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THE COPYRIGHT-CONTRACT INTERSECTION:
SOFTMAN PRODUCTS CO. v. ADOBE SYSTEMS, INC.
& BOWERS v. BAYSTATE TECHNOLOGIES, INC.

By Deanna L. Kwong

Although copyright and contract law have long co-existed symbiotically,¹ their relationship has faced increasingly greater scrutiny in light of the explosive growth of digital information technology over the last few years.² Two related factors have impelled courts and commentators to ponder the proper balance between copyright law and contract law. First, the idiosyncratic nature of digital information technology exacerbates the "public goods" problem of intellectual property rights and disrupts the traditional "tangible goods" paradigm upon which copyright protection is based.³ Second, there has been a consequent "movement to contract,"⁴ as computer software companies increasingly depend on prohibitive contractual provisions to assert and arguably even expand their intellectual property rights in an attempt to gain market dominance.⁵ Contract law offers a

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2. See Maureen A. O’Rourke, Striking a Delicate Balance: Intellectual Property, Antitrust, Contract, and Standardization in the Computer Industry, 12 HARV. J.L. & TECH. 1, 3 (1998) (asserting that debate over the former proposed Uniform Commercial Code Article 2B on Software Contracts and Licenses of Information actuated analysis of the appropriate relationship between contract law and intellectual property law); see also Dennis S. Karjala, Copyright Owners’ Rights and Users’ Privileges on the Internet: Federal Preemption of Shrinkwrap and On-Line Licenses, 22 U. DAYTON L. REV. 511, 512 (1997) ("While [the issue of the intersection of copyright and contract law] could theoretically have arisen with traditional copyright-protected works, it is only . . . the digital age . . . that [has] pressed it upon us with practical force.").

3. See Michael J. Madison, Legal-Ware: Contract and Copyright in the Digital Age, 67 FORDHAM L. REV. 1025, 1035-1049 (1998) (explaining that digital technology disrupts implicit assumptions about traditional forms of intellectual property, such as books, and that digitization decreases the costs and increases the ease of free-riding and piracy).


5. See O’Rourke, supra note 2, at 3-4 (1998) ("[T]he computer industry has brought to the fore the issue of how to address a dominant market participant’s use of
potential conduit through which a copyright holder may not only bolster the protection of his rights under federal copyright provisions, but also create protection that is otherwise unavailable under current intellectual property law.\(^6\)

Scholars disagree and courts are in conflict as to the proper balance between contract and copyright. The underlying questions are twofold:

"Are the traditional copyright balances between the rights of copyright owners and the rights of users merely a 'default position' that is subject to variation by contractual agreement between owners and the users of particular copies? Or do those balances represent, rather, a resolution of policy tensions that are not amenable to private reordering by the transacting parties?"\(^7\)

This Note seeks to examine two recent judicial decisions, *SoftMan Products Co. v. Adobe Systems, Inc.*\(^8\) and *Bowers v. Baystate Technologies, Inc.*\(^9\), in the context of the conflicting scholarship and inconsistent caselaw regarding whether contract law may appropriately supplement or supplant federal copyright law. This Note concludes that economic efficiency and public policy considerations strongly disfavor the holdings in both *SoftMan* and *Bowers*.

I. BACKGROUND

A. The Idiosyncratic Nature of Digital Information Technology

Information is a public good.\(^10\) Unlike a private good that, "once consumed, cannot be consumed by another,"\(^11\) multiple individuals may use a public good simultaneously, without depleting the value of the good itself.\(^12\) Furthermore, an individual who does not have authorized access to

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6. O'Rourke, *supra* note 4, at 54.
12. See Madison, *supra* note 3, at 1036-1037; see also Norman Siebrasse, *A Property Rights Theory of the Limits of Copyright*, 51 UNIV. OF TORONTO L.J. 1, 4-7 (2001)
a particular public good may nevertheless get a copy of the work and use it for unauthorized purposes. Given that a public good is "virtually inexhaustible once produced," there is a high probability of both free-riding and piracy. Copyright law seeks to protect the expression of information, and information is a public good; consequently, the public goods problem may deter content providers from creating or supplying copyrighted works. Copyright law attempts to remedy this market imperfection by allowing a copyright owner to limit who may use the copyrighted work.

The unprecedented ease with which digital information may be accessed, copied, and distributed exacerbates the public goods dilemma. Although digital storage and transmission technologies profitably optimize the potential for widespread availability of copyrighted digital works, they also create two market imperfections. First, digital storage and transmission technologies lower the costs of pirating and free-riding. Second, digital storage and transmission technologies raise the costs of policing the use of copyrighted digital works and protecting the copyright owner's rights.

Digital information technology not only aggravates the public goods problem, but also disrupts the tangible goods paradigm upon which tradi-
tional copyright law is based. For traditional copyrighted works, such as novels, paintings, or other "hard-copied" goods, courts have applied the idea/expression dichotomy to demarcate the scope of copyright protection. In doing so, courts have extended copyright protection only to the original, non-functional, expressive elements that they are able to separate definitively from the functional, non-original, non-protectable elements.

