IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

No. 96-1139

ProCD, Inc.,

Plaintiff-Appellant,

v.

Matthew Zeidenberg and Silken-Mountain Web Services, Inc.,

Defendants-Appellees.

**On Appeal From a Judgment of the United States District Court
for the Western District of Wisconsin
Barbara B. Crabb, Chief Judge**

**BRIEF *AMICUS CURIAE* OF
AMERICAN COMMITTEE FOR INTEROPERABLE SYSTEMS
IN SUPPORT OF APPELLEES**

Peter M.C. Choy
American Committee for
  Interoperable Systems
2550 Garcia Avenue
Mountain View, CA 94043
(415) 336-2482

Prof. Mark A. Lemley
Counsel of Record
University of Texas School of Law
727 East 26th Avenue
Austin, TX 78705
(512) 471-7405

Dated: March 28, 1996

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CONSTITUTIONAL PROVISIONS AND STATUTES

OTHER AUTHORITIES

HALE AND DORR
COUNSELLORS AT LAW

60 STATE STREET, BOSTON, MASSACHUSETTS 02109
617-526-6000 • FAX 617-526-5000

THOMAS N. O'CONNOR
617-526-6128

March 29, 1996

BY FACSIMILE

Peter Choy, Esq.
Micro Systems
2550 Garcia Avenue
Mail Stop PAL 1-521
Mountain View, CA   94043

> Re: ProCD, Inc.
>   v. Matthew Zeidenberg and Silken Mountain Web Services
>   Appellate Court No. 96-1139

Dear Mr. Choy:

In accordance with our telephone conversations of the past couple of days, this will confirm that my client, ProCD, Inc., does not object to the American Committee for Interoperable Systems filing an amicus brief in this case.

Thank you very much.

Very truly yours,
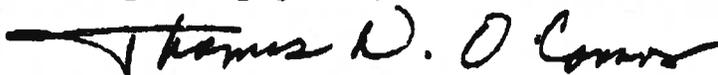
Thomas N. O'Connor

Thomas N. O'Connor

TNO/bjo

Keith Napolitano
1602 N. Thompson Dr., #301
Madison, WI 53704
(608) 243-9084

March 27, 1995

Peter M. C. Choy
American Committee for Interoperable Systems
Mail Stop PAL1-521
2550 Garcia Avenue
Mountain View, CA 94043

Dear Mr. Choy,

Matthew Zeidenberg and Silken Mountain Web Services, Inc., consent to your
request to file a brief as amicus curiae on their behalf in the matter of ProCD,
Inc., v. Zeidenberg (7th Cir. No. 96-1139).

Sincerely,

Keith Napolitano

Keith Napolitano
Attorney for Appellees

CERTIFICATE OF INTEREST

The undersigned counsel of record for *amicus curiae* American Committee for Interoperable Systems furnishes the following information in compliance with Circuit Rule 26.1.

1.   The full name of the *amicus curiae* represented by the undersigned is the American Committee for Interoperable Systems ("ACIS").

2.   ACIS is an informal organization, not a corporation. Its members are:

> Accolade, Inc.
> Advanced Micro Devices, Inc.
> Amdahl Corporation
> America Online, Inc.
> Broderbund Software, Inc.
> Bull HN Information Systems, Inc.
> Chips and Technologies, Inc.
> Clearpoint Research Corporation
> Color Dreams, Inc.
> Comdisco, Inc.
> Emulex Corporation
> Forecross Corporation
> The Fortel Group
> Fujitsu Systems Business of America, Inc.
> Hitachi Data Systems
> ICTV
> Johnson-Laird, Inc.
> Landmark Systems Corporation
> LCS/Telegraphics
> MidCore Software, Inc.
> NCR Corporation
> New York Systems Exchange, Inc.
> Octel Communications Corporation
> Passage Systems, Inc.
> Phoenix Technologies, Ltd.
> Plimoth Research Inc.
> Seagate Technology, Inc.
> Software Association of Oregon
> Software Entrepreneurs Forum
> Storage Technology Corporation

Sun Microsystems, Inc.
Tandem Computers, Inc.
3Com Corporation
Western Digital Corporation
Zenith Data Systems Corporation

3. Although the undersigned is Of Counsel to Fish & Richardson, he represents ACIS in his individual capacity.

Respectfully submitted,
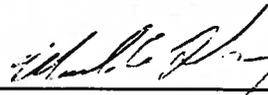
Prof. Mark A. Lemley
University of Texas School of Law
727 East 26th Avenue
Austin, TX 78705
(512) 471-7405

Dated: March 28, 1996

IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

No. 96-1139

ProCD, Inc.,

Plaintiff-Appellant,

v.

