

Canada-United States Trade Issues: Back from Purgatory? Why Computer Software “Shrink-Wrap” Licenses Should Be Laid to Rest

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I. INTRODUCTION

From almost the beginning of transactions involving computers and computer software, a special form of “license,” the shrink-wrap license,¹

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1. Jeffrey B. Ritter, *Scope of the Uniform Commercial Code: Computer Contracting Cases and Electronic Commercial Practices*, 45 BUS. LAW. 2533, 2548-49 (1990). A license in the area of intellectual property, such as copyright, patent, and trade secret, means the authorization, express or implied, through agreement with the owner of the applicable right(s) to another to exercise part or all of the owner’s bundle of rights. It is, in other words, a contract; and like contracts, licenses come in many forms. A good description of what shrink-wrap licenses were like in the late 1980s and early 1990s is the following:

“In the practice of software licensing, many off-the-shelf programs are “sold” at retail, pre-packaged, in sealed boxes, or wrapped cellophane packages. The complete terms of the purchase or license, as the case may be, are set forth on the package, and provide that the opening of the package constitutes acceptance of those terms.”

has been ubiquitous.² Shrink-wrap “licenses” are special for many reasons. However, they are particularly notable for attempting to alter, if not create anew, a contract relationship between the owner of the intellectual property rights in the product purportedly “sold,” (the computer software), and the “buyer,” after the contract of “sale” has already taken place. With it, software publishers³ have attempted to control, largely without negotiations, and often with surprise, what software users can and cannot do with the computer programs⁴ that they acquire and use.⁵

In addition, from the start, questions have been raised as to the enforceability of shrink-wrap licenses, if not the very need for them.⁶ There is no other comparable product today, at least in terms of items so readily available to consumers, that places as many prohibitions on its “purchasers”⁷ as the shrink-wrap license does for computer software. Recent business and legal developments in the United States seem to point to an expansion in the use of shrink-wrap licenses not only by software publishers, but other entities with which consumers contract

Id. at 2549. Since the length of shrink-wrap licenses was becoming longer and longer, and the print size smaller and smaller, software publishers took to placing a notice on their packaging that the software was being sold subject to a license, the terms of which were included inside the packaging. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1450 (7th Cir. 1996) (notice placed on box including software; license terms printed in manual inserted in box and appearing on user’s screen every time software used).

2. See Thomas M.S. Hemmes, *Restraints on Alienation, Equitable Servitudes, and the Feudal Nature of Computer Software Licensing*, 71 DENV. U. L. REV. 577-78 (1994).

3. This paper will refer to software producers as software publishers because under the copyright laws of both the United States and Canada, computer programs are protected as literary works. See *infra* notes 39 & 58 and accompanying text. As the producers of literary works are generally described as publishers, for the sake of consistency, the designation will be continued. See BLACK’S LAW DICTIONARY 1233 (6th ed. 1990).

4. This Article will interchangeably use the terms “computer program” and “computer software,” or simply “program” and “software,” to mean the same thing: instructions for a computer that are fixed in a tangible medium. See *infra* notes 38 & 58 (for definitions of computer program under the Copyright Acts of Canada and the United States). Currently, the most common media of storage for computer programs are computer discs, CD-ROMs, and a computer’s hard drive. A computer hard drive is part of a computer’s internal memory. Software can be pre-written and obtained “off-the-shelf,” the source of most computer programs today, or custom made and/or modified for a user’s specific needs. See Bonna Lynn Horovitz, Note, *Computer Software As a Good under the Uniform Commercial Code: Taking a Byte Out of the Intangibility Myth*, 65 B.U. L. REV. 129, 134 (1985).

5. See generally Robert W. Gomulkiewicz & Mary L. Williamson, *A Brief Defense of Mass Market Software License Agreements*, 22 RUTGERS COMPUTER & TECH. L.J. 335 (1996).

6. See generally Gary W. Hamilton & Jeffrey C. Hood, *The Shrink-Wrap License—Is It Really Necessary?*, Vol. 10, No. 8 COMPUTER LAW 16 (1993).

7. The reason why terms such as “purchaser,” “seller,” “license” and “sales” will sometimes appear in quotes throughout this Article will become evident once the issue of whether computer software shrink-wrap licenses actually are contracts involving a sale is addressed. See *infra* Part III.B.

every day.⁸ For the moment, the reader may want to consider whether the use of shrink-wrap licenses should be extended to other consumer goods embodying intellectual property such as books, sound recordings, video tapes, automobiles, televisions, postcards, etc. The Uniform Commercial Code, which applies to contracts for the sale of goods in all but one state in the United States, is presently undergoing revision that would explicitly render such licenses enforceable,⁹ even though current law is, at best, unclear over whether and/or when such contracts are or should be enforced.

Unlike the dozens of articles on software shrink-wrap licenses,¹⁰ the approach taken in this paper shall be one of comparison: not only between the laws of copyright and contract, patent and trade secret, but between international and domestic laws, and especially between the laws of the United States and Canada. According to the Software Publishers Association, in 1996, the sale of computer application software in the United States and Canada passed the ten billion dollar mark for the first time.¹¹ Almost all of those sales involved a license, be it a shrink-wrap license or one that was actually negotiated between the contracting parties. North America is the world leader in the creation of software programming,¹² and Canada and the United States are each others' largest

8. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1451 (7th Cir. 1996), and discussion *infra* Part IV.B. The influence of this computer industry practice began by spreading to new and different software applications such as the CD-ROM. See Mary Brandt Jensen, *CD-ROM Licenses: What's in the Fine or Non-Existent Print May Surprise You*, CD-ROM PROFESSIONAL, March 1991, at 13. CD-ROMs are compact discs which may store not only text, but also images and sounds. They are used with computers, but they could not, until relatively recently, be copied onto ordinary computer discs used for storage (ROM stands for Read Only Memory). Encyclopedias, books, movies and music as well as briefs from famous intellectual property cases can be stored on the discs. The CD-ROM is probably one of the most important developments in the so-called "interactive media" technologies. The use of the shrink-wrap license in CD-ROM "sales" to individual users thus raises similar issues that will be examined in this paper.

9. See Raymond T. Nimmer, *The Emerged and Emerging New Uniform Commercial Code - UCC Revision: Information Age in Contracts*, SB29 ALI-ABA 17 (West 1996).

10. For a representative list of articles discussing shrink-wrap licenses, see Gomulkiewicz & Williamson, *supra* note 5, at 336 n.2.

11. Software Publishers Association, Press Release, *1996 Personal Computer Application Software Sales Pass \$10 Billion for the First Time* (visited on Apr. 23, 1997) <<http://www.spa.org/research/releases/1996NA.htm>>. Computer application software should be distinguished from operating system software. The latter, such as Windows 95, Windows 3.x and MS-DOS, is the software used by a computer to run individual application programs, such as a word processing program like WordPerfect, or a program of a game of chess. Thus the amount of money that computer programs generate in sales is even higher than those reported by the SPA.

12. See OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, COMPUTER SOFTWARE AND INTELLECTUAL PROPERTY: BACKGROUND PAPER 5 (1990); *Software Industry Outlines Changes; Canada*, COMPUTER DEALER NEWS, Oct. 18, 1993, at 17.

trading partners.¹³ The market shares of North American computer software in Europe, and in countries where English is not the primary language, far surpass ordinary expectations.¹⁴ Furthermore, because software sales can involve trans-border transactions that go beyond North America, contracting parties may ignore, if not forget, that international treaties, such as the United Nations Convention on Contracts for the International Sale of Goods, may apply,¹⁵ often with unexpected results.¹⁶ The goal of this paper is to explain why software publishers have felt compelled to resort to the shrink-wrap license, to show how these concerns have translated themselves in Canada and the United States, and to examine the reasons why shrink-wrap licenses should be abandoned once and for all before it becomes too late to rein in their spread to other areas.

II. THE SHRINK-WRAP LICENSE

Before further venturing into the legal questions surrounding computer software contracts, an examination of the shrink-wrap license must be entertained in order to establish a sound basis for discussion. A copy of Westlaw's Software License Agreement (Westlaw License) is

13. See E.W. Kieckhefer, *U.S. Throws Big Economic Shadow Across Canada*, COMMERCIAL APPEAL, Jan. 19, 1997, at B4, available in 1997 WL 7339345; David Israelson, *Yanking Our Chain: Canada Is Tightly Tied to the U.S. by Trade—A Cause for Worry Whenever Our Neighbor Begins Rattling Sabres*, TORONTO STAR, Mar. 5, 1996 at D1, available in 1996 WL 3354054.

14. See PR Newswire, *End User and Corporate Demand for Microsoft Internet Explorer Reaches Major Milestones*, Apr. 17, 1997, available in Lexis; Hasso Plattner & Paul Taylor, *Top-tier Software Companies 'Must Be Global'*, FIN. TIMES, Feb. 5, 1997, at 1, available in 1997 WL 3771558.

15. *United Nations Convention on Contracts for the International Sale of Goods*, U.N. Doc. A/CONF.97/19 (1980), reprinted in S. TREATY DOC. No. 98-9, 98th Cong., 1st Sess. 22 (1983) and in 52 Fed. Reg. 6264 (1987) [hereinafter CISG or Convention]. The United States adopted the Convention on December 11, 1986, and it went into effect on January 1, 1988. Canada adopted the Convention on April 23, 1991, becoming effective on May 1, 1992, soon after the nine Canadian provinces and two territories following the common law tradition passed legislation to adopt it. See Thomas L. Lockhart & Richard J. McKenna, *Software License Agreements in Light of the UCC and the Convention on the International Sale of Goods*, 70 MICH. B.J. 646, 652 n.65 (1991).

16. The reason for an examination of shrink-wrap licenses under international rules becomes apparent when one discovers that the Convention applies to sales contracts between parties whose places of business are in Canada and the United States, and that the United States and Canada constitute the world's largest trading bloc. See CISG, *supra* note 15, art. 1(1)(a); Errol P. Mendes, *The U.N. Sales Convention and U.S.-Canada Transactions; Enticing the World's Largest Trading Bloc to Do Business under a Global Sales Law*, 8 J.L. & COM. 109, 143 (1988). Being parties to the Convention, the United States and Canada are likely to provide an important source of interpretation for the Convention's provisions. See Peter Winship, *Changing Contract Practices in the Light of the United Nations Sales Convention: A Guide for Practitioners*, 29 INT'L LAW. 525 (1995) (for a listing of nation parties to CISG).

provided in Appendix I.¹⁷ The license may be familiar to many law students, professors and legal practitioners in the United States, assuming that, unlike most consumers, they have bothered to read its provisions.¹⁸ When it comes to shrink-wrap licenses, familiarity is probably a question of degree, even for members of the legal community, since many users are either not aware of the licenses accompanying computer software,¹⁹ or have simply chosen to ignore them.²⁰

The software shrink-wrap license typically includes the following provisions:

- (i) a conspicuous notice of agreement clause stating that opening the shrink wrap or using the software constitutes agreement to the license's terms;²¹
- (ii) a title retention clause which, in effect, states that the user does not own the copy of the program s/he has contracted for, but takes possession subject to a perpetual license;²²

17. WESTLAW SOFTWARE LICENSE AGREEMENT (1996) [hereinafter WESTLAW LICENSE] (also on file with the author).

18. The license is that which was included with the software to run Westlaw, a "computer-assisted legal research service," on the author's home computer. WESTLAW LICENSE, *supra* note 17. The software was obtained during the fall of 1996 when the author was a 1997 candidate for an LL.M. in Trade Regulation at New York University School of Law. Westlaw, like Lexis and Nexis, allows its users to search its data bases for case and statutory law, as well as other legal research materials. By typing in search commands into a computer that is linked, usually with a device called a modem, by telephone hook-up, a Westlaw user can access information that is stored and continually updated in Westlaw's central data base.

19. This may be the case for users who have contracted for computers with pre-loaded software from a merchant to those who use computers in the workplace without having been apprised of the license's provisions. Hamilton & Hood, *supra* note 6, at 17 ("The typical purchaser will, in most instances, be completely unaware of the restrictions associated with the software until after the purchase has been made, if at all.")

20. This includes the countless number of "purchasers" of software from stores or mail order organizations who ignore the packaging and thus the potential effect of opening and allowing others to use and copy the software without authorization. The Business Software Alliance and Software Publishers Associations have estimated unauthorized copying of software costs their industries over 13 billion dollars a year. See Software Publishers Association Press Release, *More Than \$13 Billion Lost Worldwide to Software Piracy Joint BSA/SPA Survey Reveals* (visited Apr. 23, 1997) <http://www.spa.org/piracy/releases/spa_bsa.htm>.

21. "Notice to User: This is a legal document between you (the "User") and West. It is important that you read this document *before* opening the sealed package and using the enclosed software ("the Software"). By using the Software, you agree to be bound by the terms of this Agreement. If you do not agree, return the Software to West and you will receive a full refund of the license fee paid, if any, for the Software." WESTLAW LICENSE, *supra* note 17 (emphasis in original).

22. The Westlaw License separates the title retention and license grants. "Title to the Software is not transferred to User. Ownership of the enclosed copy of the Software and of copies made by User is vested in West, subject to the rights granted to User in this Agreement." WESTLAW LICENSE, *supra* note 17. "West grants User a non-exclusive, non-transferable, limited license to use the Software with compatible equipment." *Id.*

- (iii) a strict anti-transfer clause prohibiting the user from lending, renting, or otherwise transferring the software to others;
- (iv) an anti-modification clause which bars the user from modifying the software in any way;
- (v) an anti-reverse engineering clause which prohibits the user from disassembling the program to discover how it works;²³
- (vi) a limited copying provision;²⁴ and
- (vii) the usual, and sometimes unusual, limitations or disclaimers of warranties and liability.²⁵

A knowledge of the asserted reasons for these provisions is required to understand why software publishers feel the need to use shrink-wrap licenses.

23. "User may not loan, lease, distribute or transfer the Software or copies thereof nor reverse engineer or otherwise attempt to discern the source code of the Software. User agrees to notify its employees and agents who may have access to the Software of the restrictions contained in this Agreement and to ensure their compliance with such restrictions." WESTLAW LICENSE, *supra* note 17; see also *infra* notes 40-45 and accompanying text for an explanation of what "source code" is and how it is written. There is no explicit anti-modification clause in the WSI agreement other than the requirement that the Software be used on "compatible equipment," possibly implying that adaptation to make the software compatible with one's computer might be a breach of the "Agreement." WESTLAW LICENSE, *supra* note 17; see also Hamilton & Hood, *supra* note 6, at 20 (modification without discovering some of the source code is rarely possible).

24. "This license permits User to make that number of copies of the Software necessary for its licensed site. A 'site' means all personal computers, servers and minicomputers (including networked systems) with the same operating system platform at a single location or at different locations which are connected by a single networked system. . . . Each copy made by User shall include the copyright/proprietary rights notice(s) embedded in and affixed to the Software. All other copying is prohibited." WESTLAW LICENSE, *supra* note 17.

Most shrink-wrap licenses limit the user to a single backup copy, for example, "you may make one (1) copy of MAPLE solely for backup purposes. You must reproduce and include the copyright notice on the backup copy." WATERLOO MAPLE SOFTWARE, LICENSE AGREEMENT AND LIMITED WARRANTY (on file with author; Waterloo is a Canadian software publisher) and/or to any copying necessary to loading the software into a computer. The Westlaw License is somewhat different because of the research use for which it is made and because students, law firms and legal offices will often use West's legal research service from different computers and locations. For example, a student may use West's services while at school on one or many computers, at home on his or her home computer, and while traveling with his/her laptop computer.

25. Among other disclaimers in the Westlaw License is the following: "EXCEPT AS EXPRESSLY STATED HEREIN, THE SOFTWARE IS PROVIDED 'AS IS' WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF PERFORMANCE OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. USER BEARS ALL RISK RELATING TO QUALITY AND PERFORMANCE OF THE SOFTWARE." WESTLAW LICENSE, *supra* note 17 (emphasis in original). For further warranty and liability limitations, see "Limited Warranty" and "Limitation of Liability." *Id.*; see also *infra* note 245.

A. *Intellectual Property, License Terms, and Contract for Sales*

Early in the history of computer software, some questioned whether copyright, patent, and, to a lesser extent, trade secret protection were available for programs in the United States and Canada. To compensate for this uncertainty, software publishers devised the shrink-wrap license in an attempt to obtain with their licenses, through contracts and trade secret law,²⁶ the protection they perceived was lacking and uncertain in intellectual property law.²⁷ Up to the early 1960s, the United States Patent Office did not consider computer software to be patentable subject matter.²⁸ In 1972, the United States Supreme Court's decision in *Gottschalk v. Benson*,²⁹ while specifically stating it was not holding against patentability of computer programs per se, held with sweeping language that algorithms³⁰ could not be patented.³¹ The Court likened algorithms to ideas or laws of nature, which are not patentable.³² "If there is to be invention from such a discovery," Justice Douglas said, "it must come from the application of the law of nature to a new and useful end."³³

Even though the United States Supreme Court came to accept patent protection for computer software a decade later in *Diamond v. Diehr*,³⁴ as the above quote from *Gottschalk* implied, the difficulty, costs, and time

26. See *infra* Part II.B for a discussion of trade secret protection for computer software.

27. See Hemmes, *supra* note 2, at 578.

28. See ROBERT PATRICK MERGES, PATENT LAW AND POLICY: CASES AND MATERIALS 46 (1992).

29. 409 U.S. 63 (1972).