On the other hand, for digital information works, the distinction between expressive elements and utilitarian elements is less definitive. While users may analyze and access the elements of traditionally protected works "on the face of the commercial product[s] sold in the marketplace," users generally need to reverse engineer digital works such as software, in order to access and analyze their unexpressive and unprotectable elements, in most circumstances. Before the arrival of digital information technology, the issue of reverse engineering within the copyright context was virtually irrelevant and unnecessary.

B. Digital Information Technology's Movement to Contract

Given that digital information technology is inherently distinct from traditional copyrighted works, digital information providers increasingly believe that application of current copyright provisions to protect their works may be inefficient or ineffective. Thus, digital content providers increasingly have utilized contractual provisions to protect their copyrighted works. Software license agreements, for example, often require


24. Id.


27. See id.

28. See Menell, supra note 22, at 66.

29. O'Rourke, supra note 4, at 53.
consumers to agree to provisions that are more restrictive than copyright law compels.\(^{30}\)

The software industry pioneered the use of private contractual provisions to supplement, and even supplant, federal copyright provisions.\(^{31}\) Originally, Congress, courts, and commentators were unsure as to the copyrightability of software.\(^{32}\) Because copyright law purports to protect the expressive, non-functional elements of a particular work, the general functional value of software and the utilitarian nature of its object code appeared to preclude its copyrightability.\(^{33}\) Thus, software providers needed to find another legal mechanism that could provide copyright-like protection for their works.\(^{34}\) Providers began to utilize private contracts to define the products they offered, to control liability, and to separate concretely the rights granted with the transfer of software from the rights thereby excluded.\(^{35}\) Software providers originally relied on two types of licensing agreements, “bargained agreements” in transferring custom software and “unbargained shrinkwrap licenses” in distributing mass-market software.\(^{36}\) During the late 1970s, Congress attempted to address, for the first time, the issue of software copyrightability. Upon recommendations from the National Commission on New Technological Uses of Copyrighted Works (CONTU), Congress broadly asserted that software was indeed copyrightable.\(^{37}\) Federal courts subsequently concluded that software is protectable as a copyrighted literary work.\(^{38}\) Since then, copyright law has become the primary source of legal protection for computer


\(^{31}\) See O'Rourke, supra note 2, at 3-4 (“[T]he computer industry has brought to the fore the issue of how to address a dominant market participant's use of intellectual property and restrictive contractual provisions to attain and maintain market power.”).


\(^{33}\) Id. at 905-13 (2000); Amin, supra note 22, at 32.


\(^{36}\) Lemley, supra note 30, at 1239.


\(^{38}\) See Frischmann & Moylan, supra note 32, at 904-05 nn. 165 & 169 (citing to various cases holding that copyright protects software as a literary work).
Moreover, as software became a "mass-market commodity," unbargained shrinkwrap licenses, rather than individually bargained agreements, became an industry norm. Congress, however, has failed to delineate exactly how courts should apply copyright law to computer programs. In light of this uncertainty, to minimize or eliminate free copying of their programs, software providers continue to distribute only object code and to use shrinkwrap licensing agreements in transfers of software.

C. Purpose of Shrinkwrap Licensing Agreements in the Software Market

Software providers structure shrinkwrap licensing agreements so as to contract around two primary statutory limitations on the rights of copyright holders. First, by characterizing transfers of software as licenses, and not sales, software providers aim to avoid copyright law's "first sale" doctrine. Second, by prohibiting the reverse engineering, decompilation, or disassembly of their software, copyright owners attempt to deprive users of activities that, notwithstanding the contractual prohibition, may otherwise qualify as fair use under copyright law.

1. Avoidance of the "First Sale" Doctrine

Under 17 U.S.C. § 106(3), the owner of a copyright has the exclusive right "to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending . . . ." The distribution method that the copyright owner ultimately
chooses is extremely significant, because it determines how much control he will have over the distribution rights of downstream users who own copies of the copyrighted work.\textsuperscript{47}

If the copyright owner opts to sell copies, he subjects himself to the "first sale" doctrine under federal copyright law.\textsuperscript{48} The first sale doctrine allows the first purchaser and any subsequent owners of a particular copy of a copyrighted work to sell or otherwise transfer possession of that copy, without the copyright owner's permission.\textsuperscript{49} Conflict potentially arises when a copyright owner alleges that a copy owner is violating the copyright owner's distribution rights under 17 U.S.C. § 106(3) and the copy owner asserts first sale rights under 17 U.S.C. § 109(a), as a defense to the infringement claim.\textsuperscript{50}

2. Attempt to Eliminate Fair Use Exceptions for Reverse Engineering

Computer programs consist of both source code and object code. A programmer writes the program in human-readable source code.\textsuperscript{51} Then, a compiler program translates the source code into object code, which consists of binary sequences that are only machine-readable.\textsuperscript{52} Commercial

\textsuperscript{47} See generally Elkin-Koren, supra note 10 (asserting that contractual arrangements may provide owners with rights not granted to them under copyright law, thus confining access information in a way not intended by the law).

