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National Interest: Copyright and Contract: Preemption After Bowers v. Baystate

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Copyright and Contract: Preemption After *Bowers v. Baystate*

David A. Rice*

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In addition to spurring the creation and publication of new expression, copyright law contains built-in First Amendment accommodations.... First, it distinguishes between ideas and expression and make only the latter eligible for copyright protection.... Second, the "fair use" defense allows the public to use not only facts and ideas, but also the expression itself in certain circumstances.\(^1\)

[I]t is Congress that has been assigned the task of defining the scope of the limited monopoly that should be granted to authors and inventors in order to give the public appropriate access to their work product.... [T]his task involves the difficult balance between the interests of authors and inventors... and society's competing interest in the free flow of ideas, information, and commerce...²

PROLOGUE

Copyright law exists in balance with patent and competition law, and with First Amendment protection of expression. It creates limited exclusive rights in original expression, channels ideas and their application into patent law and its more stringent requirements for protection, and respects limited state trade secret law protection of unpatented ideas and their utilization. Like patent law, copyright creates statutory exceptions to the national policy favoring freedom to compete.³ Unlike patent law, it

^{1.} Eldred v. Ashcroft, 123 S. Ct. 769, 788-89 (2003) (citations omitted). Among the omitted citations are two statutory references, the Court's reference of the first statement to § 102(b) and the second statement to § 107 of the Copyright Act. 17 U.S.C. §§ 102(b), 107 (2000). The First Amendment and copyright law relationship is examined in a number of recent articles. See, e.g., Yochai Benkler, Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain, 66 LAW & CONTEMP. PROBS. 173 (2003); William W. Van Alstyne, Reconciling What the First Amendment Forbids with What the Copyright Clause Permits: A Summary Explanation and Review, 66 LAW & CONTEMP. PROBS. 225 (2003); Neil Weinstock Netanel, Locating Copyright Within the First Amendment Skein, 54 STAN. L. REV. 1 (2001). The classic reconciliation of copyright and the First Amendment is Melville B. Nimmer, Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?, 17 UCLA L. REV. 1180 (1970) (developing what is often termed the "Nimmer exoneration").

^{2.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984).

icy favoring freedom to compete.³ Unlike patent law, it carves limited exceptions to the First Amendment protection of freedom of expression "to promote the Progress of Science and the Useful Arts, by securing for limited Times to Authors... the exclusive Right to their respective Writings...." This Article focuses on copyright and contract law, and secondarily deals with patent and trade secret law. Yet the opening quotations remind that all are public purpose serving exceptions to overarching norms of freedom of competition, freedom of expression, and freedom to use ideas, facts and knowledge.

I. INTRODUCTION

Bowers v. Baystate Technologies, Inc.⁵ began with Baystate Technologies seeking a declaration that it did not infringe Bowers' computer program template patent. Notoriety attached when the United States Court of Appeals for the Federal Circuit, with one judge dissenting, held on rehearing that § 301 of the Copyright Act did not preempt state contract law enforcement of a standard form shrink-wrap license term prohibiting reverse engineering of the computer program code.⁶

^{3.} Unpatented ideas and innovations have been characterized by the Supreme Court as "free for all to use" in competition or otherwise. Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 167 (1989); see also Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 231 (1964). Many commentators have discussed the competition-limiting effects and purpose of the subject matter of this article; contractual prohibition of computer program code reverse engineering. See, e.g., Paul Heald, Federal Intellectual Property Law and the Economics of Preemption, 76 IOWA L. REV. 959 (1991); Charles R. McManis, Intellectual Property Protection and Reverse Engineering of Computer Programs in the United States and the European Community, 8 HIGH TECH. L.J. 25 (1993); David McGowan, Free Contracting, Fair Competition and Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality," 13 BERKELEY TECH. L.J. 1173 (1998); David A. Rice, Digital Information As Property and Product: U.C.C. Article 2B, 22 U. DAYTON L. REV. 621, 631, 637 (1997); Pamela Samuelson & Susan Scotchmer, The Law and Economics of Reverse Engineering, 111 YALE L.J. 1575, 1630 (2002).

^{4.} U.S. CONST. art. I, § 8, cl. 8.

^{5. 320} F.3d 1317 (Fed. Cir. 2003), cert. denied, 123 S. Ct. 2588 (2003).

^{6.} The decision superceded and vacated the court's prior and unanimous opinion at 320 F.3d 1334 (Fed. Cir. 2002). Judge Timothy B. Dyk dissented from the court's opinion on rehearing solely on the issue of whether the contract term was preempted by § 301(a) of the Copyright Act. *Bowers*, 320 F.3d at 1335.

Federal courts, including the Federal Circuit, consistently hold that making unauthorized copies of a computer program as a necessary step in reverse engineering a computer program by decompilation of its object code⁷ is a fair use under § 107 of the Copyright Act.⁸ The *Bowers* majority acknowledged this, but held that a copyright owner may circumvent it by including in a standard form shrink-wrap license a term that negates reliance on § 107 to insulate computer program code by using any of several reverse engineering methods. Judge Timothy B. Dyk, dissenting, objected that this vitiated § 107, rendered null § 301(a) preemption of state law that created rights equivalent to the limited exclusive rights created by the Copyright Act, and sanctioned standard form contract amendment of the scope of copyright as legislated in § 102(b).⁹ The United States Supreme Court subsequently denied Baystate's certiorari petition.¹⁰

This Article faults the *Bowers* majority's reasoning on several counts. First, although correctly looking to U.S. Court of Appeals for the First Circuit decisions for guidance, the jurisdiction from which the trial court decision was appealed, 11 it over-broadly mis-

^{7.} Computer programs are authored in a programming language. This initial writing consists of statements and instructions in terms readable by humans trained in use of the language. This "source code" then must be translated by an assembler or compiler program into binary machine readable "object code" before it can be used in or with a computer. See Andrew Johnson-Laird, Software Reverse Engineering in the Real World, 19 U. DAYTON L. REV. 843, 856-59 (1994). Decompilation or disassembly requires making computer program copies in order to subject program object code to analysis and reconstruction of the equivalent, though not exact, original source code. These are characterized as "intermediate" copies. See Sony Computer Entm't Corp. v. Connectix, Inc., 203 F.3d 596, 599-600 (9th Cir.), cert. denied, 531 U.S. 871 (2000).

^{8.} Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832 (Fed. Cir. 1992). See *infra* note 19 for additional cases. The "fair use" characterization makes the unauthorized reproduction of a computer program, otherwise an infringement of a copyright owner's exclusive § 106(a) reproduction right, a privileged and non-infringing act. See 17 U.S.C. § 107 (2000).

^{9.} Bowers, 320 F.3d at 1335 (concurring in part, dissenting in part) (dissent limited to Copyright Act preemption issue).

^{10.} Baystate Techs., Inc. v. Bowers, 123 S. Ct. 2588 (2003). Subsequent thereto, the Federal Circuit issued an order granting a motion to voluntarily dismiss the appeal. No. 02-1078, 2003 WL 21675702 (Fed. Cir. Jul. 01, 2003).

^{11.} The Federal Circuit has exclusive appellate jurisdiction in patent law matters under 28 U.S.C. § 1295(a)(4) (2000). The Federal Circuit applied the law as articulated by the United States Court of Appeals for the First Circuit,

applied that law. Second, its use of case law was in some instances highly selective, superficial and even misleading. Third, it compounded these errors when it held that state contract law may be employed to circumvent one provision of the federal Copyright Act that explicitly narrows the statute-created exclusive rights of a copyright owner set forth in another section of the Act. Fourth, it paid no heed to the two ultimate consequences of its decision. The most important consequence was that state contract law was permitted to expand the scope of copyright by shielding subject matter that § 102(b) of the Copyright Act expressly excludes from protection by a copyright. Related thereto, its decision is precedent for other situations in which standard form contract terms purport to negate other Copyright Act scope of protection, copyright owner rights, and non-owner privileges provisions. Last, but not least, it did not recognize that it effectively sanctioned use of standard form license terms to amend state trade secret law, a state rather than a federal law question.

This article deals with an additional issue not addressed by the court. Closely related to § 102(b)'s indirect evisceration, the court's decision permits state contract law to create by nonnegotiated standard form license terms the equivalent of patentlike protection without regard to patent law conditions or limits. This is distinct from creating enhanced copyright protection by sanctioning standard form contract term circumvention of § 107 fair use as an express limitation on copyright owner statutory rights. Its relationship to copyright is that the collateral effect is the blunting of the letter and underlying policy of § 102(b) and its codification of long-established limits on the scope of copyright vis a vis patent and trade secret law, and altogether unprotected public domain subject matter. This begs consideration of Bonito Boats, Inc. v. Thunder Craft Boats, Inc. 12 as requiring patent law or perhaps non-statutory copyright preemption of state contract law when it is used to insulate subject matter that is, first, unpatented and, second, excluded from protection by copyright.¹³

the circuit in which the action was brought, in deciding questions not concerning the Patent Act. Bowers, 320 F.3d at 1322-23.

^{12. 489} U.S. 141 (1989).

^{13.} Baystate briefly presented the issue for the first time in its Reply Brief in the original appeal. Appellant's Corrected Reply Brief at 19-20 (No. 01-1108, -1109), available at http://www.mucow.com/bowers/Reply.pdf (last

This Article thus concerns two questions. ¹⁴ The first is the soundness and precedential importance of the *Bowers* majority opinion concerning Copyright Act preemption of state contract law. Specifically, this inquiry is whether and, if so, to what extent the Copyright Act permits utilization of state contract law to circumvent statutory provisions that narrow copyright owner rights and thereby expand the scope of copyright protection in copyright subject matter. The second issue is whether state contract law enforcement of such terms is independently subject to constitutional Supremacy Clause ¹⁵ preemption based on conflict with the Patent and Copyright Clause ¹⁶ and federal legislation.

II. BOWERS V. BAYSTATE

Judge Nathaniel M. Gorton of the U.S. District Court of Massachusetts ruled, after a jury verdict for Bowers, on issues involving the contract and copyright intersection. In particular, he dealt with whether the damages awarded by the jury for copyright infringement and breach of contract were duplicative in that the underlying claims were based on the same facts. ¹⁷ Judge Gorton determined that there was duplication and limited Bowers to the recovery of contract damages. He also denied Baystate's motion for judgment as a matter of law or, in the alternative, for a new trial. Baystate appealed the denial of its motions and Bowers cross-appealed the denial of copyright damages. ¹⁸ The copyright and contract intersection issue was recast on appeal as whether

visited January 23, 2004). Bowers argued in its opposition to Baystate's petition for rehearing that conflict preemption had been waived because it was not presented in Baystate's original brief. Bower's Opposition to Baystate's Combined Petition for Panel Rehearing and Rehearing En Banc at 15 (No. 01-1108, -1109), available at http://www.mucow.com/bowers/RehearingOpposition (last visited January 23, 2004) [hereinafter Bower's Opposition to Rehearing Brief].

^{14.} As noted in the Prologue, I do not independently discuss the potential First Amendment issue that was not treated by the parties, the trial court, or the appeals court.

^{15.} U.S. CONST. art. VI, cl. 2 (Supremacy Clause)

^{16.} U.S. CONST. art. I, § 8, cl. 8 (Patent and Copyright Clause, the source of federal policy).

^{17.} Bowers v. Baystate Techs., Inc., 112 F. Supp. 2d 185, 186 (D. Mass. 2000), aff'd, 320 F.3d 1317 (Fed. Cir. 2003), cert. denied, 123 S. Ct. 2588 (2003).

^{18.} Bowers, 320 F.3d at 1322.

the Copyright Act preempted enforcement of a standard form computer program copy use license term that forbade reverse engineering of Bowers' computer program.

Bowers presented for the first time in an appellate court the question of whether state contract law could be drawn upon to prohibit a judicially-recognized limitation on the copyright owner's § 106 exclusive rights, a limited fair use privilege under § 107 to reverse engineer a computer program.¹⁹ The evidence that Bay-state used reverse engineering consisted of a combination of an admission that Bay-state had observed the operation of Bowers' program in order to ascertain how it functioned and expert witness comparative analysis of Bowers' and Bay-state's computer programs.²⁰ Initially, the court unanimously ruled that § 301(a) of the Copyright Act did not preempt enforcement.²¹ After rehearing, the panel reaffirmed its decision, but with one panel member dissenting on the ground that § 301(a) preempted the contract claim.

Baystate argued that § 106 expressly renders copyright owner rights subject to § 107, which states that an otherwise infringing act that is found to be a "fair use" under § 107 is not an infringement.²² Asserting that Baystate's conduct was lawful under § 107,

^{19.} E.g., Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1520 (9th Cir. 1992); Sony Computer Entm't Corp. v. Connectix Corp., 203 F.3d 596, 602 (9th Cir. 2000), cert. denied, 531 U.S. 871 (2000); DSC Communications Corp. v. Pulse Communications Corp., 170 F.3d 1354, 1363 (Fed. Cir. 1999) (curiously, discussing only Sega v. Accolade and not even citing the Federal Circuit's own Atari v. Nintendo decision); DSC Communications v. DGI Techs., Inc., 81 F.3d 597, 601 (5th Cir. 1996); Gates Rubber Co. v. Bando Chem. Indus., 9 F.3d 823, 839-40 (10th Cir. 1993); Bateman v. Mnemonics, Inc., 79 F.3d 1532, 1539-40 n.18 (11th Cir. 1996); Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 817-18 (1st Cir. 1996) (Boudin, J. concurring), aff'd, 516 U.S. 233 (1996); Vault v. Quaid, 847 F.2d 255, 264 (5th Cir. 1988); Alcatel USA, Inc. v. DGI Techs., Inc., 166 F.3d 772, 786 (5th Cir. 1999).

^{20.} Bowers, 320 F.3d at 1326-27. The particular "reverse engineering" method is one of the most limited and least intrusive. The most extensive, intrusive and expensive is decompilation or disassembly of computer program code. See Johnson-Laird, supra note 7, at 856-59; Sony Computer Entm't Corp., 203 F.3d at 596, 599-600 (citing and discussing Johnson-Laird's identification of various methods and their characteristics and costs). Decompilation and disassembly require making one or more computer program copies in order to subject program code to analysis. These are commonly characterized by courts and others as "intermediate" copies.