Matthew Zeidenberg and Silken-Mountain Web Services, Inc.,

Defendants-Appellees.

**On Appeal From a Judgment of the United States District Court
for the Western District of Wisconsin
Barbara B. Crabb, Chief Judge**

BRIEF *AMICUS CURIAE* OF
AMERICAN COMMITTEE FOR INTEROPERABLE SYSTEMS
IN SUPPORT OF APPELLEES

The American Committee for Interoperable Systems ("ACIS") submits this brief as

amicus curiae and respectfully requests that this Court affirm the decision below.

INTEREST OF *AMICUS CURIAE*

ACIS is an informal organization of companies that develop innovative software and

hardware products that interoperate with computer systems developed by other companies.[1]

ACIS believes that computer programs deserve effective intellectual property protection to

---

[1] A list of ACIS members is included in the Certificate of Interest.

give developers sufficient incentive to create new programs. At the same time, ACIS is concerned that granting developers excessive protection will impede innovation and inhibit fair competition in the computer industry. ACIS urges the application of legal standards that will effectuate copyright law's fundamental aims by ensuring authors "the right to their original expression," while at the same time encouraging competitors "to build freely upon the ideas and information conveyed by a [copyrighted] work." *Feist Publications, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 349-50 (1991).

Neither ACIS nor its members have a direct financial interest in the outcome of this litigation. However, reversal of the district court's decision in this case would have serious anti-competitive consequences for ACIS members and for consumers and the computer industry as a whole. In particular, reversal of the district court's holding on copyright preemption would permit software vendors unilaterally to outlaw reverse engineering and other privileges that the Copyright Act grants to the users of computer programs. This would stifle the ability of ACIS member companies to develop innovative and competitive products.[2]

SUMMARY OF ARGUMENT

The United States Copyright Act embodies a compromise between two competing goals: encouraging the creation of new works, and encouraging the widespread dissemination and use of works. To reconcile these competing interests, Congress in passing the Act, and

---

[2] Of course, this Court need address the preemption issue only if it finds the ProCD shrink-wrap license to be enforceable as a matter of contract law.

the courts in applying it, have struck a delicate balance between the rights of authors and the privileges of users in a wide range of contexts. Any departure from this balance may have devastating consequences for producer and consumer welfare.

In this brief, ACIS focuses on one particular example of the copyright balance at work — the well accepted privilege of users of computer programs to "reverse engineer" those programs in order to determine how to make interoperable programs. Although the privilege to reverse engineer computer programs for certain limited purposes is firmly established in modern copyright law, some software vendors have attempted to circumvent this legal mandate by enforcing license terms that purport to prohibit customers from reverse engineering their software.

To permit software vendors, pursuant to state contract law, to enforce contractual restrictions on reverse engineering would frustrate the important federal copyright policy — embodied in Section 107 of the Copyright Act — that gives a privileged place to reverse engineering. The Supremacy Clause of the U.S. Constitution prevents this result by preempting any enforcement of the offending contractual provisions. Further, the dire consequences forecast by appellant's *amici* if these provisions are not enforced are overstated and implausible. The computer software industry is robust and growing even without the additional protection appellant and its *amici* demand.

ARGUMENT

I. COPYRIGHT LAW REPRESENTS A "DELICATE BALANCE" BETWEEN THE RIGHTS OF AUTHORS AND USERS

A copyright is not an absolute property right. Rather, it is the result of "a scheme of carefully balanced property rights that give authors and their publishers sufficient inducements to produce and disseminate original creative works and, at the same time, allow others to draw on these works in their own creative and educational activities." 1 Paul Goldstein, *Copyright: Principles, Law and Practice* § 1.14, at 1:40 (1995). This regime of limited authorial rights was established for the express purpose of achieving two goals — encouraging the creation of new works of authorship by giving authors incentives to create, and encouraging the dissemination and use of these new works among the general public. *Id.* The Supreme Court has made clear that the first goal is but a means to the end of the second goal:

> Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an author's creative labor. But the ultimate aim is, by this incentive, to stimulate . . . creativity for the public good.

Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).

Sometimes, these related goals are at odds with each other. For instance, one way to encourage the creation of new works of authorship is to give more and more powerful rights to the authors. The greater the benefit authors receive, arguably, the greater the incentive for authors to produce new works. But expanding copyright in this fashion comes at a price. Giving greater exclusive rights to authors would reduce the availability of existing works to

both the ultimate consumer and to those who would alter, improve, or extend the works that had come before. Thus, expanding copyright will not necessarily encourage the dissemination of works to those who could make use of them, and may not even optimally encourage the creation of works in the long run.[3]

Congress and the courts have responded to this complex incentive structure by creating a set of copyright rules that is essentially a compromise between the desires of authors and those of users. *Stewart v. Abend*, 495 U.S. 207, 225 (1990).[4] The Copyright Act grants certain exclusive rights to authors, but it also reserves privileges (such as the fair use doctrine, 17 U.S.C. § 107, and the rights granted in Section 117 of the Act) to users. The Supreme Court has repeatedly underscored that the compromises in the Copyright Act reflect a delicate balance between these competing interests: "the Act creates a balance between the artist's right to control the work during the term of the copyright protection and the public's need for access to creative works." *Stewart*, 495 U.S. at 228; *accord Fogerty v. Fantasy, Inc.*, 114 S. Ct. 1023, 1029-30 (1994); *Feist*, 499 U.S. at 349-50.

---

[3] The situation is even more complex in the computer industry, from which this case arises. The interests at stake are not just those of the original creator, subsequent creators, and users. The interests of computer hardware manufacturers, original and subsequent operating system developers, original and subsequent developers of search engines, compilers and distributors of uncopyrightable data, advertisers and end users are all at stake, and are each somewhat different from the others.

[4] *See also* Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. Cal. L. Rev. 1239, 1278 (1995) ("Compromises abound in copyright law. Creative expression may be copyrighted, but not ideas. Copyrights, like patents, are granted only for a limited term. The copyright owner is granted certain exclusive rights, but those rights are subject to a number of statutory exceptions. And the rights granted to the copyright owner do not include the right to control the use of the copyrighted work by the purchaser."); *accord* Jessica Litman, *The Public Domain*, 39 Emory L.J. 965 (1990).

Because of the delicate nature of this balance between competing interests, courts must exercise care in expanding (or contracting) the nature of the rights granted to the copyright owner, lest the unintended consequences of such a change bring the whole edifice tumbling down.

II. USERS HAVE A FIRMLY ESTABLISHED PRIVILEGE TO "REVERSE ENGINEER" COPYRIGHTED COMPUTER PROGRAMS

Unlike traditional literary works such as novels and plays that stand alone, computer programs never function by themselves. They function only by interacting with other programs, and with the computer environment in which their developers place them. This environment is absolutely unforgiving. Unless the computer program conforms to the precise rules for interacting with the other elements of the system, no interaction between the program and the system is possible. As a result, no matter how much better or cheaper the new program is, it will not be marketable unless it can work with (or "interoperate" with) existing computer systems. Such interoperability is achieved by conforming to the rules that the developer of one program establishes as a "socket" to enable another program to "plug into" it.

These rules are referred to in computer parlance as interface specifications. It is well established that copyright does not extend to interface specifications; thus, the interoperable developer is free to conform to the interface specifications established by the first comer.[5]

---

[5] *See, e.g., Lotus Dev. Corp. v. Borland Int'l, Inc.,* 49 F.3d 807 (1st Cir. 1995); *Bateman v. Mnemonics,* No. 93-3234, 1996 U.S. App. LEXIS 5155 (11th Cir. Mar. 22, 1996); *Computer Assoc. Int'l, Inc. v. Altai, Inc.,* 982 F.2d 693 (2d Cir. 1992); *Sega Enter. Ltd. v. Accolade, Inc.,* 977 F.2d 1510, 1527-28 (9th Cir. 1992). These cases suggest that interface specifications are the subject matter of patents. *See Sega,* 977 F.2d at 1526.