\textsuperscript{48} 17 U.S.C. § 109(a) states:

Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord. Notwithstanding the preceding sentence, copies or phonorecords of works subject to restored copyright under section 104A that are manufactured before the date of restoration of copyright or, with respect to reliance parties, before publication or service of notice under section 104A(e), may be sold or otherwise disposed of without the authorization of the owner of the restored copyright for purposes of direct or indirect commercial advantage only during the 12-month period beginning on—

(1) the date of the publication in the Federal Register of the notice of intent filed with the Copyright Office under section 104A(d)(2)(A), or

(2) the date of the receipt of actual notice served under section 104A(d)(2)(B), whichever occurs first.


\textsuperscript{49} Id.


\textsuperscript{51} Amin, supra note 22, at 21.

\textsuperscript{52} Id.
software developers normally distribute the software program in object code form only. Consequently, the uncopyrightable elements and ideas of most software programs are only available through reverse engineering processes such as decompilation and disassembly, or through the derivation of the software’s human-readable source code from the unreadable object code. Because decompilation and disassembly require the making of unauthorized intermediate copies of software programs, many commercial software providers contend that reverse engineering of software constitutes copyright infringement and trade secret misappropriation.

Courts, however, have held that decompilation and disassembly are legal if they are undertaken for the purpose of obtaining specifications needed to make interoperable or competitive products, and if reverse engineering is the only means by which the user can access the program’s uncopyrightable elements. Furthermore, Section 117 of the Federal Copyright Act specifically allows a computer program user to make an adaptation of that program, if such adaptation is an essential step in the utilization of the program.

D. Enforceability of Shrinkwrap Licensing Agreements

To determine the enforceability of shrinkwrap licensing agreements, courts consider three legal issues: (1) whether the shrinkwrap license is valid as a matter of contract formation, (2) whether the transfer of software is a sale or a license, and (3) whether federal copyright law preempts state contractual claims. Currently, there is no judicial consensus or standard statutory resolution of these issues. The Uniform Computer Information Transactions Act (UCITA), which began as proposed U.C.C.

53. Commercial developers do not normally provide the source code because (1) object code sufficiently serves the users’ functional purposes and (2) software providers wish to maintain privately source code as trade secrets. Samuelson & Scotchmer, supra note 26, at 1608-09.

54. See Menell, supra note 22, at 21-22; Dennis S. Karjala, A Coherent Theory for the Copyright Protection of Computer Software and Recent Judicial Interpretations, 66 U. Chi. L. Rev. 53, 113 (1997) (“[Computer] [p]rograms, however, cannot be ‘read’ like books. In order for a human being to understand the ideas and other unprotected elements contained in the object-code form of a computer program, a technological process known as ‘reverse analysis’ is necessary.”).

55. Samuelson & Scotchmer, supra note 26, at 1609.

56. See generally Sony Computer Entm’t, Inc. v. Connectix Corp., 203 F.3d 596 (9th Cir. 2000); Sega Enters. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992); Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832 (9th Cir. 1992); see also Samuelson & Scotchmer, supra note 26, at 1608-12.


58. See generally Samuelson & Scotchmer, supra note 26.
Article 2B, has been the only legislative attempt to resolve dispute over the enforceability of shrinkwrap licensing agreements. However, many state legislators and commentators have criticized UCITA, contending that the model legislation deprives consumers of their rights and is too pro-computer industry.59 UCITA has been largely unsuccessful, as only two states have adopted the model legislation.60

1. Is the Shrinkwrap License Valid as a Matter of Contract Formation?

A shrinkwrap licensing agreement does not result from a bargain between the parties.61 Unlike traditionally enforceable contracts, which are comprised of the elements of offer, acceptance, and consideration, shrinkwrap licenses are essentially “reverse unilateral contracts.”62 Accordingly, in the 1980s and early 1990s, courts declared that U.C.C. Sections 2-207 and 2-209 rendered shrinkwrap licenses generally unenforceable.63 However, in the late 1990s, in ProCd, Inc. v. Zeidenberg, the Seventh Circuit pioneered a judicial trend toward the enforcement of shrinkwrap licenses.64 In ProCd, the Seventh Circuit held that a shrinkwrap license accompanying boxes of computer software was enforceable.65 Since then, courts have considered shrinkwrap licenses generally enforceable as a matter of contract formation.66

2. Is the Transfer of Software a Sale or a License?

There are four appropriate lines of inquiry to determine whether the transfer of software is a sale or a license.57 A court should consider (1) whether the copy of software was lawfully produced under the authority of the copyright owner; (2) whether that particular copy was lawfully transferred under the authority of the copyright owner; (3) whether the defen-