^{21.} Bowers, 320 F.3d at 1334.

^{22.} Id. at 1323. Section 106 states in relevant part: "Subject to sections 107 through 120, the owner of copyright under this title has the exclusive

it claimed that § 301(a) barred judicial enforcement of the contract term it effectively created through state law – a right greater than or at least equivalent to a § 106 exclusive right. Baystate's logic was that § 301(a) preempts state contract law when it is used to revive a copyright owner's § 106 exclusive right that § 107 makes unenforceable. The effect is to permit contract-based creation of the unqualified equivalent of a § 106 right and to invite use of contract by others to privately amend the Copyright Act in other ways in order to simultaneously claim the private rights and gain relief from limitations that secure public benefits of copyright law.²³

The Federal Circuit, on rehearing and denial of a petition for rehearing en banc, held with one dissent that enforcement of the contract term was not preempted. While reaffirming its prior Atari Games Corp. v. Nintendo of America, Inc.²⁴ holding that making unauthorized copies essential to reverse engineer computer program code is a fair use in certain circumstances, it concluded that § 301(a) did not preempt enforcement of a shrink-wrap license term that prohibited what § 107 otherwise authorized.²⁵ The Bowers majority concluded that the First Circuit Court of Appeals, the law of which the Federal Circuit was required to apply on issues other than patent law, would reach the same conclusion.²⁶ The foundation of its decision was the much criticized Seventh Circuit ruling in ProCD, Inc. v. Zeidenberg²⁷ that § 301(a) of the Copyright Act does not preempt state contract law and rights created thereunder.²⁸

Judge Timothy B. Dyk vigorously and soundly argued in dissent that Data General v. Grumman Systems, the First Circuit

rights to do and to authorize any of the following: (1) to reproduce the copyrighted work in copies or phonorecords; "17 U.S.C. § 106 (2000). Correlatively, § 107 states, in relevant part: "Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords . . . is not an infringement of copyright." *Id.* § 107.

^{23. 320} F.3d at 1323.

^{24. 975} F.2d 832 (Fed. Cir. 1992).

^{25. 320} F.3d at 1325.

^{26.} Id. at 1325-26.

^{27. 86} F.3d 1447 (7th Cir. 1996).

^{28. 320} F.3d at 1325. This conclusion was based on the court's reasoning from the quite different, and not controlling, decision in *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147 (1st Cir. 1994), that a trade secret law claim was not preempted on the facts of the case.

case relied upon by the majority, undertook deeper analysis than that undertaken by the Bowers majority. It prescribed consideration of whether the state law was equivalent in substance once that it is found that the elements of the state law and copyright claims differed.²⁹ In addition, Judge Dyk was persuaded that the majority's rote reliance on ProCD was indefensible. He noted that even ProCD admitted a rare possibility of contract preemption where a term "interfere[d] with the attainment of national objectives"30 and then addressed whether Bowers was among the exceptional cases. His lodestars were the purposes, policies and objectives of Congress in enacting § 301(a) and, more generally, national policies underlying patent and copyright law. 31 Congress, he concluded, expressed important national policy in enacting § 107, legislating in § 106 and § 107 that the copyright owner rights are subject to fair use as an affirmative defense, and declaring that § 301(a) made the Copyright Act the exclusive source of protection for copyright works.32

Judge Dyk's national policy discussion drew upon the Supreme Court decision in *Bonito Boats*,³³ a case involving Supremacy Clause conflict preemption of state law that conflicted with federal patent law policy.³⁴ *Bonito Boats* strongly reaffirmed the principle first announced twenty-five years earlier in *Sears*, *Roebuck & Co. v. Stiffel Co.*³⁵ and *Compco Corp. v. Day-Bright Lighting Co.*³⁶ that state law is preempted if it protects innovations "by substantially restricting the public's ability to exploit ideas which the patent system mandates shall be free for all to use."³⁷ Considering that the majority decision not only negated the express cross-references between sections 106 and 107, but indirectly expanded the scope of copyright under § 102, Judge Dyk concluded that enforcement of the standard form contract reverse engineering prohibition was preempted under § 301(a) in accordance with

^{29. 320} F.3d at 1335 (Dyk, J., dissenting).

^{30. 86} F.3d at 1455.

^{31. 320} F.3d at 1337-38 (Dyk, J., dissenting).

^{32.} Id. at 1335-36 (Dyk, J., dissenting).

^{33.} Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 167 (1989).

^{34.} Id. at 1335 (Dyk, J., dissenting).

^{35. 376} U.S. 225 (1964).

^{36. 376} U.S. 234 (1964).

^{37.} Bonito Boats, Inc., 489 U.S. at 167.

the reasoning of the Fifth Circuit in Vault Corp. v. Quaid Software Ltd.³⁸ Like the majority, he did not address whether, under Bonito Boats, enforcement was constitutionally preempted under the Supremacy Clause based on a conflict between state law and federal patent or copyright law and policy as expressed in the Patent and Copyright Clause and federal legislation.

III. BOWERS V. BAYSTATE ANTECEDENTS

A. Reverse Engineering of Computer Program Copy Code as a Fair Use

Reverse engineering of computer programs by various methods – including decompilation or disassembly of machine readable computer program code, or object code, in order to ascertain elements not protected by copyright – constitutes a § 107 "fair use."³⁹ The *Bowers* majority acknowledged that the Federal Circuit itself so held in *Atari Games v. Nintendo.*⁴⁰ Review of other federal court

From a preemption standpoint, there is no distinction between a state law that explicitly validates a contract that restricts reverse engineering (Vault) and general common law that permits such a restriction (as here). On the contrary, the preemption clause of the Copyright Act makes clear that it covers "any such right or equivalent right in any such work under the common law or the statutes of the State."

Id.

^{38.} Bowers v. Baystate Techs., Inc., 320 F.3d 1317, 1337 (Fed. Cir. 2003). His conclusion followed a reference to Vault Corp. v. Quaid Software Ltd., and its quotation from the 1964 decision of the Supreme Court in Sears, Roebuck & Co., that state law, including common law, is preempted where state law "touched upon an area' of federal copyright law" in such a way as to create a conflict with federal copyright law and policy. Id. (quoting 847 F.2d 255, 269-70 (5th Cir. 1988) (quoting Sears, Roebuck, 376 U.S. at 229)). Judge Dyk met the argument that there is a significant difference between state legislation and contract law as follows:

^{39.} See supra note 11. Decompilation or disassembly requires making "intermediate" unauthorized copies of the computer program and is the principal focus of previously decided cases. This method was not used by Baystate, but reverse analysis even by observation and making notes on the operation of Bowers' program was found by the Bowers majority to constitute reverse engineering within the broadly stated prohibition in Bowers' standard form license agreement. Bowers, 320 F.3d at 1326.

^{40.} Bowers, 320 F.3d at 1325; see also Atari Games Corp. v. Nintendo of Am., 975 F.2d 832 (Fed. Cir. 1992).

decisions indicates unanimity of view on this point.⁴¹ Courts have generally confined rejection of the fair-use defense to case-specific determinations where the parties invoking § 107 in support of decompilation or disassembly have not met their burden.⁴²

Differentiation of program elements that constitute original expression protected under § 102(a) of the Copyright Act⁴³ and elements excluded from protection of a copyright by § 102(b)⁴⁴ ordinarily requires either unprotected element disclosure by the copyright owner or independent study of the computer program. The facts in *Bowers* indicate that Baystate used the least intrusive means, repeated observation of operations performed by Bowers' program. The most effective, intrusive and expensive means requires making copies of the original and subjecting them to decompilation or disassembly of their object code, a process that ordinarily involves making a number of additional and unauthorized copies.⁴⁵ Proceeding cautiously, the earliest decisions held that resort to program code decompilation was permissible when

^{41.} See supra note 19.

^{42.} See, e.g., DSC Communications Corp. v. Pulse Communications, Inc., 170 F.3d 1354 (Fed. Cir. 1999) (reverse engineering may be a fair use, but the computer program copy that is decompiled must be one that was owned or lawfully acquired).

^{43.} Section 102(a) states, in part, that "[c]opyright protection subsists... in original works of authorship fixed in any tangible medium of expression... from which they can be perceived, reproduced or otherwise communicated, either directly or with the aid of a machine or device." 17 U.S.C.A. § 102(a) (2000).

^{44.} Section 102(b) provides, in full, that "[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C.A. §102(b) (2000). The leading computer program copyright infringement case dealing with filtering out matter excluded from copyright protection by § 102(b) is Computer Assocs. Int'l Corp. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992). The basic approach has since been generally followed but in some instances with modification, the latter epitomized by Gates Rubber Co. v. Bando Chemical Indus., 9 F.3d 823 (10th Cir. 1993). See also Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807 (1st Cir. 1995), aff'd, 516 U.S. 233 (1996) (section 102(b) excludes methods of operation from the protection of a computer program copyright).

^{45.} Sony Entm't Corp. v. Connectix, Inc., 203 F.3d 596, 599-601 (9th Cir. 2000), cert. denied, 531 U.S. 871 (2000); see also Johnson-Laird, supra note 7, at 856-57 (describing the alternative methods and explaining by example the steps involved in reverse engineering using code decompilation or disassembly).

necessary to further a legitimate purpose, the sought information was unprotected by copyright under § 102(b), and the information was neither disclosed nor otherwise available.⁴⁶

Each reproduction of computer program code not authorized by the copyright owner infringes the copyright owner's § 106(a) exclusive right to reproduce, or authorize the reproduction, of a copyright work. Yet § 106 expressly states that the exclusive rights created by that section are subject to the limitations legislated in sections 107 to 120 of the Copyright Act.⁴⁷ Reciprocally, § 107 etches that any unauthorized act that violates a § 106 exclusive right of the copyright owner does not infringe if it is found to be a fair use.⁴⁸

The two sections, read together, integrally establish copyright owners' exclusive rights and one of their general limitations.⁴⁹ Disquieting as this may be to some computer program copyright owners, it is no anomaly. It tracks more than a century of judicial development of fair use as a direct limitation on copyright owner rights.⁵⁰ Legislatively, it is the ultimate product of many years of debate and negotiation preceding enactment of the 1976 Act.⁵¹ Notably, fair use and its § 107 codification is regarded as one of the principal copyright law accommodations of the First Amendment.⁵² Finally, and contrary to its treatment by the *Bowers* majority, fair use in copyright law fundamentally protects the

^{46.} Sega Enters. Ltd. v. Accolade, Inc. 977 F.2d 1510, 1527-28 (9th Cir. 1992); Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832, 843 (Fed. Cir. 1992); Sony Entm't Corp. v. Connectix, Inc., 203 F.3d 596, 602 (9th Cir. 2000), cert. denied, 531 U.S. 871 (2000).

^{47. 17} U.S.C. § 106 (2000).

^{48.} See id. §§ 106, 107, 120.

^{49.} Harper & Row, Publishers, Inc. v. Nation Enters. Inc., 471 U.S. 539, 560 (1985); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 431 (protection given to copyright is wholly statutory), 433 (non-infringer is a person authorized to use copyright work pursuant to § 106 or who makes a fair use pursuant to § 107), 433 (not all reproductions are within exclusive domain of copyright owner because any person may reproduce a work for fair use; "the copyright owner does not possess the exclusive right to such a use").

^{50.} See generally WILLIAM PATRY, THE FAIR USE PRIVILEGE IN COPYRIGHT LAW 19-62 (1985); Pierre N. Leval, Toward A Fair Use Standard, 103 HARV. L. REV. 1105, 1107-10 (1990).

^{51.} See generally PATRY, supra note 50, at 261-365.

^{52.} See Eldred v. Ashcroft, 123 S. Ct. 769, 789 (2003); Harper & Row, Publishers, Inc., 471 U.S. at 560.

general public rather than "property rights of individual parties." 53

B. Contractual Restriction of Computer Program Copy Use

Standard form shrink-wrap, and more recent click-wrap and web-wrap, documents are self-characterized as licenses to use a copy of a computer program, digital database, or other digital product copy. Most include terms and conditions that define permitted and prohibited uses and acts. Although originally developed and employed to contractually leverage state trade secret law at a time when federal copyright protection for computer programs was in doubt and federal patent law protection for computer programs was generally regarded as unavailable,⁵⁴ vendordrafted standard forms expanded in scope and purpose upon the advent and then widening use of personal computers. Computer program copy licenses⁵⁵ usually include terms and conditions that prohibit or restrict copy use or transfer, and as in *Bowers*, reverse engineering of the computer program object code.

Other commonly used terms serve to price discriminate between market segments.⁵⁶ The business method makes the same product available solely for consumer or personal non-commercial use at one price and business or other commercial use at a substantially higher price. Arbitrage is foreclosed by a term that prohibits the transfer of a non-commercial use copy to a commercial

^{53.} Bowers v. Baystate Techs., Inc., 320 F.3d 1317, 1325-26 (Fed. Cir. 2003).

^{54.} David A. Rice, Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine, 30 JURIMETRICS J. 157, 157-59 (1990); Mark A. Lemley, Intellectual Property and Shrink-wrap Licenses, 68 S. Cal. L. Rev. 1239, 1243-44 (1995); see also, Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 96 n.7 (3d Cir. 1991); Softman Prods., LLC v. Adobe Sys., Inc., 171 F. Supp. 2d 1075, 1083 (C.D. Cal. 2001) (citing expert declaration prepared by the article's author as a retained expert for Softman Products, LLC).

^{55.} The more common, but legally imprecise, characterization of the transaction subject matter is "software" and the documents as "software licenses." The author does not use that convention because it fails to distinguish between ownership of copyright and a copy, and resulting rights, a distinction made clear by § 202 of the Copyright Act. 17 U.S.C. § 202 (2000).

^{56.} See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996) (describing the practice and how it works); see also Michael J. Meurer, Copyright Law and Price Discrimination, 23 CARDOZO L. REV. 55 (2001).

use or to a third party commercial purpose user. Price discrimination obviates more costly resort to functional differentiation by creating two different versions of a computer program or database product, one less robust and lower-priced than the other.