30. "A procedure for solving a given type of mathematical problem is known as an algorithm." *Id.* at 65.

31. See *id.* at 70-71.

32. See *id.* The patent that was being sought in *Gottschalk* was for "a method of programming a general-purpose digital computer to convert signals from binary-coded decimal form into pure binary form." *Id.* at 65. The Court feared that a "patent would preempt the mathematical formula and in practical effect would be a patent on the algorithm itself." *Id.* at 71. What the Court failed to grasp was the distinction between the idea underlying the program and how the idea was being applied by the program in question. Justice Douglas, writing for the Court, appears to have had a broader conception of the term idea than is the case in patent law today, and as such, has often been criticized as being against patents. See Donald S. Chisum, *The Future of Software Protection: The Patentability of Algorithms*, 47 U. PITT. L. REV. 959, 961 (1986).

33. *Gottschalk*, 409 U.S. at 71-72. In order to obtain patent protection in the United States and Canada, an inventor must apply for a patent. An inventor will receive a patent if after examination it is shown that his or her invention is novel, has utility and is nonobvious to one familiar with the area of invention. 35 U.S.C.A. §§ 100-103; *Graham v. John Deere Co.*, 383 U.S. 1 (1966); R.S.C. 1985, c. P-4 (Can.); Sunny Handa, *Reverse Engineering Computer Programs under Canadian Copyright Law*, 40 MCGILL L.J. 621, 656-57 (1995). The threshold for patent protection in computer programs can thus be quite high. *In re Grams*, 888 F.2d 835 (Fed. Cir. 1989). *But see In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (upholding patent in a digital oscilloscope not very different from an analog oscilloscope).

34. 450 U.S. 175 (1981).

involved in overcoming the algorithm issue and obtaining a patent often made such protection unfeasible for software publishers.³⁵ After some initial waffling by the United States Copyright Office,³⁶ Congress eventually amended the Copyright Act in 1980 to explicitly include computer programs within its coverage.³⁷ Section 101 of the Copyright Act of 1976 was changed to include a definition for computer programs,³⁸ which were henceforth to be copyrighted as literary works.³⁹

The "writing" of a computer program is undertaken in several stages.⁴⁰ The initial stage requires defining the problem to be solved by the program and flow charting how the program should "instruct" a computer to do this.⁴¹ Then comes a stage where the instructions needed to accomplish the task(s) are written in a programming language such as FORTRAN or C.⁴² The resulting program becomes the "source code."⁴³ The source code is input into a computer, compiled by it, and turned into the "object code."⁴⁴ The object code is in binary (0 and 1, or off and on) form to make it readable by the digital computer.⁴⁵ Thus, even though protected as a literary work, a computer program is much more utilitarian than most of the usual literary productions of authors. In view of this utilitarian nature, a new section 117 attached limitations on the copyright granted in software.⁴⁶ An "owner of a copy of a computer program"

35. See L. Scott Primak, *Computer Software: Should the U.N. Convention on Contracts for the International Sale of Goods Apply? A Contextual Approach to the Question*, 11 *COMPUTER L.J.* 197, 220 (1991). The same arguments as to costs and time can be made for Canada. See Handa, *supra* note 33, at 656-57.

36. See George D. Cary, *Copyright Registration and Computer Programs*, 11 *BULL. COPYRIGHT SOC'Y* 362 (1964). Since 1964, the Copyright Office has accepted applications for registration of computer programs.

37. Copyright Act of 1980, Pub. L. No. 96-517, § 10(a), (b), 94 Stat. 3015, 3028 (codified as amended at 17 U.S.C.A. §§ 101, 117 (1988)). In amending the Copyright Act of 1976, Congress relied on the final report of a study by the National Commission on New Technological Uses of Copyrighted Works issued in 1978. See NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT 1 (1978) [hereinafter CONTU].

38. "A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C.A. § 101.

39. See 17 U.S.C.A. § 102(a)(1). Section 106 of the United States Copyright Act lists the exclusive rights the owner of a copyrighted work controls. *Id.* § 106. They include the right to reproduce, to prepare derivative works, to distribute, to perform publicly, and to display the copyrighted material. *Id.*

40. See J. FRASER MANN, *COMPUTER TECHNOLOGY AND THE LAW IN CANADA* 13 (1987); see also *Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693 (2d Cir. 1992).

41. MANN, *supra* note 40, at 13.

42. *See id.*

43. *Id.* at 14.

44. *Id.*

45. *Id.* The object code is sometimes called "machine-readable language."

46. See Handa, *supra* note 33, at 635. Section 117 reads as follows:

§ 117. Limitations on exclusive rights: Computer Programs

could make a copy or adaptation of the program if such a copy were needed to use the program⁴⁷ or for archival purposes.⁴⁸ A further limitation of the copyright grant, and one of much longer standing than section 117, is the "first sale doctrine."⁴⁹ The doctrine, codified at section 109 of the Copyright Act, authorizes "the owner of a particular copy . . . lawfully made under this title . . . to sell or otherwise dispose of the possession of that copy . . ."⁵⁰ Thus, a person who owns a copy of the word processing program WordPerfect may sell that copy once he or she chooses to stop using it.

Protection of the intellectual property in computer programs has developed similarly in Canada. As was the case in the United States, there had been considerable confusion as to whether patent, copyright, and/or trade secret protection were available.⁵¹ Regarding patent protection, the history of the patentability of programs almost mirrors that of the United States. *Schlumberger Canada Ltd. v. Commissioner of Patents*,⁵² decided in 1981, is remarkably similar to *Gottschalk*; both *Schlumberger* and *Gottschalk* denied protection to "any mere scientific principle or abstract theorem," and, like *Gottschalk*, the Canadian Federal Court of Appeal specifically stated it was not holding that patent protection could not cover computer programs. Rather, the court in *Schlumberger* held that something more than a mere idea was required before protection would be granted.⁵³ Since *Schlumberger*, the Canadian

Notwithstanding the provisions of section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

(1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or

(2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that the possession of the computer program shall cease to be rightful.

Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.

17 U.S.C.A. § 117.

47. See 17 U.S.C.A. § 117(1).

48. See *id.* § 117(2).

49. See Kenneth R. Corsello, Note, *The Computer Software Rental Amendments Act of 1990: Another Bend in the First Sale Doctrine*, 41 CATH. U. L. REV. 177 (1991); 17 U.S.C.A. § 109.

50. 17 U.S.C.A. § 109(a).

51. See C. Ian Kyer, *Dealing with Canada Since the Free Trade Agreement*, 7 No. 6 COMPUTER LAW. 7 (1990).

52. 56 C.P.R.2d 204 (1981).

53. See *id.*; see also *Gottschalk*, 409 U.S. at 63.

Patent Office has been more amenable to granting patents to computer software.⁵⁴

The question of copyrightability of computer programs is of slightly more recent vintage in Canada than in the United States. Though initially there were questions, as in the United States,⁵⁵ whether programs were literary works and thus copyrightable, a decision handed down from the Canadian courts⁵⁶ effectively closed the door on such questions with a finding that they were.⁵⁷ In 1988, the Canadian Parliament amended the Copyright Act to expressly include computer programs within its coverage.⁵⁸ Though the history behind the inclusion of computer programs is markedly different from that of the United States, the results were as markedly similar.⁵⁹ Like section 117 of the U.S. Copyright Act, limitations on the copyright protection for computer programs were imposed.⁶⁰ As a result of such limitations, software publishers have

54. See Handa, *supra* note 33, at 657.

55. See Cary, *supra* note 36.

56. Apple Computer Inc. v. Mackintosh Computers Ltd., [1987] 1 F.C. 173, 200, *aff'd*, [1988] 1 F.C. 673 (C.A.), *aff'd*, [1990] 2 S.C.R. 209 (Can.). The *Apple* case was not without its problems, not the least of which was the existence of a White Paper prepared for the Canadian House of Commons in its deliberations on whether and/or how to protect computer programs in Canada. CANADIAN DEP'T OF CONSUMER & CORPORATE AFFAIRS & DEP'T OF COMMUNICATIONS, FROM GUTTENBERG TO TELIDON: A GUIDE TO CANADA'S COPYRIGHT REVISION PROPOSALS (1984). The White Paper's recommendations had included a form of *sui generis* protection for software which would have given computer programs a term of protection for five years. See *id.* at 79. The recommendation was never adopted. See *infra* note 58.

57. The rights of copyright holders in Canada can generally be found in section 3 of the Canadian Copyright Act. See generally Copyright Act, R.S.C., c. C-42; c. 10 (1st Supp.), cc. 1, 41 (3d Supp.), c. 10 (4th Supp.); 1988, c. 65; 1990, c. 37; 1992, c. 1; 1993, cc. 15, 23, 44; 1994, c. 47; 1995, c. 1, § 3 (Can.) [hereinafter Canadian Copyright Act] (listing the rights to produce, reproduce and translate a work, convert a dramatic work, convert a nondramatic work by way of performance, to make any record, to adapt a work by cinematography, to communicate a work by telecommunication, to publicly exhibit an artistic work, and, under amendments required under the North American Free Trade Agreement, since 1993, to rent a computer program). The Parliament of Canada is currently in the process of significantly amending the Canadian Copyright Act, and would add to these rights. See An Act to Amend the Copyright Act, Bill C-42, 45 Eliz. II, 1996 (Can.) [hereinafter Canadian Copyright Revisions].

58. Bill C-60, as the act to amend the Copyright Act was called, became effective on June 8, 1988. It expressly included computer programs in the category of literary works, Canadian Copyright Act, *supra* note 57, § 1(2), and defined a computer program as "a set of instructions or statements, expressed, fixed, embodied or stored in any manner, that is to be used directly or indirectly in a computer in order to bring about a specific result." Canadian Copyright Act, *supra* note 57, § 1(3). Compare with 17 U.S.C.A. § 101, *supra* note 38.

59. See Susan J. Bahr, *The Canadian Computer Software Copyright Law: One Small Step for U.S. Software Vendors*, 17 RUTGERS COMPUTER & TECH. L.J. 139, 166-69 (1991) (examining the legislative history behind Bill C-60 and the differences between the Canadian and American copyright systems); see also *supra* note 56; Kyer *supra* note 51.

60. The following acts do not constitute an infringement of copyright:

(1) the making by a person who owns a copy of a computer program, which copy is authorized by the owner of the copyright, of a single reproduction of the copy by

attempted to avoid these limitations in Canada in exactly the same way they have in the United States: through the shrink-wrap license.

The title retention clause in a shrink-wrap license, it is argued, allows the software publisher to circumvent sections 109 and 117 of the U.S. Copyright Act and section 27(2) of the Canadian Copyright Act by *licensing rather than selling* a copy of its program.⁶¹ Since the "licensee/purchaser" does not "own" a "copy" of the program, it is liable to the publisher for breach of the license under state and provincial contract law. The irony is that North American courts have, so far, interpreted shrink-wrap licenses under the law of contracts as applied to the *sale of goods*.⁶² Thus, software publishers claim contract protection as if they had sold instead of merely licensed a copy of their software. What this ignores is that the limitations to the copyright protection of computer software were legislated by Congress and Parliament for the protection of users of programs. Without the limitations, it is conceivable that every use of a program that makes a copy of the software in one's computer, a step which is necessary to use a program, would constitute copyright infringement.⁶³ By apparently circumventing these provisions of copyright law meant to balance the protection of software creators against that of software users, software publishers appear to retain the power to pick and choose which parts of the U.S. and Canadian Copyright Acts they wish to employ. In other words, they get to have their cake and eat it too.⁶⁴

adapting, modifying or converting the computer program or translating it into another computer language if the person proves that

- (i) the reproduction is essential for the compatibility of the computer program with a particular computer,
- (ii) the reproduction is solely for the person's own use, and,
- (iii) the reproduction is destroyed forthwith when the person ceases to be the owner of the copy of the computer program; and
- (m) the making by a person who owns a copy of a computer program, which copy is authorized by the owner of the copyright, of a single reproduction for backup purposes of the copy or of a reproduction referred to in paragraph (l) if the person proves that the reproduction for backup purposes is destroyed forthwith when the person ceases to be the owner of the copy of the computer program.

Canadian Copyright Act, *supra* note 57, §§ 27(2)(l), (m).

61. See *United States v. Wise*, 550 F.2d 1180 (9th Cir. 1977), *cert. denied*, 434 U.S. 929 (1977) ("title" has to pass before the first sale doctrine can apply; court was willing to look and see whether a lease was really a sale transferring title); 17 U.S.C.A. § 109(a).

62. See *infra* Part III.

63. See CONTU, *supra* note 37, at 13-14. *But see* Handa, *supra* note 33, at 641.

64. See Horovitz, *supra* note 4, at 157 n.175. Shrink-wrap licenses also typically contain the boilerplate clause stating "[s]hould any provision of this Agreement be held to be void, invalid, unenforceable or illegal by a court, the validity and enforceability of the other provisions shall not be affected thereby." WESTLAW LICENSE, *supra* note 17.

Despite copyright protection, software publishers claim to use shrink-wrap licenses because copying computer software is often easy and, compared to the costs of developing programs,⁶⁵ an incentive exists to do so without authorization.⁶⁶ All one needs is a computer with a floppy disk drive⁶⁷ to be able to copy most programs. Copying can be done in less time than it takes to listen to a Bach concerto or, depending on your computer, to watch half of the typical television sitcom.

Software publishers recognize that they cannot possibly bring action against all the individuals who infringe on their copyrighted software, especially with today's mass marketing of software, and the ease of transfer made possible by the growth of the Internet.⁶⁸ If, historically, the resort to software licensing, instead of outright sale, provided a means of compensating for the uncertain availability of intellectual property protection, the concern became not for want of copyright protection, but

65. This is the classic "public goods" problem. "The cost of developing computer programs is far greater than the cost of their duplication. Consequently, computer programs . . . are likely to be disseminated only if . . . [t]he creator can spread its costs over multiple copies of the work with some form of protection against unauthorized duplication of the work" CONTU, *supra* note 37, at 11.

66. See Corsello, *supra* note 49, at 19. This appears to be the reason why the sound recording and computer software industries have managed to obtain amendments to the first sale doctrine from the U.S. Congress against rental of their products whereas the audio-visual industry has not; one is more likely to copy a song or a program because it is easy and inexpensive to do so *and* because they are the types of product which command repeated listening or use. *Id.* Since one is not as likely to watch a video more than once, or desire to retain a copy of it, nor as likely to be able to copy the video (since two video tape recorders are required unless one is taping from a television broadcast), the first sale doctrine still applies to video. Furthermore, film producers and distributors have still managed to make sizable profits from video sales, to the point where revenue from video has surpassed that from the domestic exhibition of the films. *Id.* at 192 (citing UNITED STATES DEPARTMENT OF COMMERCE, 1991 U.S. INDUSTRIAL OUTLOOK 3 (1991)). In comparison, the Software Publishers Association, an industry group representing software publishers, argues that for every legitimate copy of a computer program, there exists at least one illegal copy. See Janet Mason, *Crackdown on Software Pirates*, COMPUTERWORLD, Feb. 5, 1990, at 107.

67. Most home computers have at least one, often two, and sometimes more floppy disk drives where the user can insert a disk to copy a program. Computer programs usually are "purchased" in the floppy disc, and increasingly, in the CD-ROM media. A computer program, to be used, is generally copied onto a computer's hard disc drive, which is part of the computer's internal memory space. A user can copy a program from the hard disc onto one or, serially, several floppy discs inserted in a floppy disc drive. If two or more floppy disc drives are available, the user can simply enter a disc containing a computer program in one drive and copy the program thereon onto another disc in the second drive, in a matter of seconds. Since many commercially "purchased" programs are sold on more than one floppy disc or CD-ROM because of the large amount of memory space (measured in bytes) they require, the process of copying a large program like WordPerfect 6.x can take some minutes.

68. See Stephen Fraser, *The Copyright Battle: Emerging International Rules and Roadblocks on the Global Information Infrastructure*, 15 J. MARSHALL J. COMPUTER & INFO L. 759 (1997).

of the perceived inability to adequately enforce the protection granted under the copyright laws of Canada and the United States.⁶⁹

The focus of software publishers turned to those who took advantage of the limitations of copyright law.⁷⁰ Because the first sale doctrine allowed for the rental of computer programs,⁷¹ often at a fraction of the full cost of software, individuals could rent a program, take it home, copy it, and return the program so that the transaction could be repeated indefinitely, while the software publishers lost precious sales.⁷² This money, the industry argued, was being diverted from possible application to research and development, and contributed to the high prices of their software.⁷³ Consequently, individual "purchasers" who would abide by the copyright laws were subsidizing other software users' infringements. Worst of all, the software publishers argued, the incentive to create, which is one of the purposes of copyright law in North America, was being circumvented by the Act itself.⁷⁴

Although the latter argument is tenable, it is persuasive only to a point. The software industry, if not every industry desiring higher levels of copyright and patent protection, tends to emphasize the incentive part of the equation in intellectual property protection over the constitutional goal mandated to Congress. As the United States Supreme Court has stated repeatedly, and most cogently in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*:

The primary objective of copyright is not to reward the labor of authors, but "to promote the Progress" of Science and Useful Arts. [U.S. CONST. a]rt. I, § 8, cl. 8. To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work. This principle, known as the idea/expression or fact/expression dichotomy, applies to all works of authorship. As applied to a factual compilation, assuming the absence of original written expression, only the compiler's selection and arrangement may be protected; the raw facts may be copied at will. This result is neither

69. See Deborah Kemp, *Mass Marketed Software: The Legality of the Form License Agreement*, 48 LA. L. REV. 87, 91 (1987).