59. See generally Brian D. McDonald, Contract Enforceability: The Uniform Computer Information Transactions Act, 16 BERKELEY TECH. L.J. 461 (2001) (tracking and analyzing the most significant recent UCITA developments).
60. Id. at 484.
61. Lemley, supra note 30, at 1248-49.
62. Id. at 1241-42.
63. Id. at 1248-53; see, e.g., Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91 (3d Cir. 1991) (holding that U.C.C. §§ 2-207 and 2-209 rendered shrinkwrap licenses generally unenforceable).
64. 86 F.3d 1447, 1448 (7th Cir. 1996).
65. Id.
67. 2 NIMMER ON COPYRIGHT § 8.12 (2002).
dant qualifies as the lawful owner of that copy; and (4) whether the defendant distributed that copy.\textsuperscript{68}

There are only a few lower court cases holding that copies of software are sold.\textsuperscript{69} The majority of courts conclude that copies of software are licensed.\textsuperscript{70} In \textit{Microsoft Corp. v. Harmony Computers \& Electronics, Inc.},\textsuperscript{71} for example, plaintiff Microsoft Corporation alleged that, by illegally copying and distributing Microsoft products, defendants were in violation of Microsoft's exclusive right as copyright holder to govern the distribution of Microsoft products. Microsoft argued that it neither licensed nor authorized defendants to distribute copyrighted Microsoft products.\textsuperscript{72} Microsoft also contended that, by unbundling the Microsoft products from their complementary personal computer systems, defendants violated Microsoft's licensing restrictions.\textsuperscript{73} Defendants admitted to distributing Microsoft Products and unbundling some items from their corresponding personal computer systems.\textsuperscript{74} However, defendants justified their actions by asserting that the first sale doctrine immunized them from copyright infringement claims.\textsuperscript{75} The Court held that, because defendants could not prove that they had received an authorized transfer of ownership title from the copyright holder, they failed to demonstrate that they had the authority to sell Microsoft products.\textsuperscript{76} The Court concluded that Microsoft only licensed the use of its products.\textsuperscript{77}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{68} \textit{Id.} at 7.
\item \textsuperscript{69} Raymond T. Nimmer, \textit{Copyright and Computer Technology}, § 1:97 LAW COMPUTER TECH. 1, n.5 (2002) ("The very few lower court cases that hold to the contrary are outside the mainstream and inconsistent with commercial practice. Among the few courts that have suggested this result, two were reversed on appeal...[and] two were vacated...\textit{DSC Communications Corp. v. Pulse Communications, Inc.}, 170 F.3d 1354, 50 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 1999) (reversing District Court ruling that licensee was an owner and expressly rejecting the view that a single payment perpetual license means that the transfer of the copy was a sale); \textit{Novell, Inc. v. Network Trade Center, Inc.}, 25 F. Supp. 2d 1218, 37 U.C.C. Rep. Serv. 2d 528 (D. Utah 1997), related reference, 25 F. Supp. 2d 1233 (D. Utah 1998), \textit{vacated in part}, 187 F.R.D. 657 (D. Utah 1999); \textit{Novell, Inc. v. CPU Distrib., Inc.}, 200 WL 33672900 (S.D. Texas 2000) (opinion vacated.").)
\item \textsuperscript{70} Nimmer, \textit{supra} note 69.
\item \textsuperscript{71} 846 F. Supp. 208, 210 (E.D.N.Y. 1994).
\item \textsuperscript{72} \textit{Id.}
\item \textsuperscript{73} \textit{Id.}
\item \textsuperscript{74} \textit{Id.}
\item \textsuperscript{75} \textit{Id.}
\item \textsuperscript{76} \textit{Id.} at 212-13.
\item \textsuperscript{77} \textit{Id.}
\end{itemize}
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Similarly, in a recent case, *Adobe Systems, Inc. v. One Stop Micro, Inc.*, plaintiff Adobe Systems, Inc., alleged that defendant One Stop Micro, a distributor, improperly acquired Adobe educational software packages, cut open and removed Adobe's shrink-wrapped licenses, peeled off and destroyed package identification stickers and labels, and then re-shrink-wrapped and distributed the boxes of software. Adobe asserted that all of its software products were subject to the shrink-wrap End User License Agreement (EULA) provision of the Off/On Campus Educational Reseller Agreement, which granted the copy owner a license and prohibited copying or commercial re-distribution of the software copies. One Stop Micro, however, contended that Adobe's Off/On Campus Educational Reseller Agreement constituted a sales agreement, and that the first sale doctrine was applicable. The Court agreed with Adobe and found that Adobe's Off/On Campus Educational Reseller Agreement was a licensing agreement, which meant that the first sale doctrine was inapplicable. The Court also concluded that the licensing agreement applied to One Stop Micro even though the distributor was not a signatory thereto. Furthermore, the Court held that One Stop Micro had committed copyright infringement by violating the license agreement. Recently, in *Adobe Systems, Inc. v. Stargate Software, Inc.*, the district court of Northern California re-affirmed the *One Stop Micro, Inc.* analysis and held that the structure and language of the EULAs at issue clearly indicated Adobe's licensing of its software.