But because most programs are distributed in object code format, *i.e.*, machine readable 0s

and 1s, the precise interface specifications cannot be identified simply by looking at the

program. Rather, to learn the interface specifications necessary for interoperability, the

interoperable developer must reverse engineer the program with which it seeks to

interoperate.[6]

The nature of software technology requires the making of interim copies while

performing some software reverse engineering techniques. Decompilation or disassembly,

for example, involves "translating" the machine-readable object code into a higher level,

human readable, format which a trained programmer can analyze. This translation entails the

making of a derivative work, in apparent contravention of the author's exclusive rights. *See*

17 U.S.C. § 106(2). Courts in several circuits, however, have explicitly recognized that such

interim copies are a fair use when the reverse engineering is performed for purposes of

uncovering interface specifications necessary for interoperability. *See Sega Enter. 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, 843-44 (Fed. Cir. 1992); *Bateman v. Mnemonics, Inc.*, No. 93-3234,

1996 U.S. App. LEXIS 5155 (11th Cir. Mar. 22, 1996); *DSC Communications Corp. v. DGI*

Tech, Inc., 898 F. Supp. 1183 (N.D. Tex. 1995); *see also Mitel, Inc. v. Iqtel, Inc.*, 896

---

[6] The Supreme Court describes reverse engineering as a "fair and honest means" of research "starting with the known product and working backward to derive the process which aided in its development or manufacture." *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (1974).

F. Supp. 1050 (D.Colo. 1995) (dictum). Most commentators have also endorsed this position.[7]

Sega is the leading decision on this issue. The Ninth Circuit recognized that "Accolade copied Sega's software solely to discover the functional requirements for compatibility with the [Sega] Genesis console — aspects of Sega's program that are not protected by copyright." Sega, 977 F.2d at 1522. The court noted that Accolade's reverse engineering was necessary for it "to become a legitimate competitor in the field of Genesis-compatible video games." Id. at 1523. The court then acknowledged the consumer welfare benefits of reverse engineering:

> Accolade's identification of the functional requirements for Genesis
> compatibility has led to an increase in the number of independently
> designed video game programs offered for use with the Genesis console.
> It is precisely this growth in creative expression, based on the
> dissemination of other creative works and the unprotected ideas contained
> in those works, that the Copyright Act was intended to promote.

Id.

The freedom to reverse engineer software in order to achieve interoperability is critical to maintaining competition not just in the video game sector, but in the entire software industry. Economists have demonstrated that the software market exhibits strong

---

[7] See, e.g., II Paul Goldstein, Copyright: Principles, Law and Practice § 5.2.1.4.a at 5:28 (1995); Melville B. Nimmer & David Nimmer, Nimmer on Copyrights § 13.05[D][4] (1991); Jonathan Band & Masanobu Katoh, Interfaces on Trial at 167-225 (1995); Julie E. Cohen, Reverse Engineering and the Rise of Electronic Vigilantism: Intellectual Property Implications of "Lock-Out" Programs, 68 S. Cal. L. Rev. 1091 (1995); Dennis S. Karjala, Copyright Protection of Computer Documents, Reverse Engineering, and Professor Miller, 19 U. Dayton L. Rev. 975, 1016-18 (1994); David A. Rice, Sega and Beyond: A Beacon for Fair Use Analysis . . . At Least as Far as It Goes, 19 U. Dayton L. Rev. 1131, 1168 (1994).

network externalities, which enable the first comer to establish its interface specification as a *de facto* standard.[8] If the first comer can prevent interoperable developers from uncovering the interface specifications which are not the subject of any intellectual property rights, then the first comer can exercise monopoly control over important segments of the computer market.

Such a broad monopoly would have serious implications for consumer welfare.[9] In the absence of competition during the effective lifespan of the product, the first developer would have little incentive to develop more innovative and less costly products. These negative consequences would be compounded by the fact that the personal computer revolution, and recent major improvements in communications technology, have produced an overwhelming need for interconnection between different elements of computer systems. Within a given large corporation, literally thousands of personal computers and workstations scattered across the globe need to interact with each other and with the company's

---

[8] *See* Garth Saloner, *Economic Issues in Computer Interface Standardization*, 1 Econ. Innov. New. Tech. 135, 140 (1990):

> Because of the compatibility and network benefits, all else equal, a new user prefers a vendor with a larger total installed base of users. Thus installed bases have a tendency to be self-perpetuating: they provide the incentive for the provision of products (software and hardware) that is compatible with that in the installed based which in turn attracts new users to the installed base further swelling its ranks and increasing the incentive for the provision of even more complementary products.