70. See Corsello, *supra* note 49.

71. See 17 U.S.C. § 109 (1982).

72. See Corsello, *supra* note 49, at 179; Bahr, *supra* note 59, at 139.

73. See generally Robert C. Scheinfeld & Gary M. Butter, *Using Trade Secret Law to Protect Computer Software*, 17 RUTGERS COMPUTER & TECH. L.J. 381 (1991).

74. See *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948) ("reward to the author or the artist serves to induce release to the public of the products of his creative genius"); *Mazer v. Stein*, 347 U.S. 201, 207 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and Useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.").

unfair nor unfortunate. It is the means by which copyright advances the progress of science and art.⁷⁵

The theory underlying copyright law in Canada is not very different: "to encourage disclosure of works for the advancement of learning."⁷⁶

Nevertheless, by using shrink-wrap licenses, software publishers believed they could circumvent the balance established under the North American copyright laws and sue renters under state and provincial contract laws for breach of license since most licenses had anti-rental provisions.⁷⁷ However, if this alone were the problem, Congress addressed it in 1990 by specially amending the first sale doctrine to bar rental of computer programs.⁷⁸ One U.S. Federal Court of Appeals stated that "[t]his amendment renders the need to characterize . . . [software] transaction[s] as a license largely anachronistic."⁷⁹ Meanwhile, in 1993, Parliament amended the Canadian Copyright Act to specifically make the rental of computer programs a right held by the copyright owner.⁸⁰ If copyright infringement, to the extent it can be controlled against individual infringers who pirate software for themselves, their immediate family, and friends, were perceived as the sole problem, the reasoning

75. *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340, 349-50 (1991) (some citations omitted); *see also supra* note 74.

76. *Apple Computer Inc. v. Mackintosh Computers Ltd.*, [1987] 1 F.C. 173, 200, *aff'd*, [1988] 1 F.C. 673 (C.A.), *aff'd*, [1990] 2 S.C.R. 209 (Can.); *see Handa, supra* note 33, at 646 ("general underpinnings of copyright law protection . . . seek to balance the public's right to knowledge with the individual's right to be remunerated for the work").

77. *See supra* note 22 and accompanying text.

78. Judicial Improvements Act of 1990 (Software Rental Amendments Act), Pub. L. No. 101-650, §§ 801-805, 104 Stat. 5089, 5134 (codified at 17 U.S.C. § 109(b)-(d)). The relevant provisions are:

"(b)(1)(A) Notwithstanding the provisions of subsection (a), unless authorized by the owners of copyright . . . in a computer program (including any tape, disc, or other medium of embodying such program), . . . neither . . . any person in possession of a particular copy of a computer program, . . . may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that . . . computer program . . . by rental, lease, or lending, or by any act or practice in the nature of rental, lease, or lending. . . .

(B) This subsection does not apply to—

(i) a computer program which is embodied in a machine or product and which cannot be copied during the ordinary operation of the machine or product;

. . .

(4) Any person who distributes a . . . copy of a computer program . . . in violation of paragraph (1) is an infringer of copyright . . ."

Id.

79. *Step-Saver Data Systems, Inc. v. Wyse Technology*, 939 F.2d 91, 96 n.7 (3d Cir. 1991).

80. *See Canadian Copyright Act, supra* note 57, § 3(1)(h); NORMAND TAMARO, THE 1995 ANNOTATED COPYRIGHT ACT 178 (1994).

would be persuasive.⁸¹ If transaction costs are too high to sue individual infringers, logically, protection under the U.S. and Canadian Copyright Acts cannot now be argued to be inadequate. If it does not make economic sense to sue individual infringers for causes of action under copyright infringement or, for that matter, breach of license, the *raison d'être* for these clauses becomes outright redundant and overly cautious. At the very least it argues that anti-rental, lending, and transfer clauses in software licenses paint with too broad a brush.

However, there are strong legal and policy considerations for the retention of the first sale doctrine, even in regards to software, or where a rental or lending right is granted as in Canada and numerous other countries.⁸²

The first sale doctrine extinguishes the distribution right [of section 106(3)] once the copyright owner receives compensation for a copy because guaranteed one-time compensation per copy is deemed by the copyright law to provide sufficient incentive to spur creation. There is, therefore, no reason to allow the copyright owner to control what the purchaser and future owners do with the work.⁸³

Not only does section 109(a) of the Copyright Act reflect this policy, section 202 makes the distinction explicit. "Ownership of a copyright, or of any of the exclusive rights under copyright, is distinct from ownership of any material object in which the work is embodied."⁸⁴ Through the Software Rental Amendments Act, the software publishers obtained further control over the physical medium in which they place their programs, thus contributing to the blurring of the distinction between the copyright and the medium in which it is embodied. The first sale doctrine

81. There is, however, a strong argument that the Software Rental Amendments Act went too far in limiting the first sale doctrine, and it should be noted that until amendments to the Canadian Copyright Act to implement the provisions of the North American Free Trade Agreement in 1993 came to pass, Canada had not placed limits on software rentals, having taken a wait and see attitude. See TAMARO, *supra* note 80, at 178; Bahr, *supra* note 59, at 163-64. The fear that new upstart Canadian software rental companies would flood the United States with unauthorized software, argued before Congress to amend the U.S. Copyright Act to bar rentals, never materialized. *Id.* at 139. Interestingly, Ralph Oman, then United States Register of Copyrights, pointed out during the hearings to amend the first sale doctrine that in 1984, the software publishers had predicted that the software rental industry was about to boom. When the hearings were held in 1990, that had yet to occur. See *Software Rental Amendments of 1990: Hearing Before the Subcomm. on Courts, Intellectual Property and the Admin. of Justice of the House Comm. on the Judiciary*, 101st Cong., 2d Sess. 18 (1990). Thus, there is some question as to whether software rental is the real culprit in software infringement. See Corsello, *supra* note 49, at 200-01.

82. See generally Jennifer M. Schneck, Note, *Closing the Book on the Public Lending Right*, 63 N.Y.U. L. REV. 878 (1988).

83. Corsello, *supra* note 49, at 188-89.

84. 17 U.S.C.A. § 202.

has its origin in “the common law’s contempt for restraints on alienation of property.”⁸⁵ It would be hard to imagine a more blatant restriction on alienation than the anti-transfer provision in a shrink-wrap license, particularly since the licenses are generally perpetual in length, and extend beyond the period of protection granted by copyright law.⁸⁶

As one commentator posited, behind the software amendments was “a desire to increase the sale of software, and hence increase the incentive to create new software, by curbing the duplication of rented software.”⁸⁷ In the end, this may be the most bothersome aspect. It flies straight in the face of the purpose of copyright law which is direct disclosure to the public, for the public’s benefit, of works of expression, by encouraging creativity through the hope for economic gain—not by accentuating an industry’s profits through maximization of copyright’s protection for the benefit of an industry and then only indirectly for the public’s welfare.⁸⁸ The appropriate concern in the search for a balance under the U.S. Constitution’s copyright clause is to avoid both overprotection and underprotection of copyrightable works.⁸⁹

B. Reverse Engineering, Trade Secrets, Preemption and Privity

Software publishers have not limited their attempts to insure greater protection for their works solely through strengthening copyright protection. By adding a prohibition in their licenses barring users from reverse engineering⁹⁰ or modifying their programs,⁹¹ the software

85. Corsello, *supra* note 49, at 188.

86. See *supra* note 22 and accompanying text. The possibility that shrink-wrap licenses could be viewed as an attempt to extend copyright protection beyond the term of the software’s copyright protection might also open software publishers to a claim of copyright misuse. See Thomas F. Smegal, Jr., *Misuse Defense Gains in Federal Courts*, NAT’L L.J., Feb. 15, 1993, at 18; Note, *Clarifying the Copyright Misuse Defense: The Role of Antitrust Standards and First Amendment Values*, 104 HARV. L. REV. 1289 (1991). This would be ironic given that the useful shelf-life of most mass-marketed software can be counted in a matter of years, if not months. There is a funny short story currently making its rounds on the Internet entitled “The Borg vs. Microsoft Windows.” The story is a parody of the “Star Trek: The Next Generation” television series, while at the same time a satire of Microsoft’s ability to quickly come up with added features to its operating system program which supersedes prior versions of its software and which take up more and more space in a computer’s memory. The story ends with Microsoft releasing its lawyers to destroy the Borg. See ANONYMOUS, THE BORG VS. MICROSOFT WINDOWS (on file with author).

87. Corsello, *supra* note 49, at 197.

88. See *supra* notes 74-76 and accompanying text.

89. See *Campbell v. Acuff-Rose Music, Inc.*, 114 S. Ct. 1164, 1181 (1994) (Kennedy, J., concurring); see also *supra* note 76.

90. Reverse engineering is the analyzing of a product containing a trade secret “to retrace the steps that went into its creation” and thereby discovering the secret hidden within it. PAUL GOLDSTEIN, 1 COPYRIGHT: PRINCIPLE, LAW, AND PRACTICE 546 (1991).

publishers believe they can maintain the trade secrets their programs may contain.⁹² These license provisions are probably the most contentious because of the nature of computer software and copyright protection.

The Final Report from CONTU, proposing a measure that, for the most part, became section 117 of the U.S. Copyright Act, states:

[I]t is likely that many transactions involving copies of programs are entered into with the full awareness that users will modify their copies to suit their own needs The comparison of this practice to extensive marginal note-taking in a book is appropriate; note taking is arguably the creation of a derivative work, but unless the note-taker tries to copy and vend that work, the copyright owner is unlikely to be very concerned. Should proprietors feel strongly that they do not want rightful possessors of copies of their programs to prepare such adaptations, they could, of course, make such desires a contractual matter.⁹³

Because computer programs are now generally transferred in object code form,⁹⁴ few users can modify the computer software they are using. The CONTU report's analogy to note-taking is thus severely diminished to all but the most technically competent, and disappears if shrink-wrap license anti-modification and reverse engineering provisions are enforced. If CONTU was correct in asserting that software publishers have a right to contractually limit section 117, the issue might end there. Unfortunately, there is very little legislative history to the changes made to the U.S. Copyright Act by Congress in 1980, adding current section 117 to the Act. Some U.S. courts have taken to using the CONTU Report

91. See *supra* note 23 and accompanying text. Section 117 of the U.S. Copyright Act and section 27(2)(l) of the Canadian Copyright Act allow the owner of a copy of a computer program to adapt a program so that it can be used in a particular computer. See 17 U.S.C.A. § 117; Canadian Copyright Act, *supra* note 57, § 27(2)(l); see also *supra* notes 46, 60. This could be argued to be a limitation not only on the software publisher's copyright but also on the rights of the "purchaser" of the software to dispose of the program as s/he pleased under the first sale doctrine. See 17 U.S.C.A. § 109(a). In fact, permission is required from the copyright owner to transfer any such adaptation under the U.S. Act, 17 U.S.C.A. § 117, while the Canadian Act requires the owner of the copy to destroy the adaptation or modification after s/he ceases to be the owner of the program. See Canadian Copyright Act, *supra* note 57, § 27(2)(l).

92. Because the U.S. and Canadian Copyright Acts do not protect such elements as concepts, ideas, procedures, methods of operation and so forth, see 17 U.S.C. § 102(b) and *Cuisenaire v. South West Imports Ltd.*, [1969] S.C.R. 208 (Can.), but do protect "original works of authorship fixed in any tangible medium of expression," see 17 U.S.C.A. § 102(a) and Canadian Copyright Act, *supra* note 57, §§ 2, 3, state trade secret laws and licensing may be the few means left to software publishers to protect these elements of their computer software. Though Canada's Copyright Act is not as explicit in terms of what it does not protect, the cases appear to show Canadian courts unwilling to extend broader copyright protection to computer programs than U.S. courts have. See *Delrina Corporation v. Triolet Systems Inc.*, [1993] Ont. C.J. Lexis 219 (Can.) (adopting the abstraction/filtration/comparison test of *Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693 (2d Cir. 1992)).

93. CONTU, *supra* note 37, at 13-14.

94. See *supra* notes 45, 46, and accompanying text.

as legislative guidance⁹⁵ even though the Report itself is at best unclear as to whether software publishers could circumvent section 117 by shrink-wrap licenses despite what the above quotation implies. Originally, the CONTU Report proposed language for section 117 that would have allowed a "rightful possessor of a computer program," rather than the current language of "the owner of a copy of a computer program," to exercise the rights/limitations under that section.⁹⁶ Under the CONTU Report's proposal, *licensees* of computer programs, as rightful possessors, might have been able to adapt and create backup copies of software as provided under section 117. Because of this uncertainty, over the years Congress has been faced with several bills to amend section 117 back to the form the CONTU Report had proposed.⁹⁷

Such a change to the U.S. Copyright Act would not necessarily avoid the question of the enforceability of anti-reverse engineering provisions in shrink-wrap licenses under state and provincial trade secret laws. By barring access to the object code through anti-reverse engineering provisions, the public is essentially barred from discovering how a program works. There is thus no means of determining the unprotected ideas that underlie the program. If a fundamental purpose of North American copyright law is to reward the author for the disclosure of his or her work to the public,⁹⁸ how is the public ever exposed to the ideas and expression which are embedded in the object and source code by using the program? It appears that the public is left almost entirely in the dark by the means through which software is currently transferred. Unless the code is released to the public by the software publisher or otherwise, thereby risking the loss of any trade secret protection, (as discussed below), the only means available for determining the ideas in a program are reverse engineering of the object code to somehow arrive at what source code was used in writing the program.⁹⁹ Even then, reverse engineering is not necessarily the best solution because it can be costly, time consuming, and not entirely effective as it rarely arrives at the exact expression used by the programmer in his or her source code.¹⁰⁰ It

95. See *Midway Mfg. Co. v. Strohon*, 564 F. Supp. 741, 750 n.6 (N.D. Ill. 1983) ("[I]t is fair to conclude, since Congress adopted [CONTU's] recommendations without alteration, that the CONTU report reflects the Congressional intent."). This may be an erroneous oversimplification. See CONTU, *supra* note 37.

96. CONTU, *supra* note 37.

97. See H.R. 533, 104th Cong., 1st Sess. (1995).

98. See *supra* notes 74-76 and accompanying text.

99. See Handa, *supra* note 33, at 633 (discussing the temptation by software publishers not to release all pertinent information and the accusations at one time levied against Microsoft of anti-competitive conduct in this regard).

100. See Handa, *supra* note 33, at 629-34; see also Andrew Johnson-Laird, *Software Reverse Engineering in the Real World*, 19 U. DAYTON L. REV. 843, 900-01 (1994).

appears that the CONTU Report's language quoted above is best suited to a time when copyrighted computer software was not as widely disseminated as today, a time when software and the computers that house software were one and the same and contracted for on such a basis. Considering that the home and personal computer revolution did not begin until after the Report was released, the above shows how quickly technology moves, and how dangerous assumptions can be in later contexts.

The limited copying provision in shrink-wrap licenses may appear strange on first perusal.¹⁰¹ After all, if software publishers wish to prevent unauthorized copying of their programs, why allow users the right to copy their programs at all? Again, the answer lies in the nature of software. Before a program can be run, it must be copied into a computer. Without the right to copy the program granted in the shrink-wrap license, an infringement of copyright would occur for the unauthorized reproduction of the program in the user's computer every time the software is used.¹⁰² As explained above, North American copyright law allows the owner of a copy of a program to reproduce the software for the purpose of loading it into a computer.¹⁰³ This is a unique feature of software. A book does not need to be copied to be used. By allowing only a limited right to copy programs in their shrink-wrap licenses, software publishers further prevent access to the unprotectable elements included in their software, partially in an effort to maintain their claims to the trade secrets in these unprotected elements.

Since both Canadian and U.S. measures of trade secret protection grow out of the common law, protection in both countries is similar.¹⁰⁴

101. See WESTLAW LICENSE, *supra* note 17.

102. For an extreme, and oft-criticized, application of the U.S. Copyright Act's reproduction right for the mere loading of a computer diagnostic program by a competitor, see *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993); see also Pamela Samuelson, *The Copyright Grab*, WIREd, Jan. 1996, at 191, 197 and Stephen Fraser, *The Conflict Between the First Amendment and Copyright Law and Its Impact on the Internet*, CARDOZO ARTS & ENT. L.J. (forthcoming 1998). There is currently a bill pending before Congress that would reverse the ruling of *MAI Systems Corp.* See H.R. 72, Computer Maintenance Competition Assurance Act of 1997, 105th Cong., 1st Sess. (1997).