3. Does a Federal Copyright Claim Preempt the State Contractual Claim?

Federal copyright law may preempt either a specific cause of action asserted under a state law or the state law itself. There are two basic types of copyright preemption. First, "direct conflict preemption" or "statutory preemption" occurs when federal copyright law preempts state statutes or state-governed contractual provisions that directly conflict with

78. *Id.* at 1088.
79. *Id.* at 1090.
80. *Id.* at 1088.
81. *Id.* at 1091-92.
82. *Id.* at 1092.
83. *Id.*
84. 216 F. Supp. 2d 1051 (N.D. Cal. 2002).
85. See *id*.
the Copyright Act.\footnote{Id.} Section 301 of the Copyright Act, which establishes statutory copyright preemption, states that “all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright” are exclusively governed by federal copyright law.\footnote{17 U.S.C. § 301(a) (2000).} Second, “delicate balance preemption” or “constitutional preemption” arises under the Supremacy Clause, when claims under state laws do not directly conflict with federal copyright law, but nevertheless “upset the balance struck by Congress.”\footnote{Lemley, supra note 30, at 1272.} Most courts reject delicate balance preemption only if the claim under state law involves an “extra element” that is not explicitly present in federal copyright law.\footnote{Id.; see, e.g., Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147 (1st Cir. 1994).} For example, some commentators contend that the agreement of the parties is enough to satisfy the “extra element” test.\footnote{Lemley, supra note 30, at 1272.} Unlike statutory preemption, constitutional preemption requires an inquiry into not only whether the rights at issue are equivalent to those that the Copyright Act establishes, but also consideration of policy decisions underlying the Copyright Act.\footnote{Daniel B. Ravicher, Facilitating Collaborative Software Development: The Enforceability of Mass-Market Public Software Licenses, 5 VA. J.L. & TECH. 11, 57 (2000).}

Courts are in conflict as to when federal copyright law preempts contractual prohibitions.\footnote{Samuelson & Scotchmer, supra note 26, at 1626.} In \textit{Vault Corp. v. Quaid Software Ltd.}, a case of first impression, the Fifth Circuit considered whether a user's intermediate copying of software violated the copyright owner's exclusive rights and breached a license agreement prohibiting decompilation or disassembly of the software program at issue.\footnote{847 F.2d 255, 258 (5th Cir. 1988).} The Court held that the license agreement provision prohibiting reverse engineering was unenforceable on the grounds of preemption.\footnote{Id. at 270.} The Fifth Circuit concluded that the Louisiana License Act, which governed the breach of agreement claim, “touched” upon the area of federal copyright law embodied in the Federal Copyright Act.\footnote{Id.} \textit{Vault}, thus, established a broad principle of copyright preemption. On the other hand, in \textit{ProCd}, the Seventh Circuit concluded that the contractual claim at issue was not equivalent to any of the exclusive rights

\footnote{88. Id.} \footnote{89. Id.} \footnote{90. Lemley, supra note 30, at 1272.} \footnote{91. Id.; see, e.g., Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147 (1st Cir. 1994).} \footnote{92. Lemley, supra note 30, at 1272.} \footnote{93. Daniel B. Ravicher, Facilitating Collaborative Software Development: The Enforceability of Mass-Market Public Software Licenses, 5 VA. J.L. & TECH. 11, 57 (2000).} \footnote{94. Samuelson & Scotchmer, supra note 26, at 1626.} \footnote{95. 847 F.2d 255, 258 (5th Cir. 1988).} \footnote{96. Id. at 270.} \footnote{97. Id.}
granted by federal copyright law and was, therefore, not preempted.\textsuperscript{98} The Court noted, however, that it did not hold that all “contracts” are never preempted by federal copyright law.\textsuperscript{99}

II. CASE SUMMARIES


1. Factual Background

Adobe Systems Inc. (“Adobe”) is a software development and publishing company that produces, among other things, Adobe “Collections” consisting of individual Adobe products bundled together as collective Adobe “Retail Boxes.”\textsuperscript{100} Each Collection is sold at a price discounted from the retail price of each individual product in the set.\textsuperscript{101} SoftMan Products Company (“SoftMan”) is a distributor of computer software products.\textsuperscript{102} The company’s main distribution channel is its website, www.buycheapsoftware.com.\textsuperscript{103} Adobe alleged that, since at least November 1997, SoftMan began distributing unauthorized Adobe products, which consisted of software components separated from unbundled Adobe Collections.\textsuperscript{104}

Adobe brought action against SoftMan, alleging that SoftMan had infringed its copyright.\textsuperscript{105} Adobe contended that by distributing the individual software components from unbundled Adobe Collections, SoftMan infringed upon Adobe's exclusive right, as the copyright owner, to govern the terms concerning distribution of Adobe products.\textsuperscript{106} More specifically, Adobe argued that SoftMan's unbundling of Adobe Collections and distribution of the individual components “exceeded the scope” of the End User License Agreement (“EULA”), which stated that the end user of an Adobe

\begin{itemize}
\item \textsuperscript{98} 86 F.3d 1447, 1455 (7th Cir. 1996).
\item \textsuperscript{99} Id. (“[W]e think it prudent to refrain from adopting a rule that anything with the label ‘contract’ is necessarily outside the preemption clause: the variations and possibilities are too numerous to foresee.”).
\item \textsuperscript{101} Id. at 1080 n.2.
\item \textsuperscript{102} Id. at 1079.
\item \textsuperscript{103} Id. at 1079-80.
\item \textsuperscript{104} Id.
\item \textsuperscript{105} Adobe's counterclaim apparently arises from an action brought by SoftMan Products Co. (“SoftMan”) that also alleges copyright and trademark infringement. See id. at 1080.
\item \textsuperscript{106} Id. at 1080-81.
\end{itemize}
product could transfer all his rights to the use of that software to another person, provided that he also transfer the EULA and all other software or hardware bundled with that particular Adobe product.\(^\text{107}\)