See also Frederick Warren-Boulton, Kenneth C. Baseman & Glenn Woroch, *Copyright Protection of Software Can Make Economic Sense*, 12 Computer Law., Feb. 1995, at 10, 23; *United States v. Microsoft Corp.,* 56 F.3d 1448, 1452 (D.C. 1995).

[9] *See, e.g.,* Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1045, 1082, 1097 n.281 (1989).

mainframes. Moreover, with the advent of the Global Information Infrastructure, different firms will need to exchange vast quantities of data through their computers.[10] Prohibiting competitors from accessing the *de facto* standard interface specifications would lock users into a particular operating system or network software environment, and would inhibit the transfer of data between users with different computing environments. *See Lotus*, 49 F.3d at 821 (J. Boudin, concurring).

It should be stressed that interoperable products are *not* mere "clones" that offer only the same functionality as the products of the first comer, but at a lower price. While interoperable products must offer at least the same functionality, they typically offer additional features not found in the first comer's products. Thus, they compete with the first comers' products not only in terms of price (indeed, sometimes the interoperable products may be more expensive), but also in terms of innovation. In this respect, interoperable developers' use of preexisting interface specifications is a transformative use of the sort accredited by the Supreme Court in *Campbell v. Acuff-Rose Music, Inc.*, 114 S. Ct. 1164 (1994).

Some ACIS companies are small start-ups with a handful of employees. Others are Fortune 500 companies. All need to interoperate with the computer systems developed by other firms in order to reach the market for their new products, which push the technological

---

[10] *See* President's Information Infrastructure Task Force, *Global Information Infrastructure: Agenda for Cooperation* (U.S. Government Printing Office, Washington, D.C., Feb. 1995) at 14-16.

envelope. Any legal impediment to reverse engineering would threaten this vital sector of the

U.S. software industry that has helped maintain our leadership position in global markets.

III. APPELLANT'S PROPOSED CHANGE IN THE LAW WOULD UNDERMINE THE PRIVILEGES GRANTED TO USERS BY COPYRIGHT LAW, AND SHOULD THEREFORE BE PREEMPTED

In the face of the clear fair use mandate[11] permitting reverse engineering, many

developers seek a "back door" by which they can evade this rule — and indeed the broader

rule that allows users access to the unprotectable ideas and facts in a copyrighted work. The

back door in this case is the contractual restriction on reverse engineering imposed by the

developers of *de facto* standard programs.

These contractual restrictions can be challenged from several different directions:

under principles of contract formation including as contracts of adhesion; as agreements in

restraint of trade; and as copyright misuse. In this brief we focus on one of the theories

considered by the court below — preemption by the Federal intellectual property system.[12]

Before proceeding any further, we must stress that we are *not* arguing for the preemption of a

contractual restriction on reverse engineering in a trade secret context. When the developer

distributes a limited number of copies subject to signed confidentiality agreements, trade

---

[11] Judge Birch of the Eleventh Circuit views fair use as a right granted by the Copyright Act. *Bateman*, No. 93-3234, 1996 U.S. App. LEXIS 5155 at *21 n.22.

[12] We are aware that this case does not specifically concern restrictions on reverse engineering. Nonetheless, this Court's ruling on the enforceability of contractual provisions that have the effect of granting protection to that which is unprotectable under the Copyright Act will necessarily implicate the enforceability of contractual restrictions on reverse engineering.

secret law should apply. However, we contend that federal law preempts contractual

restrictions on the reverse engineering of widely distributed object code.

