licensing in the Article 2B drafting process.⁹⁴

Dreyfuss, however, seems more sanguine than does Nimmer about Article 2B's potential to take on functions similar to those of intellectual property law. 95 Indeed, she believes that Article 2B may help to fill a gap in the existing framework of intellectual property law, which currently underprotects investments in subpatentable and subcopyrightable informational works, such as the commercially valuable Nasdaq data about which Wolfson expresses concern. 96 This prospect does not make Dreyfuss uncomfortable as long as Article 2B does not suffocate the ongoing process of innovation. 97

^{89.} See id. at 197-98.

^{90.} See id. at 202; see also U.C.C. art. 2B §§ 102, 103 (Draft, Aug. 1, 1998).

^{91.} See Dreyfuss, supra note 7, at 201-09.

^{92.} See id. at 206-09 (discussing the various meanings of "information" in Article 2B and intellectual property law).

^{93.} See id. at 198.

^{94.} See id. at 196-97.

^{95.} See id. at 267; Nimmer et al., supra note 23, at 23.

^{96.} See Dreyfuss, supra note 7, at 267; Wolfson, supra note 9, at 88-91; see also Rochelle C. Dreyfuss, A Wiseguy's Approach to Information Products: Muscling Copyright and Patent into a Unitary Theory of Intellectual Property, 1992 Sup. Ct. Rev. 195, 208-09 (1992) (expressing concern about the lack of protection available to commercially valuable information); J.H. Reichman, Legal Hybrids Between the Patent and Copyright Paradigms, 94 Colum. L. Rev. 2432, 2455-2500 (1994) (giving numerous examples of new forms of legal protection that have been devised for information works not qualifying for traditional copyright or patent protection); Pamela Samuelson et al., A Manifesto Concerning the Legal Protection of Computer Programs, 94 Colum. L. Rev. 2308, 2412-20 (1994) (proposing a new form of legal protection for uncopyrightable and unpatentable aspects of computer software).

^{97.} See Dreyfuss, supra note 7, at 260.

V

"W(h)ITHER WARRANTY: THE B(L)OOM OF PRODUCTS LIABILITY THEORY IN CASES OF DEFICIENT SOFTWARE DESIGN"98

While intellectual property lawyers tend to focus exclusively on how intellectual property law affects incentives to invest in socially desirable information products and services, Professor Peter Alces makes it clear that other rules are also important. For example, rules setting quality standards for information products—such as the software warranty rules proposed in Article 2B99-also affect investment incentives. 100 Setting very high warranty standards could deter investments in products or services because the risks of liability for developers may be too great.¹⁰¹ Conversely, setting very low warranty standards can harm market growth in the long run if such standards lead consumers to have too little faith in the products or services that such standards cover. 102 According to Alces, in designing warranty standards, policymakers must find a "delicate balance" between providing sufficient incentives for developer investment on the supply side and providing enough quality assurance to induce consumer investment on the demand side. 103

Alces suggests that striking such a balance is easier when legislation is "bilateral"—that is, when relatively large and sophisticated players routinely participate in both sides of the transactions being regulated. He thinks, however, that Article 2B is more "unilateral" in character: it is more favorable to licensors of information and thus biased towards lower warranty standards, which the industry participants perceive to be in their interests. 105

Much of Alces' Article explains why raising Article 2B's warranty standards in relation to computer software is desirable, both from the standpoint of society and from the standpoint of the software

^{98.} Peter A. Alces, W(h)ither Warranty: The B(l)oom of Products Liability Theory in Cases of Deficient Software Design, 87 CALIF. L. REV. 269 (1999).

^{99.} See U.C.C. art. 2B pt. 4 (Draft, Aug. 1, 1998).

^{100.} See Alces, supra note 98, at 274. The arguments in this paragraph were more forcefully set forth in Professor Alces's oral presentation at the Berkeley conference than in his written text. See Peter Alces, Remarks at the Berkeley Center for Law & Technology's Conference, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce (Apr. 25, 1998) [hereinafter, Alces, Remarks].

^{101.} See Alces, Remarks, supra note 100

^{102.} See id.

^{103.} See id.

^{104.} See Alces, supra note 98, at 291. For example, because the Ford Motor Company is a buyer of goods as often as it is a seller, it will be in Ford's interests to ensure that the rules affecting buyers and sellers are balanced. See id.

