THE LAW OF SOFTWARE CONTRACTS: CASES AND MATERIALS

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Prepared for the
Munich Intellectual Property Law Summer Program
First Session (June 29-July 10, 2015)

ASSIGNMENT FOR FIRST CLASS: Please read the course syllabus (next page) and pages 1-19 of these materials.

LAW OF SOFTWARE CONTRACTS

COURSE SYLLABUS

1. Coverage of the Course. This course will cover seven important topics arising out of the sale of computer software. These topics are: (1) whether sales of software should be viewed as contracts for the sale of goods; (2) the extent to which contracts allowing the use of software also, or alternatively, should be viewed as merely copyright licenses; (3) the extent to which copyright law may restrict terms in software contracts; (4) the validity of forming software contracts using "shrink wrap" and "click wrap"; (5) the legal status of open source public licenses; (6) the enforceability of limitations on the buyer's remedies in software contracts; and (7) the permissibility of self-help remedies against software buyers (e.g., remotely disabling computer programs).

2. Prerequisites. This course has no prerequisites. It also does not impermissibly overlap in coverage with any other course. Therefore, all students may take this course and any subsequent course, including Copyright Law.

3. Meeting Times. This course is offered during the first session of the Munich Intellectual Property Summer Program. The course will meet from 9:00 a.m. to 10:40 a.m. on Monday-Thursday during the first week (June 29-July 2) and Monday-Wednesday during the second week (July 6-8).

4. Office Hours and Contact Information. I will generally be available to answer questions both immediately before class and after class. In addition, you may contact me by email at gmaggs@law.gwu.edu.

5. Reading Assignments. We will read these materials in order from start to finish. For the first class, please read pages 1-19. I will announce how far to read for each subsequent class. Please come to class prepared to discuss the reading.

6. Final Examination. On Friday, July 10, at 9:00 a.m. (unless the schedule changes) you will be given a 1-hour open-book final examination. You may consult any written materials when taking the examination. The examination will consist of short essay questions pertaining to the material covered in class. For practice, please see Appendix B, which contains two past final examinations and their grading guides.

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TOPIC 1
VIEWING SOFTWARE CONTRACTS AS CONTRACTS FOR THE SALE OF GOODS

When you buy software, like a word processing program or a computer game, you generally agree to contractual terms. These terms may limit your ability to copy, use, or resell the software, they may restrict your remedies if the software is defective, they may give the producer or vendor of the software various rights if you fail to pay, and so forth. If disagreements arise about the effect or enforceability of these terms, an immediate question is: What law governs the dispute? These materials address this question, covering many of the most important topics.

Further information about the law of software contracts can be found in a variety of sources, some dealing with contract law and others dealing with copyright law. One of the most comprehensive reference works is a one-volume treatise by the American Law Institute (the organization which has produced the famous Restatements of the Law) called *Principles of the Law of Software Contracts* (2010). These materials cite the *Principles* on numerous topics. The complete text of the *Principles* is available through WestLaw and also through HeinOnline to which many university libraries subscribe.

ARTICLE 2 OF THE UNIFORM COMMERCIAL CODE

In the United States, almost all courts now agree that article 2 of the Uniform Commercial Code is *one of the laws* that governs software contracts. Article 2 is a model law adopted in 49 states and various federal territories to govern contracts for the sale of goods. Article 2 defines goods as "things movable at the time of identification to the contract." U.C.C. 2-105(1). The following two cases show the reasoning that courts have used in deciding that software falls within this definition. The first case addresses a situation in which software is sold together with a computer. The second case concerns software sold by itself, a more difficult issue.

NEILSON BUSINESS EQUIPMENT CENTER, INC. V. MONTELEONE

524 A.2d 1172 (Del. 1987)

[Seller Neilson Business Equipment Center, Inc. (Neilson) agreed to supply a computer system to Dr. Italo V. Monteleone. Under the contract, the computer system would come with installed software that would automate Dr. Monteleone's recordkeeping. When the software did not work as anticipated, Dr. Monteleone sued Neilson for breach of implied warranties under article 2 of the Uniform Commercial Code. Neilson argued that article 2 did not apply to the sale of software because a sale of software is not a sale of goods.]

Neilson urges us to separate the contract into three distinct subparts-hardware, software and services. Defendant contends that only the hardware can be classified as "goods" under the Code, that there was nothing defective about the hardware, and thus plaintiff's claims for breaches of implied warranties fail. Neilson further argues that software is an intangible, and that intangibles do not constitute "goods" subject to the Code.

That argument is innovative, but unpersuasive. Neilson contracted to supply a turn-key computer system; that is, a system sold as a package which is ready to function immediately. The hardware and software elements are combined into a single unit—the computer system—prior to sale. The trial court's factual conclusion that the computer system is predominantly "goods" is supported by substantial evidence. Dr. Monteleone did not intend to contract separately for hardware and software. Rather, he bought a computer system to meet his information processing needs. Any consulting services rendered by Neilson were ancillary to the contract, and cannot reasonably be treated as standing separately to escape the implied warranties of the Uniform Commercial Code.

Notes

1. Two Ways to Buy Software. This case involves a very common situation. Most new computers are sold with both an operating system and other programs already installed. But some software, like a computer game, is usually sold separately and installed by the user of the computer.

2. Problem. Suppose you buy a new laptop computer on sale for $595. The laptop comes with Microsoft Windows and Microsoft Office already installed. Buying these two software packages separately for installation onto a computer that you already own would cost more than $595. (The idea that buying the software separately is more expensive than buying a

computer already loaded with the software may seem odd, but it is not uncommon.) Would article 2 apply to your purchase of the computer under the rationale in *Neilson*?

ADVENT SYSTEMS LTD. V. UNISYS CORP.

925 F.2d 670 (3d Cir. 1991)

WEIS, Circuit Judge.

[Advent Systems Limited sued Unisys Corporation for breach of contract, claiming that Unisys promised to pay Advent System to develop document management software and then repudiated that promise. Unisys defended on grounds that the alleged promise to pay for the software was not enforceable because it was not evidenced by a sufficient signed writing, as required by the "statute of frauds" provision in U.C.C. § 2-201(1). Section 2-201(1) says:

> Except as otherwise provided in this section a contract for the sale of goods for the price of $500 or more is not enforceable by way of action or defense unless there is some writing sufficient to indicate that a contract for sale has been made between the parties and signed by the party against whom enforcement is sought or by his authorized agent or broker.

Advent System argues that § 2-201 did not apply because a contract for software is not a contract for the sale of goods.]

II.
SOFTWARE AND THE UNIFORM COMMERCIAL CODE

The district court ruled that as a matter of law the arrangement between the two parties was not within the Uniform Commercial Code and, consequently, the statute of frauds [in § 2-201] was not applicable. As the district court appraised the transaction, provisions for services outweighed those for products and, consequently, the arrangement was not predominantly one for the sale of goods.

In support of the district court's ruling that the U.C.C. did not apply, Advent contends that the agreement's requirement of furnishing services did not come within the Code. Moreover, the argument continues, the "software" referred to in the agreement as a "product" was not a "good" but intellectual property outside the ambit of the Uniform Commercial Code.

Because software was a major portion of the "products" described in the agreement, this matter requires some discussion. Computer systems consist

of "hardware" and "software." Hardware is the computer machinery, its electronic circuitry and peripheral items such as keyboards, readers, scanners and printers. Software is a more elusive concept. Generally speaking, "software" refers to the medium that stores input and output data as well as computer programs. The medium includes hard disks, floppy disks, and magnetic tapes.

In simplistic terms, programs are codes prepared by a programmer that instruct the computer to perform certain functions. When the program is transposed onto a medium compatible with the computer's needs, it becomes software. The process of preparing a program is discussed in some detail in *Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc.,* 797 F.2d 1222, 1229 (3d Cir. 1986), *cert. denied,* 479 U.S. 1031 (1987) and *Apple Computer, Inc. v. Franklin Computer Corp.,* 714 F.2d 1240 (3d Cir. 1983).

The increasing frequency of computer products as subjects of commercial litigation has led to controversy over whether software is a "good" or intellectual property. The Code does not specifically mention software.

In the absence of express legislative guidance, courts interpret the Code in light of commercial and technological developments. The Code is designed "[t]o simplify, clarify and modernize the law governing commercial transactions" and "[t]o permit the continued expansion of commercial practices." 13 Pa.Cons.Stat.Ann. § 1102 (Purdon 1984). As the Official Commentary makes clear:

> "This Act is drawn to provide flexibility so that, since it is intended to be a semi-permanent piece of legislation, it will provide its own machinery for expansion of commercial practices. It is intended to make it possible for the law embodied in this Act to be developed by the courts in the light of unforeseen and new circumstances and practices."

Id. comment 1.

The Code "applies to transactions in goods." 13 Pa.Cons.Stat.Ann. § 2102 (Purdon 1984). Goods are defined as "all things (including specially manufactured goods) which are moveable at the time of the identification for sale." *Id.* at § 2105. The Pennsylvania courts have recognized that " 'goods' has a very extensive meaning" under the U.C.C. *Duffee v. Judson,* 251 Pa.Super. 406, 380 A.2d 843, 846 (1977); *see also Lobianco v. Property Protection, Inc.,* 292 Pa.Super. 346, 437 A.2d 417 (1981) ("goods" under U.C.C. embraces every species of property other than real estate, choses in action, or investment securities.).

Computer programs are the product of an intellectual process, but once implanted in a medium are widely distributed to computer owners. An analogy can be drawn to a compact disc recording of an orchestral rendition. The music is produced by the artistry of musicians and in itself is not a "good," but when transferred to a laser-readable disc becomes a readily merchantable commodity. Similarly, when a professor delivers a lecture, it is not a good, but, when transcribed as a book, it becomes a good.

That a computer program may be copyrightable as intellectual property does not alter the fact that once in the form of a floppy disc or other medium, the program is tangible, moveable and available in the marketplace. The fact that some programs may be tailored for specific purposes need not alter their status as "goods" because the Code definition includes "specially manufactured goods."

The topic has stimulated academic commentary with the majority espousing the view that software fits within the definition of a "good" in the U.C.C.

Applying the U.C.C. to computer software transactions offers substantial benefits to litigants and the courts. The Code offers a uniform body of law on a wide range of questions likely to arise in computer software disputes: implied warranties, consequential damages, disclaimers of liability, the statute of limitations, to name a few.

The importance of software to the commercial world and the advantages to be gained by the uniformity inherent in the U.C.C. are strong policy arguments favoring inclusion. The contrary arguments are not persuasive, and we hold that software is a "good" within the definition in the Code.

Notes

1. Rationale. The court reasons in part that software is a good because it is subsumed into a tangible medium, like a compact disc, when it is sold. Is this necessarily true of all software when it is sold? What is the court's additional policy argument for applying article 2 to sales of software? Is it more persuasive?

2. Copyright. The court notes that software is protected by copyright. What is the buyer's predominant purpose in buying the software? Is it to own the compact disk containing the software or is it to have the right to copy the software from the disk onto a computer and use it?

3. UCITA. The Uniform Law Commission (formerly called the National Conference of Commissioners on Uniform State Laws) is the

organization that promulgated the U.C.C. In the 1990s, this organization decided to draft a model law specifically addressed to software contracts. The goal was to eliminate uncertainty about the application of U.C.C. article 2 to software contracts. The model law, called the Uniform Computer Information Transactions Act (UCITA), has been unsuccessful. Only two states, Virginia and Maryland, have enacted the law. Other states rejected it as unnecessary and overly favorable to major software developers. These other states have continued to apply U.C.C. article 2.

4. International view. The United Nations Convention on Contracts for the International Sale of Goods (CISG) is a multilateral treaty adopted by more than 80 countries, including the United States and almost all the nations of Europe. S. Treaty Doc. No. 98-9, 1489 U.N.T.S. 3 (Apr. 11, 1980). This treaty governs contracts for the sale of goods between businesses located in different countries. According to CISG Advisory Council Opinion No. 4, there is a division of authority on whether the CISG applies to software. The opinion gives the following information: "For cases considering that standard software is governed by the CISG, but not custom-made software, see: OLG Köln, 16 October 1992 (Germany); OLG Köln, 26 August 1994 (Germany); and LG München, 8 February 1995 (Germany). On the other hand, HG Zürich, 17 February 2000 (Switzerland), considered the sale of software as well as the joint purchase of software and hardware as a sale of goods within the CISG, citing Articles 1, 3(1), and 51."

TOPIC 2
VIEWING SOFTWARE CONTRACTS AS COPYRIGHT LICENSES

A. APPLICATION OF COPYRIGHT LAW TO SOFTWARE

Section 101 of the U.S. Copyright Law[1] defines a "computer program" as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. For example, Microsoft Word is an example of a computer program. It consists of millions of lines of instructions that enable computers to be used as word processors. The creators of computer programs may seek to protect them by copyright. A computer program can be subject to copyright protection if it meets all of the requirements of § 102 of the U.S. Copyright Law. Section 102 says: "Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." *Id.* § 102.