C. Enforceability of Shrink-Wrap License Terms Under State Contract Law

The enforceability of copy-use license terms continues to inspire vigorous debate. Specific to shrink-wrap licenses and terms, the most prominent state contract law issue concerns the legal effect of terms not accessible until after paying for and taking possession of a shrink-wrapped package containing those terms as well as the product.⁵⁷

The most significant judicial responses are federal court decisions applying and interpreting state law. All agree that the governing law is Article 2: Sales of the Uniform Commercial Code (UCC) as enacted by the relevant state. The two earliest decisions, Step-Saver Data Systems, Inc. v. Wyse Technology and Arizona Retail Systems, Inc. v. Software Link, Inc., 60 held on their

^{57.} These have come to be known as "money now, terms later" or "pay first, terms later" transactions. See, e.g., Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1148 (7th Cir. 1997), cert denied, 522 U.S. 888 (1997); Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1336-37 (D. Kan. 2000); O'Quin v. Verizon Wireless, 256 F. Supp. 2d 512, 516 (M.D. La. 2003). Related issues have since been raised concerning click-wrap and web-wrap contract formations and terms. See, e.g., Specht v. Netscape Communications, Inc., 306 F.3d 17 (2d Cir. 2002); I.Lan Sys., Inc. v. Netscout Serv. Level Corp., 183 F. Supp. 2d 328 (D. Mass. 2002); Pollstar v. Gigmania, Ltd, 170 F. Supp. 2d 974 (E.D. Cal. 2000).

^{58.} See Advent Sys. Ltd v. Unisys Corp., 925 F.2d 670, 676 (3d Cir. 1991); Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 98 (3d Cir. 1991); ProCD, Inc., 86 F.3d at 1450; Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1336-37 (D. Kan. 2000); Softman Prods., LLC v. Adobe Sys., Inc., 171 F. Supp. 2d 1075, 1084 (C.D. Cal. 2001); M.A. Mortenson Co., Inc. v. Timberline Software Corp., 998 P.2d 305, 310 (2000); cf. Specht v. Netscape Communications, Inc., 306 F.3d 17, 30 n.13 (2d Cir. 2002).

^{59.} Step-Saver, 939 F.2d at 100 (applying Pennsylvania or Georgia law, both of which were the official text of Article 2 of the Uniform Commercial Code).

^{60. 831} F. Supp. 759, 765 (D. Ariz. 1993) (applying Georgia law). There were several contracts at issue in *Arizona Retail*. The court held that the first did include the disputed terms because Arizona Retail did not enter into a contract until after it received a trial copy of the computer program, along with the shrink-wrap terms. It is with respect to subsequent orders placed by

facts that offer and acceptance occurred and resulted in contract formation prior to product delivery and sending an invoice. Both cases involved telephonic placement and acceptance of an order followed by product shipment and sending an invoice. The disputed terms were contained in one instance inside the product package while in the other they were printed on the invoice. The key terms disclaimed implied warranties and limited remedies for vendor's breach, something UCC Article 2 expressly permits subject to certain conditions.⁶¹

Step-Saver and Arizona Retail agreed that the terms were not included in the contract at the time of contract formation.⁶² The Third Circuit in Step-Saver, and the District Court for Arizona in Arizona Retail, concluded that section 2–207 provided the applicable rule.⁶³ Both courts determined on the facts that, under section 2–207(1), a contract had been formed and that the terms in question constituted proposals for addition subject to section 2–207(2) rules governing whether the terms became part of the contract.⁶⁴ Upon determining that the proposed terms would materially alter the original agreement, both held that they were excluded by section 2–207(2)(b).⁶⁵

The picture changed in 1996 when the Seventh Circuit held in *ProCD*, *Inc.* v. *Zeidenberg*⁶⁶ that the trial judge erroneously treated *Step-Saver* and *Arizona Retail* as persuasive authority in her interpretation and application of Wisconsin's enactment of the UCC. Judge Frank Easterbrook's opinion was footed in an initial observation that it was sound business practice and beneficial to consumers for "ProCD... to engage in price discrimination, selling its database to the general public for personal use at a low price ... while selling information to the trade for a higher

Arizona Retail that the court held that the contract was formed when the orders were placed by telephone and accepted at that time by the vendor who thereafter shipped the product in a shrink-wrap package that also contained a shrink-wrap license agreement that included warranty and remedy limitation terms.

^{61.} U.C.C. §§ 2-316, 2-719 (2003).

^{62.} Step-Saver, 939 F.2d at 105; Arizona Retail, 831 F. Supp. at 766.

^{63.} Step-Saver, 939 F.2d at 98; Arizona Retail, 831 F. Supp. at 765.

^{64.} Step-Saver, 939 F.2d at 98-99; Arizona Retail, 831 F. Supp. at 766.

^{65.} Step-Saver, 939 F.2d at 105-06; Arizona Retail, 831 F. Supp. at 766.

^{66.} ProCD, Inc., 86 F.3d at 1452 (applying Wisconsin law).

price."⁶⁷ The court clearly understood that the practice was dependent on judicial validation of the personal-use-only term in ProCD's shrink-wrap license as the means to control arbitrage.⁶⁸ Otherwise, a purchaser like Zeidenberg would be able to purchase and use for commercial purposes the less expensive consumer use product in lieu of purchasing the identical product for commercial use at a higher price.

The Seventh Circuit focused on Step-Saver and Arizona Retail decisions for the very different purpose of factually distinguishing and substantively differentiating them. This was the first step in finding legal support for ProCD's business method, reversing the District Court determination that ProCD's terms and conditions had not become enforceable under Wisconsin contract law, and eventually holding that § 301(a) of the Copyright Act did not preempt their enforcement.⁶⁹

Two fallacious legal assertions established the Seventh Circuit's foundation. The first, and transparently erroneous, was the perfunctory and outcome-prescriptive transformation of the familiar tenet that the offeror is the master of the offer and its terms⁷⁰ into "[a] vendor, as master of the offer, may invite acceptance by conduct, and may propose limitation of the kind of conduct that constitutes acceptance."⁷¹ Equally stunning was Judge Easter-

^{67.} Id. at 1449.

^{68.} *Id.* at 1450.

^{69.} The opinion effectively nullified UCC rejection of the common law "last shot" rule at least for cases in which a computer program or database product is the transaction subject matter. Not long after, Judge Easterbrook in *Hill v. Gateway* extended this override to ordinary sale of goods transactions by the simple declaration that *ProCD* governed. Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1149 (7th Cir. 1997), cert. denied, 522 U.S. 808 (1997).

^{70.} RESTATEMENT (SECOND) OF CONTRACTS § 58 (1981).

^{71.} ProCD, Inc., 86 F.3d at 1452. The sleight of hand transformation has extraordinary implications. One example concerns the general rule that a seller who advertises goods or services merely invites offers rather than makes them. See, e.g., John D. Calamari & Joseph M. Perillo, Calamari and Perillo on Contracts § 2.6(e) (5th ed. 2003); John E. Murray, Jr., Murray on Contracts § 34A (4th ed. 2001). Inferentially, this makes the customer, and particularly a consumer or end-user, ordinarily the offeror and the master of the offer. ProCD necessarily indicates that the Seventh Circuit will make the advertisement a mere invitation to make an offer, a customer's affirmative response also a mere invitation to make an offer or perhaps a "proposal to deal," and the advertiser's affirmative response to the buyer's invitation, or proposal, the offer. Strange as that is at common law, it will be far more interesting to see if ProCD is consistently applied in the Seventh

brook's assertion that section 2–207, and therefore Step-Saver and Arizona Retail, were irrelevant because the ProCD transaction involved only one printed form. Although the section does concern the "battle of forms" phenomenon, its text in no way requires an exchange of two forms, and an Official Comment to the section makes clear that it is not so limited. Many prior judicial decisions in fact had applied section 2–207 on facts that involve a telephone or other oral offer that was either accepted at the time and then later confirmed in writing or accepted by a later writing. More generally, ProCD overlooked Wisconsin appellate court decisions that had applied UCC section 2–207 to facts involving

Circuit and other states within which the *ProCD* characterization has been cited and applied with approval when the case before the court is a substantial commercial transaction. Being consistent will upend long-established business understandings, expectations and practices. This presents a strong challenge to Judge Easterbrooks's "practical legal reasoning."

The prevailing view concerning "self-service" or "off-the-shelf" sales transactions of the kind epitomized by Zeidenberg's purchase is that on-shelf presentation of the product is the offer, and acceptance is either payment at checkout or removing the product from the shelf. If the latter, it is an acceptance subject to an implied condition to pay. See CALAMARI, supra, § 2.6(e); MURRAY, supra, § 36B. This was the view adopted by Chief Judge Crabb in the ProCD trial court. 908 F. Supp. 640, 651-52 (W.D. Wis. 1996).

- 72. ProCD, Inc., 86 F.3d at 1452. The surprise was not limited to UCC and contract law scholars. See, e.g., Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1339 (D. Kan. 2000) (Vratil, J., declining to follow ProCD).
- 73. Official comment 1 to section 2–207, which was not considered in *ProCD*, likewise states that the section applies in two types of situations, one of which is when there is a single document that is a written acceptance or confirmation that contains additional or different terms. Specifically, it reads: "This section is intended to deal with two situations. The one is the written confirmation, where an agreement has been reached either orally or by informal correspondence and is followed by one or both of the parties sending formal memoranda embodying the terms so far as agreed upon and adding terms not discussed." U.C.C. § 2–207, cmt. 1 (2003).
- 74. The decisions included ones rendered by the Seventh Circuit. See Advance Concrete Forms, Inc. v. McCann Constr. Specialties Co., 916 F.2d 412, 415 (7th Cir. 1990) (applying Wisconsin law and specifically quoting Mid-South Packers, Inc. v. Shoney's, Inc., 761 F.2d 1117, 1123 (5th Cir. 1985) and its interpretation of Mississippi's version of section 2–207 for the specific point that only one writing is required); Schulze & Burch Bisquit Co. v. Tree Top, Inc., 831 F.2d 709, 712-13, 715 (7th Cir. 1987) (applying Illinois law); Northrup Corp. v. Litronic Indus., Inc., 29 F.3d 1173, 1177 (7th Cir. 1994) (applying Illinois law). ProCD cited Northrup for the proposition that section 2–207 deals with "the exchange of incompatible forms" just before declaring that section 2–207 was inapplicable because there was only one form in ProCD. 86 F.3d at 1452.

one form and cases indicating that terms provided after payment and delivery, i.e., disclaimer of a statutorily implied warranty did not become part of the parties' agreement.⁷⁵

Section 2–207 modifies the common law "mirror image" rule⁷⁶ and declares that a contract is formed if a communication in response to an offer manifests an intention to enter into a contract and it is not "expressly made conditional on assent to the additional or different terms."⁷⁷ Since the latter is rare, additional terms ordinarily become proposals for addition and a particular term becomes part of the agreement in transactions between merchants if it is not excluded by one of three exceptions stated in UCC section 2–207(2).⁷⁸ An important implication is that, absent

^{75.} See Air Prod. & Chem., Inc. v. Fairbanks Morse, Inc., 206 N.W.2d 414, 421-23 (1973). More on point, an earlier Seventh Circuit decision applying Wisconsin law, Advance Concrete Forms, had stated by quotation from the Fifth Circuit that section 2–207: "applies to the situations in which an agreement has been previously reached either orally or by informal writings, and one or both parties send written confirmation of terms discussed, adding certain terms not discussed." 916 F.2d at 415; see also U.C.C. § 2–207, cmt. 1 (2003); Mid-South Packers, Inc. v. Shoney's, Inc., 761 F.2d 1117, 1123 (5th Cir. 1985) (applying Mississippi's version of U.C.C. section 2–207); Waukesha Foundry, Inc. v. Indus. Eng'g, Inc, 91 F.3d 1002, 1007-08 (7th Cir. 1996) (decided after ProCD but before the Seventh Circuit's 1997 decision in Hill).

^{76.} John E. Murray, Jr., The Definitive "Battle of Forms": Chaos Revisited, 20 J.L. & Com. 1, 5 (2000). The author agrees with Professor Murray's statement that UCC section 2-207 modifies, not rejects, the mirror image rule. But see Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 99 (3rd Cir. 1991).

^{77.} U.C.C. § 2–207(1). The aim is to recognize contemporary business practices and what they imply about parties' usual intentions, and the reality that standard forms seldom are read and responded to with emphasis on their inclusion of additional or different terms. Remarkable, then, is that the Seventh Circuit in *Hill* powerfully invoked the old chestnut of self-protection responsibility of consumers to read contract terms and accept the risks attendant in not doing so. See Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1148 (7th Cir. 1997). But see Licitra v. Gateway, Inc., 734 N.Y.S.2d 389, 393 (N.Y. Civ. Ct. 2001) (treating the underlying assumption as unrealistic and characterizing Gateway's argument as the "Marie Antoinette 'let them eat cake' defense").

^{78.} UCC section 2-207(2) states:

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 expressly limits acceptance to the terms of the offer;

⁽b) they materially alter it; or

an express agreement, no additional terms become effective and enforceable unless both parties are merchants.79 This presented an insurmountable hurdle for the vendors in ProCD and later consumer cases that have treated Judge Easterbrook's decision as authoritative. 80 Judge Easterbrook finessed this, preemptively dismissing Step-Saver and Arizona Retail as authority with the flat declaration that "folur case has only one form; UCC section 2-207 is irrelevant."81 He then turned to section 2-204(1) which states "[a] contract for sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract"82 and overlaid this with its deft and prudential transformation of "the offeror is master of the offer" axiom into "[a] vendor, as master of the offer" legal principle.83 It easily followed that the contract was not formed by product selection and payment in exchange for goods in a retail store because the offer, not just terms and conditions, were contained within the vendor's shrink-wrapped box.84 This transposed post-sale delivery of terms from raising a legal issue into a substantial justification of the Seventh Circuit's result. The stage

⁽c) notification of objection to them has already been given or is given within a reasonable time after notice of them is received. U.C.C. § 2-207(2).

^{79.} See Murray, supra note 76, at 33; Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1341 (D. Kan. 2000).