Copyright preemption of state law can take one of two basic forms. First, Congress

has to a limited extent "preempted the field" of copyright by passing the Copyright Act of

1976. This statutory preemption is governed by Section 301 of the Copyright Act, 17 U.S.C.

§ 301, which provides in part that "all legal or equitable rights that are equivalent to any of

the exclusive rights within the general scope of copyright . . . are governed exclusively by"

federal copyright law. Courts applying this section have concluded that federal preemption

of contract law under Section 301 must be examined on a case-by-case basis. Contract law is

not wholly preempted by Section 301, *see Fantastic Fakes, Inc. v. Pickwick Int'l, Inc.*, 661

F.2d 479, 483 (5th Cir. 1981), but neither is it immune from preemption. *See, e.g., S.O.S.,*

Inc. v. Payday, Inc., 886 F.2d 1081, 1088 (9th Cir. 1989); David Rice, *Public Goods, Private*

Contract and Public Policy: Federal Preemption of Software Licenses Prohibitions Against

Reverse Engineering, 53 U. Pitt. L. Rev. 543, 604 (1992).

While appellant's *amici* devote much of their attention to Section 301 preemption,

that is not the critical issue in this case.[13] Federal preemption of state law also occurs where

there is a conflict between state law and the federal intellectual property system. This

Constitutional preemption based on the U.S. Constitution's Supremacy Clause, Article VI,

and its Intellectual Property Clause, Article I, Section 8, can occur either when the federal

---

[13] Of course, appellants must survive both Constitutional *and* Section 301 preemption if
their shrinkwrap license is to be enforced. For an argument that shrinkwrap license
provisions prohibiting reverse engineering are preempted under Section 301. *See* Rice,
supra, at 614.

and state laws directly conflict, so that it is physically impossible for a party to comply with both, or when a state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *California Fed. Sav. & Loan Ass'n v. Guerra*, 479 U.S. 272, 281 (1987).

The Constitution's Intellectual Property Clause provides for copyright and patent regimes; a contractual prohibition on reverse engineering conflicts with both. The leading case treating Constitutional preemption under the copyright laws is *Goldstein v. California*, 412 U.S. 546 (1973). In that case, the Supreme Court considered whether the Copyright Act of 1909, then in force, preempted state protection for subject matter not included within that Act. In deciding that such state copyright rules were not preempted, the Court distinguished three types of situations — areas in which federal law mandated protection, areas in which federal law mandated no protection, and areas in which federal law was silent:

> Where the need for free and unrestricted distribution of a writing is thought to be required by the national interest, the Copyright Clause and the Commerce Clause would allow Congress to eschew all protection. In such cases, a conflict would develop if a State attempted to protect that which Congress intended to be free from restraint or to free that which Congress had protected. However, where Congress determines that neither federal protection nor freedom from restraint is required by the national interest, it is at liberty to stay its hand entirely.

Goldstein, 412 U.S. at 559. In resolving the Constitutional preemption question regarding reverse engineering, therefore, a court must decide whether enforcing a contractual restriction on reverse engineering would have the effect of protecting that which the copyright laws intended to be free from restraint.

It clearly would. As discussed in section I above, the copyright laws are not unrestricted grants of property rights. Rather, copyright strikes a delicate balance between

13

the rights of various parties with an interest in copyrighted material. While the Copyright

Act provides a series of exclusive rights to copyright owners in 17 U.S.C. § 106, many other

provisions of the Act (notably 17 U.S.C. § 102(b) and 17 U.S.C. §§ 107-120) expressly

create certain user privileges in copyrighted material. Courts have interpreted these

privileges as permitting the reverse engineering of software to learn the information

necessary to achieve interoperability. Indeed, the *Sega* court explained that reverse

engineering furthered the public policy of the Copyright Act. A legal prohibition on the

reverse engineering of programs would

> preclude[] public access to the ideas and functional concepts contained in those programs, and thus confer[] on the copyright owner a *de facto* monopoly over those ideas and functional concepts. That result defeats the fundamental purpose of the Copyright Act — to encourage the production of original works by protecting the expressive elements of those works while leaving the ideas, facts, and functional concepts in the public domain for others to build on.

Sega, 977 F.2d at 1527. In this passage, the Ninth Circuit echoes the Supreme Court's

teachings in *Feist*, where the Court explained why a compilation of phone book information

could not receive protection:

> It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation. As Justice Brennan has correctly observed, however, this is not 'some unforeseen byproduct of a statutory scheme.' It is, rather, 'the essence of copyright,' and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but 'to promote the Progress of Science and useful Arts.' To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work.... *This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art.*

Feist, 499 U.S. at 349-50 (emphasis added; citations omitted).