Copyright law in most European nations is similar. The Council of the European Communities has directed member states to "protect computer programs, by copyright, as literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works." Art. 1, Council Directive of 14 May 1991 on the legal protection of computer programs (91/250/EEC) [hereinafter Council Directive]. Most European nations have followed this Directive.

Problems

1. Impermissible Copying. Copyright law gives the owner of the copyright in a work the exclusive right to reproduce the work, make derivative works, and distribute copies of the copyrighted work. *See* 17 U.S.C. § 106(1)-(3). Suppose you buy a copyrighted computer program

[1]Appendix A contains the text of selected provisions of the U.S. Copyright Law.

that is stored on a DVD. What would be examples of copying that would violate the rights of the copyright holder? Could you make a duplicate of the DVD and sell or give a copy to a friend? Could you modify the program by adding improvements and then sell copies of the modified program?

2. Permissible Copying. Again, suppose you buy a copyrighted computer program that is stored on a DVD. When you install the program, your computer copies the program from the DVD onto your hard disk drive. That night, you run software that backups your computer; the backup software automatically makes another copy of the program on an external drive. The next day when you go to execute the program, your computer will make another copy as it temporarily loads the program into your computer's memory. Absent any contract terms on point, are these copies a violation of the rights of the copyright holder? Congress did not think that they should be. Section 117 of the Copyright Law says that "it is not an infringement for the owner of a copy of a computer program to make . . . another copy or adaptation of that computer program provided: (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or (2) that such new copy or adaptation is for archival purposes only . . . ." 17 U.S.C. § 117(a)(1)-(2). The Council Directive cited above makes the law the same in Europe. The Directive requires member states to make exceptions to their general restrictions on copying to allow copying for the purpose of "loading, displaying, running, transmission or storage of the computer program," Council Directive, *supra*, art. 4, and "the making of a back-up copy by a person having a right to use the computer program," *id.* art. 5.

B. COPYRIGHT LICENSES AND COMPUTER SOFTWARE

Under copyright law, the author of a creative work generally acquires a copyright in the work. This copyright, as noted above, gives the author the exclusive right to make copies of the work. If the author wants to allow someone else to make copies of the work, the author has two options. One is to issue a license to the other person, and the other is to assign the copyright to that person. A copyright license is a grant of permission by the copyright holder to another person to do something that the copyright holder otherwise could prevent.

For example, suppose that I write an article and submit it to a journal for publication. If the journal agrees to publish the article, representatives of the journal and I will have to have a discussion about copyright. As the author of the article, I initially own the copyright to the article. Absent

some kind of permission, the journal could not publish the article without violating my copyright. So to allow the journal to publish the article, I might grant the journal a license. The license would make clear that I still own the copyright, and can prevent others from making copies, but that I am allowing the journal to publish the article. Alternatively, I might assign the copyright to the journal. The journal then would not only have the right to publish the article, but also the right to prevent others (including me) from making copies of the article.

Consider the option of giving the journal a copyright licence in the foregoing example. The copyright license clearly *increases* the rights of the journal. Before the journal receives the license, it cannot make copies. After receiving the license, however, the journal can make copies. That is the general understanding of the function of licenses: they augment the rights of the licensee.

In many instances, software contracts grant licenses that add rights to the purchaser of the software. For example, suppose that a law school wants to make word processing software available to all of its forty professors. In purchasing the software, the law school might bargain for a license that allows the law school to install the software on forty computers. The license would say that the law school could make copies of the software onto the hard disk drives of all forty of the faculty member's computers. In this way, the license would grant the law school rights that the law school otherwise would not have. Without the license, the law school could not lawfully make these forty copies.

But many computer software license agreements have a different function: they often *restrict* the rights that the buyer of software otherwise would have. For example, in copyright law, the "right of first sale doctrine"—discussed at length below—says that the owner of the copyright in a book can restrict the first sale of a book, but does not have a right to restrict subsequent sales of the book. *See* 17 U.S.C. § 109(a). If I buy computer software, however, the "license" that comes with the software typically will say that I cannot resell it. This license accordingly might be seen as reducing my rights, at least in comparison to the rights that I would ordinarily have after purchasing other kinds of copyrighted works. The material below explores this idea further.

END-USER LICENSE AGREEMENTS

When you install new software on a personal computer, you are often asked to assent to an "end-user license agreement" or EULA. The EULA

is a license granted by the owner of the copyright (e.g., Microsoft, Adobe, etc.) to the "end-user" of the software (i.e., you as the consumer). The EULA is separate from any sales agreement that you might have with the vendor who sold you the software (e.g., Amazon, BestBuy, etc.). We will consider in Topic 4 questions about the formation of EULAs, such as whether a consumer really consents to them merely by clicking something on the computer screen during installation.

The following EULA may govern software on a computer you own:

MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT OFFICE 2010

1. RETAIL LICENSE TERMS.

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. Printed-paper license terms, which may come with the software, may replace or modify any on-screen license terms. These terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply. BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE. INSTEAD, RETURN IT TO THE RETAILER FOR A REFUND OR CREDIT.

* * *

4. MANDATORY ACTIVATION. . . .UNLESS THE SOFTWARE IS ACTIVATED, YOU HAVE NO RIGHT TO USE THE SOFTWARE AFTER THE TIME PERMITTED FOR ACTIVATION. This is to prevent its unlicensed use. YOU ARE NOT PERMITTED TO BYPASS OR CIRCUMVENT ACTIVATION. You can activate the software by Internet or telephone. If you do so, Internet and telephone service charges may apply. Some changes to your computer components or the software may require you to reactivate the software. THE SOFTWARE WILL REMIND YOU TO ACTIVATE IT UNTIL YOU DO.

* * *

7. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the features included in the software edition you licensed. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- make more copies of the software than specified in this agreement or allowed by applicable law, despite this limitation;
- publish the software for others to copy;
- use the software in any way that is against the law;
- rent, lease or lend the software; or
- use the software for commercial software hosting services.

* * *

8. BACKUP COPY.

a. Media. If you acquired the software on a disc or other media, you may make one backup copy of the media. You may use it only to reinstall the software on the licensed device.

b. Electronic Download. If you acquired and downloaded the software online, you may make one copy of the software on a disc or other media in order to install the software on the licensed device. You may also use it to reinstall the software on the licensed device.

* * *

10. NOT FOR RESALE SOFTWARE. You may not sell software marked as "NFR" or "Not for Resale."

* * *

12. HOME AND STUDENT SOFTWARE. For software marked "Home and Student" edition, you may install one copy of the software on up to three licensed devices in your household for use by people for whom that

is their primary residence. The software may not be used for commercial, nonprofit, or revenue-generating activities.

* * *

Notes

1. Software compared to a book. In what ways does the EULA above grant rights to the end-user? Can this EULA also be seen as restricting the end-user's rights? In thinking about the answer to this question, consider the following hypothetical example: You buy two items from Amazon.com: a new copy of "Microsoft Office 2010: Home and Student Edition" and a copyrighted book called *Microsoft Office for Dummies*. You then install the software on your computer and assent to the EULA above. How do your rights with respect to the software compare to your rights with respect to the book?

a. Can you make copies of the software? Can you make copies of the book?

b. Can you lease or resell the software? Can you lease or resell the book?

c. Can you use the software in your business? Can you use the book for commercial purposes (e.g., to help you use Microsoft Office in your business)?

d. Do you need to take any preliminary steps before using the book or before using the software?

2. Business Practices. Why is software typically sold subject to a EULA but a book not typically sold subject to a EULA? Are electronic copies of books (like ones you would buy for a Kindle) subject to EULAs?

GEOSCAN, INC. OF TEXAS v. GEOTRACE TECHNOLOGIES, INC.

226 F.3d 387 (5th Cir. 2000)

CARL E. STEWART, Circuit Judge:

This dispute arises from a licensing agreement entered into by Scan and Trace. Scan develops and sells software used in the oil and gas exploration industry for plotting seismic data computer files ("the Plotting Software"). The Plotting Software is made up of five software components: Master Plot Server ("MPS"), GeoBand, CGMband, CGMgen, and QNET Daemeon ("QNET"). Trace processes seismic data using its own software program,

ANSER, which integrates Scan's plotting software and some third party software. * * *

In 1991, Scan and Trace entered into a licensing agreement ("1991 agreement" or "1991 licensing agreement"). The 1991 agreement grants Trace a nontransferable, non-exclusive license to use Scan's MPS and GeoBand software on designated central processing units ("CPUS"). . . . The agreement stated that . . . that Trace was prohibited from making Scan's products available to third parties not covered by the agreement. . . .

* * *

Scan contends that Trace breached the 1991 licensing agreement by distributing Scan software to third parties. Specifically, Scan maintains that Trace distributed Scan software to a Nigerian business, to a Canadian computer company, Techco, and to several independent contractor computer programmers. The 1991 agreement states that: "[Trace] shall take all necessary steps to ensure that the Products . . . are not made available or disclosed by the Licensee directly or indirectly, to any individual, firm, or corporation which is *not covered by this Agreement.* " (emphasis added). The Agreement states that the products may be used "by and *on behalf of* Licensee." The summary judgment evidence presented by Trace establishes that the Nigerian office was not a "third party" but instead was a Trace office located in Nigeria. The summary judgment evidence establishes that Trace owned 50% of the Nigerian business. Also, the Nigerian partners who owned the other 50% were not involved in the daily operations of the business; instead, the operations were run by Trace employees. There was no summary judgment evidence presented in rebuttal to demonstrate that Scan software was distributed to non-Trace partners or employees in the Nigerian office.

A Canadian company, Techco, had access to Trace's software program, ANSER. Scan software and Techco software are both embedded in the larger ANSER software program. Techco had access to the ANSER program in order to test modifications of the Techco software as it was used in the larger ANSER software. Scan was informed that Trace had made ANSER available to Techco to test modifications. Techco was working on behalf of Trace by overseeing modifications to Trace's ANSER software. Thus, because Techco was working on behalf of Trace when it had access to the embedded Scan software, Techco was covered under the agreement and any disclosure of Scan software to Techco was not a violation of the agreement.

Some independent contracting computer programmers also had limited access to the ANSER program. Similar to Techco, the summary judgment

evidence shows that the independent contractor computer programmers only were given access to the embedded Scan software while they were working on behalf of Trace. The ANSER program in which the Scan software was embedded had key codes that would have prevented general access to the ANSER program. Thus, the summary judgment evidence supports the district court's grant of summary judgment in favor of Trace on the issue of breach of the 1991 agreement by disclosure to third parties.

* * *

Notes

1. Evidence. What rights did the license grant the licensee? What restrictions did it impose? What kind of evidence would be needed to show a violation of the license in this case?

2. Drafting. What suggestions might you have given the parties in drafting the license?

MAI SYSTEMS CORP. V. PEAK COMPUTER, INC.

991 F.2d 511 (9th Cir. 1993)

BRUNETTI, Circuit Judge:

Peak Computer, Inc. and two of its employees appeal the district court's order issuing a preliminary injunction pending trial as well as the district court's order issuing a permanent injunction following the grant of partial summary judgment.

I. FACTS

MAI Systems Corp., until recently, manufactured computers and designed software to run those computers. The company continues to service its computers and the software necessary to operate the computers. MAI software includes operating system software, which is necessary to run any other program on the computer.

Peak Computer, Inc. is a company organized in 1990 that maintains computer systems for its clients. Peak maintains MAI computers for more than one hundred clients in Southern California. This accounts for between fifty and seventy percent of Peak's business.

Peak's service of MAI computers includes routine maintenance and emergency repairs. Malfunctions often are related to the failure of circuit boards inside the computers, and it may be necessary for a Peak technician

to operate the computer and its operating system software in order to service the machine.

In August, 1991, Eric Francis left his job as customer service manager at MAI and joined Peak. Three other MAI employees joined Peak a short time later. Some businesses that had been using MAI to service their computers switched to Peak after learning of Francis's move.

* * *

IV. COPYRIGHT INFRINGEMENT

The district court granted summary judgment in favor of MAI on its claims of copyright infringement and issued a permanent injunction against Peak on these claims. The alleged copyright violations include: (1) Peak's running of MAI software licenced to Peak customers; (2) Peak's use of unlicensed software at its headquarters; and, (3) Peak's loaning of MAI computers and software to its customers. Each of these alleged violations must be considered separately.