^{80.} The consequence in a straight-forward and precedent-guided application of UCC section 2-207 is that the additional terms did not qualify as proposals for addition to the terms upon which the parties had agreed and that express agreement is required. See Klocek, 104 F. Supp. 2d at 1341; U.S. Surgical Corp. v. Orris, Inc., 5 F. Supp. 2d 1201, 1206 (D. Kan. 1998); Lemmer v. IDS Props., Inc., 304 N.W.2d 864, 870-71 (Minn. 1980); MURRAY, supra note 71, § 50C, at 181.

Most of the cases, including *ProCD*, involve an end-user who was not a merchant within the "merchant" definition of UCC section 1–104. *See* Specht v. Netscape Communications Corp., 306 F.3d 17 (2d Cir. 2002); O'Quin v. Verizon Wireless, 256 F. Supp. 2d 512 (M.D. La. 2003); *Klocek*, 104 F. Supp. 2d 1332; Rinaldi v. Iomega Corp., 1999 WL 1442014 (Del. Super. Ct. Sept. 3, 1999); Brower v. Gateway 2000, Inc., N.Y.S.2d 569 (N.Y. App. Div. 1998); *Licitra*, 734 N.Y.S.2d 389; *cf.* I.Lan Sys., Inc. v. Netscout Serv. Level Corp., 183 F. Supp. 2d 328 (D. Mass. 2002); M.A. Mortenson Co., Inc. v. Timberline Software Corp., 998 P.2d 305 (Wash. 2000).

^{81.} ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1452 (7th Cir. 1996).

^{82.} Id. (quoting U.C.C. § 2-204(1)).

^{83.} Id.

^{84.} Id. at 1452-53.

thus was set for addressing the next, federal law, issue of whether § 301(a) of the Copyright Act nevertheless preempted state law and made the term unenforceable.

The preceding brief treatment of *ProCD* and its progeny is in many respects unnecessary, but is important background to *Bowers* and its reliance on *ProCD*'s subsequent second stage preemption analysis. *Bowers* neither decided nor even remarked upon the question of the enforceability of shrink-wrap and click-wrap licenses and their terms under Massachusetts law. As in *ProCD*, enforceability under state law was necessary to the outcome in *Bowers*, though hardly arguable in *Bowers* favor since at least one Massachusetts decision had held in favor of the *ProCD* view of state contract law.⁸⁵ My limited purpose is to introduce the *Bowers* and *ProCD* link as a foundation for a later discussion of the *Bowers*' majority connection with and reliance upon *ProCD* in deciding whether contract terms are subject to § 301(a) preemption.

IV. SECTION 301 AND STANDARD FORM SHRINK-WRAP LICENSE TERMS

A. Legislative Background of § 301

The Copyright Act of 1976 displaced the dual system of state common law and federal statutory copyright protection with a unified and exclusive system of federal copyright legislation. Section 301(a) of the statute captured this by providing that:

[A]ll legal or equitable rights that are equivalent to any of the exclusive rights with the general scope of copyright as specified by section 106 in works of authorship that are fixed in a tangible medium of expression and come within the scope of copyright as specified by section 102 and 103... are governed exclusively by this title.⁸⁶

^{85.} See I.Lan Sys., Inc. v. Netscout Serv. Level Corp., 183 F. Supp 2d. 328, 337-38 (D. Mass. 2002) (applying Massachusetts Uniform Commercial Code and adopting ProCD and its reasoning).

^{86. 17} U.S.C. § 301(a) (2002). Section 301(b)(1) correlatively declares that state law and equity rules that do not create rights equivalent to those created by federal law in copyright subject matter are not preempted. § 301(b)(1).

Section 301, as enacted, supplanted original Senate bill language that particularly specified state laws that were and were not preempted. The original bill excluded, among other things, rights created under state contract law.⁸⁷ While the legislative history of the change is generally unilluminating, one critical factor appears to have been Department of Justice concern that the original Senate bill language sheltering rights created by state misappropriation law was over-broad.⁸⁸ In any event, the revised § 301 reflects a very different approach. It establishes the federal law primacy in broad terms and leaves it to the courts to determine case-by-case the equivalency of state law rights and remedies and federal statutory rights in copyright subject matter.⁸⁹

B. Section 301 and State Contract Law and Rights

State contract law is the principal means for exercise and realization of the economic benefits of copyright owner rights created by the Copyright Act. Thus, for example, contract is used to authorize others to reproduce or distribute copies in accordance with § 106(a) and (b), and establish royalty or other payment terms. This warrants judicial skepticism toward claims that § 301(a) preempts a state law contract right. Even so, congressional abandonment of a blanket exclusion of contract rights in favor of the enacted § 301(a) compels case-by-case judicial determination of equivalency. This has resulted in many reported decisions dealing with whether particular contract terms, otherwise enforceable under state law, create rights equivalent to those created by federal copyright law.⁹⁰

^{87.} See David A. Rice, Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering, 53 U. PITT. L. REV. 543, 602-05 (1992); Lemley, Intellectual Property, supra note 54, at 1269-74.

^{88.} See Rice, Public Goods, supra note 87, at 602-05; Lemley, Intellectual Property, supra note 54, at 1269-74; Paul Goldstein, Preempted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright, 24 UCLA L. REV. 1107, 1112-20 (1977).

^{89.} See Sony Corp. of Am. v. Universal City Studios, Inc., 494 U.S. 417, 448 (1984); Harper & Row Publishers, Inc. v. Nation Enter., 471 U.S. 539, 560-62 (1985); Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 577 (1994).

^{90.} MELVILLE B. NIMMER & DAVID NIMMER, 1 NIMMER ON COPYRIGHT \$1.01[B][1][a] (2003).

A sizable majority of the decisions have held that the term at issue was not preempted.91 This is quite as one would expect. Contract is the means for copyright owners' exploitation of limited property rights through transfer of exclusive or non-exclusive rights.92 Non-preemption usually is explained under an "extra element" test, now the standard judicial benchmark for determination of whether a right created by state law is equivalent to one created by the Copyright Act.93 This judicially-devised and nonstatutory tool directs a court to consider whether state contract or other state law requires proof that a defendant did something additional to that which must be shown in order to make out a claim of copyright infringement.94 Focusing on the contract law requirement of a promise and proof of its breach, many cases conclude that a right created by state contract law was not equivalent to one created by § 106 of the Copyright Act because contract includes an extra element; e.g., promise, mutual assent or consideration.95

Judicial application often is quite pro forma. Many courts overlook that the complete statement of the test recognizes that the policy expressed in § 301 requires a court to consider whether an identified extra element makes the state law claim one that is qualitatively, not just technically, different. Generating qualitative difference, some courts properly focus more on conduct and particularly whether the same conduct establishes both copyright

^{91.} Id.

^{92.} Id.

^{93.} *Id.* § 1.01[B][1].

^{94.} See Wrench, LLC v. Taco Bell Corp., 256 F.3d 446, 457 (6th Cir. 2001); Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1164 (1st Cir. 1994); NIMMER, supra note 90, § 1.01[B][1][a].

^{95.} See Wrench, LLC, 256 F.3d at 457; Data Gen. Corp., 36 F.3d at 1164; Nimmer, supra note 90, § 1.01[B][1][a].

^{96.} Wrench, LLC, 256 F.3d at 457; Mayer v. Josiah Wedgewood & Sons Ltd., 601 F. Supp. 1523, 1535 (S.D.N.Y. 1985); Kabehie v. Zoland, 125 Cal. Rptr. 2d 721, 728 (Cal. Ct. App. 2002) (distinguishing which contract claims were, and were not, preempted). Each of the three cases cited by ProCD as answering "no" to the question of whether § 301(a) preempted contract rights, in fact, noted that qualitative difference is the ultimate consideration when applying the extra element decision-aid and expressly limited themselves to particular contract terms rather than contract in general. See Nat'l Car Rental Sys., Inc. v. Computer Assocs. Int'l, Inc., 991 F.2d 426, 433 (8th Cir. 1993); Taquino v. Teledyne Monarch Rubber, 893 F.2d 1488, 1501 (5th Cir. 1990); Acorn Structures, Inc. v. Swantz, 846 F.2d 923, 926-27 (4th Cir. 1993).

infringement and breach of contract or the same measure of damages. This approach rejects formalistic analysis in favor of ascertaining if the contract and copyright claims are substitutable, one for the other. Although most hold as expected that contract usually is not preempted, others find preemption in particular contexts. The clearest instance of the latter is when the promise is to not make a copy or distribute copies without obtaining copyright owner authorization. In that instance, the exact same conduct establishes infringement and breach and the promise adds nothing to the exclusive statutory rights of the copyright owner. 97 Another example makes clear, however, that even this change in focus does not assure invariably correct outcomes. A promise to pay a royalty for each distributed copy is breached if the required payments are not made, and each copy that is distributed may infringe the § 106(3) distribution right because the copyright owner has expressly or impliedly conditioned her authorization to distribute upon payment of the agreed royalty. The same conduct will establish both breach and infringement, but the contract clearly includes an extra element as neither the promise to pay nor the amount to be paid is an independent, not merely extra, element that truly is qualitatively different.

V. BOWERS, CONTRACT AND § 301(A): A CRITIQUE AND REAPPRAISAL

A. Bowers and Contract

Bowers, like ProCD, depended on an initial determination – or assumption in the case of Bowers – that the shrink-wrap license was enforceable under state contract law. Beyond that, it concluded that the facts presented no contract interpretation issue because the contract term in Bowers broadly prohibited reverse engineering of any kind. In this respect it differed from the situation presented in Bonito Boats where the concern was with a

^{97.} Wrench, LLC, 256 F.3d at 457 (finding no preemption on the facts, but stating: "If the promise amounts only to a promise to refrain from reproducing, performing, distributing or displaying the work, the contract claim is preempted.").

^{98. 320} F.3d 1316, 1326 (Fed. Cir. 2003).

state statute that prohibited one, albeit the least costly, of several available methods of reverse engineering.⁹⁹

Finally, the majority directed its attention to whether Massachusetts law would permit contractual waiver of a statutory right. Implied was that a shrink-wrap license term "waiver" of a licensee's statutory fair-use right under § 107 would be unenforceable if contrary to state law. If so, there would be no reason to consider whether federal copyright law preempted state contract law.

After first expressing that "courts do not lightly set aside freely-entered contracts" 100 and indicating that the term would be enforceable under Massachusetts law, the majority launched into its § 301(a) analysis. This consisted primarily of invoking ProCD as distinguishing contract and property rights, citing a First Circuit decision indicating its adherence to the extra element test when deciding if a state trade secret law cause of action was preempted, 101 and listing ProCD and cases it relied upon as establishing that § 301(a) "does not preempt state contract action in this case" because "the Copyright Act does not preempt contractual constraints on copyrighted articles." 102 Addressing and distin-

^{99.} It is useful to recall at this point that decompilation of computer program code is but one, albeit the most thorough and expensive, means for computer program code reverse engineering.

³²⁰ F.3d at 1323 (citing Beacon Hill Civic Ass'n v. Ristorante Toscano, 662 N.E.2d 1015, 1017 (Mass. 1996)). Overall, cited Massachusetts authority was limited to the following: (1) Beacon Hill Civic Ass'n, 662 N.E.2d at 1017, for the statement in a non-UCC case that courts "do not lightly set aside freely-entered agreements," although the Massachusetts Supreme Judicial Court in that case did set aside an agreement for the reason that it violated public policy; (2) several cases for the contract construction principle that words that are free from ambiguity are to be taken in their ordinary or usual sense; (3) Canal Elec. Co. v. Westinghouse Elec. Corp., 548 N.E.2d 182, 187 (Mass. 1990), for the proposition that "a contractual waiver of statutory rights is permissible when the statute's purpose is 'the protection of the property rights of individual parties . . . rather than . . . the protection of the general public." Bowers, 320 F.3d at 1323, 1325-26 (quotation omitted). Not noted was that the Massachusetts Supreme Judicial Court in Canal Electric emphasized that the case involved a negotiated commercial contract between two commercially sophisticated parties for purchase of a turbine generator and that Massachusetts law otherwise disfavored waiver in consumer cases and required careful consideration of alleged rights waivers in other matters. Canal Elec. Co., 548 N.E.2d at 185.

^{101. 320} F.2d at 1324 (citing Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1164 (1st Cir. 1994)) (quotation omitted). 102. Id.

guishing Vault Corp. v. Quaid Software, Ltd., 103 a Fifth Circuit decision holding unconstitutional a Louisiana statute that made shrink-wrap licenses and their terms enforceable, the Bowers majority contrasted private contract and a public law and concluded that the First Circuit would not extend Vault "to include private contractual agreements supported by mutual assent and consideration" because the First Circuit "recognizes contractual waiver of affirmative defenses and statutory rights."104 Finally, and at last recognizing that Massachusetts¹⁰⁵ contract law governed, the court spoke to contract construction in reading the shrink-wrap term to broadly and unambiguously prohibit any and all methods of reverse engineering, including Baystate's observation and analysis of computer program operation rather than code decompilation. 106 The majority tersely concluded that the "First Circuit would follow the reasoning of ProCD" based on its trade secret law preemption decision in Data General 107 and held that the Copyright Act did not preempt Bowers' contract claim.

As earlier noted, at least one decision of the U.S. District Court for Massachusetts had predicted that Massachusetts courts would follow *ProCD* and held a shrink-wrap license and its terms enforceable as a matter of Massachusetts contract law. 108 On the other hand, no federal court or Massachusetts appellate decision had dealt with the enforceability of a standard form shrink-wrap license term that nullified a federal copyright law provision. Yet there is substantial reason to believe that Massachusetts law itself might render such a contract term unenforceable as against public policy. 109 If this had been considered, it might have made it

^{103. 847} F.2d 255 (5th Cir. 1988).

^{104.} Bowers, 320 F.3d at 1325.

^{105.} *Id.* at 1325 (discussing Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255 (5th Cir. 1988)). Unremarked by the *Bowers* majority was that *Vault* concerned a contract term that prohibited reverse engineering of computer program code.

^{106.} *Id.* at 1326. None of the cited cases were decided under Article 2: Sales of the Massachusetts Uniform Commercial Code.

^{107.} Id. at 1325.