^{105.} See id. at 292-93

industry. 106 He cites historical analogues to support his warning that if Article 2B does not adequately protect licensee interests in reasonable levels of quality, products liability law will probably grow to respond to licensee concerns. 107 Suppose, for example, that a firm suffers grievous losses on account of the failure of "inillennium bug" (i.e., the year 2000 problem) detection software. The firm is unlikely to accept sole responsibility for the losses. If a warranty claim against the licensor appears difficult to sustain, the firm will probably look to products liability law to obtain a fair recovery. 108 Alces explains why such a claim might succeed and argues that "the arguments of those who would insulate licensors from liability may well backfire." 109

VI

ARTICLES AND COMMENTS PUBLISHED IN A COMPANION ISSUE OF THE Berkeley Technology Law Journal 110

The Berkeley Technology Law Journal is publishing a companion issue to this Symposium.¹¹¹ That issue includes several papers and comments that were also presented at the Berkeley Conference.¹¹² In Breaking Barriers: The Relation Between Contract and Intellectual Property Law, Article 2B's reporter Professor Raymond T. Nimmer discusses the commercial importance of Article 2B licenses for promoting on-line commerce in information.¹¹³ He also explains his views on preemption and other federal policy intersection issues.¹¹⁴ In Authors as

^{106.} See id. at 297-98.

^{107.} See id. at 298-99. Alces gives the example of the emergence of strict liability law in cases involving defective automobiles. See id. at 287-88. He says that this sort of law was a response to prevalent automobile industry contracts that greatly restricted warranty liability. See id. at 291.

^{108.} See id. at 299. Alces does a nice job explaining how software defect cases are likely to be analyzed in product liability terms. See id. at 298-303. Products liability law may have evolved in the context of manufacturing industries, but that does not mean that it cannot be adapted to deal with software. See id. at 301-02.

^{109.} Id. at 304.

^{110.} Symposium, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information and Commerce, 13 Berkeley Tech. L.J. (forthcoming Dec. 1998).

^{111.} *Id.* This issue and the *Berkeley Technology Law Journal* issue are the first symposium issues devoted to the intellectual property and related public policy issues raised by Article 2B. A previous symposium on Article 2B is Symposium, *The Uniform Commercial Code Proposed Article 2B*, 16 J. MARSHALL J. COMPUTER & INFO. L. 205 (1997).

^{112.} Last spring, editors from both the California Law Review and the Berkeley Technology Law Journal met to discuss how to allocate the papers between the two journals. The principal criteria for allocation were thematic congruence and the degree of completion of the papers (the California Law Review has a more time-intensive publication process and had to complete several stages of its process by May). I am deeply grateful to both the editorial boards of these journals and to the authors of the Articles and Comments for their dedication to making the written Symposium as great a success as the live Symposium.

^{113. 13} BERKELEY TECH. L.J. (forthcoming Dec. 1998) (on file with author).

^{114.} See id. at 19-26.

"Licensors" of "Informational Rights" Under UCC Article 2B, Professor Jane C. Ginsburg provides some "good news" and some "bad news" for authors who license their intellectual property rights to publishers. 115 Professor Jessica Litman's Tales That Article 2B Tells argues that Article 2B is "confusing and confused" about copyright and its relationship with that law. 116 In Copyright and the Jurisprudence of Self-Help, Professor Julie E. Cohen asserts that copyright policy should limit the extent to which licensors can use technical protection systems to enforce licenses. 117 David F. McGowan's Free Contracting, Fair Competition, and Draft Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality" examines Article 2B from the standpoint of federal antitrust policy. 118 Finally, in 2B as Legal Software for Electronic Contracting—Operating System or Trojan Horse?, Professor Michael Froomkin considers the technological ripeness of electronic commerce's infrastructure for Article 2B's regulations.119

CONCLUSION

We are currently witnessing the emergence of new forms of commerce in information and new means by which to distribute it. As a consequence, new rules governing commerce in information are inevitable. Together, the papers contained in this issue and the companion issue of the *Berkeley Technology Law Journal* provide a rich set of reflections on Article 2B's implications for intellectual property law and contract law in light of developments in the information economy. As these papers show, Article 2B will not be alone in responding to the challenges that developments in the information economy will bring. Intellectual property law and policy will also be an integral part of the mix. Both bodies of law must work together if the information economy is to achieve its full potential.

^{115.} Ginsburg, supra note 8.

^{116. 13} BERKELEY TECH. L.J. (forthcoming Dec. 1998).

^{117.} Cohen, supra note 81.

^{118.} McGowan, supra note 23.

^{119.} Froomkin, supra note 13.