103. See *supra* notes 46, 60.

104. One who discloses or uses another's trade secret without a privilege to do so, is liable to the other if

- (a) he discovered the secret by improper means, or
- (b) his disclosure or use constitutes a breach of confidence reposed in him by the other in disclosing the secret to him, or
- (c) he learned the secret from a third person with notice of the facts that it was a secret and that the third person discovered it by improper means or that the third person's disclosure of it was otherwise a breach of his duty to the other, or

An element of privity or confidence is required between the parties sharing a trade secret for protection to attach.¹⁰⁵ Because a significant amount of software is now sold over-the-counter by retailers or through other distributors, establishing the requisite "special relationship"¹⁰⁶ for privity is more difficult than before.¹⁰⁷ However, transfers over the Internet directly from a software publisher to the ultimate user may change that.¹⁰⁸ Nevertheless, software publishers contend that once the user breaks the shrink-wrap seal and/or uses the program, privity is created between the software publisher and software user by the user's agreement to the terms of the license contract. This privity occurs despite any possible prior "purchase" contract with the retailer or merchant.¹⁰⁹

The problem with this approach in establishing the necessary privity relationship is the possibility that the user never opened the shrink-wrap license in the first place. Computer merchants who package computer systems often install software for their customers. Some customers, therefore, may never learn of the shrink-wrap license until first turning on their computers, if ever. Moreover, it is current practice for distributors and retailers of personal computers to have operating system and application programs "pre-loaded" without the ultimate "purchaser's"

(d) he learned the secret with notice of the facts that it was a secret and that its disclosure was made to him by mistake.

RESTATEMENT OF TORTS § 757. The often cited comment b to the *Restatement* defines a trade secret as "any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain advantage over competitors who do not know or use it." *Id.* cmt. b; see also MANN, *supra* note 40, at 117; R.L. Crain Ltd. v. Ashton [1949] O.R. 303, 309-09 (Ont. H.C.), *aff'd*, [1950] O.R. 62 (Ont. C.A.) (Can.).

105. See *K-2 Ski Co. v. Head Ski Co.*, 506 F.2d 471 (9th Cir. 1974) (absolute secrecy is not required); *Data Gen. Corp. v. Digital Computer Controls, Inc.*, 357 A.2d 105 (Del. Ch. 1975) (where almost 6,000 had access to the secret, held "dissemination is not significant if in confidence"). To understand why software publishers feel the need to use shrink-wrap licenses to show breach of confidence: "First, the information itself . . . must "have the necessary quality of confidence about it." Second, that information must have been imparted in circumstances importing an obligation of confidence. Third, there must be an unauthorized use of that information to the detriment of the party communicating it." *Coco v. A.N. Clark (Engineers) Ltd.* [1969] R.P.C. 41, 47 (Can.). "The confidence in which a trade secret is disclosed may be created expressly by contract or may be implied as a consequence of the relationship or the circumstances in which the owner disclosed the secret to its prospective user." GOLDSTEIN, *supra* note 90 at 544.

106. Handa, *supra* note 33, at 647.

107. See Michael G. Ryan, Note, *Offers Users Can't Refuse: Shrink-Wrap License Agreements as Enforceable Adhesion Contracts*, 10 CARDOZO L. REV. 2105, 2127 (1989).

108. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1451 (7th Cir. 1996); see also G. Moore & J. Hadden, *On-Line Software Distribution: New Life for "Shrinkwrap" Licenses*, Vol. 13, No. 4, COMPUTER LAW. 1 (Apr. 1996).

109. Ryan, *supra* note 107, at 2127.

authorization prior to the transfer.¹¹⁰ Thus, privity, and in most cases, secrecy, between the software publisher and user requires some form of legal fiction to establish the necessary relationship needed to maintain trade secret protection for a vast amount of software currently distributed.¹¹¹

The title retention clause is an important element in the shrink-wrap license where trade secrets are involved.¹¹² While in the copyright area, this clause tends to blur the distinction between protected expression and the property in which the expression is embodied,¹¹³ title retention assists software publishers to prohibit reverse engineering in a way that is more fundamental than the anti-reverse engineering clause. By retaining title in the copy of the program, software publishers can prevent third parties from attempting to uncover their trade secrets, even without a privity relationship. This is because while "purchasers" are purportedly in privity with the software publisher through the shrink-wrap license,¹¹⁴ third parties happening to fall upon the program most often are not. By retaining title in the copy, a software publisher may hope to argue that reverse engineering by a third party constitutes discovery of their secret(s) "by improper means."¹¹⁵ Once a secret becomes general knowledge it is lost forever and, if no wrongdoing was involved in its disclosure, no cause of action will lie with its owner.¹¹⁶ However, there exists a long history of cases encouraging reverse engineering in the United States and Canada, exhibiting a strong policy for the disclosure of trade secrets in order to promote competition.¹¹⁷ Considering the strong public policy for

110. Section 117 of the U.S. Copyright Act allows the "owner" of a copy of a computer program to authorize someone else to make a copy of the program if made for use on the owner's computer or for backup purposes. *See* 17 U.S.C.A. § 117.

111. Note that the Westlaw License places the obligation on the User "to notify its employees and agents who may have access to the Software of the restrictions contained in this Agreement and to ensure their compliance with such restrictions." WESTLAW LICENSE, *supra* note 17.

112. *See supra* note 22.

113. *See supra* notes 84, 85, and accompanying text.

114. *But see supra* notes 110-112 and accompanying text.

115. RESTATEMENT OF TORTS, *supra* note 104, § 757A. It should be noted that over twenty states in the United States now have adopted statutory trade secret statutes, most of which are based on the Uniform Trade Secrets Act. That Act, similar in effect to the Restatement, does not include reverse engineering in its definition of "improper means." The commission's comments to the Act make clear that reverse engineering was not meant to be a violation of the Act. *See* UNIF. TRADE SECRETS ACT § 1(1), cmt. § 1(4) (1985).

116. *See* R.I. Crain Ltd. v. Ashton [1949] O.R. 303, 308-09, *aff'd*, [1950] O.R. 62 (Can.).

117. *See* Breeze Corps. v. Hamilton Clamp & Stamping Ltd. [1962] O.R. 29 (Can.) (disassembling of a clamp to discover how to make its parts); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974) ("trade secret law, however, does not offer protection against discovery by fair and honest means, such as by independent invention, accidental disclosure, or by so-called reverse engineering, that

disclosure and access to information in North American copyright law, it is questionable whether the anti-modification and reverse engineering provisions should ever be enforced outside of situations where the parties have explicitly negotiated and agreed to them.¹¹⁸ The anti-competitive effects of such provisions could come back to haunt North American software publishers if they insist on their continued use.¹¹⁹

III. CONTRACT ISSUES

Of the seven typical provisions found in shrink-wrap licenses first introduced in Part II above,¹²⁰ five have been directly addressed in the prior section, with most faring poorly. Of the last two provisions to examine, (i.e. the notice of agreement, and the warranty and liability limitations), the issue of whether shrink-wrap licenses are binding agreements has particular importance. With the above review of shrink-wrap licenses in mind, an examination of how state, provincial and international contract rules, as well as federal and international law, affect these licenses can be undertaken.

is by starting with the known product and working backward to divine the process which aided in its development or manufacture"); E.I. duPont de Nemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970), *cert. denied*, 400 U.S. 1024, *reh'g denied*, 401 U.S. 967 (1970).

118. See Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 493-95 (1995) (distinguishing between shrink wrap, negotiated and form licenses). Professor O'Rourke acknowledges there may be a preemption problem where shrink-wrap licenses are used, but proposes that "copyright policy could best be served by upholding the provisions unless doing so would allow the software provider to expand its limited copyright monopoly beyond the market to which the monopoly was intended to apply." *Id.* at 541. The problem with this approach, which the professor concedes, is that it would introduce the high costs of antitrust type litigation into the issue, thereby possibly further subverting policy through process. See *id.* at 554.

119. On the same day that the new General Agreement on Tariffs and Trade (GATT) accord was announced, see Keith Bradsher, *U.S. and Europe Clear the Way for a World Accord on Trade, Setting Aside Major Disputes*, N.Y. TIMES, Dec. 15, 1993, at A1, D18, the software industry's unified front against reverse engineering appeared to begin to crumble. Despite U.S. copyright cases favorable to the reverse engineering of computer programs, see *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992) and *Vault Corp. v. Quaid Software Ltd.*, 655 F. Supp. 750 (E.D. La. 1987), *aff'd*, 847 F.2d 255 (5th Cir. 1988) (discussed *infra* in Part III.C), but cf. *Atari Games Corp. v. Nintendo of America, Inc.*, 975 F.2d 832 (Fed. Cir. 1992), "a change in Japan's copyright law that . . . would let Japanese companies 'reverse-engineer' and copy programs [in order to reverse engineer programs]" had many American companies 'vigorously oppose[d]' to the proposal. However, and apparently for the first time, some U.S. companies stated publicly that they saw the proposed Japanese revision as a "spur to innovation and competition . . . [that would] make it easier for different programs and computers to work together." Andrew Pollack, *U.S. Concerns Split Over Japan Law*, N.Y. TIMES, Dec. 15, 1993, at D12.

120. See *supra* notes 21-25 and accompanying text.

A. Goods

The first issue that arises in software contracts is whether goods are involved. The strongest argument for not treating computer software as goods is that the subject of the shrink-wrap contract is the license of the intellectual property underlying the software, which is intangible.¹²¹ Consequently, contracts involving intangibles are not transactions in goods,¹²² and as such they would fall outside of statutory sale of goods provisions.¹²³ Courts in the United States and Canada have either assumed or simply decided that computer programs are goods.¹²⁴

In the United States, the overriding question has been whether the Uniform Commercial Code applies to transactions in software.¹²⁵ Article 2 of the UCC, covering sales, has been adopted in every state in the United States except for Louisiana.¹²⁶ In Canada, which for the most part still regulates contracts under the Sale of Goods Act and classic common law, the issue has not, as of yet, become so heated. Tangibility is not generally an issue under the Sale of Goods Act, however some form of chattel, or thing, must be involved.¹²⁷ Canada and its provinces, with the exception of Quebec which has retained a civil law of obligations instead of the common law tradition of contract,¹²⁸ never adopted Article 2 of the

121. See, e.g., Horovitz, *supra* note 4; *Tomb v. Laval*, 444 A.2d 666 (Pa. Super. 1981) (intangibles not goods within Article 2 of Sales of the Uniform Commercial Code); see also *infra* note 128 and accompanying text (for tangibility under Sale of Goods Act in Canada).

122. The implication is to Article 2-102 of the Uniform Commercial Code, establishing the scope of Article 2 as applying to "transactions in goods." UNIF. COMMERCIAL CODE § Article 2-102 (1996). Nowhere in CISG is the term "goods" defined. The UCC's definition of goods is "all things (including specially manufactured goods) which are moveable at the time of identification to the contract for sale . . ." *Id.* § Article 2-105(1).

123. See Horovitz, *supra* note 4, at 160.

124. See *Advent Systems Ltd. v. Unisys Corp.*, 925 F.2d 670, 675-77 (3d Cir. 1991); *RRX Industries, Inc. v. Lab-Con, Inc.*, 772 F.2d 543, 546-47 (9th Cir. 1985); *Triangle Underwriters, Inc. v. Honeywell, Inc.*, 604 F.2d 737, 74 (2d Cir. 1979); *North Am. Systemshops Ltd. v. King*, [1989] 68 Alta.L.R.2d 145 (Can.).

125. See, e.g., Horovitz, *supra* note 4.

126. Kemp, *supra* note 69, at 88 n.11.

127. Sale of Goods Act, R.S.O. 1990, c. sec. 1 (Ont.) [hereinafter Sale of Goods Act]; G.H.L. FRIDMAN, *SALE OF GOODS IN CANADA* 16-17 (4th ed. 1995); 1 ALPHONSE M. SQUILLANTE & JOHN R. FONSECA, *WILLISTON ON SALES* § 5-13 (4th ed. & Supp. 1985).

128. See FRIDMAN, *supra* note 127, at 471. Like Louisiana, the Canadian province of Quebec has a strong civil law tradition. See Kemp, *supra* note 69, at 97; Bernard Perusse, *New Civil Code Brings Big Changes*, MONTREAL GAZETTE, June 8, 1993, at C7. Their law of sales (or obligations) are still governed by civil law, as opposed to the common law tradition that has predominated in North America. *Id.* Both Louisiana and Quebec are former French colonies. Napoleon sold Louisiana (and what is now much of Arkansas, Oklahoma, Northern Texas, Kansas, Missouri, Iowa, Southern Minnesota, South Western North Dakota, South Dakota, South Eastern Montana, Wyoming, and Colorado) to the United States in the Louisiana Purchase of 1803. Quebec was conquered by English forces under the command James Wolf in 1759, and, as part of the Treaty of Paris, came under English rule in 1763. With the Quebec Act of 1774, Quebec was allowed to maintain its civil law tradition which continues to this day. Videotron

UCC, choosing instead to retain their Sale of Goods Acts based on the English Imperial Sale of Goods Act of 1893,¹²⁹ and to rely on various consumer protection statutes.¹³⁰ The Uniform Sales Act, which the UCC replaced in the United States, was patterned on the English Sales of Goods Act.¹³¹ U.S. software publishers could be weary of contracting with Canadian businesses were it not for the existence of the Convention.¹³²

Those who have argued that software is an intangible have distinguished the medium, which is the physical embodiment of the intangible software, and the messages, which are the intangible elements such as program functions and machine readable binary form which allow the program to be run on a computer.¹³³ Problems in the United States have arisen because Article 2 of the UCC for sales defines goods as "all things which are moveable at the time of identification of the contract for sale"¹³⁴ Though software is almost always found in a tangible medium, such as disc or tape, or in a computer's memory, the issue may not be as moot as most courts and commentators believe. Already software is being transferred not through the physical medium of a computer's hard drive memory or on discs, but directly through wires into one's computer.¹³⁵ No "thing" is transferred. Even users' manuals that generally accompany software (and which often include a copy of the shrink-wrap license) can now be distributed directly to a "purchaser's" computer through the Internet.¹³⁶

Ltée v. Industries Microlec Produits Electroniques Inc., [1992] 45 C.P.R. 3d 1 (Can.). This Article assumes the discussion takes place in the common law jurisdictions of North America to the extent contract validity is in question. See CISG, *supra* note 15, art. 4(a). Quebec has recently completed a major revision of its civil law and has forced most of its attorneys and notaries to undertake mandatory studies to familiarize themselves with the changes. Perusse, *supra*, at C7. For more about the application of the Convention in Louisiana, see generally Kemp, *supra* note 69.

129. Sale of Goods Act of 1893, 56 & 57 Vict., ch. 71.

130. Richard B. Potter, *The Drafting and Enforcement of Canada/United States Contracts: A Canadian Lawyer's Perspective*, 20 INT'L LAW. 3, 10 (1986).

131. Horovitz, *supra* note 4, at 137 n.57.

132. See UCC, *supra* note 122, § Article 2-101 cmt.

133. See Horovitz, *supra* note 4, at 131-33.

134. UCC, *supra* note 122, § Article 2-105(1).

135. See Bahr, *supra* note 59, at 166; Horovitz, *supra* note 4, at 133.

136. See Stephen J. Davidson & Michael J. Wurzer, *Shrink-Wrap Licenses: The Continuing Controversy*, 453 PLI/Pat 673, 691-92 (1996); see also Fraser, *supra* note 68. The fact that a license must be approved prior to the "sale" of software as a good could prove to be a significant development in the use of shrink-wrap licenses: on the one hand, the licenses may be enforceable, at least as contracts. See Mark A. Lemley, *Shrinkwraps in Cyberspace*, 35 JURIMETRICS J. 311, 317 (1995); on the other hand, they may not be contracts for the sale of goods because no title or physical good is ever passed to the licensee, thus requiring construction under common law contract rules. See *supra* Part III.C.

Unfortunately, the United Nations Convention is not very helpful on whether computer software constitutes goods either. Yet, its importance has too often been de-emphasized or forgotten in North America. Accordingly, a pause is required to explain how CISG works. The Convention applies to all contracts for the sale of goods between parties whose places of business are in Canada and the United States.¹³⁷ This immediately reveals one of the limitations of the Convention, made explicit in Article 2: "This Convention does not apply to sales . . . of goods bought for personal, family or household use, unless the seller, at any time before or at the conclusion of the contract, neither knew nor ought to have known that the goods were bought for any such use."¹³⁸

One problem is that the language of Article 2 may mislead sellers of software into complacency. A substantial amount of software with shrink-wrap licenses is purchased and used by businesses. In fact, some users of computers may not have computers for personal use at home at all, using their computers at work for such purposes. Additionally, sellers can never be certain that the software they transfer to a purchaser in a

137. Article 1, subparagraph 1(a) of the Convention reads as follows: "This Convention applies to contracts of sale of goods between *parties whose places of business are in different States*: (a) when the States are Contracting States." CISG, *supra* note 15, art. 1(1)(a) (emphasis added). *But See* Article 1, subparagraph 2 ("The fact that the parties have their places of business in different States is to be disregarded whenever this fact does not appear either from the contract or from any dealings, or from information disclosed by, the parties at any time before or at the conclusion of the contract.").

The United States chose, under CISG Article 95, not to be bound by Article 1, subparagraph 1(b) ("The Convention applies . . . when the rules of private international law lead to the application of the law of the Contracting State"). CISG, *supra* note 15, arts. 95 & 1(1)(b). Accordingly, the Convention only applies to sale of goods contracts between those parties "whose places of business" are in States which have adopted the Convention. CISG, *supra* note 15, art. 1(1)(a). Otherwise, a contract between a party doing business in the United States and one doing business in Japan might still have been governed by the Convention under conflict of law rules even though Japan has yet to adopt the Convention. CISG, *supra* note 15, art 1(1)(b); *See* Winship, *supra* note 16 (Japan has yet to sign onto the Convention).