^{108.} I.Lan Sys., Inc. v. Netscout Serv. Level Corp., 183 F. Supp. 2d 328, 336 (D. Mass. 2002) (following *ProCD* on enforceability of clickwrap license and its forum selection term).

^{109.} See, e.g., Beacon Hill Civic Ass'n v. Ristorante Toscano, 662 N.E.2d 1015, 1018-19 (1996); Canal Elec. Co. v. Westinghouse Elec. Corp., 548 N.E.2d 182 (1990) (discussing unconscionability and unfair trade practices);

unnecessary to take up the only contract-related issue that *Bowers* actually addressed: whether § 301(a) preempted state contract law enforcement of a term that is otherwise enforceable as a matter of state law.¹¹⁰

Judge Dyk limited his dissent to the question of whether § 301(a) preempted Baystate's contract claim. It was unnecessary to speak to any state contract law issue or the majority's effort to build state law support for its preemption analysis by showing that it is permissible under Massachusetts law to contractually waive a statutory right. Correctly perceiving the latter to be irrelevant to the federal law issue and otherwise assuming state contract law enforceability of the standard form shrink-wrap license and its reverse engineering prohibition, he limited his attention to Baystate's argument that federal law preempted enforcement of the particular term. Like the majority, he there focused solely on the second point in that inquiry, equivalency of state and federal law rights, since it was beyond question that the dispute involved rights in copyright subject matter.¹¹¹

B. Bowers and § 301(a)

The *Bowers* majority recognized that "[t]he shrink-wrap agreements in this case are far broader than the protection afforded by copyright law." 112 At the same time, it rejected Bowers' appeal from Judge Gorton's exercise of discretion to permit recovery of contract and vitiate the jury's award of copyright damages because they were duplicative. In so doing, however, the majority reasoned that "the breach of contract damages arose from the

Data Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1165 (1st Cir. 1993) (discussing misappropriation, intentional interference, and unfair competitive conduct). Ironically, these are the cases relied upon by the majority to establish enforceability of the term under Massachusetts law.

^{110.} Mark Lemley also has noted the possibility of nonenforceability based on state public policy grounds. See Mark A. Lemley, Beyond Preemption: The Law and Policy of Intellectual Property Licensing, 87 CAL. L. REV. 111, 163-67 (1999).

^{111.} Section 301(a) does not apply unless it is shown that the dispute involves copyright subject matter as defined in § 102 and alleged state law creation of rights equivalent to those created by the Copyright Act in that subject matter.

^{112. 320} F.3d at 1326.

same copying and included the same lost sales that form the basis for the copyright damages."113

The second statement strongly indicates that federal courts ought to consider whether the same conduct or acts establish both state and federal law liability when making their determination of the equivalency of rights created by state law and federal copyright law.¹¹⁴ This arguably is subsumed in the teaching that elevating substance over form requires that an identified extra element must be one that makes the state law claim qualitatively, not just literally, different from a copyright claim.

The combination of the two quoted statements is striking. The first statement proceeds from general recognition that contract in many respects works hand-in-hand with copyright, and this is recognized by the Copyright Act and more generally in case law dealing with exploitation of the economic value of copyright ownership. The second statement, on the other hand, admits that in some instances the same conduct may establish both contract breach and copyright infringement. Equivalency, under the latter, exists only if it is exact unless the state law claim extra element is but a sham. Otherwise, the first statement immunizes

^{113.} Id. at 1328.

This was the approach actually followed by the First Circuit in Data 114. Gen. Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1164-65 (1st Cir. 1994) (state trade secret law creates extra element, but the court noted that some cases have preempted trade secret claim and further examined whether in this case the state law claim was qualitatively different). See also Harper & Row, Publishers, Inc. v. Nation Enters., 723 F.2d 195, 201 (2d Cir. 1983); Wrench, LLC v. Taco Bell Corp., 256 F.3d 446, 447 (6th Cir. 2001), (disapproving ProCD view that contract is not preempted as a matter of law, but concluding on the facts that a qualitative difference precluded preemption of contract implied-in-fact claim); Alcatel USA, Inc. v. DGI Techs., Inc., 166 F.3d 772, 777 (5th Cir. 1999) (state misappropriation claim preempted; although an extra element present, not qualitatively different because same conduct created liability under both federal copyright and state law); Kabehie v. Zoland, 125 Cal. Rptr. 2d 721, 731-35 (Cal. Ct. App., 2d Dist. 2002) (distinguishing contract claims that were, and were not, preempted); Green v. Hendrickson Publishers, Inc., 770 N.E.2d 784, 789-90 (Ind. 2002) (ProCD harshly criticized to extent it has been interpreted as holding that no state contract law claim is preempted, ProCD and cases relied upon by it wrongly decided to extent they support that broad proposition, and breach consisting of "continuing to print additional copies of books covered by the 1985 agreement" was preempted because it was the equivalent of § 106(1) unauthorized reproduction).

^{115.} See NIMMER, supra note 90, § 1.01[B][2][c].

all contract claims from federal preemption because contract introduces an extra element, e.g., promise, consideration or assent.

The majority acknowledged the qualitative equivalency dimension of the extra element test, ¹¹⁶ but then immediately segued to *ProCD* and a string citation of the cases it relied upon as establishing that mutual assent and consideration make contract claims different from copyright claims. ¹¹⁷ Overlooked was that its *Data General* quotation to show First Circuit adherence to the extra element test and the qualitative difference factor showed that the First Circuit was itself quoting a prior decision in which a particular contract term was preempted by § 301(a). ¹¹⁸ Also not noted was that the qualitative difference criterion led the *Data General* court to go beyond it to find an extra element and to closely examine its qualitative difference. ¹¹⁹

Bowers joined ProCD as one of only two federal appeals court decisions that sanction use of standard form shrink-wrap licenses and state contract law to redefine the scope of federal copyright, a wholly statutory creation. ProCD knowingly permitted copy use restrictions in a "money now, terms later" shrink-wrap license to create better-than-copyright protection for database contents that were copyright subject matter but neither protected by copyright nor part of a compilation that had the modicum of originality necessary for even thin copyright protection. The effect was to judicially add a new right to the exclusive statutory rights of a copyright owner, an extra-statutory power to control the use of unprotected informational content.

Bowers vastly outdid *ProCD*. Facially, it concerned use of state contract law to privately render rights created by § 106 no longer subject to, currently, the most important computer program fair use – decompilation. It did so with awareness that competition in the use of statutorily unprotected ideas, methods, processes and the like was the term's real target. The harm claimed by Bowers, and what he sought to remedy through shrink-wrap con-

^{116. 320} F.3d at 1324.

^{117.} *Id.* at 1325.

^{118.} Mayer v. Josiah Wedgwood & Sons, Ltd., 601 F. Supp. 1523, 1535 (S.D.N.Y. 1985).

^{119.} Data Gen. Corp., 36 F.3d at 1164-65 (holding that a court must consider whether the extra element shows the existence of a qualitative difference because not every extra element does so).

tract term enforcement, was that "Baystate's introduction of Draft-Pak version 3 induced intense price competition between Bowers and Baystate." ¹²⁰

Freeing Bowers of price competition by approving contractual expansion of the limited statutory monopoly was antithetical to both federal intellectual property and competition law. Copyright and patent law carve, for utilitarian purposes, limited and interest-balanced statutory exceptions to the overarching national policy favoring competition and freedom to compete. Bowers recognized that the contract term's purpose and effect was to substantively and substantially increase protection by copyright, and regarded that as unremarkable if not in fact a "right" inherent in ownership of copyright.

Judge Dyk vigorously challenged the majority's preemption holding on three fronts. First, he asserted that market-wide use of shrink-wrap licenses to gain efficiencies inherent in doing business based on standard terms simply are not classic two-party agreements of the kind posited by *ProCD* and the *Bowers* majority. They operate across a relevant market consisting of all product customers, not one-to-one as in the classic two-party bargain paradigm evoked by *ProCD* and the majority. Judge Dyk

^{120. 320} F.3d at 1322. Judge Easterbrook in *ProCD, Inc. v. Zeidenberg* similarly, approvingly, but mistakenly, stated that "[t]o the extent that licenses facilitate distribution of object code while concealing the source code (the point of a clause forbidding disassembly), they serve the same procompetitive functions as does the law of trade secrets." 86 F.3d 1447, 1455 (7th Cir. 1996) (citing Rockwell Graphic Sys., Inc. v. DEV Indus., Inc., 925 F.2d 174, 180 (7th Cir. 1991)). *Bonito Boats* and *Kewanee*, in contrast, positively presented reverse engineering as promoting competition by increasing knowledge dissemination and use. Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 160 (1989); Kewanee Oil Co. v. Bicron Corp, 416 U.S. 470, 489-90 (1974).

^{121.} See generally Heald, supra note 3; J.H. Reichman, Legal Hybrids Between the Patent and Copyright Paradigms, 94 COLUM. L. REV. 2432 (1994). 122. 320 F.3d at 1337 (Dyk, J., dissenting).

^{123.} The difference has been widely noted and commented upon. Niva Elkin-Koren, Copyrights in Cyberspace – Rights Without Laws?, 73 CHI.-KENT L. REV. 1155, 1180-85 (1998); Dennis S. Karjala, Federal Preemption of Shrink-wrap and On-Line Licenses, 22 U. DAYTON L. REV. 512, 528-32 (1997); Robert P. Merges, Intellectual Property and the Costs of Commercial Exchange: A Review Essay, 93 MICH. L. REV. 1570, 1612-13 (1995); Maureen A. O'Rourke, Fencing Cyberspace: Drawing Borders in a Virtual World, 82 MINN. L. REV. 609, 693 (1998); Rice, supra note 3, at 636-37. The distinction also was noted and outcome critical in the principal Massachusetts cases re-

underscored this by stating that he would accept Bowers' argument against preemption if the transaction had been negotiated.¹²⁴

Judge Dyk's second argument was firmly grounded in federal copyright and patent law policy. He appraised the standard form shrink-wrap agreement and its broad prohibition against reverse engineering in light of the legislative and constitutional policy foundations of § 301 and the broader expression of national policy in *Bonito Boats*. ¹²⁵ The Supreme Court's concern in the latter and in its earlier decision in *Kewanee* was whether state trade secret law, in *Kewanee*, and state legislation, in *Bonito*, overreached federal patent law and policy in contravention of the Court's earlier *Sears* and *Compco* decisions. ¹²⁶ Although the four decisions concerned patent law and policy and their relationship to competition policy, Judge Dyk looked particularly to *Bonito Boats* and *Sears* and their conflict preemption teachings as a source of guidance in dealing with copyright law statutory preemption.

Third, he concluded his opinion by declaring that the First Circuit, the law of which the Federal Circuit must apply, was actually contrary to the majority's interpretation. Quoting *Data General*, he concluded that the First Circuit would preempt a

lied upon by the *Bowers* majority in stating the First Circuit and Massachusetts law permit contractual waiver of statutory rights. *See supra* notes 100, 109; *infra* note 173.

^{124.} Bowers, 320 F.3d at 1336 (Dyk, J., dissenting). This sharply contrasts with Judge Easterbrook's declaration in ProCD that standard form shrink-wrap licenses and terms are especially well-suited to mass distribution and, therefore, particularly justify enforcement under state law and immunity from § 301(a) preemption. ProCD, Inc., 86 F.3d at 1455. The most obvious reason for the difference is that ProCD at least facially concerned vendor realization of the full benefits of distribution control and market differentiation by price discrimination whereas Bowers dealt with use of contract to defeat a judicially recognized § 107 limitation on the most fundamental copyright owner right, the right to reproduce copies of the original work. As noted at various points, however, both dealt with contractual alteration of the statute-defined scope of copyright. Bowers is simply more transparent and overreaching in this regard.

^{125.} Bowers, 320 F.3d at 1335-36.

^{126.} See Kewanee Oil Co. v. Bicron Corp, 416 U.S. 470, 479-80 (1974); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 168 (1989). Both cases involved Supremacy Clause preemption based on state law conflict with federal patent law and policy. *Id. Bonito* included extensive discussion intended to put to rest any idea that the Court had backed away from its broadly stated conflict preemption holdings in Sears and Compco. Bonito Boats, Inc., 489 U.S. at 154-59.

shrink-wrap license term that prohibited reverse engineering because the extra element of agreement "merely concerns the extent to which authors and their licensees can prohibit unauthorized copying by third parties." Aside from his Data General quotation, three points framed his analysis. The first was that "Congress made the Copyright Act the exclusive means for protecting copyright" in § 301(a). Peaking to the policy intention to occupy the field by making federal law the exclusive source of protection for expressive works, he drew upon Bonito Boats, stating that: "The test for preemption by copyright law, like the test for patent law preemption, should be whether the state law 'substantially impedes the public use of the otherwise unprotected' material."

Noting that § 102(b) excludes from copyright protection the subject matter that reverse engineering is used to discover, he faulted approval of state contract law as a shield against public use of computer program content which the section expressly denies protection by a program's copyright. 130

Referring to *Eldred v. Ashcroft*¹³¹ as the most recent expression of authority for applying patent precedent in copyright cases, Judge Dyk reminded that *Bonito Boats* reaffirmed the *Sears* holding that the Supremacy Clause dictates preemption of state law that "substantially restrict[ed] the public's ability to exploit ideas that the patent system mandates shall be free for all to use." ¹³² Fi-

^{127.} Bowers, 320 F.2d at 1317 (quoting Data Gen. Corp. v. Grumman Sys. Support, 36 F.3d 1147, 1165 (1st Cir. 1994)) (emphasis in original Data Gen. Corp. opinion).

^{128.} Id. at 1335.

^{129.} Id. (quoting Bonito Boats, Inc., 489 U.S. at 157, 167).

^{130.} Id. at 1336.

^{131.} Eldred v. Ashcroft, 123 S. Ct. 769, 779 (2003).