SoftMan argued that its resale of the Adobe Collection software was allowable under the first sale doctrine.\(^\text{108}\) Adobe, however, contended that the first sale doctrine was inapplicable because Adobe neither sells nor authorizes any sale of its software.\(^\text{109}\) Rather, Adobe asserted that throughout the stream of commercial transactions involving Adobe software, the software is always licensed.\(^\text{110}\)

On August 27, 2001, the District Court of the Central District of California granted Adobe's request for a temporary restraining order and seizure order against SoftMan.\(^\text{111}\) Then, on September 10, 2001, the Court ordered a preliminary injunction for the duration of the Court's review of supplemental materials.\(^\text{112}\) Finally, on October 19, 2001, the Court heard oral argument regarding Adobe's motion for a preliminary injunction.

2. The District Court's Holding and Analysis

The district court held that Adobe did not demonstrate a likelihood of success on the merits regarding its copyright infringement claim.\(^\text{113}\)

First, although Adobe characterized the EULA as a "shrinkwrap license," the Court concluded that the transfer of Adobe software to the end user is a "sale" and not a license.\(^\text{114}\) The Court also concluded that Adobe likewise sells its software to distributors.\(^\text{115}\) The Court reasoned that because the distributors pay full value for the software and bear the risk that the products may be lost or damaged or otherwise unfit for resale, the ex-
change of consideration and risk of loss for the transfer of title in the software constitutes a sale.\textsuperscript{116}

Second, the Court held that SoftMan did not assent to the EULA terms and, therefore, is not bound by the EULA.\textsuperscript{117} The Court reasoned that because the end user is asked to agree to the electronically recorded EULA terms only when he attempts to install the software, and SoftMan never loaded the software, SoftMan never agreed to be bound by the EULA.\textsuperscript{118} Additionally, the Court explicitly noted that it would not determine the general validity of shrinkwrap licenses.\textsuperscript{119}

B. \textit{Bowers v. Baystate Technologies, Inc.}

1. \textit{Background}

Plaintiff Harold L. Bowers patented and marketed Cadjet, a template for streamlining computer aided design (CAD) software.\textsuperscript{120} Defendant Baystate Technologies, Inc., which creates and sells tools for CAD software, purchased copies of Bowers' Cadjet, reverse engineered the Cadjet software, and then developed its own slightly modified version of the product.\textsuperscript{121} Bowers asserted that, by reverse engineering the Cadjet software, Baystate infringed on Bowers' copyright and breached the shrinkwrap license agreement governing Baystate's possession of the copy of Cadjet software.\textsuperscript{122} Baystate, on the other hand, contended that the Copyright Act preempted the contractual prohibition of reverse engineering found in the shrinkwrap license agreement.\textsuperscript{123}

The case went to trial, whereby a jury awarded Bowers damages for both copyright infringement and breach of contract.\textsuperscript{124} The district court, however, set aside the copyright damages, reasoning that they were duplicative of the contract damages.\textsuperscript{125}
2. The Federal Circuit's Holding and Analysis

The Federal Circuit held that the federal Copyright Act did not pre-empt Bowers' breach of contract claim. First, the Federal Circuit concluded that the shrinkwrap license contained the "extra element" necessary to qualitatively distinguish Bowers' contractual claim from his copyright infringement claim. In reaching this conclusion, the Federal Circuit relied upon ProCD, in which the Seventh Circuit held that the mutual assent and consideration necessary for a valid contract are sufficient to prevent federal copyright law from preemptioning a state contractual claim. Second, the Federal Circuit reasoned that, because the shrinkwrap license prohibited any reverse engineering of Bowers' product, the scope of the shrinkwrap license was far broader than that of copyright protection.

On January 29, 2003, on a combined petition that Baystate filed, the Federal Circuit denied rehearing en banc and granted the petition for rehearing of the case by the panel. Upon examination of new briefs that the parties had submitted, the Federal Circuit affirmed its prior decision.