A. Peak's running of MAI software licenced to Peak customers

To prevail on a claim of copyright infringement, a plaintiff must prove ownership of a copyright and a " 'copying' of protectable expression" beyond the scope of a license. *S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1085 (9th Cir. 1989).

MAI software licenses allow MAI customers to use the software for their own internal information processing. This allowed use necessarily includes the loading of the software into the computer's random access memory ("RAM") by a MAI customer. However, MAI software licenses do not allow for the use or copying of MAI software by third parties such as Peak. Therefore, any "copying" done by Peak is "beyond the scope" of the license.

It is not disputed that MAI owns the copyright to the software at issue here, however, Peak vigorously disputes the district court's conclusion that a "copying" occurred under the Copyright Act.

The Copyright Act defines "copies" as:

> material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

17 U.S.C. § 101.

The Copyright Act then explains:

> A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.

17 U.S.C. § 101.

The district court's grant of summary judgment on MAI's claims of copyright infringement reflects its conclusion that a "copying" for purposes of copyright law occurs when a computer program is transferred from a permanent storage device to a computer's RAM. This conclusion is consistent with its finding, in granting the preliminary injunction, that: "the loading of copyrighted computer software from a storage medium (hard disk, floppy disk, or read only memory) into the memory of a central processing unit ("CPU") causes a copy to be made. In the absence of ownership of the copyright or express permission by license, such acts constitute copyright infringement." We find that this conclusion is supported by the record and by the law.

Peak concedes that in maintaining its customer's computers, it uses MAI operating software "to the extent that the repair and maintenance process necessarily involves turning on the computer to make sure it is functional and thereby running the operating system." It is also uncontroverted that when the computer is turned on the operating system is loaded into the computer's RAM. As part of diagnosing a computer problem at the customer site, the Peak technician runs the computer's operating system software, allowing the technician to view the systems error log, which is part of the operating system, thereby enabling the technician to diagnose the problem.

Peak argues that this loading of copyrighted software does not constitute a copyright violation because the "copy" created in RAM is not "fixed." However, by showing that Peak loads the software into the RAM and is then able to view the system error log and diagnose the problem with the computer, MAI has adequately shown that the representation created in the RAM is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."

The law also supports the conclusion that Peak's loading of copyrighted software into RAM creates a "copy" of that software in violation of the Copyright Act. In *Apple Computer, Inc. v. Formula Int'l, Inc.,* 594

F.Supp. 617, 621 (C.D.Cal. 1984), the district court held that the copying of copyrighted software onto silicon chips and subsequent sale of those chips is not protected by § 117 of the Copyright Act. Section 117 allows "the 'owner'[5] of a copy of a computer program to make or authorize the making of another copy" without infringing copyright law, if it "is an essential step in the utilization of the computer program" or if the new copy is "for archival purposes only." 17 U.S.C. § 117 (Supp. 1988). One of the grounds for finding that § 117 did not apply was the court's conclusion that the permanent copying of the software onto the silicon chips was not an "essential step" in the utilization of the software because the software could be used through RAM without making a permanent copy. The court stated:

> RAM can be simply defined as a computer component in which data and computer programs can be temporarily recorded. Thus, the purchaser of [software] desiring to utilize all of the programs on the diskette could arrange to copy [the software] into RAM. This would only be a temporary fixation. It is a property of RAM that when the computer is turned off, the copy of the program recorded in RAM is lost.

Apple Computer at 622.

While we recognize that this language is not dispositive, it supports the view that the copy made in RAM is "fixed" and qualifies as a copy under the Copyright Act.

We have found no case which specifically holds that the copying of software into RAM creates a "copy" under the Copyright Act. However, it is generally accepted that the loading of software into a computer constitutes the creation of a copy under the Copyright Act. *See e.g. Vault Corp. v. Quaid Software Ltd.,* 847 F.2d 255, 260 (5th Cir. 1988) ("the act of loading a program from a medium of storage into a computer's memory creates a copy of the program"); 2 *Nimmer on Copyright,* § 8.08 at 8-105 (1983) ("Inputting a computer program entails the preparation of a copy."); *Final Report of the National Commission on the New Technological Uses of Copyrighted Works,* at 13 (1978) ("the placement of a work into a computer is the preparation of a copy"). We recognize that these authorities are somewhat troubling since they do not specify that a copy is created regardless of whether the software is loaded into the RAM, the hard disk or the read only memory ("ROM"). However, since we find that the copy created in the RAM can be "perceived, reproduced, or otherwise com-

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[5]Since MAI licensed its software, the Peak customers do not qualify as "owners" of the software and are not eligible for protection under § 117.

municated," we hold that the loading of software into the RAM creates a copy under the Copyright Act. 17 U.S.C. § 101. We affirm the district court's grant of summary judgment as well as the permanent injunction as it relates to this issue.

B. Use of unlicensed software at headquarters

It is not disputed that Peak has several MAI computers with MAI operating software "up and running" at its headquarters. It is also not disputed that Peak only has a license to use MAI software to operate one system. As discussed above, we find that the loading of MAI's operating software into RAM, which occurs when an MAI system is turned on, constitutes a copyright violation. We affirm the district court's grant of summary judgment in favor of MAI on its claim that Peak violated its copyright through the unlicensed use of MAI software at Peak headquarters, and also affirm the permanent injunction as it relates to this issue.

C. Loaning of MAI computers and software

MAI contends that Peak violated the Copyright Act by loaning MAI computers and software to its customers. Among the exclusive rights given to the owner of a copyrighted work is the right to distribute copies of the work by lending. 17 U.S.C. § 106(3). Therefore, Peak's loaning of MAI software, if established, would constitute a violation of the Copyright Act.

MAI argues that it is clear that Peak loaned out MAI computers because Peak advertisements describe the availability of loaner computers for its customers and Chiechi admitted that the available loaners included MAI computers. However, there was no evidence that a MAI computer was ever actually loaned to a Peak customer. * * *

The district court's grant of summary judgment is AFFIRMED in part and REVERSED in part. This case is REMANDED for proceedings consistent with this opinion.

Notes

1. Terms of the License. MAI retained the copyright in its software, but licensed its customers to make copies. But the license was very narrow. It allowed the customers to copy (i.e., load) the software onto their own computers. The license did not allow anyone else to copy the software onto the customers' computers, and did not allow the customers to copy their software onto anyone else's computers. Any copying beyond what the license allowed was unauthorized, and thus a violation of MAI's copyright.

2. Business Practices. What was MAI attempting to accomplish from a business prospective? Why should MAI have the right to sell software in this way?

3. Comparison. Suppose that, instead of selling computers and software to its customers, MAI had sold them movie projectors and films. Could a repair company load films into the customers' movie projectors to diagnose and repair problems? Could the repair company lend movie projectors and films to the customers while it made repairs?

4. Digital Millennium Copyright Act. In 1998, Congress overruled part of *MAI Systems* in the Digital Millennium Copyright Act. The Act added paragraph (c) to § 117. This paragraph now says that "it is not an infringement for the owner or lessee of a machine to make or authorize the making of a copy of a computer program if such copy is made solely by virtue of the activation of a machine that lawfully contains an authorized copy of the computer program, for purposes only of maintenance or repair of that machine . . . ." Why might Congress have thought this provision was a good idea?

DSC COMMUNICATIONS CORP. v. PULSE COMMUNICATIONS, INC.

170 F.3d 1354 (Fed. Cir. 1999)

BRYSON, Circuit Judge.

DSC Communications Corporation (DSC) and Pulse Communications, Inc., (Pulsecom) make products for the telephone industry and compete for the business of the Regional Bell Operating Companies, more commonly known as the "RBOCs." Competition between the two parties led to this litigation over certain products that the two produce for use in commercial telephone systems.

DSC struck first, filing an action in the United States District Court for the Eastern District of Virginia in which it alleged that Pulsecom had committed various federal and state law violations, including (1) contributory infringement of DSC's copyright in certain software used with one of DSC's products; (2) direct infringement of DSC's copyright in that software; (3) misappropriation of DSC's trade secrets; and (4) tortious interference with DSC's business expectancy. Pulsecom then counterclaimed, charging that DSC had infringed Pulsecom's U.S. Patent No. 5,263,081 (the '081 patent).

The parties went to trial on DSC's claims, and at the close of DSC's case-in-chief, Pulsecom moved for judgment as a matter of law. The court granted the motion and dismissed all four of DSC's claims. With respect to Pulsecom's counterclaim of patent infringement, the court held a hearing to construe the claims, and the parties subsequently filed cross-motions for summary judgment. The court granted DSC's motion and entered a summary judgment of noninfringement.

I

This case involves certain components of digital loop carrier systems (DLCs), electronic devices that allow telephone companies to serve large numbers of subscribers efficiently. Before the advent of DLCs, telephone companies had to run copper wire from their central offices to the telephones of each of their subscribers. DLCs allow the individual copper lines to be run over much shorter distances, resulting in large savings for telephone companies. Typically, a DLC is placed in a location central to a number of subscribers, and copper lines are run over the relatively short distances from the DLC to the subscribers.

The DLC acts as an analog-to-digital converter and as a signal modulator-demodulator. The electrical signals that travel over the copper lines between the DLC and the subscribers are voice-frequency analog signals, but the signals that travel between the DLC and the central telephone office are digital signals that travel over a high-bandwidth (*e.g.,* fiber optic) digital channel. The DLC converts the various analog signals it receives from individual subscribers to a digital format and modulates those digital signals into a high-bandwidth composite signal that is sent to the central office through the digital channel. The DLC performs the reverse process on signals traveling from the central office to individual subscribers.

The devices at the heart of the dispute in this case are the "Litespan 2000" DLC, which is manufactured by DSC, and the interface cards, which DSC and Pulsecom designed to work with the Litespan. The Litespan has a backplane connecting 500 interface card slots, through interface circuitry, to a microprocessor. The backplane is controlled by an application-specific integrated circuit that uses a particular signaling protocol. The purpose of the interface cards is to comport with the backplane protocol while providing a particular type of service to subscribers. For example, a single Litespan might have some interface cards providing POTS (plain old telephone service) service and other interface cards providing PBX (private branch exchange) service. The analog signals traveling between the subscribers and the two types of interface cards may be quite different, but

the interface cards process the signals so that they are compatible with the Litespan's backplane protocol.

Litespans and individual interface cards each have their own microprocessors and interface circuitry, which require software to operate. Two software packages are at issue here. The first is the Litespan System software, which includes both the Litespan operating system software and various Litespan utility programs. The second is the POTS-DI software, which DSC developed to operate its POTS interface cards. Both the Litespan System software and the POTS-DI software normally reside in nonvolatile storage within Litespan systems. When a DSC POTS card is inserted into a Litespan and powered up, a copy of the POTS-DI software is downloaded into volatile memory on the POTS card. When the POTS card is powered down, its copy of the POTS-DI software ceases to exist. This design allows changes to be made to the POTS-DI software in a central location (*i.e.,* in the Litespan system) with no need to update software in the individual POTS cards.

DSC designed the Litespan to be used in the telephone networks of the RBOCs, and it transferred the Litespan technology to the RBOCs through a series of comprehensive agreements. The seven agreements at issue here—DSC-Ameritech, DSC-NYNEX, DSC-Bell Atlantic (1993-96 and 1996-99), DSC-U.S. West, DSC-Pacific Bell, and DSC-BellSouth—have generally similar provisions. The agreements all contain provisions that license, under a variety of restrictions, the Litespan System software and POTS-DI software to the RBOCs.

Pulsecom has developed a Litespan-compatible POTS card to compete with DSC's POTS card. Pulsecom decided not to develop the software necessary to operate its POTS card, but rather to design the card so that-like DSC's POTS card—it downloads the POTS-DI software from the host Litespan into its resident memory upon power-up. Pulsecom's design has the obvious advantage of allowing Pulsecom's POTS cards to remain compatible with the Litespan system if DSC modifies its Litespan System software and POTS-DI software.

II

A

DSC's theory of contributory infringement is that each time an RBOC powers up a Pulsecom POTS card in one of its Litespan systems, it directly infringes DSC's POTS-DI software copyright by copying the POTS-DI software from the Litespan into the resident memory of a Pulsecom POTS card. An act of direct infringement is a necessary predicate for any

derivative liability on the part of Pulsecom; absent direct infringement, there can be no contributory infringement. *See, e.g., Subafilms Ltd. v. MGM-Pathe Communications Co.,* 24 F.3d 1088, 1092 (9th Cir. 1994). The district court disposed of DSC's claim on the ground that DSC had not made a prima facie showing of direct infringement.

Section 117 provides a limitation on the exclusive rights of the owner of the copyright in a piece of software. It provides, in pertinent part:

> [I]t is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided: (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner. . . .