^{132.} Bowers, 320 F.2d at 1335 (quoting Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 231-32 (1964)) (editing is that of Judge Dyk). He might have further noted that Sears spoke about both copyright and patent preemption of state law that intruded upon a federal right to copy in stating:

Pursuant to this constitutional authority, Congress in 1790 enacted the first federal patent and copyright law... and ever since that time has fixed the condition upon which patents and copyrights shall be granted.... These laws, like other laws of the United States enacted pursuant to constitutional authority, are the supreme law of the land.... When state law touches upon the area of these federal statutes, it is "familiar doctrine" that the federal policy "may not be set at naught, or its benefits denied" by the state law. Sola Elec. Co.

delity to this principle was best shown, in his view, by *Data General* and other decisions that rigorously employ an "equivalent in substance" test in case-by-case determination of § 301(a) preemption. He buttressed this by quoting from *Data General* to make clear that § 301(a) states the applicable law and that the extra element test is but a non-statutory, judicially-fashioned decision-making aid derivative of the statutory standard of equivalence in substance.¹³³

The third frame was that *Atari* and other decisions consistently established that even making unauthorized copies incident to decompilation or disassembly of computer program code is a fair use in at least some instances. The *Bowers* majority did speak to this, but in a curious way it observed that it "left untouched the conclusions reached in *Atari Games v. Nintendo* regarding reverse engineering as a statutory fair use exception to copyright infringement." While it further stated that a "prohibition on all copying whatsoever would stifle the free flow of ideas without serving any legitimate interest of the copyright holder," it concluded that a standard form shrink-wrap license prohibition against reverse engineering was not preempted because contract requires proof of an element additional to what must be shown to prove infringement. 135

Judge Dyk would have none of this. He fixed his focus by quoting the court's declaration in *Atari* that: "An author cannot acquire patent-like protection by putting an idea, process or method of operation into an unintelligible format and asserting

v. Jefferson Elec. Co., 317 U.S. 172, 173, 176, 63 S. Ct. 172, 173, 87 L.Ed. 165 (1942). [other citations omitted].

Sears, Roebuck & Co., 376 U.S. at 228-29.

^{133.} Bowers, 320 F.3d at 1324 (quoting Data Gen. Corp., 36 F.3d at 1164, 1165).

^{134.} *Id.* at 1325.

^{135.} Id. Is this a non sequitur? If so, it is not a product of my creatively patching together two unrelated statements that happen to appear on the same page of the opinion. The intimation is that a contract term could not wholly circumvent § 107 by prohibiting unauthorized reproduction, but that presents difficulties for counsel and other courts in determining what the Federal Circuit would permit and not permit contract to do with respect to the operation of § 107.

copyright infringement against those who try to understand that idea, process, or method of operation."136

Invoking § 102(b) and its exclusion of ideas, processes, methods of operation and certain other subject matter from protection by a copyright, he presented the computer program reverse engineering fair use defense as an essential element of federal copyright law. It was this exemption that assured that copyright protection would not be extended "to any idea, procedure, process, system, method of operation, concept, principle, or discovery... embodied in such work." Thus, he concluded that "[a] state is not free to eliminate the fair use defense" because "[e]nforcement of a total ban on reverse engineering would conflict with the Copyright Act itself by protecting otherwise unprotectable material." 138

Judge Dyk correctly observed that validating a shrink-wrap term prohibiting reverse engineering goes deeper than unburdening copyright owner rights of an express statutory limitation. ¹³⁹ The contract term privately amends the cornerstone of the Copyright Act, its two-part § 102 definition of the subject matter and scope of copyright. Market-wide use of the term simultaneously secures copyright's private benefits and contracts out of its public-oriented limitations, and its judicial approval delegates to private actors the power to set at naught long-established and accepted copyright boundaries. ¹⁴⁰ Among these boundaries are ones drawn by such venerable precedents as *Baker v. Selden* ¹⁴¹ and *Hoehling*

^{136.} *Id.* at 1336 (quoting Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832, 842 (Fed. Cir. 1992)).

^{137.} Id.

^{138.} *Id.* Although not specifically referenced by Judge Dyk, the majority concluded that the term unambiguously prohibited any and all methods of computer program code reverse engineering. *Id.* at 1326; *cf.* Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 160 (1989) (fact that state law prohibits just one, not all, reverse engineering methods "does not eliminate conflict with federal scheme").

^{139.} Although he could have, he did not accentuate this by also noting the § 102(b) linkage with the First Amendment or competition policy.

^{140.} *ProCD* is criticized on this same point by Nimmer. NIMMER, *supra* note 90, § 3.04[B][3][a], at 3-34.10 (objecting that *ProCD* "upsets the delicate balance in copyright law" by allowing computer program copyright owners to economically exploit their copyright while simultaneously depriving users the interests that copyright law itself confers on their usage).

^{141. 101} U.S. 99 (1879) (idea-expression dichotomy).

v. Universal City Studios, Inc., 142 and expanded upon by Feist, Computer Associates International v. Altai 143 and Lotus Development Corp. v. Borland International, Inc. 144 ProCD accomplished this by permitting standard form shrink-wrap contracts to accord mere facts and their compilation greater protection than that which copyright provides genuinely original works of authorship. Bowers leapt to the other end of the spectrum, the patent law boundary, by sanctioning use of contract to leverage copyright into protection of computer program-embodied methods, processes, other functional characteristics, know-how and the like. Yet Atari, Lotus, Sony v. Connectix and other leading cases soundly condition such protection on meeting the more demanding requirements of patent law or dependence on more vulnerable state trade secret law protection. 145

VI ROWERS AND CONSTITUTIONAL PREEMPTION

A. Bonito Boats and Patent Law Preemption

Long ago, in information technology era terms, this author explored the possibility that *Bonito Boats* and its *Kewanee*, *Sears* and *Compco* antecedents sounded the basis for patent law or, more precisely, Supremacy Clause and Patent and Copyright Clause conflict preemption of contract terms prohibiting computer program code reverse engineering. The thesis in this part is

^{142. 618} F.2d 972 (2d Cir. 1980), cert. denied, 449 U.S. 841 (1980) (historical facts not protected by work's copyright).

^{143. 982} F.2d 693 (2d Cir. 1992) (computer program copyright infringement determination is possible only after first filtering out unprotected elements).

^{144. 49} F.3d 807 (1st Cir. 1995), aff'd, 516 U.S. 233 (1996) (section 102(b) excludes methods of operation from a computer program's copyright protection).

^{145.} The difference was captured by the Supreme Court in *Kewanee*, stating that "[w]here patent law acts as a barrier, trade secret law functions relatively as a sieve." Kewanee Oil Corp. v. Bicron Corp., 416 U.S. 470, 490 (1974).

^{146.} My original venture into the subject area was David A. Rice, Trade Secret Clauses in Shrink-Wrap Licenses, 2 Computer Lawyer #2, at 17 (1985). David A. Rice, Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering, 53 U. PITT. L. REV. 543 (1992), a far more extensive analysis, was published several years later and that was followed by David A. Rice, Sega and Beyond: A Bea-

that, if the issue had been squarely posed in *Bowers*, counsel might have challenged the Federal Circuit and perhaps invited the Supreme Court to quite differently view standard form shrinkwrap term override of § 107 in general, or at least as interpreted and applied in *Atari* and numerous other federal appellate court decisions.

Baystate's counsel primarily focused on countering Bowers' copyright infringement and breach of contract counterclaims with what seemingly, and actually, were strong copyright and contract arguments. 147 Judge Dyk similarly was compelled to focus on those issues although his dissent showed that he viewed the case and its implications in broader terms. Hinted, but not directly presented, was the notion that Supreme Court patent law preemption decisions in *Bonito Boats*, *Kewanee* and their *Sears Roebuck* and *Compco* antecedents presented a perhaps clearer and more compelling Supremacy Clause preemption argument.

Bowers expanded the protection of patent law subject matter through extension of copyright. Events subsequent to the Bonito Boats, Kewanee, Sears, and Compco decisions make this even more clear than at the time this author earlier addressed patent law preemption of computer program reverse engineering prohibitions. The Federal Circuit has now established that computer programs as such are patentable subject matter. This makes Bowers' effect on § 102(b), which deals in part with the interplay and common border of copyright and patent, a call for revisiting whether federal patent law preempts enforcement of computer program copy license terms that prohibit reverse engineering of computer program code.

Bonito Boats extensively discussed and reaffirmed Kewanee and its examination of the relationship between federal patent and state trade secret law. In the course of rejecting the claim that federal patent law and policy preempts state trade secret law, Kewanee considered alleged state and federal law conflict over a

con for Fair Use Analysis . . . At Least as Far as It Goes, 19 U. DAYTON L. REV. 1131 (1994).

^{147.} See supra note 13 (concerning the timing and brevity of Baystate's attention to conflict preemption as an alternative argument).

^{148.} State Street Bank & Trust Co. v. Signature Fin. Servs., Inc., 149 F.3d 1368 (Fed. Cir. 1998); AT&T v. Excel Communications, 172 F.3d 1352 (Fed. Cir. 1999).

range of subject matter. It began with that which is unpatentable and ultimately proceeded to that which is patentable, the one area in which trade secret law might encourage inventors to withdraw from the patent system and its requirement of public disclosure. Even though both state and federal law created innovation incentives, the Court noted that trade secret law additionally serves an important state interest in maintaining standards of commercial ethics. It does so in liability rules addressed to disclosure in breach of confidence or discovery by dishonest, fraudulent or other unfair means rather than by creating property rights. Second, it emphasized that patent law provides an opportunity to obtain, for a limited term, an exclusive right to make, use and sell even as it requires disclosure as a quid pro quo. In contrast, trade secret protection is lost if the subject matter is disclosed or ascertained through a lawful means of discovery. 151

Kewanee highlighted that reverse engineering is a "fair and honest" means of discovery under state trade secret law. 152 Bonito Boats emphasized this when dealing with a statute which, although not barring all reverse engineering, banned the most efficient method for reverse engineering an unpatented boat hull design. 153 Justice O'Connor emphasized that trade secret law incorporation of reverse engineering as a lawful means of discovery importantly distinguished patent and trade secret law. First, it did not channel innovation or inventions away from the patent system. Second, it made trade secret law primarily a protection against conduct that constituted unfair competition whereas patent law creates property rights as a means to promote invention. 154 Altering trade secret law would negate the first, at least change the second, and present a direct conflict with patent law. Notably, Justice O'Connor concluded that it was not sufficient to

^{149.} For example, subject matter that could not meet the novelty and nonobviousness requirements for a patent.

^{150.} Kewanee, 416 U.S. at 484.

^{151.} *Id.* at 490-91; see also Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 155 (noting that with respect to *Kewanee* it was central to the Court's conclusion that trade secret protection is weaker than patent protection because trade secret law leaves the public "free to discover and exploit the trade secret through reverse engineering" or independent discovery).

^{152. 416} U.S. at 476, 490.

^{153. 489} U.S. at 160.

^{154.} Id. at 155-60, 162-64.

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avoid conflict preemption that the Florida statute did not prohibit copying based on independent discovery or resort to other unprohibited means of reverse engineering. Consistent with this, Sony v. Connectix rejected Sony's argument that § 107 of the Copyright Act precludes reverse engineering that employs computer program code decompilation or disassembly unless use of lesser alternative means is shown to be unavailing.

While neither the Kewanee nor Bonito Boats Courts dealt with a contractual prohibition against reverse engineering, both emphasized that Sears and Compco made freedom to copy the constitutional norm except as otherwise provided by federal law or state law regulating fraud, deception, breach of confidence, breach of trust, industrial espionage or the like. Those state interests are not implicated in Bowers, ProCD or other instances of routine, market-wide use of shrink-wrap contracts drawn by copyright owners to alter and augment copyright in order to enhance protection against competition. Pursuing the latter is antithetical to national policy favoring competition. It also heavily touches upon the Patent and Copyright Clause by constructing copyright-based patent-like protection without submitting to rigorous Patent Office examination to determine if program-embodied § 102(b) subject matter meets more demanding patent requirements. Finally, and specific to trade secret law, Bowers sustained use of state contract law to tinker with federal copyright law in a way that expands state trade secret law protection well beyond that upheld against constitutional attack in Kewanee.

In contrast to *ProCD* and *Bowers*, the Supreme Court rejects foreclosure of competition as a constitutionally legitimate use of state law to restrict or prohibit copying of patent subject matter for which no patent has been granted. It is difficult to imagine that the Court would countenance or could justify enforcement of competition-preventing standard form shrink-wrap terms that redraw well-established copyright, patent and trade secret law boundaries codified by Congress in § 102(b). It was precisely that which *Bonito Boats* emphatically rejected when it strongly reaffirmed *Sears* and *Compco* and carefully explained the narrow limits of permissible state law control over copying.

^{155.} Id.

^{156. 203} F.3d 596, 604 (9th Cir. 1999).

B. Non-Statutory Copyright Preemption

Professor Paul Goldstein offers a closely reasoned argument for reaching beyond § 301 to consider the possibility of Supremacy Clause preemption in the realm of copyright. Professor Goldstein argues that § 301 did not fully exercise the power of Congress under Article I, Section 8, Clause 8 of the Constitution and that Bonito Boats and its antecedent Supreme Court decisions instruct that the Supremacy Clause provides an independent basis for state law preemption. The thesis is that, like patent law and policy, copyright law and policy establish non-statutory limits on the power of individual states to enact or enforce laws that prohibit copying, or prevent access to and use of, content not protected by copyright. This is supported by language in Sears and Compco that treat patent and copyright alike based on the fact that both are grounded in the Patent and Copyright Clause. 159

This was the bedrock of Judge Dyk's dissent. ¹⁶⁰ He focused on a direct conflict between state contract law and national policy as expressed in federal copyright law rather than on parsing the language and meaning of § 301(a). ¹⁶¹ His discussion of *Bonito Boats* concerned state law intrusion upon national law or, in this instance, the use of state contract law to redefine the scope of copy-

^{157.} Paul Goldstein, Preempted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright, 24 UCLA L. REV. 1107, 1122-23 (1977) and PAUL GOLDSTEIN, 3 COPYRIGHT § 15.3.3 (2d ed. 2001 Supp.). ProCD suggested the same view. 86 F.3d at 1453-55.