Allowing software vendors to impose terms that prohibit reverse engineering would frustrate the policy of encouraging the creation of new, interoperable software products.[14] Not surprisingly, the one reported decision to consider the issue found that federal copyright law preempts state laws enforcing contractual restrictions on reverse engineering. *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255 (5th Cir. 1988), examined the enforceability of a state statute which expressly validated shrinkwrap license terms precluding users from reverse engineering computer programs. Relying on the Constitutional preemption cases, the Fifth Circuit refused to enforce the term because it "conflicts with the rights of computer program owners under [17 U.S.C.] § 117 and clearly 'touches upon an area' of federal copyright law." *Id.* at 270.

Contractual restrictions on reverse engineering also interfere with the operation of the federal patent system. The most recent Supreme Court patent preemption case, *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141 (1989), concerned a Florida statute which prohibited the unauthorized use of a direct molding process to replicate manufactured boat hulls. The Supreme Court in a unanimous decision held that the statute conflicted with the federal patent law and thus was invalid under the Supremacy Clause. The Court stated that "the States may not offer patent-like protection to intellectual property creations which would otherwise remain unprotected as a matter of federal law." *Id.* at 156. The Court further stated that "[i]n essence, the Florida law prohibits the entire public from engaging in a form of reverse engineering of a product in the public domain." *Id.* at 160. The Court concluded that

---

[14] Enforcing contractual restrictions on the use of interface specifications uncovered during reverse engineering would similarly frustrate this policy.

"the efficient operation of the federal patent system depends upon substantially free trade in publicly known, unpatented design and utilitarian conceptions." *Id.* at 156.

Like the Florida statute, a contractual restriction on software reverse engineering would "offer patent-like protection to intellectual property creations which otherwise would remain unprotected as a matter of federal law." *Id.* at 156. The utilitarian interface specifications could not be used by competitors even though the specifications had not endured the rigors of a patent examination and found to meet the statutory requirements of novelty and nonobviousness. Similarly, a contractual restriction would prohibit the licensee "from engaging in a form of reverse engineering of a product" distributed to the public. *Id.* at 160. Without question, such restrictions would interfere with the "free trade" in publicly distributed, "unpatented . . . utilitarian conceptions," and thereby impede the "efficient operation of the federal patent system." *Id.* at 156. Accordingly, "the *Bonito Boats* decision strongly suggests that federal patent law is an alternative to federal copyright law for preempting both state legislation and judicial cases that uphold the enforceability" of contractual restrictions on software reverse engineering. Charles R. McManis, *Intellectual Property Protection and Reverse Engineering of Computer Programs in the United States and the European Community*, 8 High Tech. L. 25, 94 (1993).[15]

---

[15] Professor McManis implies that patent preemption might not occur if the program had limited distribution. *Id.* In such a case, the developer would not truly be seeking patent-like rights, but only trade secret rights. *See* Steven W. Lundberg & John P. Sumner, *Patent Preemption of Shink-Wrap Prohibitions on Reverse Engineering*, 4 Computer Law., Apr. 1987, at 9.

The Business Software Alliance ("BSA") and the Software Publishers Association

("SPA") suggest that Constitutional preemption applies only to state statutes, and not

contracts, because contracts between private parties are "substantially less 'offensive' to the

federal intellectual property scheme than a state statute . . . ." BSA Brief at 14; *see also* SPA

Brief at 16. In fact, whether a contract is more or less inconsistent with the goals and

objectives of the federal intellectual property system than a state statute turns on the nature of

the contract and the statute. A state trade secret statute modeled on the Uniform Trade

Secrets Act does not offend the federal intellectual property system, while a contractual

restriction on a biographer's use of a manuscript found in a library would offend the fair use

provision of the Copyright Act. Thus, the Second Circuit, in *Wright v. Warner Books, Inc.*,

953 F.2d 731, 741 (2d Cir. 1991), found that "[t]o read [the restriction] as absolutely

forbidding any quotation, no matter how limited or appropriate, would severely inhibit

proper, lawful scholarly use and place an arbitrary power in the hands of the copyright owner

going far beyond the protection provided by law." Likewise, enforcement of contractual

restrictions on reverse engineering would place an arbitrary power in the hands of the

software developer going far beyond the protection provided by law.