17 U.S.C. § 117.

The district court concluded that making copies of the POTS-DI software (in the resident memory of POTS cards) was an "essential step in the utilization" of the POTS-DI software and that there was no evidence that the RBOCs used the software in any other manner that would constitute infringement. Accordingly, under the district court's theory of the case there was no direct infringement (and thus no contributory infringement) if the RBOCs were section 117 "owners" of copies of the POTS-DI software.

The district court then held that the RBOCs were "owners" of copies of the POTS-DI software because they obtained the software by making a single payment and obtaining a right to possession of the software for an unlimited period. Those attributes of the transaction, the court concluded, made the transaction a "sale."

DSC challenges the district court's conclusion that, based on the terms of the purchase transactions between DSC and the RBOCs, the RBOCs were "owners" of copies of the POTS-DI software. In order to resolve that issue, we must determine what attributes are necessary to constitute ownership of copies of software in this context.

In the leading case on section 117 ownership, the Ninth Circuit considered an agreement in which MAI, the owner of a software copyright, transferred copies of the copyrighted software to Peak under an agreement that imposed severe restrictions on Peak's rights with respect to those copies. *See MAI Sys. Corp. v. Peak Computer, Inc.,* 991 F.2d 511, 26 USPQ2d 1458, 1462 (9th Cir. 1995). The court held that Peak was not an "owner" of the copies of the software for purposes of section 117 and thus

did not enjoy the right to copy conferred on owners by that statute. The Ninth Circuit stated that it reached the conclusion that Peak was not an owner because Peak had licensed the software from MAI. *See id.* at 518 n. 5. That explanation of the court's decision has been criticized for failing to recognize the distinction between ownership of a copyright, which can be licensed, and ownership of copies of the copyrighted software. *See, e.g.,* 2 Melville B. Nimmer, *Nimmer on Copyright* ¶ 8.08[B][1], at 8-119 to 1-121 (3d ed. 1997). Plainly, a party who purchases copies of software from the copyright owner can hold a license under a copyright while still being an "owner" of a copy of the copyrighted software for purposes of section 117. We therefore do not adopt the Ninth Circuit's characterization of all licensees as non-owners. Nonetheless, the *MAI* case is instructive, because the agreement between MAI and Peak, like the agreements at issue in this case, imposed more severe restrictions on Peak's rights with respect to the software than would be imposed on a party who owned copies of software subject only to the rights of the copyright holder under the Copyright Act. And for that reason, it was proper to hold that Peak was not an "owner" of copies of the copyrighted software for purposes of section 117. *See also Advanced Computer Servs. of Mich. v. MAI Sys. Corp.,* 845 F.Supp. 356, 367 (E.D. Va. 1994) ("MAI customers are not 'owners' of the copyrighted software; they possess only the limited rights set forth in their licensing agreements"). We therefore turn to the agreements between DSC and the RBOCs to determine whether those agreements establish that the RBOCs are section 117 "owners" of copies of the copyrighted POTS-DI software.

Each of the DSC-RBOC agreements contains a provision that is similar in effect to the following, taken from the DSC-BellSouth agreement: "All rights, title and interest in the Software are and shall remain with seller, subject, however, to a license to Buyer to use the Software solely in conjunction with the Material [*i.e.,* the Litespan-2000 and related equipment] during the useful life of the Material." Two of the agreements also contain clauses that provide for the passage of title to all the material transferred from DSC to the RBOCs, except for the software. The language and the context of those clauses makes it clear that the clauses refer to DSC's rights to the copies of the software in the RBOCs' possession, not DSC's copyright interest in the software. There was no need for a contract clause making clear that DSC was not selling its copyrights in its software to its customers, as it was obvious that DSC did not intend to convey any ownership rights in its copyright as part of the licensing agreements with the RBOCs. The question of ownership of the copies of the software, by contrast, was a matter that needed to be addressed in the contracts.

Not only do the agreements characterize the RBOCs as non-owners of copies of the software, but the restrictions imposed on the RBOCs' rights with respect to the software are consistent with that characterization. In particular, the licensing agreements severely limit the rights of the RBOCs with respect to the POTS-DI software in ways that are inconsistent with the rights normally enjoyed by owners of copies of software.

Section 106 of the Copyright Act, 17 U.S.C. § 106, reserves for a copyright owner the following exclusive rights in the copyrighted work: the right to reproduce the work; the right to prepare derivative works; the right to distribute copies of the work; the right to perform the work publicly; and the right to display the work publicly. Those rights are expressly limited, however, by sections 107 through 120 of the Act. Of particular importance are the limitations of sections 109 and 117. As we have seen, section 117 limits the copyright owner's exclusive rights by allowing an owner of a copy of a computer program to reproduce or adapt the program if reproduction or adaptation is necessary for the program to be used in conjunction with a machine. Section 109, which embodies the "first sale" doctrine, limits the copyright owner's otherwise exclusive right of distribution by providing, in relevant part, that

> the owner of a particular copy . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy. . . . Notwithstanding [the above], unless authorized by . . . the owner of copyright in a computer program . . . [no] person in possession of a particular copy of a computer program . . . may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that . . . computer program . . . by rental, lease, or lending . . . .

17 U.S.C. § 109.

Each of the DSC-RBOC agreements limits the contracting RBOC's right to transfer copies of the POTS-DI software or to disclose the details of the software to third parties. For example, the DSC-Ameritech agreement provides that Ameritech shall "not provide, disclose or make the Software or any portions or aspects thereof available to any person except its employees on a 'need to know' basis without the prior written consent of [DSC]. . . ." Such a restriction is plainly at odds with the section 109 right to transfer owned copies of software to third parties. The agreements also prohibit the RBOCs from using the software on hardware other than that provided by DSC. If the RBOCs were "owners of copies" of the software, section 117 would allow them to use the software on any hardware, regardless of origin. Because the DSC-RBOC agreements substantially

limit the rights of the RBOCs compared to the rights they would enjoy as "owners of copies" of the POTS-DI software under the Copyright Act, the contents of the agreements support the characterization of the RBOCs as non-owners of the copies of the POTS-DI software.

In finding that the RBOCs were owners of copies of the POTS-DI software, the district court relied heavily on its finding that the RBOCs obtained their interests in the copies of the software through a single payment and for an unlimited period of time. It is true that the transfer of rights to the POTS-DI software in each of the agreements did not take the form of a lease, and that the transfer in each case was in exchange for a single payment and was for a term that was either unlimited or nearly so. One commentator has argued that when a copy of a software program is transferred for a single payment and for an unlimited term, the transferee should be considered an "owner" of the copy of the software program regardless of other restrictions on his use of the software. *See* Raymond T. Nimmer, *The Law of Computer Technology* ¶ 1.24[1], at 1-143 to 1-144 (3d ed. 1997). That view has not been accepted by other courts, however, and we think it overly simplistic. The concept of ownership of a copy entails a variety of rights and interests. The fact that the right of possession is perpetual, or that the possessor's rights were obtained through a single payment, is certainly relevant to whether the possessor is an owner, but those factors are not necessarily dispositive if the possessor's right to use the software is heavily encumbered by other restrictions that are inconsistent with the status of owner.

In passing, the district court found added support for its ruling on the contributory infringement issue in the "non-exclusive market rights" clause in DSC's contracts with the RBOCs. The court concluded that the market rights clause supported its view that the RBOCs were entitled to use the POTS-DI software in connection with Pulsecom's POTS cards, because otherwise there would be no point in permitting the RBOCs to buy equipment such as POTS cards from another source.

We conclude that the district court read the market rights clause too broadly. The market rights clause gave the RBOCs the right to obtain competing products and software from other sources, but it did not give the RBOCs the right to copy DSC's copyrighted software in the course of using other companies' products. In fact, the contracts specifically prohibited the RBOCs from copying DSC's software except for use with DSC equipment.

In light of the restrictions on the RBOCs' rights in the copies of the POTS-DI software, we hold that it was improper for the court to conclude, as a matter of law, that the RBOCs were "owners" under section 117 of the

copies of DSC's software that were in their possession. The court was therefore incorrect to rule, at the close of DSC's case, that section 117 of the Copyright Act gave the RBOCs the right to copy the POTS-DI software when using Pulsecom's POTS cards without violating DSC's copyright in the software. Accordingly, we reverse the district court's order granting judgment for Pulsecom on DSC's contributory infringement claim.

* * *

AFFIRMED IN PART, REVERSED IN PART, VACATED IN PART, and REMANDED.

Notes

1. Owner of Software. If I buy a book, the publisher may still own the copyright to the book but I own the physical book. But if I pay for computer software, and my contract says that I am merely acquiring a license to use the software, what do I own?

2. Comparison. How does this case differ from *MAI Systems Corp. v. Peak Computer, Inc.* on the issue of who the owner of software is? *See* Lothar Determann & Aaron Xavier 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.S.F. L. Rev. 1, 39 n. 157 (2001) ("Under *MAI*, if the agreement calls itself a license agreement and not a sale agreement, then it is one. Under *DSC Communications*, if the license prohibits the exercise of the very rights that the First Sale Doctrine and section 117 afford to the software purchaser, then the statutes providing for such rights in the interest of public policy will not apply.").

C. APPLICATION OF THE FIRST SALE DOCTRINE TO SOFTWARE

The "First Sale Doctrine" in copyright law is "[t]he rule that the purchaser of a physical copy of a copyrighted work, such as a book or CD, may give or sell that copy to someone else without infringing the copyright owner's exclusive distribution rights. . . . With regard to that physical copy, the copyright owner's distribution right is said to be exhausted." Black's Law Dictionary (9th ed. 2009). Section 109(a) of the Copyright Law says: "The owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord. . . ." 17 U.S.C. § 109(a).

How does the First Sale Doctrine apply to computer software? There are two general views. Buyers of software often argue that the doctrine prevents the copyright owner from restricting how they dispose of their

lawfully acquired copies of the software. For example, if I purchase a computer game on a CD, I might argue that I can sell or give the CD to someone else. But copyright owners usually respond that buyers of software have not bought a copy of the software but instead merely bought a license to use the software. Because no sale of a copy of the software has occurred, the First Sale Doctrine cannot apply. The following cases illustrate these themes. In addition, as discussed below, § 109(b) of the Copyright Law contains specific rules for certain sales of software.

VERNOR V. AUTODESK, INC.

621 F.3d 1102 (9th Cir. 2010)

CALLAHAN, Circuit Judge:

Timothy Vernor purchased several used copies of Autodesk, Inc.'s AutoCAD Release 14 software ("Release 14") from one of Autodesk's direct customers, and he resold the Release 14 copies on eBay. Vernor brought this declaratory judgment action against Autodesk to establish that these resales did not infringe Autodesk's copyright. The district court issued the requested declaratory judgment, holding that Vernor's sales were lawful because of two of the Copyright Act's affirmative defenses that apply to owners of copies of copyrighted works, the first sale doctrine and the essential step defense.

Autodesk distributes Release 14 pursuant to a limited license agreement in which it reserves title to the software copies and imposes significant use and transfer restrictions on its customers. We determine that Autodesk's direct customers are licensees of their copies of the software rather than owners, which has two ramifications. Because Vernor did not purchase the Release 14 copies from an owner, he may not invoke the first sale doctrine, and he also may not assert an essential step defense on behalf of his customers. For these reasons, we vacate the district court's grant of summary judgment to Vernor and remand for further proceedings.

I.

A. Autodesk's Release 14 software and licensing practices

The material facts are not in dispute. Autodesk makes computer-aided design software used by architects, engineers, and manufacturers. It has more than nine million customers. It first released its AutoCAD software in 1982. It holds registered copyrights in all versions of the software including the discontinued Release 14 version, which is at issue in this case. It provided Release 14 to customers on CD-ROMs.

Since at least 1986, Autodesk has offered AutoCAD to customers pursuant to an accompanying software license agreement ("SLA"), which customers must accept before installing the software. A customer who does not accept the SLA can return the software for a full refund. Autodesk offers SLAs with different terms for commercial, educational institution, and student users. The commercial license, which is the most expensive, imposes the fewest restrictions on users and allows them software upgrades at discounted prices.

The SLA for Release 14 first recites that Autodesk retains title to all copies. Second, it states that the customer has a nonexclusive and nontransferable license to use Release 14. Third, it imposes transfer restrictions, prohibiting customers from renting, leasing, or transferring the software without Autodesk's prior consent and from electronically or physically transferring the software out of the Western Hemisphere. Fourth, it imposes significant use restrictions:

> YOU MAY NOT: (1) modify, translate, reverse-engineer, decompile, or disassemble the Software . . . (3) remove any proprietary notices, labels, or marks from the Software or Documentation; (4) use . . . the Software outside of the Western Hemisphere; (5) utilize any computer software or hardware designed to defeat any hardware copy-protection device, should the software you have licensed be equipped with such protection; or (6) use the Software for commercial or other revenue-generating purposes if the Software has been licensed or labeled for educational use only.