^{158.} Goldstein, supra note 157, at 1122-23; see also Heald, supra note 3, at 994 (arguing that the Bonito Boats preemption rationale should be applied to state laws which upset the balance struck by copyright law); Karjala, supra note 123, at 533-34 (concluding that state law that frustrates the full purposes and objectives of Congress should be preempted); Maureen A. O'Rourke, Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms, 45 DUKE L.J. 479, 534-41 (1995) (noting that Supremacy Clause preemption must be examined as well as statutory preemption); Charles R. McManis, Intellectual Property Protection And Reverse Engineering Of Computer Programs In The United States And The European Community, 8 HIGH TECH. L.J. 89-90 (1993) (stating that express statutory preemption does not preclude Supremacy Clause preemption).

^{159.} Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 230, 231 (1964); Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234, 237-38 (1964).

^{160.} Bowers argued in its Opposition to the Petition for Rehearing that the copyright conflict preemption was not raised in a timely manner by Baystate. See Bower's Opposition to Rehearing Brief, supra note 13, at 15.

^{161.} Bowers, 320 F.3d at 1335 (Dyk, J., dissenting).

right and the statutory rights of copyright owners. Judge Dyk saw shrink-wrap contracts that prohibit computer program reverse engineering as cutting to the very core of federal copyright law and policy. He thereby shifted the focus from wooden application of the extra element test, devised by the judiciary to address equivalency of rights, to whether state contract law could be used to subvert the § 301(a) declaration that the Copyright Act is the exclusive source of copyright, sole determinant of its subject matter and scope, and arbiter of copyright owner and public rights.

Like patent law, copyright carves particular and limited exceptions to policies favoring competition, treatment of knowledge and information as free for all to use, and freedom to copy. It is instrumental, providing limited exclusive rights only in the expression of ideas, and none at all in ideas or the methods, practices or processes of their application. This limitation, and its constitutional foundation, is recognized in other contemporary federal appellate court decisions. Thus, in a different context, the Ninth Circuit in *Sony v. Connectix* cited *Bonito Boats* when rejecting Sony's efforts to distinguish prior computer program code reverse engineering fair use precedents, stating as follows:

[S]ome economic loss by Sony as a result of... competition [from those who reverse engineer] does not compel a finding of no fair use. Sony understandably seeks control over the market for devices that play games Sony produces or licenses. The copyright law, however, does not confer such a monopoly. 163

The court continued, quoting its earlier decision in Sega v. Accolade:

An attempt to monopolize the market by making it impossible for others to compete runs counter to the statutory purpose of promoting creative expression and cannot constitute a strong equitable basis for resisting invocation of the fair use doctrine.¹⁶⁴

^{162.} See, e.g., Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992); Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807 (1st Cir. 1995). 163. 203 F.3d at 607.

^{164.} *Id.* at 607-08 (quoting Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1523-24 (9th Cir. 1992)).

Finally, and referencing Bonito Boats, the Ninth Circuit explained, "[if] Sony wishes to obtain a lawful monopoly on the functional concepts in its software, it must satisfy the more stringent standards of the patent law."165

Constricted judicial reading of § 301(a) to narrowly bind its operation obviously leaves more subject to the Supremacy Clause as arbiter of alleged state law conflicts with federal copyright law and policy. Prediction may be folly, yet Bowers and other decisions that permit copyright owners to pick and choose beg Supremacy Clause preemption scrutiny when contract and business practices claim the benefits of copyright and, simultaneously, the freedom to contractually opt out of statutory limitations that secure public benefits. 166 Courts, such as the Bowers majority, that do this substantially remake the intellectual property law landscape, modify state trade secret law in the form upheld in Kewanee, and revise federal copyright law by expanding its protection and copyright owner rights to include program-embodied ideas, procedures, process, systems and methods of operation.

If the literal language of § 301(a) does not reach, the Supremacy Clause, in conjunction with Article I, Section 8, Clause 8 and the § 301(a) statement that the Copyright Act is the exclusive source of protection for copyright subject matter, establishes that federal law and policy is not hobbled by statutory language processed under judicially-fashioned decision aids and canons of statutory interpretation.

VII. CONCLUDING OBSERVATIONS

Copyright creates limited rights in order "to encourage the production of original works by protecting the expressive elements while leaving the ideas, facts and functional concepts in the public

166. See David Nimmer, et al., The Metamorphosis of Copyright Into Expand, 87 CAL. L. REV. 17 (1999); David A. Rice, Copyright as Talisman: Expanding 'Property' in Digital Works, 16 INT'L REV. OF LAW, COMPUTERS &

ТЕСН. 113 (2002).

^{165.} Id. at 605 (citing Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489) U.S. 141, 160-61 (1989)). Bonito itself taught that unpatentable methods, processes, and other such matter are free for use by all, subject only to alternative protection by state trade secret law, including its preemption-saving recognition of reverse engineering as a lawful means of trade secret discovery.

domain for others to build on."¹⁶⁷ Its schema, as presented in the Constitution, is to create limited author's rights for a limited time in order to promote creative activity in service of the ultimate aim of "promoting broad public availability of literature, music and the other arts."¹⁶⁸ Recognition of even decompilation reverse engineering as a fair use emphasizes the public interest in and claim to that knowledge.

Judicial respect for the exclusively statutory character of copyright underpins the often expressed preference to leave important unsettled issues for Congress whenever that is possible. 169 The corollary expressed in *Eldred v. Ashcroft* is that courts must strongly defer to what Congress has wrought. 170 *Bowers*, like *ProCD*, is no exemplar of these principles. It eschewed reading the Copyright Act as a whole and unhesitatingly delegated to standard form shrink-wrap drafters the power to amend the Copyright Act by overriding § 107 and striking the § 106 express "subject to" reference to § 107. More importantly, it chose this with knowledge that the real effect was to permit vendor-crafted shrink-wrap license term amendment of § 102(b) so as to expand copyright pro-

Sega Enters. Ltd., 977 F.2d at 1527. The realm of public interests and use rights is called the "public domain." See generally COLLECTED PAPERS: DUKE CONFERENCE ON THE PUBLIC DOMAIN (James Boyle ed. 2003); Yochai Benkler, Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain, 74 N.Y.U. L. REV. 354, 360-62 (1999); Jessica Litman, The Public Domain, 39 EMORY L. REV. 965, 967-68 (1990). In contrast to the ProCD and Bowers treatment of copyright as well as patent creating strong proprietary rights good against the world, copyright and patent balance statutory private rights and public interests in access and use. This is most clearly expressed in the patent law quid pro quo of disclosure and, more particular to Bowers, the copyright law fair use doctrine and limitation of copyright protection to only the author's expression of ideas, methods, processes, procedures and the like. It is obvious in that light that the copyright law public interest or rights guarantees are not private rights of the kind before the Massachusetts Supreme Judicial Court in Canal Electric Co. v. Westinghouse Electric Corp., 548 N.E.2d 182, 187-88 (Mass. 1990), the authority cited by the Bowers majority as supporting freedom to contractually waive the public protection established by § 107. Bowers, 320 F.2d at 1325.

^{168.} Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975); see also Fogerty v. Fantasy, Inc., 510 U.S. 517, 526-27 (1994); Eldred v. Ashcroft, 123 S. Ct. 769, 784-85 (2003).

^{169.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984); Stewart v. Abend, 495 U.S. 207, 230 (1990); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 168 (1989).

^{170.} Eldred v. Ashcroft, 123 S. Ct. 769, 779, 785 (2003).

tection for copyright-protected digital products¹⁷¹ and, secondarily, substantially alter state trade secret law. It approved use of contract to leverage copyright into what one recent article has characterized as "expand."¹⁷² Despite that knowledge, it not once considered the intent of Congress or, in broader terms, the very explicit statement in § 301(a) that copyright is solely statutory and federal.

The 1976 Copyright Act is a comprehensive statute enacted pursuant to the Patent and Copyright Clause after years of preparation, extensive debate, negotiation and congressional deliberation. 173 Perhaps the Bowers majority was so strongly swaved by Judge Easterbrook's animating notion that contract and vendor freedom with its use is the strongest of all public policies, one paramount even to federal legislation enacted pursuant to an express Article I power.¹⁷⁴ It is quite to the contrary in contract law, including its expression in the cases cited and relied upon by the Bowers majority, when enforcement would violate public policy. In that context, relevant and not just directly superceding federal or state legislation ranks below only the federal or a state constitution and well above contract or other private law as a source of applicable public policy. 175 The relevant sources of public policy in this instance are Article I, Section 8, Clause 8 of the U.S. Constitution and the 1976 Copyright Act and their protection of public interests.

The core of the latter is the § 102 definition of the scope and limits of copyright and its protection. It is the cornerstone of the

^{171.} Knowledge is attributed based on the fact that Judge Dyk changed and explained his position on rehearing, and on the author's review of briefs submitted to the Federal Circuit for its consideration on rehearing.

^{172.} Nimmer, supra note 166; see also, Rice, supra note 166.

^{173.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 462, n.9 (1984) (Blackmun, J., dissenting).

^{174.} See Bowers v. Baystate Technologies, Inc. for suggestion of this view. 320 F.3d 1317, 1323-24 (Fed. Cir. 2003).

^{175.} See RESTATEMENT (SECOND) CONTRACTS §§ 178-179 (1978). Well before the ProCD decision and the Federal Circuit decision in Bowers, Ray Patterson and Stanley Lindberg expressed the view that standard form shrinkwrap licenses are almost surely against public policy as unilateral attempts to override public law with private law in an adhesion contract. L. RAY PATTERSON & STANLEY W. LINDBERG, THE NATURE OF COPYRIGHT 220 (1991). One can be sure that to the extent the provisions of such licenses preclude fair use of the work, they have no legal effect, although their in terrorem effect may be substantial.

"copyright bargain" and marks the boundaries of copyright protection vis a vis patent and other intellectual property law, and also that which is wholly within the public domain and free to copy. Copyright owner rights have meaning only in reference to § 102, and those rights are expressly subject to or shaped by the fair use and other statutory limitations.

Copyright is exclusively statutory and it is presumptively outside the province of the courts or copyright owners to effectively amend the statute. This must be particularly so where amendment is accomplished by standard form contracts and terms that are routinely used market-wide to redefine the scope of copyright protection in service of copyright owner interests. Bowers is, in that regard, the best evidence of *ProCD*'s disposition and reasoning concerning vendor freedom with contract and creation of a virtual presumption that standard form shrink-wrap contracts and terms lie beyond § 301(a) or other preemption. ProCD was the springboard for the *Bowers* majority to perfunctorily conclude that if § 301(a) does not preempt use of shrink-wrap standard form contract terms to circumvent Feist, then a fortiori it does not preempt use of standard form terms to circumvent a particular or, by extension, any statutory fair use limitation on the rights of copyright owners. 176 This, like ProCD, strongly manifested a recent judicial as well as digital product distributors' tendency toward

Judge Dyk surmised that the majority's rationale would permit a standard form shrink-wrap contract to nullify any § 107 to § 120 limitation on the rights of copyright owners. His principal example was the first sale doctrine codified in § 109(a) which is already a matter of controversy. Purported licensing of the use of individual copies rather than selling them is intended to have precisely the effect of circumventing § 109(a) for the purpose of using contract terms to restrict uses and prohibit copy transfer. David A. Rice, Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine, 30 JURIMETRICS J. 157, 157-59 (1990); Lothar Determann & Aaron Fellmeth, Don't Judge a Sale by Its License: Software Transfers Under the First Sale Doctrine in the United States and the European Community, 36 U. SAN FRAN. L. REV. 1, 4 (2001). While some cases accept this without question, there is a division. One recent decision expressly rejected vendor characterization as a "license" as legally dispositive. Looking to the realities of the transaction, the court concluded it was functionally a "sale" and therefore held that a computer program copy shrink-wrap license term that prohibited copy transfer did not yest the copyright owner with continuing authority to control downstream transfer. See Softman Prods., LLC v. Adobe Sys., Inc, 171 F. Supp. 2d 1075, 1084 (C.D. Cal. 2001).

increasingly treating copyright as truly "property-like" in an absolute sense.

Equally, but only with respect to computer programs, *Bowers* substantially altered state trade secret law by upholding state contract law transformation of reverse engineering from a lawful into an impermissible means of discovery. This was contrary to *Bonito Boats* and the reasons articulated in *Kewanee* when the Court sustained state trade secret law against constitutional challenge. It also is highly unlikely that a state court would enforce such a mass-market contract term as a matter of state law. State common law and the Uniform Trade Secrets Act, now enacted in more than forty states, expressly make reverse engineering a lawful means of trade secret discovery. Contracting out of this, except in an employer-employee or truly two-party nondisclosure agreement, would risk challenge under *Bonito* and *Kewanee* and invite contest as against state public policy.

Judge Easterbrook's *ProCD* opinion is often criticized by legal scholars but, as it was in *Bowers*, often embraced by other courts without reflection. Even so, most decisions that follow *ProCD* concern state contract law enforceability of shrink-wrap contracts and especially terms provided on a "money now, terms later" basis, an issue not before the court in *Bowers*. Instead, the majority followed *ProCD* on its second issue, whether a term contained in a computer program copy shrink-wrap license agreement is subject to copyright law preemption.

Preemption is, of course, a blunt instrument.¹⁷⁸ On the other hand, even legislation that depends on case-by-case application by the courts is blunt. The Copyright Act, though it leaves much to case-by-case application, speaks clearly. Sections 106 and 107 in-

^{177.} Concerning the common law, see the discussion in *Kewanee*. 416 U.S. 470, 490 (1974); see also Rockwell Graphic Sys., Inc. v. Dev. Indus., Inc., 925 F.2d 174, 178-80 (7th Cir. 1991); Chicago Lock Co. v. Fanberg, 676 F.2d 400, 404 (9th Cir. 1991); E.I. duPont de Nemours & Co. v. Christopher, 431 F.2d 1012, 1015 (5th Cir. 1970). The rule is codified in section 1 of the Uniform Trade Secrets Act. Unif. Trade Secrets Act § 1(1)-(2) (amended 1985), 14 U.L.A. 437 (1979) (as explained in comment 1 to section 1); see also RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 43 (1995).