IV. REFUSING TO ENFORCE LICENSE RESTRICTIONS ON REVERSE ENGINEERING WILL NOT UNDERMINE INCENTIVES FOR THE DEVELOPMENT OF COMPUTER PROGRAMS

Appellant's *amici* in the software industry predict imminent disaster if the district

court is not reversed. The SPA warns that the district court's reasoning, "if widely adopted,

would hinder severely the ability of computer software companies to transact business in a

rapidly changing, global economy." SPA Brief at 6. The BSA goes further, asserting that a

17

"multi-billion dollar industry rests, in substantial part, on the confidence that transactions involving terms such as these rest on binding licenses." BSA Brief at 16. Reading these briefs, one is left with the impression that innovation in this computer industry will come to a screeching halt if the district court's interpretation of the law is left standing.

This is not the first time we have heard such predictions in the computer industry. Indeed, there seems to be a pattern of predicting dire consequences whenever courts place any limit on intellectual property protection in this industry. When in 1992 the Second Circuit in *Altai* adopted a less expansive interpretation of copyright protection for computer programs than prior courts had done, two IBM lawyers called the decision "a legal Chernobyl" and warned that it would surely destroy the software industry. Anthony L. Clapes & Jennifer M. Daniels, *Revenge of the Luddites: A Closer Look at Computer Associates v. Altai*, 9 Computer Law., Nov. 1992, at 11. Despite unanimous adoption of the Second Circuit's approach since 1992, the collapse of the computer software industry has yet to occur. To the contrary, the software industry remains extremely robust. Professor Miller similarly called the Ninth Circuit's recognition in *Sega* of a privilege to reverse engineer computer programs "singularly ill-suited to vindicating the public interest." Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 Harv. L. Rev. 977 (1993). Again, despite widespread adoption in the courts of such a reverse engineering privilege, the public interest seems alive and well. The district court's decision does not change the law; it merely applies rules that are already well-established. There is no reason to believe that this case will do any serious damage to the thriving computer industry. To the contrary, we believe that the district court

decision will maintain competitive conditions in the industry and thereby prevent

"monopolistic stagnation."[16] *Altai*, 982 F.2d at 696.

The SPA's most specific concern with the district court's preemption ruling is that it

threatens SPA members' ability to protect their trade secrets. SPA Brief at 15. The SPA

completely misconstrues the district court's holding. The district court nowhere suggested

that the Copyright Act preempted all contracts relating to copyrightable works. Rather, the

court found that the Copyright Act preempted contract provisions which sought to

circumvent the limits the Copyright Act placed on the author's rights. A provision which

sought to maintain the confidentiality of a real trade secret would not circumvent a limitation

of the Copyright Act, and thus would not be preempted.

By contrast, a confidentiality provision that sought to restrict use of the unprotected

elements of a widely disseminated work would not pass preemption scrutiny. In *Feist*, for

example, Rural Telephone could not have enforced an agreement with its thousands of

subscribers to keep the information contained in its white pages secret. Neither can ProCD.
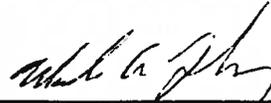
---

[16] Indeed, since 1991 the European Union has expressly prohibited contractual
restrictions on reverse engineering, to no ill effect. *See* Jonathan Band & Masanobu Katoh,
Interfaces on Trial at 246, 255.

CONCLUSION

For the foregoing reasons, ACIS respectfully requests that this Court affirm the judgment below.

Respectfully submitted,

Peter M.C. Choy
American Committee for
   Interoperable Systems
2550 Garcia Avenue
Mountain View, CA 94043
(415) 336-2482

Prof. Mark A. Lemley
Counsel of Record
University of Texas School of Law
727 East 26th Avenue
Austin, TX 78705
(512) 471-7405

Dated: March 28, 1996

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on this 1st day of April, 1996, two copies of the foregoing document were served by mail, first-class postage prepaid, on all counsel of record herein, as follows:

John T. Gutkowski
Thomas N. O'Connor
Hale and Dorr
60 State Street
Boston, Massachusetts 02109

Keith Napolitano
1602 North Thompson Drive
Suite 301
Madison, Wisconsin 53704

_____
Peter M.C. Choy