III. DISCUSSION

A. Precedent Cases Indicate that Software is Licensed and that Economic Efficiency and Public Policy Favor the Licensing of Software

First, in concluding that Adobe sold, rather than licensed, its software to authorized distributors, the district court in Softman ignored industry standards and misapplied precedent. To support its holding, the court reasoned that "many courts and commentators [have] conclude[d] that a 'shrinkwrap license' transaction is a sale of goods rather than a license." However, the court failed to cite to any cases that both concluded that a "shrinkwrap license" transaction is a sale of goods and that consisted of facts similar to the situation in Softman. For example, the court heavily

126. Id. at 1341.
127. Id. at 1341-43.
128. Id. at 1342-43.
129. Id.
relied on Novell, Inc. v. CPU Distributors, Inc.,\(^{133}\) to bolster its holding that Adobe sold its software.\(^{134}\) However, Novell involved an OEM Agreement that unambiguously and repetitiously used the terms "sell," "sells," "resellers," "resale," and "sold."\(^{135}\) In SoftMan, on the other hand, there was no evidence of such concrete language to indicate that Adobe’s agreements with its authorized distributors were sales.\(^{136}\) Novell is, thus, factually distinguishable from Softman and would seem to be inapplicable.

Furthermore, the court’s dismissal of Microsoft Corporation v. Harmony Computers and Electronics, Inc.,\(^{137}\) and Adobe Systems Inc. v. One Stop Micro, Inc.,\(^{138}\) was unsubstantiated and improper.\(^{139}\) The court found that, because the defendants in Harmony were allegedly selling counterfeit Microsoft products and the defendants in SoftMan were not, the two cases were incomparable.\(^{140}\) However, the court misconstrued both Harmony itself and Adobe’s reliance thereon. Contrary to the court’s assumption, only some of the products at issue in Harmony were allegedly counterfeit.\(^{141}\) Furthermore, the counterfeit issue was not a dispositive factor upon which the Harmony court based its holding; in fact, the Harmony court declined to even make a finding on that issue.\(^{142}\) Rather, the court in Harmony held that, as Adobe correctly argued, Microsoft only licensed and did not sell its products.\(^{143}\)

Rather than provide any explanation as to why One Stop Micro, Inc., is distinguishable from SoftMan, the SoftMan court “simply decline[d] to adopt that analysis.”\(^{144}\) An examination of the factual background and legal issues in One Micro, Inc., however, reveals its applicability to SoftMan. Adobe alleged copyright infringement in both SoftMan and One Mi-
cro, Inc. More importantly, the dispositive issue in both SoftMan and One Micro, Inc., was whether the subject shrinkwrap EULA constituted a sale, thereby allowing the alleged infringer to assert a first sale defense to Adobe's copyright claims. Additionally, in both cases, the alleged infringer was not a signatory to the agreement at issue.

Second, the SoftMan court reasoned that fundamental economic realities and public policy considerations weighed in favor of finding that Adobe sold its software. However, economic efficiency and public interest strongly indicate that SoftMan was decided incorrectly.

By creating opportunities for arbitrage, the resale of software inhibits price discrimination and renders the market inefficient. Price discrimination occurs when a seller charges different prices for different groups of consumers purchasing commensurate or identical products. For example, a seller may categorize purchasers according to the degree to which they value the product. Purchasers who have a stronger demand or need for the product are “high valuation” consumers, whereas purchasers who have a weaker demand or need for the product are “low valuation,” less-favored consumers. In a perfectly efficient software market, a seller would know exactly what product each user desires and how much each user is willing to pay for that product. The seller would be able to modify and price discriminate his products accordingly. Arbitrage occurs when the favored customers purchase the products and then re-sell them to the disfavored customers. If high valuation, favored software users can

147. See id. at 1092.
148. See id. at 1084, 1087, 1090-91.
150. Three conditions are necessary to sustain effective price discrimination: the seller can measure consumer preferences and correlate prices thereto; the seller has some measure of market power; and the seller can stop arbitrage of price differentials. Michael J. Meurer, Copyright Law and Price Discrimination, 23 CARDOZO L. REV. 55, 59 (2001) [hereinafter Meurer, Copyright Law].
151. See id.
152. Id. at 105.
153. Id.
154. Meurer, Price Discrimination, supra note 149, at 850.
re-sell their acquired copies to low valuation, disfavored users, then price discrimination fails. The re-sale of software inefficiently inflates the minimum price at which the seller would sell his product to anyone.

Moreover, the re-sale of software inhibits a seller's ability to use bundling, a price discrimination technique with several potential benefits. Bundling averages demand over multiple products so as to achieve the most effective price, given the different groups of consumers. Bundling reduces transaction and enforcement costs by potentially avoiding wasteful investment in the valuation of the components of a bundle. By rendering bundling ineffective, the re-sale of software inefficiently increases transaction and enforcement costs.

Adobe, for example, bundled the "Collections" and Educational software at issue in SoftMan and offered the bundled software at a discount from the price of the individual retail products contained therein. The SoftMan court's holding renders such bundling impossible, since consumers can, just as SoftMan had done, purchase the bundled software, unbundle the software, and then resell each individual retail products at its higher price. To offset the costs of such resale, Adobe would need to raise the minimum price at which it sells the bundled "Collections" and Educational software to anyone.

In sum, precedent caselaw, public policy, and economic efficiency all disfavor the holding in SoftMan and the effects thereof.