Fifth, the SLA provides for license termination if the user copies the software without authorization or does not comply with the SLA's restrictions. Finally, the SLA provides that if the software is an upgrade of a previous version:

> [Y]ou must destroy the software previously licensed to you, including any copies resident on your hard disk drive . . . within sixty (60) days of the purchase of the license to use the upgrade or update. . . . Autodesk reserves the right to require you to show satisfactory proof that previous copies of the software have been destroyed.

Autodesk takes measures to enforce these license requirements. It assigns a serial number to each copy of AutoCAD and tracks registered licensees. It requires customers to input "activation codes" within one month after installation to continue using the software. The customer obtains the code by providing the product's serial number to Autodesk. Autodesk issues the activation code after confirming that the serial number is authentic, the copy is not registered to a different customer, and the

product has not been upgraded. Once a customer has an activation code, he or she may use it to activate the software on additional computers without notifying Autodesk.

B. Autodesk's provision of Release 14 software to CTA

In March 1999, Autodesk reached a settlement agreement with its customer Cardwell/Thomas & Associates, Inc. ("CTA"), which Autodesk had accused of unauthorized use of its software. As part of the settlement, Autodesk licensed ten copies of Release 14 to CTA. CTA agreed to the SLA, which appeared (1) on each Release 14 package that Autodesk provided to CTA; (2) in the settlement agreement; and (3) on-screen, while the software is being installed.

CTA later upgraded to the newer, fifteenth version of the AutoCAD program, AutoCAD 2000. It paid $495 per upgrade license, compared to $3,750 for each new license. The SLA for AutoCAD 2000, like the SLA for Release 14, required destruction of copies of previous versions of the software, with proof to be furnished to Autodesk on request. However, rather than destroying its Release 14 copies, CTA sold them to Vernor at an office sale with the handwritten activation codes necessary to use the software.

C. Vernor's eBay business and sales of Release 14

Vernor has sold more than 10,000 items on eBay. In May 2005, he purchased an authentic used copy of Release 14 at a garage sale from an unspecified seller. He never agreed to the SLA's terms, opened a sealed software packet, or installed the Release 14 software. Though he was aware of the SLA's existence, he believed that he was not bound by its terms. He posted the software copy for sale on eBay.

Autodesk filed a Digital Millennium Copyright Act ("DMCA") take-down notice with eBay claiming that Vernor's sale infringed its copyright, and eBay terminated Vernor's auction. Autodesk advised Vernor that it conveyed its software copies pursuant to non-transferable licenses, and resale of its software was copyright infringement. Vernor filed a DMCA counter-notice with eBay contesting the validity of Autodesk's copyright claim. Autodesk did not respond to the counter-notice. eBay reinstated the auction, and Vernor sold the software to another eBay user.

In April 2007, Vernor purchased four authentic used copies of Release 14 at CTA's office sale. The authorization codes were handwritten on the outside of the box. He listed the four copies on eBay sequentially, representing, "This software is not currently installed on any computer." On each of the first three occasions, the same DMCA process ensued.

Autodesk filed a DMCA take-down notice with eBay, and eBay removed Vernor's auction. Vernor submitted a counter-notice to which Autodesk did not respond, and eBay reinstated the auction.

When Vernor listed his fourth, final copy of Release 14, Autodesk again filed a DMCA take-down notice with eBay. This time, eBay suspended Vernor's account because of Autodesk's repeated charges of infringement. Vernor also wrote to Autodesk, claiming that he was entitled to sell his Release 14 copies pursuant to the first sale doctrine, because he never installed the software or agreed to the SLA. In response, Autodesk's counsel directed Vernor to stop selling the software. Vernor filed a final counter-notice with eBay. When Autodesk again did not respond to Vernor's counter-notice, eBay reinstated Vernor's account. At that point, Vernor's eBay account had been suspended for one month, during which he was unable to earn income on eBay.

Vernor currently has two additional copies of Release 14 that he wishes to sell on eBay. Although the record is not clear, it appears that Vernor sold two of the software packages that he purchased from CTA, for roughly $600 each, but did not sell the final two to avoid risking further suspension of his eBay account.

II.

In August 2007, Vernor brought a declaratory action against Autodesk to establish that his resales of used Release 14 software are protected by the first sale doctrine and do not infringe Autodesk's copyright. He also sought damages and injunctive relief. On January 15, 2008, Autodesk moved to dismiss Vernor's complaint, or in the alternative, for summary judgment. The district court denied the motion, holding that Vernor's sales were non-infringing under the first sale doctrine and the essential step defense. *See Vernor v. Autodesk, Inc.*, 555 F.Supp.2d 1164, 1170-71, 1175 (W.D. Wash. 2008).

Following discovery, the parties filed cross-motions for summary judgment. The district court granted summary judgment to Vernor as to copyright infringement in an unpublished decision. However, the district court declined to resolve Vernor's affirmative defense that Autodesk had misused its copyright, reasoning that a misuse defense would not benefit Vernor since he had prevailed on copyright infringement. In October 2009, the district court entered judgment for Vernor, and Autodesk timely appealed.

III.

Copyright is a federal law protection provided to the authors of "original works of authorship," including software programs. 17 U.S.C. §§ 101-103. The Copyright Act confers several exclusive rights on copyright owners, including the exclusive rights to reproduce their works and to distribute their works by sale or rental. Id. § 106(1), (3). The exclusive distribution right is limited by the first sale doctrine, an affirmative defense to copyright infringement that allows owners of copies of copyrighted works to resell those copies. The exclusive reproduction right is limited within the software context by the essential step defense, another affirmative defense to copyright infringement that is discussed further infra. Both of these affirmative defenses are unavailable to those who are only licensed to use their copies of copyrighted works.

This case requires us to decide whether Autodesk sold Release 14 copies to its customers or licensed the copies to its customers. If CTA owned its copies of Release 14, then both its sales to Vernor and Vernor's subsequent sales were non-infringing under the first sale doctrine. However, if Autodesk only licensed CTA to use copies of Release 14, then CTA's and Vernor's sales of those copies are not protected by the first sale doctrine and would therefore infringe Autodesk's exclusive distribution right.

A. The first sale doctrine

The Supreme Court articulated the first sale doctrine in 1908, holding that a copyright owner's exclusive distribution right is exhausted after the owner's first sale of a particular copy of the copyrighted work. *See Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350-51 (1908). In *Bobbs-Merrill*, the plaintiff-copyright owner sold its book with a printed notice announcing that any retailer who sold the book for less than one dollar was responsible for copyright infringement. *Id.* at 341. Plaintiff sought injunctive relief against defendants-booksellers who failed to comply with the price restriction. *Id.* at 341-42. The Supreme Court rejected the plaintiff's claim, holding that its exclusive distribution right applied only to first sales of copies of the work. *Id.* at 350-51. The distribution right did not permit plaintiff to dictate that subsequent sales of the work below a particular price were infringing. *Id.* The Court noted that its decision solely applied to the rights of a copyright owner that distributed its work without a license agreement. *Id.* at 350 ("There is no claim in this case of contract limitation, nor license agreement controlling the subsequent sales of the book.").

Congress codified the first sale doctrine the following year. See 17 U.S.C. § 41 (1909). In its current form, it allows the "owner of a particular copy" of a copyrighted work to sell or dispose of his copy without the copyright owner's authorization. *Id.* § 109(a) (enacted 1976). The first sale doctrine does not apply to a person who possesses a copy of the copyrighted work without owning it, such as a licensee. *See id.* § 109(d); *cf. Quality King Distribs., Inc. v. L'anza Research Int'l Inc.*, 523 U.S. 135, 146-47, 118 S.Ct. 1125, 140 L.Ed.2d 254 (1998) ("[T]he first sale doctrine would not provide a defense to . . . any non-owner such as a bailee, a licensee, a consignee, or one whose possession of the copy was unlawful.").

B. Owners vs. licensees

We turn to our precedents governing whether a transferee of a copy of a copyrighted work is an owner or licensee of that copy. We then apply those precedents to CTA's and Vernor's possession of Release 14 copies.

1. *United States v. Wise*, 550 F.2d 1180 (9th Cir.1977)

In *Wise*, a criminal copyright infringement case, we considered whether copyright owners who transferred copies of their motion pictures pursuant to written distribution agreements had executed first sales. *Id.* at 1187. The defendant was found guilty of copyright infringement based on his for-profit sales of motion picture prints. *See id.* at 1183. The copyright owners distributed their films to third parties pursuant to written agreements that restricted their use and transfer. *Id.* at 1183-84. On appeal, the defendant argued that the government failed to prove the absence of a first sale for each film. If the copyright owners' initial transfers of the films were first sales, then the defendant's resales were protected by the first sale doctrine and thus were not copyright infringement.

To determine whether a first sale occurred, we considered multiple factors pertaining to each film distribution agreement. Specifically, we considered whether the agreement (a) was labeled a license, (b) provided that the copyright owner retained title to the prints, (c) required the return or destruction of the prints, (d) forbade duplication of prints, or (e) required the transferee to maintain possession of the prints for the agreement's duration. *Id.* at 1190-92. Our use of these several considerations, none dispositive, may be seen in our treatment of each film print.

For example, we reversed the defendant's conviction with respect to Camelot. *Id.* at 1194. It was unclear whether the Camelot print sold by the defendant had been subject to a first sale. Copyright owner Warner Brothers distributed Camelot prints pursuant to multiple agreements, and the government did not prove the absence of a first sale with respect to each

agreement. *Id.* at 1191-92, 1194. We noted that, in one agreement, Warner Brothers had retained title to the prints, required possessor National Broadcasting Company ("NBC") to return the prints if the parties could select a mutual agreeable price, and if not, required NBC's certification that the prints were destroyed. *Id.* at 1191. We held that these factors created a license rather than a first sale. *Id.*

We further noted, however, that Warner Brothers had also furnished another Camelot print to actress Vanessa Redgrave. *Id.* at 1192. The print was provided to Redgrave at cost, and her use of the print was subject to several restrictions. She had to retain possession of the print and was not allowed to sell, license, reproduce, or publicly exhibit the print. *Id.* She had no obligation to return the print to Warner Brothers. *Id.* We concluded, "While the provision for payment for the cost of the film, standing alone, does not establish a sale, when taken with the rest of the language of the agreement, it reveals a transaction strongly resembling a sale with restrictions on the use of the print." *Id.* There was no evidence of the print's whereabouts, and we held that "[i]n the absence of such proof," the government failed to prove the absence of a first sale with respect to this Redgrave print. *Id.* at 1191-92. Since it was unclear which copy the defendant had obtained and resold, his conviction for sale of Camelot had to be reversed. *Id.*

Thus, under *Wise*, where a transferee receives a particular copy of a copyrighted work pursuant to a written agreement, we consider all of the provisions of the agreement to determine whether the transferee became an owner of the copy or received a license. We may consider (1) whether the agreement was labeled a license and (2) whether the copyright owner retained title to the copy, required its return or destruction, forbade its duplication, or required the transferee to maintain possession of the copy for the agreement's duration. *Id.* at 1190-92. We did not find any one factor dispositive in *Wise*: we did not hold that the copyright owner's retention of title itself established the absence of a first sale or that a transferee's right to indefinite possession itself established a first sale.

2. The "*MAI* trio" of cases

Over fifteen years after *Wise*, we again considered the distinction between owners and licensees of copies of copyrighted works in three software copyright cases, the "*MAI* trio." *See MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir.1993); *Triad Sys. Corp. v. Se. Express Co.*, 64 F.3d 1330 (9th Cir.1995); *Wall Data, Inc. v. Los Angeles County Sheriff's Dep't*, 447 F.3d 769 (9th Cir.2006). In the *MAI* trio, we considered which software purchasers were owners of copies of copy-

righted works for purposes of a second affirmative defense to infringement, the essential step defense.

The enforcement of copyright owners' exclusive right to reproduce their work under the Copyright Act, 17 U.S.C. § 106(1), has posed special challenges in the software context. In order to use a software program, a user's computer will automatically copy the software into the computer's random access memory ("RAM"), which is a form of computer data storage. *See MAI*, 991 F.2d at 513. Congress enacted the essential step defense to codify that a software user who is the "owner of a copy" of a copyrighted software program does not infringe by making a copy of the computer program, if the new copy is "created as an essential step in the utilization of the computer program in conjunction with a machine and . . . is used in no other manner." 17 U.S.C. § 117(a)(1).