Like the individual American states, each province in Canada has jurisdiction to regulate contracts. However, without a similar provision for Federal implementation of the Convention like the U.S. Supremacy Clause, the individual provinces and territories had to adopt the treaties in their legislatures. *See supra* note 15.

138. The full text of Article 2 of the Convention reads as follows:

"This Convention does not apply to sales:

- (a) of goods bought for personal, family or household use, unless the seller, at any time before or at the conclusion of the contract, neither knew nor ought to have known that the goods were bought for any such use;
- (b) by auction;
- (c) on execution or otherwise by authority of law;
- (d) of stocks, shares, investment securities, negotiable instruments or money;
- (e) of ships, vessels, hovercraft or aircraft;
- (f) of electricity."

CISG, *supra* note 15, art. 2.

business, or from an order over the telephone or the Internet, will be used for personal, family or household use unless it is so revealed, or unless they inquire before or at the end of the transaction.¹³⁹ Therefore, the Convention puts sellers on notice that they should err on the side of branding any North American trans-border transactions involving the sale of goods as business contracts rather than as consumer contracts.

Parties to a North American contract may choose to opt out of the Convention,¹⁴⁰ but this should be done explicitly. A simple (and common) contract provision, stating that the law of the province of New Brunswick or of the state of New York will be used to construe the terms of the contract, will not be sufficient because the treaty is the law to be applied in a Canadian province or American state to any contract falling within Article 1. For example, the Westlaw License examined above contains the following choice of law provision: "This Agreement shall be governed by and under the laws of the State of Minnesota."¹⁴¹ Because of the Supremacy Clause of the United States Constitution, the contract law of Minnesota would be superseded by the contract rules of the Convention.¹⁴²

Nowhere are goods defined in the Convention.¹⁴³ What indication it provides is one of negation.¹⁴⁴ In fact, under a strict interpretation of the language of the Convention, one could argue that since the sale of electricity is barred by the Convention, direct transfers of the intangible elements of computer software would not be covered either.¹⁴⁵ However, it is not likely that the Convention would be read so narrowly in light of its purpose and international character.¹⁴⁶ Either way, it would be difficult

139. It is this author's experience, as a junior attorney in a Manhattan law firm with an office close to the mail room, that many personal items are ordered from and delivered to one's place of work. Often this is because it is more convenient, if not safer, to take delivery at work than it is at home.

140. See CISG, *supra* note 15, art. 6.

141. WESTLAW LICENSE, *supra* note 17.

142. U.S. CONST. art. VI, cl. 2 ("This Constitution . . . and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land . . ."); see also *Filanto v. Chilewich Int'l Corp.*, 789 F. Supp. 1229, 1237 n.5 (S.D.N.Y. 1992) (quoting *Hauenstein v. Lyman*, 100 U.S. 483, 490 (1880) ("[T]he Constitution, laws, and treaties of the United States are as much a part of the law of every state as its own local laws and Constitution."); *Filanto* is one of the few reported cases to apply the Convention in the United States. No Canadian cases construing the Convention seem to have arisen as of this writing.

143. See Primak, *supra* note 35, at 207.

144. See CISG, *supra* note 15, art. 2, reproduced *supra* note 138.

145. CISG, *supra* note 15, art. 2(f).

146. Article 7 of the Convention states:

(1) In the interpretation of this Convention, regard is to be had to its international character and to the need to promote uniformity in its application and the observance of good faith in international trade.

to deny the status of goods to computer software given that other forms of intangible intellectual property are sold as goods. The most commonly used analogy is that of books.¹⁴⁷ Books are sold as goods despite the copyright in the expression involved which gives the book its value. The only real distinction from computer software is that it is more utilitarian than most forms of copyrighted, mass-marketed property.¹⁴⁸ The book/goods analogy could be extended to address software as a more powerful version of a "do-it-yourself" book.¹⁴⁹ Furthermore, a program must be embodied in some physical medium of storage, usually a computer, before it can be used at all. The user's provision of the storage medium or method for retrieving the goods should not provide a basis upon which to deny that a good is involved in the transaction.

If the UCC, the Sale of Goods Act and/or the CISG are unable to include computer programs as goods, whether in physical or electronically transferred copies, the law will lag behind technological developments, leaving businesses and consumers to contract for computer software through the uncertainties of provincial and state common law theories of contract and tort.¹⁵⁰ Courts, having held or assumed that the "sale" of programs involves a transaction in goods, implicitly are choosing to fit software transfers into tried and reliable legal traditions by analogy or unstated legal fiction.¹⁵¹ While there may be some intellectual dishonesty involved in this practice, as reviewed in Part II, nothing in the area of computer software and shrink-wrap licenses is entirely free of categorical confusion.

B. Sales

A problematic and often-discussed (but rarely litigated) aspect in this field,¹⁵² is whether shrink wrap and other computer software licenses are

(2) Questions concerning matters governed by this Convention which are not expressly settled in it are to be settled in conformity with the general principles on which it is based or, in the absence of such principles, in conformity with the law applicable by virtue of the rules of private international law.

CISG, *supra* note 15, art. 7.

147. See Horovitz, *supra* note 4, at 150-51.

148. See, e.g., *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff'd by an equally divided Court*, 116 S. Ct. 804 (1996); *Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693 (2d Cir. 1992).

149. See Horovitz, *supra* note 4, at 151.

150. *Id.* at 160.

151. *But see infra* note 157 and accompanying text (noting that Canadian Sale of Goods Acts complement and do not replace the common law of contracts).

152. At least one commentator has noted that little litigation concerning shrink-wrap licenses has taken place. Ritter, *supra* note 1, at 2549 n.60. Since August 1990 when that comment was published, only a handful of cases have been published on shrink-wrap licenses

sales contracts. The UCC broadly defines a sale as a “transaction” in goods.¹⁵³ This definition has often been extended in reach in certain jurisdictions, such as New York, to include leases.¹⁵⁴ While the individual provincial Sale of Goods Acts, which govern most contracts for goods in Canada, can be a maze, one should remember that they are “meant to complement and not replace the common law rules relating to the sale of goods and services.”¹⁵⁵

Internationally, the problem is not entirely whether the UCC or provincial acts consider software licenses as sales of goods, but whether the Convention would or should view them as such. If they are not so viewed, the goal of uniformity in international commercial contracts for the sale of goods becomes irrelevant¹⁵⁶ in regards to computer program licenses, and the parties are left with choice of law provisions which the Convention hoped to obviate.¹⁵⁷ Unfortunately, the situation has been exacerbated by the software publishers themselves who, on the one hand, wish to brand software licenses as a limited right of possession of their intellectual property, not involving the transfer of title in copies of their

both in Canada and the United States. Case law interpreting the Convention in Canada and the United States is even sparser.

153. UCC, *supra* note 122, § Article 2-102.

154. *See* Communications Groups, Inc. v. Warner Communications, Inc., 527 N.Y.S.2d 341 (N.Y. City Civ. Ct. 1988).

155. Kyer, *supra* note 51.

156. Not all commentators agree that the Convention will lead to uniformity in interpretation of international sale of goods contracts under its provisions. *See* Note, *Unification and Certainty: The United Nations Convention on Contracts for the International Sale of Goods*, 97 HARV. L. REV. 1984 (1984) [hereinafter Harvard Note]. Despite the “[g]reat care . . . taken in [the Convention’s] preparation to make it as clear and easy to understand as possible,” EXPLANATORY NOTE BY THE UNCITRAL SECRETARIAT ON THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS § 13 (the unofficial commentary attached to the Convention), there is no doubt that compromise was necessary to arrive at the Convention’s adoption. *Id.* §§ 1-4 (for a brief history of the Convention); Harvard Note, *supra*, at 1991-92 (positing Article 7 establishes a theoretical hierarchy to be applied to issues confronted by local courts while leaving undefined what the “international character” and “general principles” of the Convention mean). Nor, however, are all the commentators so pessimistic. The reliance on the writings of Professor John Honnold, especially his treatise on the Convention, which has come to be seen as almost the “official” unofficial commentary on the Convention, cannot be ignored. *See* JOHN HONNOLD, UNIFORM LAW FOR INTERNATIONAL SALE UNDER THE 1980 UNITED NATIONS CONVENTION (1982). Professor Honnold was a significant contributor to the Convention as Chairman of the United States’ delegation in the Convention’s negotiations. Honnold identified at least three “general principles” underlying the Convention: (1) protection of a contracting party’s reliance on the other party’s conduct; (2) a duty to communicate required information; (3) a duty to mitigate damages. *Id.* at 113.

157. CISG, *supra* note 15, art. 7(1). Article 7 is reproduced *supra* at note 147.

software,¹⁵⁸ while, at the same time, claiming protection under traditional concepts of sale of goods contracts.¹⁵⁹

Article 3 of the Convention further specifically excludes from CISG "contracts in which the preponderant part of the obligations of the party who furnishes the goods consists in the supply of labor or other services."¹⁶⁰ Apparently this would exclude most contracts for the creation of new, or the customization of, software for a party's particular purposes since "the preponderant part" of such contracts is the supply of labor.¹⁶¹ Additionally, trans-border contracts for the setting up and maintenance of computer systems, commonly involving leases of computer equipment and software, might escape the Convention.

At least one court in the United States has been willing to brand the latter scenario a *sale* of goods under the Uniform Commercial Code. *Communications Groups, Inc. v. Warner Communications, Inc.*,¹⁶² dealt with the license of a computer software package to the defendant, Warner Communications.¹⁶³ Though not explicitly a shrink-wrap license case, it involved a written license which contained shrink-wrap provisions such as a perpetual term and warranty and liability disclaimers.¹⁶⁴ The plaintiff's position, exemplifying the schizophrenic approach by software publishers to whether and when their licenses should be construed as sales contracts, was that its license to the defendant was for providing intangible services and, as such, the software was not a good that fell within the scope of the UCC.¹⁶⁵ With a string cite to cases that had held computer software to be goods and to a law review article on the topic, the court found that the software in the license to be a good, without further analysis other than a mention to UCC 1-102.¹⁶⁶

158. See *supra* note 114, and accompanying text; UCC, *supra* note 122, § Article 2-106(1) ("A 'sale' consists in the passing of title from the seller to the buyer for a price.").

159. See *supra* note 62 and accompanying text.

160. CISG, *supra* note 15, art. 3(2). The full text of Article 3 reads as follows:

(1) Contracts for the supply of goods to be manufactured or produced are to be considered sales unless the party who orders the goods undertakes to supply a substantial part of the materials necessary for such manufacture or production.

(2) This Convention does not apply to contracts in which the preponderant part of the obligations of the party who furnishes the goods consists in the supply of labour or other services.

CISG, *supra* note 15, art. 3.

161. CISG, *supra* note 15, art. 3(2).

162. 527 N.Y.S.2d 341 (N.Y. City Civ. Ct. 1988).

163. See *id.* at 341-42.

164. See *id.* at 345-46.

165. See *id.* at 343.

166. See *id.* at 344. The court stated that UCC 1-102 provides that the Act "shall be liberally construed and applied to promote its underlying purposes and policies" though without stating what these are. *Id.* UCC, *supra* note 122, § 1-102 provides, in relevant part:

As to the issue of whether the license constituted a sale, its answer was a strong maybe. Judge Leonard N. Cohen found “the Agreement clearly is a lease for the use of plaintiff’s goods, despite the contractual label of a license.”¹⁶⁷ Using an economic effect test to determine whether the lease was in fact a sale in disguise, the court stated “where the contract price of a lease is as large as the sales price of the same item, the transaction is analogous to a sale and will be covered by the UCC.”¹⁶⁸ Since the court had insufficient evidence before it on which it could decide this issue on a motion to dismiss, the question of whether plaintiff’s software package license was a sale could not be decided.¹⁶⁹ However, the license in *Communications Groups* was of perpetual duration, like those found in shrink-wrap licenses.¹⁷⁰ Since the “purchase” or “sale” price often equals the “lease” price under typical shrink-wrap licenses, under the economic test of *Communications Groups*, shrink-wrap licenses would equal sales. Because this economic effect test could easily be applied as a “preponderant part” test under the language of Article 3 of the Convention, it could hardly be said to be a leap of (good) faith to say the CISG would support a determination that shrink-wrap licenses can be sales of goods under its provisions.¹⁷¹

The rule in Canada is complicated by the fact that certain provincial statutes specify that a contract which mixes the provision of goods and services will be a contract for the sale of goods.¹⁷² In the provinces with no such specific statute(s), application of the Sale of Goods Act requires examination of the “essential character” of a contract.¹⁷³ Hence, a Canadian court would construe a contract on whether its essence was for

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- (2) Underlying purposes and policies of this Act are
- (a) to simplify, clarify and modernize the law governing commercial transactions;
-
- (c) to make uniform the law among the various jurisdictions.

UCC, *supra* note 122, § 1-102(2).

167. *Id.* at 345. See Kemp *supra* note 69, at 98-105 (for an argument that shrink-wrap licenses resemble sales rather than they do licenses); Page M. Kaufman, Note, *The Enforceability of State “Shrink Wrap” License Statutes in Light of Vault Corp. v. Quaid Software, Ltd.*, 74 CORNELL L. REV. 222, 233, 236 (1988) (concluding shrink-wrap licensees are actually buyers).

168. *Communications Groups*, 527 N.Y.S.2d at 345.

169. See *id.* at 346-47.

170. See *supra* note 22 and accompanying text.

171. See *Word Management Corp. v. AT&T Information Systems, Inc.*, 525 N.Y.S.2d 433 (N.Y. App. Div. 3rd Dept. 1988) (where transaction predominantly service oriented, contract outside of UCC-2); *North Am. Leisure Corp. v. A & B Duplicators, Ltd.*, 468 F.2d 695 (2d Cir. 1972) (whether the “essence” of the agreement is for services or goods). But see UCC, *supra* note 122, § Article 2-106(1) (“A ‘sale’ consists in the passing of title from the seller to the buyer for a price.”).

172. See FRIDMAN, *supra* note 127, at 20-21.

173. *Id.* at 22.

the provision of goods or labor/service.¹⁷⁴ This seems to place the Sale of Goods Act squarely in line with the CISG.¹⁷⁵

C. *Enforceability*

A major gap left by the Convention is that of contract validity. Article 4 is express when stating "it is not concerned with . . . the validity of the contract or of any of its provisions . . ."¹⁷⁶ Thus a contract for the sale of goods that is formed under the Convention, or its contract provisions, may still run the risk of being found invalid in a court of one of the countries where the parties are doing business. In the United States and Canada, there was, until the Seventh Circuit Court of Appeal's decision in *ProCD, Inc. v. Zeidenberg*,¹⁷⁷ a developing trend in the case law not to enforce shrink-wrap licenses for a variety of reasons. Interestingly, the cases, until *ProCD*, had not directly dealt with the concerns of consumers (as opposed to businesses) who buy mass-marketed software over-the-counter. Because the Convention will not generally apply to sales to consumers in an over-the-counter/retail context, its effect on such licenses is more likely to be indirect.¹⁷⁸ But as the cases examined in this section will show, software publishers have not been averse to attempting to enforce their shrink-wrap licenses on business parties. Situations that have arisen in precedents would be directly on point in contracts between merchants in Canada and the United States.

At the one extreme is the case of *Vault Corp. v. Quaid Software Ltd.*¹⁷⁹ There, the maker of computer floppy discs with encoded copy protection brought suit against the maker of a program that could unlock those discs so that they could be copied by others.¹⁸⁰ The Court of Appeals for the Fifth Circuit, without analysis, merely quoted the district court in affirming that court's decision not to enforce the plaintiff's

174. *Id.*

175. *Id.* at 22 n.109.

176. CISG, *supra* note 15, art. 4(a). The full text of Article 4 reads:

This Convention governs only the formation of the contract of sale and the rights and obligations of the seller and the buyer arising from such a contract. In particular, except as otherwise expressly provided in this Convention, it is not concerned with:

(a) the validity of the contract or any of its provisions or of any usage;
(b) the effect which the contract may have on the property in the goods sold.

CISG, *supra* note 15, art. 4.

177. 86 F.3d 1447, 1450 (7th Cir. 1996).

178. See CISG, *supra* note 15, art. 2(a). Article 2 of the Convention is reproduced at note 138.

179. 655 F. Supp. 750 (E.D. La. 1987), *aff'd*, 847 F.2d 255 (5th Cir. 1988).

180. *Id.* at 755.

shrink-wrap license because it was “a contract of adhesion which could only be enforceable if the [Louisiana License Act] is a valid and enforceable statute.”¹⁸¹ Since the appellate court agreed with the district court that the Louisiana License Act was preempted by the Copyright Act, the shrink-wrap license was found unenforceable.¹⁸²

The *Vault* case thus raised many issues not only about the validity of shrink-wrap licenses under contract law, but also about their usefulness given the protection afforded to computer software under U.S. copyright law. In particular, the Fifth Circuit specifically held the anti-reverse engineering provision of Louisiana’s shrink-wrap license statute, meant to validate such licenses,¹⁸³ “clearly ‘touches upon an area’ of federal copyright law” and was accordingly preempted.¹⁸⁴ The quoted language raised sweeping constitutional preemption issues of what states could legislate in the area of enforcing shrink-wrap licenses.¹⁸⁵ Illinois, the only other state at the time to give state statutory protection to shrink-wrap licenses, later repealed its statute.¹⁸⁶

The *Vault* decision has been criticized as being overly broad and not well reasoned.¹⁸⁷ Though one may debate the issue of whether statutory preemption would have been a better alternative for the court to take to strike down Louisiana’s statute, rather than reaching the constitutional issue, there was some equally sweeping precedent on which the court relied,¹⁸⁸ precedent which could apply to the attempt by software publishers to bar reverse engineering of their programs under trade secret and contract law.¹⁸⁹ One of *Vault*’s weakness is the court’s blanket holding that adhesion contracts are not enforceable unless justified by statute.¹⁹⁰ It seems clear that adhesion contracts abound in this age where form contracts are overwhelmingly employed as opposed to contracts that are drafted and negotiated between parties.¹⁹¹ Although the Fifth Circuit’s aversion to such contracts may have been commendable in its zeal to

181. *Id.* at 761-62.