B. Public Policy Favors Preemption Analysis that Considers Constitutional Preemption and Available Remedies, and Disfavors the Blanket Prohibition of Reverse Engineering

The Federal Circuit's preemption analysis in Bowers completely failed to consider constitutional preemption under the Supremacy Clause. Under a constitutional preemption analysis, the Federal Circuit may have come to a different conclusion in Bowers. Contractual prohibitions on reverse engineering, like the one at issue in Bowers, are unconstitutional because their overbreadth distorts the proper owner-user balance underlying

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155. Id. at 83.
156. See ProCd, Inc. v. Zeindenberg, 86 F.3d 1447, 1450 (7th Cir. 1996).
157. Meurer, Copyright Law, supra note 149, at 131.
158. Id. at 123-25 (illustrating the profit-enhancing effect of the averaging technique achieved through bundling).
159. Id. at 131.
the Copyright Act. Shrinkwrap licensing agreements in the software industry may be characterized as a type of private legislation because of their uniformity and non-negotiability. Thus, like various state legislation that courts have preempted, contractual prohibitions on reverse engineering wholly subvert important federal policy allowing reverse engineering under specified, limited circumstances.

Moreover, the equivalence of rights analysis should include not only an examination of the rights themselves, but also a consideration of their means of enforcement. Courts should compare applicable copyright remedies with applicable contract remedies and then determine, on a case-by-case basis, whether they are comparable in terms of availability, appropriateness, and effectiveness. Although a particular contractual right may appear equivalent to a statutory right, their respective enforcement may differ in terms of availability, appropriateness, and effectiveness. For example, federal copyright law offers strong remedies such as injunctive relief and seizure or destruction of infringing copies, whereas contract remedies offer arguably weaker remedies, such as specific performance, which are harder to obtain.

Public policy considerations, moreover, strongly disfavor a blanket prohibition on reverse engineering and, instead, favor the allowance of reverse engineering under limited, federally specified circumstances. Interoperability is crucial to mitigate “tipping,” which occurs when a single interface becomes the monopolizing marketplace standard. Reverse engineering

162. Douma, supra note 45, at 257.
164. Id.
166. Id. at 168.
167. Id.
169. See Samuelson & Scotchmer, supra note 26, at 1624-1625: “Tipping” means that a single interface succeeds in becoming the standard in the market, creating a monopoly. Such tipping may be detrimental to consumers, but it is beneficial to the winning platform owner. By buying up talented independent application developers, entering into exclusive licensing agreements with them, or simply attracting them with its large installed base, a platform owner may create sufficient network externalities to drive out rivals and remain the sole platform provider. A right to reverse-engineer may neutralize this threat of tipping. If the interface becomes open through reverse engineering or
engineering is the primary means for software manufacturers to achieve interoperability. Blanket contractual prohibitions on reverse engineering may increase tipping and leave consumers at the mercy of a single manufacturer.\textsuperscript{170} Additionally, without interoperability, developers will waste costs associated with the development of different applications for different interfaces.\textsuperscript{171} Moreover, caselaw and statutory fair use allowances for reverse engineering are sufficiently narrow to prohibit most reverse engineering without the use of contractual prohibitions.\textsuperscript{172} Reverse engineering is a sufficiently costly and difficult endeavor so as to preclude widespread abuse of the fair use exceptions.\textsuperscript{173}

IV. CONCLUSION

In determining the proper balance between copyright law and contract law, courts ought to consider whether the agreement or contractual provision at issue (1) achieves the Copyright Act's goal of furthering the progress of knowledge and (2) threatens to displace the owner-user balance that is the foundation of the Copyright Act.\textsuperscript{174} The re-sale of software disrupts the owner-user balance without furthering the progress of knowledge. Thus, economic realities and public policy strongly disfavor the conclusion reached in SoftMan. Similarly, a blanket rule establishing that contractual prohibitions on reverse engineering are never preempted could eventually deprive users of the benefits of interoperability. In Bowers, the Federal Circuit ignored “the fundamental purpose of the Copyright Act,” which “is to encourage the production of original works by protecting the expressive elements of those works while leaving the ideas, facts, and functional concepts in the public domain for others to build on.”\textsuperscript{175} These recent decisions indicate that courts still have not delineated a copyright-otherwise, other firms can develop platforms to compete with the proprietary platform and thereby undermine the latter's monopoly pricing strategy. Insofar as this interface becomes a de facto standard, consumers will benefit because more applications will be available for the platform and application developers will be in a better position to negotiate with firms competing in the platform market for better access to interface information.

\begin{itemize}
\item \textsuperscript{170} Id.
\item \textsuperscript{171} Id.
\item \textsuperscript{172} Id.
\item \textsuperscript{173} Id.
\item \textsuperscript{174} See Ginsburg, supra note 165, at 168 (1997).
\item \textsuperscript{175} Sega Entertainments v. Accolade, Inc., 977 F.2d 1510, 1527 (9th Cir. 1992); see also Lemley, Amicus, supra 161, at 11.
\end{itemize}
contract balance that not only maintains the owner-user balance but also achieves the goal of "furthering the progress of knowledge."\textsuperscript{176}

\footnotesize{\textsuperscript{176} See Ginsburg, \textit{supra} note 165, at 168.}