The Copyright Act provides that an "owner of a copy" of copyrighted software may claim the essential step defense, and the "owner of a particular copy" of copyrighted software may claim the first sale doctrine. 17 U.S.C. §§ 109(a), 117(a)(1). The MAI trio construed the phrase "owner of a copy" for essential step defense purposes. Neither Vernor nor Autodesk contends that the first sale doctrine's inclusion of the word "particular" alters the phrase's meaning, and we "presume that words used more than once in the same statute have the same meaning throughout." *Moldo v. Matsco, Inc. (In re Cybernetic Servs., Inc.)*, 252 F.3d 1039, 1051 (9th Cir.2001). Accordingly, we consider the *MAI* trio's construction of "owner of a copy" controlling in our analysis of whether CTA and Vernor became "owner[s] of a particular copy" of Release 14 software.

In *MAI* and *Triad*, the defendants maintained computers that ran the plaintiffs' operating system software. *MAI*, 991 F.2d at 513; *Triad*, 64 F.3d at 1333. When the defendants ran the computers, the computers automatically loaded plaintiffs' software into RAM. *MAI*, 991 F.2d at 517-18; *Triad*, 64 F.3d at 1333, 1335-36. The plaintiffs in both cases sold their software pursuant to restrictive license agreements, and we held that their customers were licensees who were therefore not entitled to claim the essential step defense. We found that the defendants infringed plaintiffs' software copyrights by their unauthorized loading of copyrighted software into RAM. *MAI*, 991 F.2d at 517-18 & n. 5; *Triad*, 64 F.3d at 1333, 1335-36. In *Triad*, the plaintiff had earlier sold software outright to some customers. 64 F.3d at 1333 n. 2. We noted that these customers were owners who were entitled to the essential step defense, and the defendant did not infringe by making RAM copies in servicing their computers. *Id.*

In *Wall Data*, plaintiff sold 3,663 software licenses to the defendant. *Wall Data*, 447 F.3d at 773. The licenses (1) were non-exclusive; (2) permitted use of the software on a single computer; and (3) permitted transfer of the software once per month, if the software was removed from the original computer. *Id.* at 775 n. 5, 781. The defendant installed the software onto 6,007 computers via hard drive imaging, which saved it from installing the software manually on each computer. It made an unverified claim that only 3,663 users could simultaneously access the software. *Id.* at 776.

The plaintiff sued for copyright infringement, contending that the defendant violated the license by "over-installing" the software. *Id.* at 775. The defendant raised an essential step defense, contending that its hard drive imaging was a necessary step of installation. *Id.* at 776. On appeal, we held that the district court did not abuse its discretion in denying the defendant's request for a jury instruction on the essential step defense. *Id.* at 784. Citing *MAI*, we held that the essential step defense does not apply where the copyright owner grants the user a license and significantly restricts the user's ability to transfer the software. *Id.* at 784-85. Since the plaintiff's license imposed "significant restrictions" on the defendant's software rights, the defendant was a licensee and was not entitled to the essential step defense. *Id.* at 785.

* * *

We read *Wise* and the *MAI* trio to prescribe three considerations that we may use to determine whether a software user is a licensee, rather than an owner of a copy. First, we consider whether the copyright owner specifies that a user is granted a license. Second, we consider whether the copyright owner significantly restricts the user's ability to transfer the software. Finally, we consider whether the copyright owner imposes notable use restrictions. Our holding reconciles the *MAI* trio and *Wise*, even though the *MAI* trio did not cite *Wise*. . . .

In response to *MAI*, Congress amended § 117 to permit a computer owner to copy software for maintenance or repair purposes. See 17 U.S.C. § 117(c); see also H.R.Rep. No. 105-551, pt. 1, at 27 (1998). However, Congress did not disturb MAI's holding that licensees are not entitled to the essential step defense.

IV.

* * *

B. Analysis

We hold today that a software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions. Applying our holding to Autodesk's SLA, we conclude that CTA was a licensee rather than an owner of copies of Release 14 and thus was not entitled to invoke the first sale doctrine or the essential step defense.

Autodesk retained title to the software and imposed significant transfer restrictions: it stated that the license is nontransferable, the software could not be transferred or leased without Autodesk's written consent, and the software could not be transferred outside the Western Hemisphere. The SLA also imposed use restrictions against the use of the software outside the Western Hemisphere and against modifying, translating, or reverse-engineering the software, removing any proprietary marks from the software or documentation, or defeating any copy protection device. Furthermore, the SLA provided for termination of the license upon the licensee's unauthorized copying or failure to comply with other license restrictions. Thus, because Autodesk reserved title to Release 14 copies and imposed significant transfer and use restrictions, we conclude that its customers are licensees of their copies of Release 14 rather than owners.

CTA was a licensee rather than an "owner of a particular copy" of Release 14, and it was not entitled to resell its Release 14 copies to Vernor under the first sale doctrine. 17 U.S.C. § 109(a). Therefore, Vernor did not receive title to the copies from CTA and accordingly could not pass ownership on to others. Both CTA's and Vernor's sales infringed Autodesk's exclusive right to distribute copies of its work. *Id.* § 106(3).

Because Vernor was not an owner, his customers are also not owners of Release 14 copies. Therefore, when they install Release 14 on their computers, the copies of the software that they make during installation infringe Autodesk's exclusive reproduction right because they too are not entitled to the benefit of the essential step defense. 17 U.S.C. §§ 106(1), 117(a)(1).

Although unnecessary to our resolution of the case, we address the legislative history in order to address the arguments raised by the parties and amici. That legislative history supports our conclusion that licensees such as CTA are not entitled to claim the first sale doctrine. The House Report for § 109 underscores Congress' view that the first sale doctrine is available only to a person who has acquired a copy via an "outright sale". H.R.Rep. No. 94-1476, at 79 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5693. The report also asserts that the first sale doctrine does not "apply to

someone who merely possesses a copy or phonorecord without having acquired ownership of it." *Id.*

Our conclusion that those who rightfully possess, but do not own, a copy of copyrighted software are not entitled to claim the essential step defense is also supported by the legislative history. Congress enacted § 117 following a report from the National Commission on New Technological Uses of Copyrighted Works ("CONTU") proposing Copyright Act amendments. DSC Commc'ns Corp. v. Pulse Commc'ns, Inc., 170 F.3d 1354, 1360 (Fed.Cir.1999) (citing Final Report of the National Commission on New Technological Uses of Copyrighted Works, U.S. Dept. of Commerce, PB-282141, at 30 (July 31, 1978)). CONTU's proposed version of § 117 was identical to the version that Congress enacted with one exception. *Id.* CONTU's version provided, "[I]t is not an infringement for the rightful possessor of a copy of a computer program to make or authorize the making of another copy or adaptation of that program. . . ." *Id.* Without explanation, Congress substituted "owner" for "rightful possessor." *Id.* This modification suggests that more than rightful possession is required for § 117 to apply—i.e., that Congress did not intend licensees subject to significant transfer and use restrictions to receive the benefit of the essential step defense.

* * *

VII.

We vacate the district court's grant of summary judgment in Vernor's favor and remand. We hold that because CTA is a licensee, not an owner, the "sale" of its Release 14 copies to Vernor did not convey ownership. Vernor is accordingly not entitled to invoke the first sale doctrine or the essential step defense, on behalf of his customers. We remand for further proceedings consistent with this opinion, including consideration of Vernor's copyright misuse defense.

VACATED AND REMANDED.

Notes

1. Common Understanding. The court concludes that a transferee of a copy of the software is a licensee rather than the owner. The court reasons that Autodesk retained title to the software and restricted transfer and use of the software. Does this result accord with the common understanding of buyers of software? If not, why not?

2. European Union. An important case, *Axel W. Bierbach (Liquidator of UsedSoft GmbH) v. Oracle International Corp.*, is now pending before

the Court of Justice of the European Union. The issue in the case is whether a license agreement can prevent the resale of software under Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs. One party, UsedSoft, has argued that licenses cannot restrict the resale of software because of the first sale doctrine in copyright law. The copyright owner, Oracle, has contended that the first sale doctrine does not apply because it has not sold any copy of the software; in its view, it has merely licensed the use of the software. The Court's Advocate General has issued a non-binding opinion (similar to an amicus brief) proposing that the court conclude that "any act by which a copy of a computer program is made available in the European Union, in any form and by any means, for the purpose of being used for an unlimited period and in return for a lump-sum payment" should be viewed as a "sale" of the software. Advocate General's Opinion, Case C-128/11 (Apr. 24, 2012), available at <http://curia.europa.eu/>. If the court adopts this conclusion, then the first sale doctrine presumably would apply, and Oracle would not be able to restrict resale of its software (although it could still prevent the making of additional unauthorized copies). What consequences would this potential ruling have for sellers of copyrighted software?

Section 109(b)(1)(A) of the Copyright Law creates an exception to the First Sale Doctrine that restricts leasing copies of software—even by the *owner* of the copies—unless authorized by copyright holder. Leasing of other copyrighted works, like books, is permissible under the First Sale Doctrine. The provision says:

> (b)(1)(A) Notwithstanding the provisions of subsection (a), unless authorized by . . . the owner of copyright in a computer program (including any tape, disk, or other medium embodying such program), . . . neither the owner of . . . nor any person in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord or computer program (including any tape, disk, or other medium embodying such program) by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending. .

17 U.S.C. § 109(b)(1)(A).

ACTION TAPES, INC. v. MATTSON

462 F.3d 1010 (8th Cir. 2006)

LOKEN, Chief Judge.

A century ago, the Supreme Court held that a copyright owner's exclusive right to distribute a copyrighted product does not include the power to control a purchaser's subsequent disposition of the purchased copy. *See Quality King Distribs., Inc. v. L'anza Research Int'l, Inc.,* 523 U.S. 135, 140-42 (1998), *citing Bobbs-Merrill Co. v. Straus,* 210 U.S. 339 (1908). This "first sale" principle is now codified at 17 U.S.C. § 109(a), and Congress has resisted efforts to alter the balance of competing interests it reflects. However, in enacting the Computer Software Rental Amendments Act of 1990, Congress decided that short-term rentals of copyrighted computer software were depriving copyright owners of an appropriate return on their creative investments. *See* H.R.Rep. No. 735, 101st. Cong., 2d Sess. 7, reprinted in 1990 U.S.C.C.A.N. 6935, 6939 (1990). The response was a limited statutory exception to the first sale principle that prohibits a person in possession of "a particular copy of a computer program" from disposing of that copy for commercial gain by "rental, lease, or lending," unless authorized to do so by "the owner of copyright in [the] computer program." 17 U.S.C. § 109(b)(1)(A). In this case, we explore the boundaries of this additional protection granted only to owners of copyrights in computer programs.

Action Tapes has assembled a portfolio of graphic embroidery designs which it embeds on disk-like memory cards that enable computer-run sewing machines to stitch the embedded design on fabric and apparel. Kelly Mattson is the owner of a sewing machine supplies store in northern Minnesota. Action Tapes commenced this action for willful copyright infringement, alleging that Mattson has repeatedly violated the Rental Amendments Act by renting Action Tapes memory cards to her customers without Action Tapes' permission. Both sides moved for summary judgment. The district court granted summary judgment in favor of Mattson, concluding that ActionTapes memory cards contain only data, not computer programs. Action Tapes appeals. Without reaching the question decided by the district court, we affirm on a different ground—that Action Tapes failed to prove it applied for registration of the computer program copyrights before commencing this infringement suit. * * *

Notes

1. Definition of Computer Program. The U.S. Copyright Law defines a "computer program" as a "set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain

result." 17 U.S.C. § 101. Why might the court have concluded that the graphic embroidery designs embedded on the disk-like memory cards are not computer programs? Under what circumstances would they be computer programs?

2. Need for the Exception to the First Sale Doctrine. Is the exception in § 109(b)(1)(A) necessary after decisions like *Autodesk*? Suppose the memory cards were computer programs and that Congress had not passed the Rental Amendments Act. Could Action Tapes use a license to prevent Mattson from renting out the programs? If so, what does the Rental Amendments Act accomplish?

D. FAIR USE DOCTRINE AND SOFTWARE LICENSES

Copyright law allows limited copying of copyrighted works under the so-called "Fair Use Doctrine." Section 107 of the Copyright Law provides in part:

> . . . [T]he fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—
>
> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
>
> (2) the nature of the copyrighted work;
>
> (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
>
> (4) the effect of the use upon the potential market for or value of the copyrighted work.
>
> * * *

17 U.S.C. § 107. For example, these course materials quote and discuss several sentences from various copyrighted books and law review articles. Presumably this minimal copying is permitted under the Fair Use Doctrine.

The following case concerns the application of the Fair Use Doctrine to software:

WALL DATA INC. V. LOS ANGELES COUNTY SHERIFF'S DEPT.

447 F.3d 769 (9th Cir. 2006)

PREGERSON, Circuit Judge.