182. 847 F.2d at 270.

183. LA. REV. STAT. ANN. § 51:1964(1)-(5) (Supp. 1987).

184. *Vault*, 847 F.2d at 270.

185. *Id.*

186. ILL. REV. STAT. ch. 29, § 804(1)-(6) (Supp. 1987) (repealed 1988).

187. See Ryan, *supra* note 107, at 2216 n.53.

188. See *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 (1964); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964).

189. See Mark A. Lemley, *Intellectual Property and Shrink-wrap licenses*, 68 S. CAL. L. REV. 1239, 1271-72 (1995); O’Rourke, *supra* note 119, at 541 (both authors taking approach that not all of trade secret or contract law are preempted by the U.S. Copyright or Patent Acts but coming to different conclusions as to the extent of preemption).

190. Ryan, *supra* note 107, at 2120-21.

191. *Id.*

protect the integrity of (and prevent the whittling away of) Federal Copyright Law, it did little to give notice to software publishers. Not surprisingly, shrink-wrap licenses did not suddenly disappear after *Vault*.¹⁹² Nonetheless, the case could become a significant hindrance to new attempts by states to validate, through legislation, shrink-wrap licenses.¹⁹³

In *Step-Saver Data Systems, Inc. v. Wyse Technology*,¹⁹⁴ the Court of Appeals for the Third Circuit also refused to enforce the shrink-wrap license involved therein, but on UCC battle of the forms grounds. Step-Saver was a retailer of custom computer systems.¹⁹⁵ It had contacted TSL, one of the defendants, in regards to a computer program which it needed for its computer systems.¹⁹⁶ TSL made some representations about the compatibility of its Multilink program with existing software, and about the capabilities of Multilink's programs.¹⁹⁷ Relying on those representations, Step-Saver ordered several copies of TSL's program by phone,¹⁹⁸ and after some testing, decided to incorporate the Multilink program into its computer systems.¹⁹⁹

The causes of action arose when TSL attempted to disclaim the oral representations it had made to Step-Saver by arguing that the warranty disclaimers in the shrink-wrap licenses attached to the programs ordered by Step-Saver were incorporated into their contracts.²⁰⁰ Finding that the UCC had expressly rejected the common law's "last shot rule"²⁰¹ in

192. Remarkably, Westlaw's License Agreement has changed very little in the last seven years. The 1990-91 version of the shrink-wrap license included with the software to run and have access to its legal research database, is almost identical to that of the 1996 license examined herein. WESTLAW SOFTWARE LICENSE AGREEMENT (1990) (on file with the author); WESTLAW LICENSE, *supra* note 17.

193. *See infra* Part IV.C.

194. 939 F.2d 91 (3d Cir. 1991).

195. *See id.* at 93.

196. *See id.* at 95.

197. *See id.*

198. *See id.* at 95-96.

199. *See id.* at 95.

200. *See id.* at 98.

201. *See id.* at 99. The court described the last shot rule as follows:

Under the common law of sales, and to some extent still for contracts outside the UCC, an acceptance that varied any term of the offer operated as a rejection of the offer, and simultaneously made a counteroffer. This common law formality was known as the mirror image rule, because the terms of the acceptance had to mirror the terms of the offer to be effective. If the offeror proceeded with the contract despite the differing terms of the supposed acceptance, he would, by his performance, constructively accept the terms of the "counteroffer," and be bound by its terms. As a result of these rules, the terms of the party who sent the last form, typically the seller, would become the terms of the parties' contract. This result was known as the "last shot rule."

Id.

Article 2-207,²⁰² the court held the parties had not intended the licenses to be binding modifications under Article 2-209²⁰³ and construed what agreements existed between them under Article 2-207.²⁰⁴

The reserve of the Third Circuit's decision can be seen by its refusal to decide many issues that shrink-wrap licenses raise. It assumed, without holding, "for the sake of simplicity," that the transaction was a sale while reserving opinion on the question of whether the contract could be construed as a sale, or as a license falling outside the UCC's provisions.²⁰⁵ The court's approach implies that provincial Sale of Goods Acts and the Convention might not apply to shrink-wrap licenses either if not for an assumption that such licenses involve sales.²⁰⁶ The court also did not decide whether the shrink-wrap license was unconscionable²⁰⁷ or used in

202. UCC, *supra* note 122, § Article 2-207 reads as follows:

- (1) A definite and seasonable expression of acceptance or a written confirmation which is sent within a reasonable time operates as an acceptance even though it states terms additional to or different from those offered or agreed upon, unless acceptance is expressly made conditional on assent to the additional or different terms.
- (2) *The additional terms* are to be construed as proposals for addition to the contract. *Between merchants* such terms *become part of the contract* unless:
 - (a) the offer explicitly limits acceptance to the terms of the offer;
 - (b) they materially alter it; or
 - (c) notification of objection to them has already been given or is given within a reasonable time after the notice of them is received.
- (3) Conduct by both parties which recognizes the existence of a contract is sufficient to establish a contract for sale even though the writings of the parties do not otherwise establish a contract. In such case the terms of the particular contract consist of *those terms on which the writings of the parties agree*, together with any supplemental terms incorporated under any other provisions of this Act.

UCC, *supra* note 122, § Article 2-207 (emphasis added).

203. See *Step-Saver*, 939 F.2d at 98. The applicable provisions to shrink-wrap licenses under UCC § Article 2-209 read as follows:

- "(1) An agreement modifying a contract within this Article needs no consideration to be binding.
- (2) A signed agreement which excludes modification or rescission except by signed writing cannot be otherwise modified or rescinded, but except as between merchants such a requirement on a form supplied by the merchant must be separately signed by the other party. . ."

UCC, *supra* note 122, § Article 2-209.

204. See *Step-Saver*, 939 F.2d at 103.

205. *Id.* at 101 n.27.

206. See CISG *supra* note 15, art. 1; Sale of Goods Act, *supra* note 127, § 1. In order for a sale of goods to occur under the Sale of Goods Act, there must be a purchase, intent to pass property to the buyer, with goods as at least an essential part of the contract, and payment of money for the goods. See FRIDMAN, *supra* note 127, at 11-25.

207. See FRIDMAN, *supra* note 127, at 45-46 (discussing the differences between the UCC's provision on unconscionability at Article 2-302 and the absence of such a rule in the Sale of Goods Act and the possibility that Canadian courts would strike down or alter unfair or unreasonable contract terms under an "inequality of bargaining power theory"); see also S.M.

good faith,²⁰⁸ or whether the disclaimers of warranties in the license were unreasonable.²⁰⁹ Thus, the Third Circuit was not as quick as the Fifth Circuit in assuming that shrink-wrap licenses were unenforceable contracts of adhesion, or whether they were preempted either by the Copyright Act or Federal policy on copyright law.²¹⁰ Nevertheless, the decision is an important one in that it encourages parties, (in this situation two merchants), and particularly software publishers,²¹¹ to be explicit in what they are contracting so as to avoid terms in shrink-wrap licenses that contradict their agreements. This is consistent with the Convention's general principles of protecting party reliance and the duty to communicate required information while contracting.²¹²

WADDAMS, THE LAW OF CONTRACTS 327-28 (1977) (similar conclusion but under rubric of "restraint of trade").

208. The CISG emphasizes that "observance of good faith in international trade" must be considered in interpreting its provisions. CISG, *supra* note 15, art. 7(1), reproduced at note 146. However, nowhere is good faith defined within it. One commentator has argued that this leaves local courts free to apply their own concepts of good faith, such as the UCC's definition of good faith for merchants: "honesty in fact and the observance of reasonable commercial standards of fair dealing in the trade." UCC, *supra* note 122, § Article 2-103(b). Because other countries may not share this concept of good faith, the Convention's goal of uniformity is argued to be undermined. See Harvard Note, *supra* note 156, at 1991; see also UCC, *supra* note 122, §§ 1-209(19), 1-203. The Sale of Goods Act defines good faith as something done in honesty (whether negligently done or not). Sale of Goods Act, *supra* note 127, § 1(2); see FRIDMAN, *supra* note 127, at 132.

209. See *Step-Saver*, 939 F.2d at 97 n.11.

210. Without belaboring the obvious, as the composition of the judicial system in the United States shows, uniformity, as in the case of the UCC, can be achieved through common implementation, through the respect given to precedent with *stare decisis*, and through resort to courts of final review. The Convention does not include a system where final review of its provisions can occur. See V. Susan Cook, Note, *The Need for Uniform Interpretation of the 1980 United Nations Convention on Contracts for the International Sale of Goods*, 50 U. PITT. L. REV. 197, 215 (1988) (suggesting the creation of a supranational advisory judicial panel). Given that not all countries put as high a value on precedent as common law jurisdictions tend to, the uniformity which the Convention seeks to attain in international sale of goods contracts is probably a matter of degree. *But cf. id.* at 216 ("unless uniformity is an empty, meaningless standard, it must include a directive to the courts to grant considerable weight to foreign decisions interpreting the Convention"). Even in the United States and Canada, the interpretation of the UCC and the Sale of Goods Act cannot be said to be absolutely uniform. It is questionable, under the circumstances, whether the Convention can ever hope to aspire to the UCC's or Sale of Goods Act's levels of achievement, at least as far as uniformity is concerned in the international sphere. That is not to imply failure; rather, it is to realize that the Convention should be viewed in the *realistic* light of its "international character." See CISG, *supra* note 15, art. 7(1), reproduced at note 146.

211. "Requiring the seller to discuss terms it considers essential before the seller ships the goods is not unfair; the seller can protect itself by not shipping until it obtains assent to those terms it considers essential." *Arizona Retail Systems, Inc. v. Software Link, Inc.*, 831 F. Supp. 759 (D. Ariz. 1993) (involving the same defendant as in *Step-Saver*, arguing similar defenses in a different Circuit and, but for one license where the terms were made aware to purchaser prior to contract, losing on the same grounds).

212. See Honnold, *supra* note 156.

The judiciary's view of shrink-wrap licenses in Canada has not congealed as much as it has in the United States, possibly because there are even fewer cases that have been decided on their enforceability.²¹³ If history has a way of repeating itself in this area, signs indicate that the American and Canadian approaches will not likely differ, even with the divergence between contract laws. So far only one case has been decided about shrink-wrap licenses per se which, on first glance, appears as sweeping as the *Vault* case was in the United States. *North American Systemshops Ltd. v. King*,²¹⁴ decided by Judge Veit of the Alberta Court of Queen's Bench, involved a case of a license that was included *inside* of the packaging in which the software was sold instead of in plain view and on the outside of the box.²¹⁵ Because the "purchaser" could not have been aware of the restrictions placed on his use prior to buying the software, the court held that the sale of software "over-the-counter constitutes the implied granting by the plaintiff of an implied permission to the purchaser to do whatever the purchaser wished with that product."²¹⁶ Since the case involved a "consumer sale,"²¹⁷ and since the license was not shrink-wrapped onto the outside of the box containing the software to provide a modicum of notice, the case is potentially distinguishable in a different situation, such as a contract of sale between merchants.²¹⁸ In fact, the court was aware of these distinctions and wondered aloud how useful its decision would be as precedent:

213. See Bahr, *supra* note 59, at 63. This is in no doubt partly due to the smaller population of Canada (30 million) and the fact that Canadians are not as litigious as their fellow North Americans.

214. 68 Alta. L.R.2d 145 (Alta. Q.B. 1989) (Can.).

215. *Id.* at 152.

216. *Id.* at 155. This holding is remarkably similar to what would have been the case under the first sale doctrine of the U.S. Copyright Act prior to the 1990 software amendments. See 17 U.S.C. § 109 (1996); *supra* note 78 and accompanying text. The Copyright Act of Canada currently does not include an explicit distribution right or limit on such a right of distribution, other than an importation right under Section 2, after the first sale of a copy of a copyrighted item. See Canadian Copyright Act, *supra* note 57, § 2. The proposed revisions to the Act now before Parliament would add such a right. See Canadian Copyright Revisions, *supra* note 57.

217. See CISG, *supra* note 15, art. 2(a), reproduced at note 138. As noted, such sales will generally not be covered by the Convention, thus necessitating resort to private international rules of choice of law to determine whether the shrink-wrap license is enforceable in a trans-border transaction. However, the fact pattern in *North American Systemshops* is interesting because, although plaintiff's software was sold over-the-counter in a retail store, the purchaser was doing so for use at his business. See *North American Systemshops*, 68 Alta. L.R.2d at 153. Thus, if the seller had been made aware of this fact prior to or at the conclusion of the "sale" of the software, and further assuming the sale was between Canadian and American business persons, the Convention would have applied. See CISG, *supra* note 15, art. 1. Query whether the kind of software being transferred, such as a program typically used in a business as opposed to a personal setting, would place the seller on notice as to the identity of the purchaser to fall under the Convention.

218. See *North Am. Systemshops*, 68 Alta. L.R.2d at 155.

Today, and for several years, it has been common to insert the floppy disk in a sealed envelope which prominently displays both a warning that the disc is sold subject to the conditions of a license agreement, the license agreement, that a card referring to the license agreement must be signed by the purchaser and returned to the copyright owner, etc.²¹⁹

The court's dicta is unfortunate. Its description of the "common practice" with shrink-wrap licenses is not entirely correct. Signed cards referring to the license agreement are *not* common in the United States or in Canada, and a system for obtaining and recording these cards would prove costly and time consuming by software publishers. Additionally, the dicta detracts from the broadness of the Queen's Bench holding and the reasoning it applied. The paragraphs immediately preceding the court's musings arrived at a rule very similar to that of the Third Circuit in *Step-Saver*.

If the vendor sells, imposing no restriction or condition upon his purchaser at the time of sale, he cannot impose a condition subsequently by delivery of the goods with a condition endorsed upon them or on the package in which they are contained. Unless the purchaser knows of the condition at the time of sale, he has the benefit of the implied license to use the article free from conditions. Furthermore, the buyer will only be restricted to the limitations expressly brought home to his attention, and has no obligations to make inquiries of the owner of the rights in the article to ascertain if there are other restrictions that have not been brought to his attention.²²⁰

The last sentence of the above quote refers to one argument made by the software publisher. The publisher believed that, in light of the copyright notice on its software, the defendant became obligated to learn by whatever means, including reading the owner's manual, which embodied the license terms, what restrictions were imposed on the program's use.²²¹ The court explicitly rejected this position. Applying *North American Systemshops'* holding that almost any software that did not sufficiently provide notice to the prospective purchaser of the shrink-wrap license's terms prior to purchase would be unenforceable. Since a substantial amount of computer programs are now transferred in this manner,²²² shrink-wrap licenses, at least in the Third Circuit and in the province of Alberta, would not be enforceable.

219. *Id.*

220. *Id.*

221. *Id.* at 154 ("The plaintiff alleges that . . . the display of the copyright forces the purchaser to seek out, and abide by, a license statement, or permission, or condition of use from the copyright owner.").

222. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1451 (7th Cir. 1996).

A more recent case basing part of its decision on *North American Systemshops* might prove that court's restrictive dicta wrong.²²³ In *Union Industries Inc. v. Beckett Packaging Ltd.*,²²⁴ the Ontario Court of Justice considered a contract dispute over whether the terms of a license were part of the contract between two parties. A patent holder, Beckett, was attempting to impose the terms of its form license upon the buyer, Union, who was unaware of the license, after they had already agreed on the basic terms of their contract. Neither software nor shrink-wrap license was at issue. The court found *North American Systemshops* applicable by analogy holding "when one purchases something for good consideration, one naturally assumes unlimited use of that item."²²⁵ Again, the issue of a conspicuously placed shrink-wrap license, or notice of such a license, to the purchaser was not addressed, but the language in *Union Industries* leaves one to wonder whether such licenses could ever be enforced in Ontario, Canada's largest and richest province without ever explicitly bringing the license to the "purchaser's" attention prior to "sale."²²⁶

But for one exception,²²⁷ the message in the Canadian cases, and in the cases since *Step-Saver* in the United States, seems to be that once a contract is formed in the guise of a sale, it will be difficult to alter that agreement into a restrictive license without adequate notice given to the buyer prior to the contract of sale. Ignoring the limitations on consumer sales, the Convention would encourage Canadian and American contracting parties to end their attempts at imposing onerous terms in their "last shot" shrink-wrap licenses²²⁸ to ensure not only contract validity, but to further "good faith in international trade"²²⁹

Yet a full review of the CISG reveals grounds for some criticism of its provisions. Application of the Convention's contract formation provisions to the situations in the cases above, particularly to the facts of *Step-Saver*, might have led to very different results despite the Convention's underlying principles of good faith in international trade.²³⁰ Assuming for the moment that the situation involved a contract for the sale of goods, as in *Step-Saver*, the last shot rule could have prevailed

223. See *supra* note 222 and accompanying text.

224. 1993 Ont. C.J. Lexis 922 (1993) (Can.).