^{178.} This has been emphasized by other authors who have dealt with the copyright and contract intersection. See, e.g., Lemley, supra note 110, at 136; J.H. Reichman & Jonathan A. Franklin, Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Goods Uses of Information, 147 U. PA. L. REV. 875, 920-22 (1999).

clude express cross-references, effectively making the two as one to strike a balance between exclusively statutory private rights and public interests.¹⁷⁹ Section 102(b) prescribes that copyright for an original work of authorship "[i]n no case... extend[s] to any idea, procedure, process, system, method of operation, concept, principle or discovery... embodied in such a work." Similarly, albeit no model of statutory clarity, § 301(a) unmistakably expresses the fundamental intent that the 1976 Act is the exclusive source of copyright and that no such right or its equivalent may be claimed under state common law or statute. It defies imagination that Congress intended, but did not state, that general contract law and the Uniform Commercial Code could be used to enforce standard form, market-wide "private legislation" to repeal § 107 and, with that, effectively rewrite § 102(b).¹⁸⁰

Theoretically, the two-party paradigm of neo-classical contract is not a blunt instrument. On the other hand, when it is used under the guise of "freedom of contract" to justify "freedom with contract" to go well beyond securing the efficiency of standardizing terms and risk, it is blunt. The extreme of rewriting, with marketwide effect, statutes enacted by Congress or state legislatures so as to claim their private benefits and then enhance them by negating intended public benefits of the same legislation, dramatically exemplifies this potential. In this instance the business method was not used just to snuff § 107, but to even more brazenly redefine what copyright protects so as to broaden the reach of the solely statutory rights of copyright owners. The exclusive power to do this lies with Congress, not standard form shrink-wrap contract drafters or even the judiciary. 181

^{179.} See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 447 (1984); Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 546-47 (1985); Bateman v. Mnemonics, Inc., 79 F.3d 1532, 1542 (11th Cir. 1996).

^{180.} The late Professor Freidrich Kessler was the first to introduce the "private legislation" notion in his seminal work on adhesion contracts. Friedrich Kessler, Contracts of Adhesion - Some Thoughts About Freedom of Contract, 43 COLUM. L. REV. 629 (1943).

^{181.} Merges, supra note 123, at 1613; Neil W. Netanel, Copyright and a Democratic Civil Society, 106 Yale L.J. 283, 383-85 (1996).

Other proffered alternatives to preemption, though not blunt, are more nuanced and also attractive in some respects. Each, however, has its own limits as effective approaches, largely because they often would require fact-intensive adjudication in their application. The copyright misuse doctrine, considered as one alternative by Mark A. Lemley, 183 is now generally recognized but sparingly applied by the courts. 184 Maureen A. O'Rourke has proposed an alternative market-based approach drawn to competition policy and basic principles and methodologies of antitrust law. 185 Review of either is beyond the scope of this Article, but a principal drawback of both is the necessity of case-by-case litigation, a condition that introduces uncertainty and litigation cost barriers that foreclose relief for most retail market licensees and small businesses. 186

^{182.} The question that I found most difficult to resolve when addressing copyright preemption of contract terms was whether commercial contract terms prohibiting computer program code reverse engineering should be held preempted by federal copyright law. See Rice, supra note 87, at 627-28. After further consideration, I since have rejected my tentative original "yes" position in favor of "it depends." This expresses, in accord with Judge Dyk in Bowers, that such a term in a truly negotiated agreement could be enforced in circumstances where it did not otherwise do violence to federal copyright law and policy. Bowers, 320 F.3d at 1336. At the same time, it reflects my view that the mere fact that a transaction is commercial ought not to foreclose the possibility of preemption. Other leading scholars have expressed similar views since 1992, beginning with Maureen A. O'Rourke who, in 1995, expressly challenged my originally expressed view. See O'Rourke, supra note 158, at 522 n.193; see also Lemley, supra note 110; Scotchmer, supra note 3.

^{183.} Lemley, supra note 110, at 151. See also Marshall Leaffer, Engineering Competitive Policy and Copyright Misuse, 19 U. DAYTON L. REV. 1087 (1994) (discussing and rejecting justification of reverse engineering based on copyright misuse doctrine); Reichman, supra note 178, at 923-24 (discussing limitations of copyright misuse).

^{184.} One relatively recent and particularly prominent application was by the Fifth Circuit in *Alcatel USA*, *Inc. v. DGI Technologies*, *Inc.*, 166 F.3d 772, 792-95 (5th Cir. 1999).

^{185.} Maureen A. O'Rourke, Copyright Preemption After the ProCD Case: A Market-Based Approach, 12 BERKELEY TECH. L.J. 53, 87-90 (1997).

^{186.} While most business or commercial licensees presumably are financially more able than consumer end-users to litigate, most small to medium size businesses and small professional practices will be financially incapable of litigating against major vendors of computer program copies and other digital products. See David A. Rice, Remedies, Enforcement Procedures and the Duality of Consumer Transaction Problems, 48 B.U. L. Rev. 559, 567-69 (1968).

Debates about bluntness or nuance aside, one alternative is totally unacceptable. Judicial consideration and weighing of the necessity or rationality of copyright owners' business practices standing alone¹⁸⁷ is not justification for judicial delegation of a power to self-interestedly supercede, annul or redraw what Congress, or for that matter a state legislature, has enacted in its representative capacity.¹⁸⁸ Even worse is a court doing this while

Judge Easterbrook in ProCD advanced resulting price and other possible consumer benefits as a reason for holding the contract term enforceable under state law and not preempted by federal copyright law. Neither the Wisconsin statute, Copyright Act nor U.S. Constitution made that a factor for judicial consideration. Moreover, the conclusory assertions are more off-thecuff speculation and rationalization than reasoned and probative economic analysis. Cf. O'Rourke, supra note 185, at 62-63 (describing ProCD argument for enforceability as, in part, "a more sophisticated economic approach"). Consistent therewith, Judge Easterbrook's accompanying legal reasoning, though topsy-turvy, misstated "Kewanee Oil Co. v. Bicron Corp. holds that contracts about trade secrets may be enforced," 86 F.3d at 1454 (citation omitted), and stated in dictum that "[t]o the extent licenses facilitate distribution of object code while concealing the source code (the point of a clause forbidding disassembly), they serve the same procompetitive functions as does the law of trade secrets." Id. at 1455 (citing to Rockwell Graphics Sys., Inc. v. DEV Indus., Inc., 925 F.2d 174, 180 (7th Cir. 1991)). Kewanee did not so hold. Furthermore, Rockwell concerned employer-employee confidentiality and nondisclosure agreements regarding technical drawings for machining replacement parts not susceptible to duplication based on reverse engineering. In addition to being irrelevant on its facts, Rockwell in fact generally treated the employee agreements as enforceable, but not so if the trial court on remand determined that Rockwell had not taken adequate safeguards to protect its trade secrets in connection with its own business-related disclosures to third parties. Id. at 177-80. It is even more discouraging to see such blithe judicial misuse of legal authority to create an illusion of "legal reasoning" than a court's use of so obviously speculative and superficial "economic analysis."

188. The reference to state legislation particularly concerns ProCD and its outcome-justifying interpretation of the Wisconsin Uniform Commercial Code without any consideration of relevant Wisconsin appellate court decisions, state legislative history documents, or the judicially declared principle that Wisconsin courts emphasize uniformity of law when interpreting and applying its Uniform Commercial Code in dealing with issues of first impression. See Belke v. M&I First Nat'l Bank of Stevens Point, 525 N.W.2d 737, 739 (Wis. Ct. App. 1994). This principle presumably would incline a Wisconsin appellate court toward following Step-Saver and Arizona Retail unless the court was convinced that the out-of-state decisions were wrong. Putting a point on it all, Erie R.R. Co. v. Tompkins, 304 U.S. 64 (1938), requires a federal court to follow, not ignore or remake, state statutes and judicial decisions in deciding state law issues, including decisions that establish guiding principles for interpretation of a state's Uniform Commercial Code. See, e.g.,

wearing blinders. Digital product vendor survival is not dependent on enforcing all business practices or contract terms that they prefer. United States computer program copy and database product vendors are subject in Europe, Australia, and elsewhere to laws that regulate and proscribe contract terms, including but not limited to ones that prohibit reverse engineering of computer program code. Vendors have not found this so compromising that the unavailability of what they claim absolutely necessary in cases

Northrop Corp. v. Litronic Indus., Inc., 29 F.3d 1173, 1178 (7th Cir. 1994) (reasoning that, despite court's preference for minority rule, Illinois judicial decisions create presumption that Illinois will adopt majority view on UCC section 2–207 issue based on UCC section 1–102 policy of promoting uniformity in law, and presumption was not rebutted).

189. Most closely related to *Bowers* is that the European Council Software Directive secures the right, without copyright owner authorization, to "study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program" while performing any act to which the user is entitled. Council Directive 91/250 of 14 May 1991 on the Legal Protection of Computer Programs, art. 5(3), 1991 O.J. (L 122) 42. Specific to decompilation, the Directive states that it is permissible to reproduce code and translate its form when it is "indispensable to obtain information necessary to achieve the interoperability of an independently created computer program with other programs" so long as that information is not given to others except within the purpose quoted above, and not used to develop, produce, or market a program that infringes the expression protected by copyright. *Id.* art. 6. Finally, article 9 of the Directive makes null and void any contractual provisions that are contrary to article 6 or the exceptions stated in article 5(2) and (3). *Id.* art. 9(1).

Of more general application is Council Directive 93/13 of 05 April 1993 on Unfair Terms in Consumer Contracts, art. 3(1), 1993 O.J. (L 95) 29 (applicable to contracts that have not been individually negotiated and a term causes a significant imbalance of the parties' rights and obligations under the contract, to the detriment of the consumer). The same article declares that the first condition is always satisfied if the contract "has been drafted in advance and the consumer has therefore not been able to influence the substance of the term, particularly in the context of pre-formulated standard contract." Id. art. 3(2). The general standard of "unfair" is defined in article 2. Certain types of terms defined with reference to their objects or effects are listed in an Annex to which article 3.3 refers in stating that that they are indicative but non-exhaustive of terms that Members must prohibit or regulate, including Annex 1(i) which includes "irrevocably binding the consumer to terms with which he had no real opportunity of becoming acquainted before the conclusion of the contract". Article 4 sets forth general guidelines for determining if a term is "unfair." An important instance of judicial determination by the House of Lords of the meaning of "unfair" under the United Kingdom's implementation, the Unfair Terms in Consumer Contracts Regulation, is Dir. Gen. of Fair Trading v. First Nat'l Bank Plc, 1 A.C. 481 (H.L. 2002).

such as *ProCD* and *Bowers* has caused them to withdraw from those markets. Similar legislation exists in other countries. Other European legal measures regulate or prohibit terms often included in United States market shrink-wrap licenses often a recent Australian Copyright Law Review Commission report strongly recommended the Copyright Act be amended to prevent use of contract to negate statutory exceptions that are "permitted purposes" safeguarded by § 116(a) of the Act, including, under section 47B, access and temporary reproduction for the purposes of achieving interoperability with a computer program protected by effective technological means. Of additionally, it is common outside the United States to find administratively implemented unfair contract terms legislation addressed primarily to take-it-or-leave it standard form terms generally.

Bowers and ProCD demonstrate above all that even prominent courts, and certainly vendors' legal counsel, lack the omniscience, perspective and representative responsibility and role of Congress to superimpose their judgment and will for the law and policy set forth in the 1976 Copyright Act after twenty years of preparatory work, discussion and negotiation. Even more certain is that neither is at liberty to legislate with disregard for the Patent and Copyright Clause and the Supremacy Clause as interpreted in close context by the Supreme Court. Judge Dyk, although in some respects not fully developing his arguments and not clearly distinguishing between § 301(a) and constitutional preemption, recognized this in principle. In addition, his identifi-

^{190.} Jonathan Band & Masanobu Katoh, Interfaces on Trial: Intellectual Property and Interoperability in the Global Software Industry 258-62 (1995); Lemley, *supra* note 54, at 1253 n.53 (providing a country-by-country listing on enforceability of shrink-wrap licenses and terms drawn from 2 American Intellectual Property Law Association, Software Licensing Compendium 35 (1992)).

^{191.} Thomas Hoeren, *The European Union Commission and Recent Trends in European Information Law*, 29 RUTGERS COMPUTER & TECH L.J. 1, 13-14 (2003).

^{192.} Copyright Law Review Committee, at http://www.ag.gov.au/www/clr Home.nsf (last visited October 28, 2003). The Committee is a part-time specialist advisory group appointed by the Attorney General of Australia. Its function is to study and report on specific copyright issues referred to it by the government. *Id*.

^{193.} Council Directive 93/13 of 05 April 1993 on Unfair Terms in Consumer Contracts, art. 3(1), 1993 O.J. (L 95) 29.

cation of consequences attendant to the majority's refusal to substantially consider federal preemption did more than highlight prospective effects of the decision as precedent. It demonstrated the essential wisdom of separation of powers as a constraint on the judiciary rather than just an independent judiciary's constraint on Congress and the Executive.

Prediction, as stated before, may be folly, and especially so in a fast-developing and still nascent area of the law. In this instance, however, the risk seems rather low. The legal reasons for rejecting Bowers and its startling statute-preemption effects are compelling. Fortunately, the majority decision is not binding in any other federal circuit because the issue was one of copyright rather than patent law. Just as a Wisconsin state court after ProCD may reject the Seventh Circuit's interpretation of Wisconsin's Uniform Commercial Code, even the First Circuit is free to disapprove the Bowers majority's misreading or misapplication of Massachusetts law (Beacon Hill and Canal Electric) and its selective and superficial application of First Circuit law (Data General). More importantly, all federal courts remain free to reject and correct the legal errors and perverse consequences of *Bowers*. The resulting circuit conflict would present the Supreme Court with an opportunity to restore federal copyright law to its proper status vis a vis state contract law. Alternatively, perhaps Congress itself may be moved some day to affirm that it meant what it enacted in § 107 and § 102(b) and will not abide self-interested private party or judicial arrogation of flat-out legislative revision in the guise of statutory interpretation and statute-based adjudication. Whether the correction emanates from the Court or Congress, its message will be that federal courts must refrain from complicity with copyright owners' presumptuously preemptive misuse of state contract law to substantially enlarge their substantial but limited statutory rights by diminishing or zeroing out intended public benefits of copyright.