The Los Angeles County Sheriff's Department purchased 3,663 licenses to Wall Data's computer software, but installed the software onto 6,007 computers. We are asked to determine whether the Sheriff's Department's conduct constituted copyright infringement. The wrinkle in this otherwise smooth question is that, although the software was installed onto 6,007 computers, the computers were configured such that the total number of workstations able to access the installed software did not exceed the total number of licenses the Sheriff's Department purchased. We have jurisdiction under 28 U.S.C. § 1291 and hold that such copying constitutes copyright infringement despite the Sheriff's Department's configuration. We therefore affirm the district court.

I. FACTS AND PROCEDURAL HISTORY

Plaintiff-Appellee Wall Data Incorporated develops, markets, and sells a line of copyrighted computer terminal emulation software products including RUMBA Office and RUMBA Mainframe. Both RUMBA products allow personal computers that use one operating system to access data stored on computers that use a different operating system. RUMBA Office is the more expensive and more powerful computer program.

Between December 1996 and February 1999, the Appellants-Defendants, the Los Angeles County Sheriff's Department and the County of Los Angeles (collectively, "Sheriff's Department"), purchased both of Wall Data's RUMBA software products through an approved vendor. In December 1996, the Sheriff's Department purchased eight "units" of Wall Data's RUMBA Office program. Each of the eight units contained a RUMBA Office CD-ROM (compact disc read-only-memory) and a volume license booklet. Each volume license booklet granted the Sheriff's Department 250 licenses to RUMBA Office. In total, the Sheriff's Department paid $175,220 for 2,000 RUMBA Office licenses, at a reduced price of $87.61 per license.[2]

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[2]The Sheriff's Department argues that it bought 2,000 *copies* of the software, while Wall Data claims that the Sheriff's Department bought 2,000 *licenses* to the software. As discussed below, we conclude that the Sheriff's Department bought licenses to, not copies of, Wall Data's software.

Between November 1997 and February 1999, the Sheriff's Department purchased 1,628 licenses to the lower-cost RUMBA Mainframe program. In all, the Sheriff's Department purchased 2,035 licenses to RUMBA Office and 1,628 licenses to RUMBA Mainframe, for a total of 3,663 licenses.

At first, the Sheriff's Department installed RUMBA Office manually, one computer at a time, onto approximately 750 computers in the Sheriff's Department's new detention facility-the Twin Towers Correctional Facility ("Twin Towers"). The Sheriff's Department soon realized that this process was too time consuming and would delay opening the Twin Towers. In addition, it was not clear where those employees who would need to use RUMBA programs would be assigned to work. To speed up the process of installation and to ensure that employees would be able to use the RUMBA software regardless of where they were assigned, the Sheriff's Department decided to install a "baseline" of software applications onto the hard drives of the remaining computers in its new detention facility. This was done by simultaneously copying the entire contents of a single "master" hard drive containing the baseline of software applications onto the hard drives of other computers. This method is known as "hard disk imaging," and saved the Sheriff's Department from having to install the software manually onto each computer.

By the time the Sheriff's Department finished hard disk imaging in mid-2001, RUMBA Office was loaded onto 6,007 computers in the Twin Towers, far in excess of the 3,663 RUMBA licenses the Sheriff's Department had purchased. Although RUMBA Office was installed onto nearly all of the computers in the Twin Towers, the Sheriff's Department configured those computers using a password-based security system such that the number of users who could access RUMBA Office was limited. The Sheriff's Department claims that, at all times, the number of those who could access the software was limited to the number of licenses it had.

Shortly thereafter, Wall Data discovered that the number of computers in the Twin Towers that had RUMBA Office installed exceeded the number of licenses held by the Sheriff's Department. As a result, Wall Data claimed that the Sheriff's Department violated the terms of its licenses because the Sheriff's Department was licensed, at most, to install RUMBA software onto only 3,663 computers.

II. ANALYSIS

The 1976 Copyright Act defines a "computer program" as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. We have long held

that a computer program is copyrightable as a "tangible medium of expression." *Apple Computer, Inc. v. Formula Int'l, Inc.,* 725 F.2d 521, 524-25 (9th Cir. 1984).

As the owner of a copyright, Wall Data has exclusive rights in its copyrighted work. *See*17 U.S.C. § 106. Exemptions, compulsory licenses, and defenses found in the Copyright Act narrow Wall Data's rights as a copyright owner. *See id.* at §§ 107-122. Here, the Sheriff's Department claims that two defenses found in the Copyright Act apply: the § 107 fair use defense and the § 117 essential step defense. As discussed below, we hold that neither of these defenses save the Sheriff's Department from liability to Wall Data for copyright infringement, and we affirm the district court in full.

A. The Sheriff's Department Is Not Entitled to a § 107 Fair Use Defense

For more than a century, courts have excused certain otherwise infringing uses of copyrighted works under the fair use doctrine. *See Folsom v. Marsh,* 9 F. Cas. 342 (C.C.D.Mass.1841); Horace G. Ball, The Law of Copyright and Literary Property 260 (1944). The Copyright Act codified the fair use defense and identified six examples of fair uses: "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research." 17 U.S.C. § 107. The fair use defense buttresses the basic goal of copyright law: to put copyrighted works to their most beneficial use so that "the public good fully coincides . . . with the claims of individuals." The Federalist No. 43, at 267 (J. Madison) (New American Library ed. 1961) (1788); *see also Sony Corp. of Am. v. Universal City Studios, Inc.,* 464 U.S. 417, 480 n. 33 (1984) ("[W]e must take care to guard against two extremes equally prejudicial; the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.") (quoting *Sayre v. Moore,* 1 East 361 n.(b), 102 Eng. Rep. 139, 140 n.(b) (K.B.1785)); *Mattel, Inc. v. Walking Mountain Prod.,* 353 F.3d 792, 799 (9th Cir.2003) ("At its core, the Act seeks to promote the progress of science and art by protecting artistic and scientific works while encouraging the development and evolution of new works."); *Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc.,* 109 F.3d 1394, 1399 (9th Cir. 1997) (holding that fair use "permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster") (citing *Iowa State Univ. Research Found., Inc. v. Am. Broad. Cos.,* 621 F.2d 57, 60 (2d Cir. 1980)).

In this case, the district court granted summary judgment against the Sheriff's Department on its fair use defense. We review *de novo* the district court's grant of summary judgment. *See Smith v. Jackson,* 84 F.3d 1213, 1218 (9th Cir. 1996). We also review *de novo* the district court's finding of fair use under the Copyright Act, a mixed question of law and fact. *See Mattel,* 353 F.3d at 799.

1. The Four Fair Use Factors

To determine whether the Sheriff's Department's use was fair, we must balance four factors. *See id.* at 800. These factors are: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work. *See Dr. Seuss,* 109 F.3d at 1399-1404.

Not all of the four factors must favor the Sheriff's Department. *See Sega Enters. Ltd. v. Accolade, Inc.,* 977 F.2d 1510, 1522 (9th Cir. 1992). As we balance these factors, we bear in mind that fair use is appropriate where a "reasonable copyright owner" would have consented to the use, i.e., where the "custom or public policy" at the time would have defined the use as reasonable. Subcomm. on Patents, Trademarks & Copyrights of the Sen. Comm. on the Judiciary, 86th Cong., 2d Sess., Study No. 14, Fair Use of Copyrighted Works 15 (Latman) (Comm. Print 1960).

2. Balancing of the Four Fair Use Factors

The Sheriff's Department claims that it is entitled to a fair use defense, because it has done nothing more than apply technology to make the broadest authorized use of its licenses. We are mindful that fair use is a tool for adapting copyright law to brisk technological advances and for tempering the over-technical application of copyright law. Nonetheless, in re-weighing the four fair use factors on appeal, "in light of the purposes of copyright,"*Campbell v. Acuff-Rose Music, Inc.,* 510 U.S. 569, 578 (1994), we conclude that the Sheriff's Department is not entitled to the fair use defense. *See Los Angeles News Serv. v. CBS Broad., Inc.,* 305 F.3d 924, 942,*as amended,*313 F.3d 1093 (9th Cir. 2002) ("As fair use is a mixed question of fact and law, so long as the record is 'sufficient to evaluate each of the statutory factors,' we may reweigh on appeal the inferences to be drawn from that record.") (quoting *Harper & Row, Inc. v. Nation Enters.,* 471 U.S. 539, 560 (1985)).

a. First Fair Use Factor: Purpose and Character of the Allegedly Infringing Use

We first consider the nature of the work: whether the new work is transformative or simply supplants the original work, and whether the work is commercial in nature. *SeeCampbell,* 510 U.S. at 579.

Of primary concern is whether the Sheriff's Department's use was transformative; the more "transformative the new work, the less will be the significance of the other factors." *Id.* A use is considered transformative only where a defendant changes a plaintiff's copyrighted work or uses the plaintiff's copyrighted work in a different context such that the plaintiff's work is transformed into a new creation. *See, e.g., id.* at 578-79. The Sheriff's Department created exact copies of RUMBA's software. It then put those copies to the identical purpose as the original software. Such a use cannot be considered transformative. *See Kelly v. Arriba Soft Corp.,* 336 F.3d 811, 819 (9th Cir.2003) (finding that reproducing music CDs in computer MP3 format is not a transformative use because the resulting use of the copyrighted work was the same as the original use, i.e., entertainment). In cases where " 'use is for the same intrinsic purpose as[the copyright holder's] . . . such use seriously weakens a claimed fair use.' " *Worldwide Church of God v. Philadelphia Church of God, Inc.,* 227 F.3d 1110, 1117 (9th Cir.2000) (quoting *Weissmann v. Freeman,* 868 F.2d 1313, 1324 (2d Cir. 1989)).

Next, the Sheriff's Department's use of hard drive imaging to copy RUMBA Office did not promote the advancement of knowledge and the arts-goals that copyright intends to secure. "[C]opyright law ultimately serves the purpose of enriching the general public through access to creative works," *Fogerty v. Fantasy, Inc.,* 510 U.S. 517, 527 (1994). But the Sheriff's Department did not "provide the marketplace with new creative works," nor was there any advancement of public knowledge in this case. *Triad Sys. Corp. v. Southeastern Express Co.,* 64 F.3d 1330, 1336 (9th Cir. 1995). Thus, allowing such a "fair use" would not further the ultimate goals of copyright law.

Finally, the Sheriff's Department use was commercial in nature. The Sheriff's Department alleges that its use was "commercially insignificant" because not all of the copies of Wall Data's computer software were actually used, and because the Sheriff's Department is a government agency that does not compete with Wall Data. We disagree. As we explained in *Worldwide Church of God,*"repeated and exploitative copying of copyrighted works, even if the copies are not offered for sale, may constitute a commercial use." 227 F.3d at 1118. A commercial use "is

demonstrated by a showing that repeated and exploitative unauthorized copies of copyrighted works were made to save the expense of purchasing authorized copies." *A & M Records, Inc. v. Napster, Inc.,* 239 F.3d 1004, 1015 (9th Cir.2001); *see also Worldwide Church of God,* 227 F.3d at 1118 (concluding that a user is "commercial" where the infringer profited from its infringement because "it gained an 'advantage' or 'benefit' from its distribution and use of [the plaintiff's product] without having to account to the copyright holder").

The terms of Wall Data's RUMBA license clearly restricted the Sheriff's Department's use to a "single designated computer" and prohibited the Sheriff's Department from using "the Software in any other multiple computer or multiple user arrangement." Despite this condition, the Sheriff's Department loaded an entire suite of software, including RUMBA Office, onto nearly all of the computers in the Twin Towers. By using hard drive imaging, the Sheriff's Department saved man-hours and eliminated possible errors associated with separately installing the individual software packages onto each computer in the Twin Tower facility. Hard drive imaging also ensured that those users who needed to use RUMBA would be able to access the software at whatever computer they were assigned to work. Such flexibility could only have been achieved by purchasing licenses for each of the computers on which the software was loaded, or by negotiating with Wall Data for a less restrictive license. Accordingly, we conclude that "the purpose and character" of the Sheriff's Department's use was commercial, because the copies "were made to save the expense of purchasing authorized copies,"*Napster,* 239 F.3d at 1015, or at least the expense of purchasing a more flexible license. Thus, the district court did not err when it decided that the Sheriff's Department's use was not "for a legitimate, essentially non-exploitative purpose," and that the commercial aspect of the Sheriff's Department's use was not "of minimal significance." *Sega,* 977 F.2d at 1522-23.