225. *Id.* at 36-37.

226. "When a man has purchased an article he expects to have the control of it, and there must be some clear and explicit agreement to the contrary to justify the vendor in saying that he has not given the purchaser his license to sell the article, or to use it wherever he pleases as against himself." *Id.* at 38 (quoting *Betts v. Willmott*, 6 Ch. App. 299, 245 (1871)).

227. See *infra* Part IV.B.

228. See *supra* note 201.

229. CISG, *supra* note 15, art. 7(1), reproduced at note 146.

230. *Id.*; Honnold, *supra* note 156.

because the Convention adopted that approach, though a somewhat tame version of that common law doctrine.²³¹

Assuming parties whose places of business are in Canada and the United States,²³² Articles 18 and 19 on contract formation, (as opposed to validity), would govern the transaction.²³³ At first, Article 19 can prove deceiving since it seems to incorporate a mirror-image rule, turning acceptances that have additional terms into counteroffers.²³⁴ But subparagraph 2 of Article 19 then continues on to establish the rule that if this new offer does not include material changes, and if one does not object to those changes, the contract will include these new terms.²³⁵ Subparagraph 3 of Article 19 contains a nonexclusive list of what those material terms could be.²³⁶ Only limits on liability explicitly included in

231. See Lisa K. Tomko, Note, *United Nations Convention on the International Sale of Goods: Its Effect on United States and Canadian Sales Law*, 66 U. DET. L. REV. 73, 90 (1988).

232. CISG, *supra* note 15, art. 1(1).

233. Article 18 reads:

(1) A statement made by or other conduct of the offeree indicating assent to an offer is an acceptance. Silence or inactivity does not in itself amount to acceptance.

(2) An acceptance of an offer becomes effective at the moment the indication of assent reaches the offeror. An acceptance is not effective if the indication of assent does not reach the offeror within the time fixed or, if no time is fixed, within a reasonable time, due account being taken of the circumstances of the transaction, including the rapidity of the means of communication employed by the offeror. An oral offer must be accepted immediately unless the circumstances indicate otherwise.

(3) However, if by virtue of the offer or as a result of practices which the parties have established between themselves or of usage, the offeree may indicate assent by performing an act, such as one relating to the dispatch of the goods or payment of the price, without notice to the offeror, the acceptance is effective at the moment the act is performed, provided that the act is performed within the period of time laid down in the preceding paragraph.

CISG, *supra* note 15, art. 18. Article 19 reads:

(1) A reply to an offer which purports to be an acceptance but contains additions, limitations or other modifications is a rejection of the offer and constitutes a counteroffer.

(2) However, a reply to an offer which purports to be an acceptance but contains additional or different terms which do not materially alter the terms of the offer constitutes an acceptance, unless the offeror, without undue delay, objects orally to the discrepancy or dispatches a notice to that effect. If he does not so object, the terms of the contract are the terms of the offer with the modifications contained in the acceptance.

(3) Additional or different terms relating, among other things, to the price, payment, quality and quantity of the goods, place and time of delivery, extent of one party's liability to the other or the settlement of disputes are considered to alter the terms of the offer materially.

CISG, *supra* note 15, art. 19.

234. See CISG, *supra* note 15, art. 19(1), reproduced at note 233.

235. See CISG, *supra* note 15, art. 19(2), reproduced at note 233.

236. See CISG, *supra* note 15, art. 19(3), reproduced at note 233.

the list²³⁷ are typically found in shrink-wrap licenses,²³⁸ leaving one to wonder whether some of the other usual license terms would be considered “material.”²³⁹ If, as was the situation in *Step-Saver*,²⁴⁰ the “purchaser” did not object to the shrink-wrap license “without undue delay,” and if none of the terms in the shrink-wrap license were material, *Step-Saver* could have been bound by the license.²⁴¹ However, it is difficult to believe that out of all the typical shrink-wrap license provisions,²⁴² not one of them other than the liability limitation would rise to the level of a material term.²⁴³ Title retention, at the least, should be viewed as a complete alteration of the contract. Furthermore, warranty provisions in typical shrink-wrap licenses are, in many ways, similar to liability limitations and, as such, are material terms constituting counteroffers rather than acceptances under Article 19.²⁴⁴

The problem does not end there. If the shrink-wrap license constitutes a counteroffer, breaking the seal arguably constitutes acceptance of its terms through conduct under Article 18.²⁴⁵ Keeping in mind the international character of the CISG, it might not be unreasonable to have such a rule because the parties are often separated by long distances. Having the “buyer” return the goods after the seller has gone through the trouble of delivering the software would impose a heavy burden on the seller and the buyer, who has relied on the seller’s representations. This brings us back to the issue of whether the shrink-wrap license would be enforceable against the buyer. As the *Step-Saver* court stated, “[e]ven with such a refund term, . . . the offeree/counterofferor may be relying on the purchaser’s investment in

237. *Id.* Note that the “Convention does not apply to the seller for death or personal injury caused by the goods to any person.” CISG, *supra* note 15, art. 5.

238. *See supra* note 25.

239. *See supra* notes 21-24 and accompanying text.

240. *Step-Saver*, 939 F.2d at 98.

241. CISG, *supra* note 15, art. 19(2), reproduced at note 233.

242. *See supra* notes 21-25 and accompanying text.

243. *Step-Saver*, 939 F.2d at 105; *Arizona Retail*, 831 F. Supp. at 166.

244. CISG, *supra* note 15, art. 19(1), (2), reproduced at note 233. The Westlaw License agreement includes the following provisions besides the limitation of liability clause:

West warrants that the medium upon which the Software is provided to User shall be free from defects in material and workmanship under normal use for a period of 90 days from the date of the User’s receipt thereof. . . . USER BEARS ALL RISK RELATING TO QUALITY AND PERFORMANCE OF THE SOFTWARE. . . . West does not warrant that the Software or the functions contained in the Software will meet User’s requirements, operate without interruption or be error free.

WESTLAW LICENSE, *supra* note 17 (emphasis in original). The limitation on the software’s quality alone would constitute a material term under Article 19(3). *See* CISG, *supra* note 15, art. 19(3), reproduced at note 233.

245. *See* CISG, *supra* note 15, art. 18(3), reproduced at note 233.

time and energy in reaching this point in the transaction to prevent the purchaser from returning the item."²⁴⁶ Since the "purchaser" may not have agreed to the shrink-wrap license's terms without having been notified of them before delivery, the modification of what is now the initial contract for sale comes late in the transaction indeed. Article 29 of the Convention, like UCC Article 2-209(1),²⁴⁷ might allow such late modifications "by the mere agreement of the parties," effectively eradicating the common law's requirement of additional consideration.²⁴⁸

Step-Saver explicitly rejected the application of Article 2-209's modification-without-consideration provision explaining that shrink-wrap licenses amounted to a battle of forms under Article 2-207, and not a request for modification of the underlying contract under Article 2-209.²⁴⁹ To hold otherwise, the court reasoned, would re-introduce the last-shot rule into Article 2 of the UCC, which the drafters of that section had explicitly rejected.²⁵⁰ More directly, the court would not apply Article 2-209 because modification requires the intent of both parties to alter the contract.²⁵¹ The implication from the court's reasoning appears to be that such an intent would have to be subjective. Rarely will a purchaser be shown to have such an intent once having been made aware of a shrink-wrap license's provisions after his or her purchase, unless clicking the "I agree" button to run the software, often the only means to get the software to work could be deemed to validly exhibit such an intent.

One should not be surprised to see U.S. or Canadian software publishers hauled into foreign courts on breach of contract grounds under CISG. They will, likely, need to defend the validity of the shrink-wrap licenses they seek to impose and, thus, take the analysis outside of the Convention and possibly into that of a foreign and unknown jurisdiction whose laws and local biases may not prove as open to such contracts of adhesion,²⁵² as the Third Circuit appears to be. The argument is forcefully made that although the Convention seems more amenable to shrink-wrap licenses because of its common-law-type last-shot-rule in its battle-of-the-forms provisions,²⁵³ software publishers would improve their position by abolishing their shrink-wrap licenses, clearly marketing their products as

246. *Step-Saver*, 939 F.2d at 102.

247. See UCC, *supra* note 122, § Article 2-209(1), reproduced *supra* at note 203.

248. CISG, *supra* note 15, art. 29(1) ("A contract may be modified by the mere agreement of the parties.").

249. See *supra* note 203 and accompanying text.

250. *Step-Saver*, 939 F.2d at 98-99.

251. *Id.* at 98.

252. See *infra* note 315 and accompanying text.

253. See *supra* note 242 and accompanying text.

goods for sale, and relying on the provisions of the Convention.²⁵⁴ Greater certainty in international (and domestic) contract formation and simplification, both of which lead to lowering transaction costs for the parties,²⁵⁵ are among the benefits fostered by the Convention.

The question becomes whether software publishers are willing to sacrifice the protections they perceive to exist in their shrink-wrap licenses for the advantages that the Convention provides for the international marketing and sale of their goods. So far, software publishers have not shown themselves willing to do so, despite the many cases that have held against them. Software publishers have not proved themselves satisfied by merely disclaiming any possible prior sales contract by retaining, if not regaining, title in the medium containing the software, with the potential of placing the transaction outside of the Uniform Commercial Code, CISG, or Canadian Sale of Goods Acts. Rather, they still ignore the title retention clause in their shrink-wrap licenses and attempt simultaneously to disclaim and limit any possible warranties and liabilities for their programs by abiding with the UCC's and applicable provincial legislation's disclaimer restrictions. Under pressure from software publishers, the purveyors of the Uniform Commercial Code, sensing the tension in shrink-wrap licenses to pick and choose which parts of which laws should apply for optimal protection, have chosen to revise Article 2 of the UCC to address the problem of shrink-wrap licenses. Final drafts of a new UCC Article 2B for licenses are due by mid-summer. Along with a landmark case decided in the Seventh Circuit in the summer of 1996, the prospect for the enforcement of shrink-wrap licenses in the United States appears to be taking a drastic turn.

IV. BACK FROM PURGATORY

A. *Wisconsin Court Confirms Rule*

From a retail store in Wisconsin, in late 1994, Matthew Zeidenberg bought a copy of ProCD's Select Phone software program and database of over 95 million residential and business listings collected from nearly three thousand public telephone books.²⁵⁶ Select Phone is sold, like most software today, with discs or CD-ROMs in a box package, containing a

254. See Bradley J. Richards, Note, *Contracts for the International Sale of Goods: Appreciability of the Convention*, 69 IOWA L. REV. 209, 210 n.7 (1983).

255. "Despite the din of criticism, [shrink-wrap licenses] continue to be widely used by almost every mass-market software publisher, even though the cost of doing so is significant." Gomulkiewicz & Williamson, *supra* note 5, at 336-37 (authors of article are attorneys for Microsoft, probably the world's leading software publisher).

256. *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 644-45 (W.D. Wis. 1996).

notice on the exterior of the box that purchase of the software is subject to a license agreement included on the inside of the package in the user guide.²⁵⁷ Following current practice, when loading or using the software and database, "computer screens remind users that use of the product and the data are subject to" a license.²⁵⁸ The shrink-wrap license for Select Phone included the following prohibition: "[Y]ou will not make the Software or the Listings in whole or in part available to any other user in any networked or time-shared environment, or transfer the Listings in whole or in part to any computer other than the computer used to access the Listings."²⁵⁹

Through the shrink-wrap license, ProCD hoped to bar further dissemination of the "comprehensive, national directory of residential and business listings" it had "spent millions of dollars creating," even though the U.S. Supreme Court in *Feist* had quite clearly held that the white pages of telephone listings were not copyrightable subject matter.²⁶⁰ Zeidenberg "did not believe the license to be binding" and extracted the data from Select Phone, created his own database and software for accessing the listings therein, and made the package available to users connecting to his company's web site on the Internet.²⁶¹ ProCD sued Zeidenberg and his company, Silken Mountain Web Services, for, *inter alia*, copyright infringement and breach of the shrink-wrap license agreement.²⁶² In an opinion skirting much of the criticism addressed at *Vault* and *Step-Saver*, but nevertheless relying on them as precedent, Chief Judge Crabb of the United States District Court for the Western District of Wisconsin held the license was not breached because defendants had never assented to its terms.²⁶³ The court further held that even if the license were an enforceable contract, the agreement was "preempted by federal copyright law to the extent plaintiff intended it to apply to uncopyrightable data."²⁶⁴

The district court's decision in *ProCD* was thus consistent with the few U.S. and Canadian courts²⁶⁵ to have addressed the question of shrink

257. "The Select Phone™ box mentions the agreement in one place in small print. The box does not detail the specific terms of the license." *Id.* at 645.

258. *Id.* at 644.

259. *Id.* at 645.

260. *Feist Publications, Inc. v. Rural Telephone Serv. Co., Inc.*, 499 U.S. 340 (1991).

261. *ProCD*, 908 F. Supp. at 645.

262. *Id.* at 643.

263. *Id.* at 644.

264. *Id.*

265. Canadian courts have yet to address whether the Canadian Copyright Act would preempt provincial contract law to the extent that shrink-wrap licenses were used in an attempt to protect matter in the public domain (such as facts and ideas as in *ProCD*). See *Handa*, *supra* note 33, at 643.

wrap licensing. In fact, Judge Crabb's decision was praised as a case that clearly analyzed the contract and copyright issues surrounding shrink-wrap licenses.²⁶⁶ Considering the amount of academic writing on the topic especially critical of shrink-wrap licenses,²⁶⁷ the court's holding could not have proved surprising. The shock arose instead when the Seventh Circuit Court of Appeals decided to reverse Judge Crabb's holdings for reasons that had not appeared in prior cases.

B. Seventh Circuit Reverses.

Where the *Vault* case represents one extreme on shrink-wrap license enforceability, essentially holding all such licenses as unenforceable contracts of adhesion and constitutionally preempted,²⁶⁸ the Seventh Circuit's opinion in *ProCD* represents the other end of the spectrum. Judge Easterbrook, a well-respected jurist of the Chicago School of Economics, employs economic theory to find that shrink wrap "licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general."²⁶⁹ In so holding, he rejected the prospect that any contract term, even one attempting to prevent the copying of material in the public domain, can be preempted under the U.S. Copyright Act.²⁷⁰

Where *Vault* did not address the express preemption provision in the Copyright Act, preferring to apply constitutional preemption theory,²⁷¹ Judge Easterbrook ignores the constitutional aspect, which *Feist* made amply clear. Instead, he distinguished federal copyright law from state contract law on the grounds that the first protects copyright owners against the world, while a license agreement, used on a mass-marketed product, is only binding between the "seller" and licensee.²⁷² But before arriving at this conclusion, the court first found that shrink-wrap license agreements were enforceable, even though a "purchaser" may not have been aware of, or assented to, the additional terms included in the license enclosed in the packaging.²⁷³ Unfortunately, Judge Easterbrook's reasoning upholding the enforceability of shrink-wrap licenses is as cloudy as the reasoning in *Vault* was sparse.

First the court held that shrink-wrap licenses are "ordinary contracts accompanying the *sale* of products, and therefore a[re] governed by the

266. See David J. Loundy, *Shrink-Wrap Licenses Don't Shrink Access to Data*, CHI. DAILY L. BULLETIN, Feb. 8, 1996, at 5.

267. Gomulkiewicz & Williamson, *supra* note 5, at 336 n.2.

268. See *supra* notes 180-185 and accompanying text.

269. *ProCD*, 86 F.3d at 1449.

270. *Id.* at 1454.

271. See *Vault*, 847 F.2d at 270.

272. See *ProCD*, 86 F.3d at 1454.

273. *Id.* at 1453.

common law and the Uniform Commercial Code.”²⁷⁴ Possibly realizing the impact of its assumption of treating shrink-wrap licenses as part of a sale of goods, the court goes on to make the same assumption so many other courts have made in the past: “Whether there are legal differences between ‘contracts’ and ‘licenses’ (which may matter under the copyright doctrine of first sale) is a subject for another day.”²⁷⁵ Although endorsing the district court’s proposition that “[o]ne cannot agree to hidden terms,”²⁷⁶ the court found that shrink-wrap licenses were part of the terms of sale even though those terms are revealed only after the “buyer” has taken the “goods” home from the store.²⁷⁷ The crux of the court’s legal argument is that “the UCC permits contracts to be formed in other ways” than “simply by paying the price and walking out of the store.”²⁷⁸ Forcing a purchaser to agree to terms appearing upon his or her computer screen after obtaining physical possession of the software is just one of those means.²⁷⁹

The court attempted to distinguish *Step-Saver*, the best precedent on the subject, on the grounds that its case involved a consumer sale. That distinction, although possibly forceful in other circumstances, is odd in light of the court’s assumption that a consumer sale cannot involve a battle of the forms as in *Step-Saver*.²⁸⁰ Even accepting for a moment the court’s argument, *Step-Saver* clearly did not involve two written forms. What the plaintiff in *Step-Saver* was attempting to do was enforce oral representations and warranties made to it by the defendant over the telephone before purchasing defendant’s software.²⁸¹ The battle of the “forms” was between the shrink-wrap licenses included with the software that the plaintiff purchased, (and which the defendants were using as a defense because the licenses disclaimed any warranties), and the oral representations the defendant made to the plaintiff prior to the “sale.”²⁸² The official comment to Article 2-207 of the UCC is more on point:

This section is intended to deal with . . . where an agreement has been reached either *orally* or by informal correspondence between the parties and is followed by one or both of the parties sending formal memoranda embodying the terms so far agreed upon and adding terms not yet

274. *Id.* at 1450 (emphasis added).

275. *Id.*

276. *Id.*

277. *Id.* at 1452.

278. *Id.*

279. *Id.*

280. “Step-Saver is a battle-of-the-forms case, in which the parties exchange incomplete forms and a court must decide which prevails Our case has only one form; UCC 2-207 is irrelevant.” *Id.*

281. See *Step-Saver*, 939 F.2d at 95.

282. *Id.* at 98.

discussed. . . . Whether or not additional or different terms will become part of the agreement depends upon the provisions of subsection 2 [of UCC § Article 2-207]. If they are such as materially to alter the original bargain, they will not be included unless expressly agreed to by the other party.²⁸³

Consequently, the court may have been disingenuous in distinguishing *Step-Saver*; any implication that the case is distinguishable because Zeidenberg purchased his software at a store cannot hold up. The battle of the forms analysis under UCC § Article 2-207 in *Step-Saver* is still good law and applies to a face-to-face transaction as well as to one between two persons over the telephone. It is in the economic analysis used by the court that one discovers the true basis for Judge Easterbrook's holding, and here the contradictions begin.

First, the court begins by emphasizing that because it costs ProCD millions to compile and to keep its database for Select Phone current, it is "natural" that the company would engage in price discrimination in order to recoup its investment.²⁸⁴ This it does by charging a "low price" of \$150 to the general public for Select Phone, and a higher price (not stated) to businesses, presumably upon different license terms as well.²⁸⁵ Without price discrimination, Judge Easterbrook continues, ProCD would have to charge the same price to all purchasers, requiring it to raise its prices and, thereby, to deprive many consumers of the ability to purchase and use Select Phone.²⁸⁶ Second, for price discrimination to work, "the seller must be able to control arbitrage," that is, diversion of lower priced works meant for consumers to business purchasers.²⁸⁷ To prevent such arbitrage, the court argues, the seller may use a shrink-wrap license to prevent the purchaser from making its work available to others at the lower price.²⁸⁸ What defendants were doing, and Judge Easterbrook failed to notice, was offering the uncopyrighted data in Select Phone, along with its own data, to users on the Internet for what the court called "a price," which was, "needless to say, less than what ProCD charges its commercial customers."²⁸⁹ The result of such action by Zeidenberg and

283. UCC, *supra* note 122, § Article 2-207, official cmt. 1 & 2 (emphasis added).

284. *See ProCD*, 86 F.3d at 1449.

285. *Id.*

286. *Id.*

287. *Id.* at 1450.

288. *Id.*

289. *Id.* Here the court's opinion diverges from the facts as stated in the district court's opinion, which mentions that defendants made their database available on the Internet for free. *See ProCD*, 908 F. Supp. at 646 ("For each search of defendants' database, users are permitted to extract up to 1,000 listings. Because the public could access defendants' database for free, plaintiff believed its ability to sell Select Phone™ was jeopardized.").

his company, following the court's analysis, was to "drive up the minimum price at which ProCD would sell to anyone."²⁹⁰

That shrink-wrap licenses should be enforced to encourage the practice of price discrimination, and hence lower prices for the public, is the linchpin of the court's analysis. Having contract law encourage such activity, the court assumes, is economically beneficial for both the consumer purchasing the software and data at a lower price and for the seller recouping its investment in its product. The court made its pro-market argument explicit at the end of its discussion of the enforceability of shrink-wrap licenses:

Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy. ProCD has rivals, which may elect to compete by offering superior software, monthly updates, improved terms of use, lower price, or a better compromise among these elements. As we stressed above, adjusting terms in buyers' favor might help Matthew Zeidenberg today (he already has the software) but would lead to a response, such as a higher price, that might make consumers as a whole worse off.²⁹¹

However, this argument ignores that copyright law is the vehicle by which software publishers are given an incentive to create and disseminate software and certain databases. What the defendants in *ProCD* did was something the U.S. Supreme Court and the Copyright Act have sanctioned: they extracted the unprotectable listings (i.e. the facts) from ProCD's product and made it available to the public for free.²⁹² Thus, consumers are not hurt, but benefit from the access to the information. This is exactly the purpose of the Copyright Act.²⁹³ The copyrighted software included in *Select Phone* was held not infringed by the district court,²⁹⁴ a holding the Court of Appeals did not reverse. Effectively, what Judge Easterbrook's economic analysis entails is a preemption of the Copyright Act by state contract law. The incentives of the Copyright Act, already a limit on the free market by providing the copyright owner a limited monopoly in his or her creative expression,²⁹⁵ are replaced by contract law enforcing onerous and sometimes unknowable terms prior to "purchase."

Perhaps recognizing the limits of its contract analysis, in its preemption discussion, the court stated:

290. *ProCD*, 86 F.3d at 1450.

291. *Id.* at 1453.

292. *See Feist*, 499 U.S. at 363-64; 17 U.S.C.A. § 102(b).

293. *See supra* notes 74, 75, and accompanying text.

294. *See ProCD*, 908 F. Supp. at 650.

295. *See Apple Computer Inc. v. MacKintosh Computers Ltd.*, [1987] 1 F.C. 173, 200, *aff'd* [1988] 1 F.C. 673 (C.A.), *aff'd*, [1990] 2 S.C.R. 209 (Can.).

“Someone who found a copy of Select Phone(trademark) on the street would not be affected by the shrink-wrap license – though the federal copyright laws of their own force would limit the finder’s ability to copy or transmit the application program.”²⁹⁶

But earlier the court said:

A buyer may accept by performing the acts the vendor proposes to treat as acceptance. And that is what happened. ProCD proposed a contract that a buyer would accept by using the software after having had an opportunity to read the license at leisure. This Zeidenberg did. *He had no choice, because the software splashed the license on the screen and would not let him proceed without indicating acceptance.*²⁹⁷

Given its reasoning, the court fails to explain why one entails a binding contract while the other does not. It cannot be because of lack of consideration, since a party must agree to the terms of the license before it can benefit from use of the software and the data.

The court’s analysis fails because it is fundamentally flawed. The court assumed shrink-wrap licenses were enforceable under an economic theory that conflicts with the economic and legal theory underlying both contract and copyright law.²⁹⁸ Its resort to everyday examples of contract terms that come to a party’s attention after payment²⁹⁹ all represent services (insurance, airline ticket, concert), and services do not generally fall under Article 2 of Sales of the UCC,³⁰⁰ but rather under the common law where the last shot rule might apply.³⁰¹ Finally, to address the court’s last examples, just because a product comes with warnings or warranty disclaimers included inside the box³⁰² does not save the maker of the product from strict liability in tort or make the warranty disclaimers enforceable.³⁰³

C. *Will the UCC Bring Salvation to Shrink-Wrap Licenses?*

Consumers have no reason to be complacent. For years software publishers have been pressuring the National Conference of Commissioners on Uniform State Laws and the American Law Institute, under whose joint action the Uniform Commercial Code is currently being revised, to specifically include and make shrink-wrap licenses

296. *ProCD*, 86 F.3d 1454.

297. *Id.* at 1452 (emphasis added).

298. *See supra* notes 74-76.

299. *Id.* at 1451.

300. *See supra* note 171.

301. *See supra* note 201 and accompanying text.

302. *Id.*

303. *See Step-Saver*, 939 F.2d at 106.

enforceable under a new Article 2B for Licenses.³⁰⁴ A final draft of Article 2B is expected by July 1997.³⁰⁵ In a nutshell, Article 2B would make a license enforceable so long as a purchaser had the opportunity to review and manifest assent to the license's terms, and the ability to reject the terms and return the software for a full refund.³⁰⁶ However, under the current draft, Section 2B-308³⁰⁷ would eliminate the need to show assent if "an obligation or limitation that was disclosed, on the product

304. See Nimmer, *supra* note 9, at 23-24. (Raymond T. Nimmer, the author of the article, is the Reporter for the Drafting Committee on Article 2B (Licenses)).

305. *Id.* at 23.

306. See Uniform Commercial Code §§ 2B-112, 2B-113 (March 21, 1997 draft), available at <http://www.lawlib.uh.edu/ucc2b/032197/download.html> (visited on April 29, 1997); see also Nimmer, *supra* note 9, at 39-40.

307. SECTION 2B-308. MASS-MARKET LICENSES.

(a) Except as otherwise provided in this section and Section 2B-309, a party adopts the terms of a mass-market license if the party agrees or manifests assent to the mass-market license before or in connection with the initial use of or access to the information.

(b) Terms adopted under subsection (a) include all of the terms of the license without regard to the knowledge or understanding of individual terms by the party assenting to the form. However, except as otherwise provided in this section, a term [for which there was no opportunity to review before payment of the contract fee is not adopted and] does not become part of the contract if the term creates an obligation or imposes a limitation that which:

(1) the party proposing the form should know would cause an ordinary and reasonable person acquiring this type of information in the mass market and receiving the form to refuse the license if that party knew that the license contained the particular term; or

(2) conflicts with the previously negotiated terms of agreement.

(c) A term described excluded under subsection (b) is part of the contract if the party that did not prepare the form manifests assent to the term. or if, under the circumstances, the limitation or obligation in the term was clearly disclosed to the party before it agreed or manifested assent to the mass-market license.

(d) Subsection (b)(1) does not apply to a term that:

(1) states a limit on the licensee's use of the information that would exist under intellectual property law in the absence of the contractual term; or

(2) becomes part of the contract under other provisions of this article.

(e) A term of a mass-market license which is unenforceable for failure to satisfy a requirement of another provision of this article, such as a provision that expressly requires use of conspicuous language or manifested assent to the term, is not part of the contract.

(f) In a mass-market transaction, unless otherwise agreed, an obligation or limitation that was disclosed, on the product packaging or otherwise, prior to before payment of the license fee, or that was part of the product description, becomes part of the contract without manifestation of assent to a license or to a term containing the obligation or limitation.

(g) A mass-market license must be interpreted whenever reasonable as treating in a similar manner fashion all parties situated similarly without regard to their knowledge or understanding of the terms of the record.

(h) A term that states a limitation that would be placed on the party by copyright or patent law in the absence of the term does not come within subsection (b)(1).

packaging or otherwise, prior to before [sic] payment of the license fee, or that was part of the product description, becomes part of the contract without manifestation of assent to a license . . .”³⁰⁸ In other words, old-fashioned shrink-wrap licenses which print the terms of the license on the outside of the box would be enforced, even though the user of the software may never have come into contact with that packaging, as in situations where the software was already loaded into a computer’s memory.

If UCC Article 2B is adopted as currently drafted, and further assuming states choose to enact its provisions, shrink-wrap licenses are in the United States to stay. Such licenses would be enforceable not only in the sphere of computer software, but possibly for almost any consumer product sold today. Hence, if a sales person tells you “those boots were made for walking,” but it turns out they were not, and the box that contained the boots included a license that states “title remains in Boot, Co.,” or “**YOU ACCEPT LICENSED MERCHANDISE AS IS**,” you are out of luck. The implications of such a change in the law are mind boggling. If a court does not hold such state laws preempted under some federal or international law, consumers’ rights could easily become a thing of the past in several U.S. states.

D. International Perspective

In the last few years, developments at the international level have done much in overtaking any concerns for insufficient protection of computer software. While the United States and Canada were pioneers in extending the protection of software as literary goods under copyright law,³⁰⁹ the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS),³¹⁰ negotiated under the auspices of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), and completed in December 1993,³¹¹ now requires all member countries of the World Trade Organization (WTO), as the GATT was renamed, to protect computer

308. UCC, *supra* note 307, § 2B-308(f).

309. *See supra* notes 39, 58, and accompanying text.

310. Agreement on Trade-Related Aspects of Intellectual Property Rights, including Trade in Counterfeit Goods, Dec. 15, 1993, GATT Doc. MTN/FA II-A1C, *reprinted in* 33 I.L.M. 81 (1994) and in 25 INT’L REV. INDUS. PROP. & COPYRIGHT L. 209 (1994) [hereinafter TRIPS].

311. Instruments resulting from the negotiations included the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, opened for signature Apr. 15, 1994, GATT Doc. MTN/FA (1993), *reprinted in* 33 ILM 1125, 1143 (1994). For a brief history of the negotiations involving intellectual property during the Uruguay Round of GATT, see Stephen Fraser, *Berne, CFTA, NAFTA & GATT: The Implications of Copyright Droit Moral and Cultural Exemptions in International Trade Law*, 18 HASTINGS COMM. ENT. L.J. 287, 311-16 (1996).

programs as literary works.³¹² In December 1996, over 160 member countries of the World Intellectual Property Organization met in Geneva to complete the negotiations on a draft Copyright treaty that included similar provisions.³¹³ These developments should further encourage software publishers from North America to expand their distribution of software with other regions where protections were either previously nonexistent, inadequate, or not enforced. Finally, though a full review is beyond the scope of this paper, the use and enforceability of shrink-wrap licenses beyond North America, as a general rule, is no more favored in other countries than in U.S. courts outside of the Seventh Circuit.³¹⁴

V. CONCLUSION

The reason why software publishers continue to insist on shrink-wrap licenses to protect their programs appears old fashioned and, needless to say,³¹⁵ restrictive. At the very least, transactions between parties in Canada and the United States do not require them. As Part II of this article illustrated, most of the restrictive provisions in these licenses have uses that are dubious at best. The legal context may be different in a few other countries where U.S. and Canadian software publishers wish to do business, and the Convention may allow use of the shrink-wrap license under those circumstances. However, increases in protection at the international level for computer software obtainable through TRIPS and the WTO, and the fact that few countries appear to give shrink-wrap licenses much favor, counsel otherwise.³¹⁶ This paper posits that software publishers should seriously consider dropping their shrink-wrap licenses. To do so would assure them that the CISG would apply to their trans-border transactions, promote uniformity in international sales, and allow them to take advantage of the Convention's subtleties that protect sellers in international trade.

Taking away the concern for intellectual property protection, by process of elimination, this paper comes to the conclusion that there are few reasons for the continued use of shrink-wrap licenses for computer software. If anything, the Internet may have already

312. See TRIPS, *supra* note 310, art. 10.

313. See WIPO Copyright Treaty art. 4, available at <http://www.wipo.org/eng/diplconf/distrib/treaty01.htm> (visited on Apr. 28, 1997) [hereinafter WIPO Copyright Treaty]; see Fraser, *supra* note 68 (arguing that the Copyright Treaty, if adopted, might actually become an impediment to the distribution of copyrighted works on the Internet).

314. For a listing of countries "thought to have rules restricting the enforceability of shrinkwrap licenses," compared to the few countries said to freely enforce them, see Lemley, *supra* note 189, at 1253 nn.53-54.

315. *ProCD*, 86 F.3d at 1450; see *supra* note 289 and accompanying text.

316. See *supra* note 314.

surpassed the problem by allowing for the assent on one's computer screen to contract terms *prior* to a sale of software transmitted directly to one's computer.³¹⁷ Nonetheless, computer publishers must still deal with the issue of preemption of those terms to the extent they attempt to extend their protection under intellectual property laws.³¹⁸ The days when North American software publishers were worried about being crushed because of insufficient intellectual property,³¹⁹ or feared to accept responsibility for the use of their programs have long since passed.³²⁰ The latter position was explicitly rejected in *Step-Saver*,³²¹ and as far as the United States and Canada are concerned, if the world leaders in computer software are not confident enough about the goods they produce to accept responsibility for their actions, then the world runs the risk of technology running amuck while Canadian and U.S. software makers can rest assured that they can continue to have their cake and eat it, too. The courts must impart to these software makers that shrink-wrap licenses are not favored. The Revisions to Article 2 of the UCC, however, are a dark cloud on the horizon. The time for change has come, but not through the enforcement of overly restrictive license terms that are imposed instead of negotiated.

317. See *supra* notes 109, 136, and accompanying text. The irony, of course, is that purchasers of software over the Internet become disadvantaged vis-à-vis other purchasers. Internet buyers must agree to the shrink-wrap license's terms prior to the completion of the purchase. See Davidson & Wurzer, *supra* note 136, at 651-52. Retail and telephone purchasers may avoid the license's terms because the transaction costs of giving notice or negotiating the contract of sale are too high. This leaves Internet veterans in a worse position, potentially contractually bound if the license is not preempted, or forced to buy over the telephone or in a store, rather than take advantage of the speed and ease of the Internet.

318. See *ProCD*, 908 F. Supp. at 644.

319. See Lemley, *supra* note 189, at 1281-82 (arguing that as construed, current U.S. copyright law offers software copyright owners patent-like protection without having to comply with the difficult requirements of the U.S. Patent Act or its shorter term (20 years) of protection).

320. In a study of computer contract terms and cases, one commentator has stated that:

[a]s an historical matter, many of the "boilerplate" terms [in licensing contracts] responded to the high level of inventiveness, and the correspondingly low level of reliability, which characterized many of the initial computers, software, and integrated systems. As computer systems become less experimental in nature, and increasingly reliable (in significant part due to the impact of the competitive market), the need for these contract terms . . . have been reduced.

Ritter, *supra* note 1, at 2548-49 (1990).

321. See *Step-Saver*, 939 F.2d at 104.