The Sheriff's Department's installation of the RUMBA Office software onto nearly all of its computers in the Twin Towers was not transformative, did not promote an advancement of the arts, and was commercial in nature. The first factor therefore weighs against a finding of fair use.

b. Second Fair Use Factor: Nature of the Copyrighted Work

In analyzing the second fair use factor, we look at the nature of the copyrighted work, creative works being " 'closer to the core of intended copyright protection' than informational and functional works." *Dr. Seuss,* 109 F.3d at 1402 (quoting *Campbell,* 510 U.S. at 586). Our sister circuits have also considered, under this factor, whether the copyrighted work

represents "substantial investment of time and labor . . . in anticipation of a financial return." *MCA, Inc. v. Wilson,* 677 F.2d 180, 182 (2d Cir. 1981). Although the RUMBA software products are not purely creative works, copyright law nonetheless protects computer software. *See Sega,* 977 F.2d at 1519 ("[T]he 1980 amendments to the Copyright Act unambiguously extended copyright protection to computer programs."). In addition, Wall Data presented undisputed evidence that RUMBA software products were developed over several years, and required a multi-million dollar investment on Wall Data's part. We therefore conclude that the nature of the copyrighted work weighs against a finding of fair use.

c. Third Fair Use Factor: Amount and Substantiality of the Portion Used

Next, we consider whether the "amount and substantiality of the portion used in relation to the copyright work as a whole,"17 U.S.C. § 107(3), is "reasonable in relation to the purpose of copying,"*Dr. Seuss,* 109 F.3d at 1402. The Sheriff's Department copied RUMBA Office in its entirety to ensure that all of the computers in the Twin Towers had identical copies of the software. And although "entire verbatim reproductions are justifiable where the purpose of the work differs from the original,"*Mattel,* 353 F.3d at 804, the Sheriff's Department put its copies to the exact purpose for which the original software licenses were purchased. Consequently, the Sheriff Department's "verbatim" copying of the entire copyrighted work also weighs against a finding of fair use. *See Worldwide Church of God,* 227 F.3d at 1118 ("While wholesale copying does not preclude fair use per se, copying an entire work militates against a finding of fair use.") (internal quotation marks omitted).

d. Fourth Fair Use Factor: Effect of the Use Upon the Potential Market

In addressing the final fair use factor, we focus on "the normal market for the copyrighted work" and whether the allegedly infringing use threatens the potential market for, or value of, a copyrighted work. *See Harper & Row,* 471 U.S. at 568 (noting that the fourth fair use factor is concerned with "use that supplants any part of the normal market for a copyrighted work") (quoting S.Rep. No. 473, 94th Cong., 1st Sess. 65 (1975)). We have said:

> [t]his inquiry attempts to strike a balance between the benefit the public will derive if the use is permitted and the personal gain the copyright owner will receive if the use is denied. The less adverse effect that an alleged infringing use has on the copyright owner's expectation of gain, the less public benefit need be shown to justify the use.

Mattel, 353 F.3d at 804-05.

The Sheriff's Department contends that its copying was solely an attempt to use efficiently its licensed copies of the RUMBA software products, and accordingly, there was no negative impact on Wall Data's market. It points to its own statements that it would not have purchased additional copies of the license had it known that its configuration went beyond its license. We are not persuaded. The Sheriff's Department bought a few licenses and found a way to install the program onto all of its computers without paying the fee required for each installation. The Sheriff's Department could have bargained for the flexibility it desired, but it did not. Whenever a user puts copyrighted software to uses beyond the uses it bargained for, it affects the legitimate market for the product. Thus, although hard drive imaging might be an efficient and effective way to install computer software, we conclude that "unrestricted and widespread conduct of the sort engaged in by the defendant" would nonetheless lead to over-use of the software. *Campbell,* 510 U.S. at 590 (quoting 3 Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 13.05[A](4), at 13-102.61 (1993)).

Equally important, ghost copies of the software lay dormant and were unuseable only *until* a Sheriff's Department network administrator decided to activate RUMBA Office on that computer. The Sheriff's Department thus created its own "sub-licensing" system where it granted users permission to use the software and, in essence, asked Wall Data to "trust" that it was not using RUMBA in excess of its authorization under the license. We recognize that computer licensing is generally an "honor system," in that there is little to stop a person with physical possession of software from installing it on multiple computers. But in this case, the Sheriff's Department's system made tracking infringement almost impossible, because Wall Data could not independently verify which of the computers had been used to access RUMBA and which ones had not—it had to trust the Sheriff's Department that its system was not allowing over-use. In fact, after Wall Data brought the over-use of RUMBA to the Sheriff's Department's attention, a Sheriff's Department employee admitted, in an email, that *he* was not sure how to tell which computers had accessed RUMBA. This system therefore made copyright infringement easier (because no physical installation was necessary) and made detection of over-use more difficult.

In recognition of the ease with which software can be over-used, courts have been cautious to extend protection to methods that would make copyright infringement of software any easier:

> Software fundamentally differs from more traditional forms of medium, such as print or phonographic materials, in that software can be both, more readily and easily copied on a mass scale in an extraordinarily short amount of time and relatively inexpensively. One of the primary advantages of software, its ability to record, concentrate and convey information with unprecedented ease and speed, makes it extraordinarily vulnerable to illegal copying and piracy. [Thus,] it is important to acknowledge these special characteristics of the software industry and provide enhanced copyright protection for its inventors and developers.

Adobe Sys., Inc. v. Stargate Software Inc., 216 F. Supp.2d 1051, 1059 (N.D.Cal.2002). We believe that "widespread use" of hard drive imaging in excess of one's licenses could seriously impact the market for Wall Data's product. *See Campbell,* 510 U.S. at 590 (citations omitted). Therefore, we conclude that the fourth factor also weighs against a finding of fair use.

* * *

In considering the four fair use factors—the purpose and character of the work, the nature of the use, the amount and substantiality of the portion used, and the effect on the plaintiffs' market—none militate in favor of the Sheriff's Department's fair use defense. We therefore hold that the Sheriff's Department is not entitled to a fair use defense, and we affirm the district court's order granting summary judgment on the Sheriff's Department's fair use defense.

Note

Professor Raymond Nimmer agrees with the conclusion that fair use is not a defense in this case: "The standard here is not whether the defendant has resold copies for a profit in competition with the licensor, but includes whether the use was repeated and exploitative, made to save the expense of purchasing authorized copies. This was precisely what occurred in *Wall Data* in that the multiple unauthorized copies were made for convenience and to save the expense of obtaining an appropriate number of licenses." Raymond T. Nimmer, *Information Law* § 11:154 (2008).

TOPIC 3
HOW COPYRIGHT LAW MAY RESTRICT TERMS IN SOFTWARE CONTRACTS

Copyright Law may restrict the terms of software contracts under two theories. First, copyright law may preempt contract terms that conflict with copyright law or copyright policies. Second, contract terms may constitute a "misuse" of copyright. This topic considers both issues.

A. COPYRIGHT PREEMPTION OF CONTRACT TERMS

In the United States, the subject of copyright is governed exclusively by federal law. Accordingly, state laws are preempted to the extent that they attempt to create rights equivalent to copyright. Section 301 of the U.S. Copyright Law says:

> On and after January 1, 1978, all legal or equitable rights that are equivalent to any of the exclusive rights within 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 subject matter of copyright as specified by sections 102 and 103, whether created before or after that date and whether published or unpublished, are governed exclusively by this title. Thereafter, no person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.

For example, in *Mayer v. Josiah Wedgwood & Sons, Ltd.*, 601 F. Supp. 1523 (S.D.N.Y. 1985), an artist sued a china manufacturer, claiming among other things that the defendant had committed the tort of unfair competition under New York law by copying her design for a Christmas tree ornament. The court, however, held that this state law claim was preempted because "the cause of action asserted here is not qualitatively different from one for copyright infringement." *Id.* at 1535-36. The court cited other cases holding that, on their particular facts, certain other state law claims were preempted, including claims for conversion, tortious interference with

contractual relations, misappropriation, dealing in stolen property, and common law copyright.

An important question has been whether § 301 also preempts contract claims under state law if a contract attempts to prohibit copying or otherwise addresses subjects covered by the U.S. Copyright Law. Professor Raymond Nimmer has provided the following general answer:

> Claims based on contract do not create a right "equivalent" to copyright, even if the contract was breached by copying a copyrighted work. The contract claim requires proof of an enforceable promise (contract) and breach of that promise; it does not suffice merely to show copying. Properly alleged contract claims are not preempted. The mere fact that copying or redistribution of copies are the acts that breach a contract does not imply that the contract claim is equivalent to a copyright claim.

Raymond T. Nimmer, *Information Law* § 2:38 (2012). Accordingly, contracts that provide rights that are consistent with copyright law are enforceable notwithstanding the general preemption of state law in the area of copyright.

But while state law contract claims that are consistent with copyright law are not preempted, contract claims that conflict with copyright law may be preempted. Summarizing the case law, the American Law Institute's *Principles of the Law of Software Contracts* contains the following succinct provision:

> § 1.09 Enforcement of Terms Under Federal Intellectual Property Law
>
> A term of an agreement is unenforceable if it (a) conflicts with a mandatory rule of federal intellectual property law; or (b) conflicts impermissibly with the purposes and policies of federal intellectual property law; or (c) would constitute federal intellectual property misuse in an infringement proceeding.

An official comment gives the following illustration of a term that conflicts with a mandatory rule of copyright law, the concern of § 1.09(a):

> A, a software vendor, orally transfers ownership of its copyright in the software to B. The oral agreement to transfer copyright ownership is unenforceable because it conflicts with a mandatory rule of intellectual property law. See 17 U.S.C. § 204(a) ("A transfer of copyright ownership, other than by operation of law, is not valid unless an instrument of conveyance . . . is in writing and signed by the owner of the rights conveyed or such owner's duly authorized agent.").

A possible example of a license term that would conflict with the purposes of copyright law, the concern of § 1.09(b), appears in *People v. Network Associates, Inc.*, 758 N.Y.S.2d 466 (Sup. Ct. 2003). In that case, a court enjoined enforcement of a clause in a software license saying: "The customer will not publish reviews of this product without prior consent from Network Associates, Inc." *Id.* at 471. Although the court did not address federal Copyright Law, the clause would appear to discourage rather than encourage the creation of original works of authorship (i.e., product reviews), contrary to the goal of copyright law. The cases in Part B below provide illustrations of copyright misuse, the concern of § 1.09(c).

NATIONAL CAR RENTAL SYSTEM, INC. v. COMPUTER ASSOCIATES INTERNATIONAL, INC.

991 F.2d 426 (8th Cir. 1993)

MAGILL, Circuit Judge.

We here deal with the difficult question of the extent to which the Copyright Act preempts state breach of contract actions alleging that the licensee of computer software exceeded limitations on the use of computer software contained in the license agreements. Computer Associates International, Inc., appeals from the district court's order resolving a motion for judgment on the pleadings and dismissing its breach of contract claim against National Car Rental as preempted under the Copyright Act. We conclude that the district court failed to grant Computer Associates all reasonable inferences from its pleadings, and hold that as properly construed, the cause of action as pled is not preempted. We reverse.

I. BACKGROUND

Computer Associates International, Inc. (CA), creates and licenses computer software. CA licensed its programs to the appellee, National Car Rental Systems, Inc. (National), to process National's data on National's hardware in Bloomington, Minnesota. The 1990 license agreement between CA and National provided, as did earlier licenses, that National may use the licensed programs "only for the internal operations of Licensee and for the processing of its own data." A separate order form, incorporated into the license agreement, similarly provided that "use of the Licensed Program[s] is restricted to the internal operations of Licensee and for the processing of its own data."

Sometime in 1990, National decided to cease its internal computer operations and contract with an independent computer services vendor for

computer related information services. Ultimately, National retained Electronic Data Systems Corporation (EDS) to provide these services. In connection with this transaction, National, EDS, and CA entered into a supplement addendum, which provided that EDS could use the licensed programs to process National's data. The supplement addendum provided that EDS would use the programs for the benefit of National subject to the terms and conditions of the 1990 license agreement, and solely "to process data of Licensee and in no event for the processing of data . . . of any third party other than Licensee."

CA subsequently determined that National had been using the programs to process the data of third parties, including Lend Lease Trucks, Inc. (Lend Lease), and Tilden Car Rental, Inc. (Tilden), in violation of the license agreement, and that such use had continued through EDS under the supplement addendum. CA threatened to sue National if such use did not stop. National then brought a declaratory judgment action in the district court. National admitted in its complaint that it "has used the Licensed Software in its business activities . . . including the activities relating to Tilden and Trucks [Lend Lease]," but requested a declaration that its use of the programs neither breached the license agreement nor infringed CA's copyright. CA asserted two counterclaims. In the first, it claimed that National's use of the programs, either individually or through EDS, for the benefit of Lend Lease and Tilden, breached the license agreement. In the second, CA claimed that National infringed its copyright by making an unauthorized copy of the software.

National moved for judgment on the pleadings under Rule 12(c), alleging that CA's first counterclaim was preempted under § 301(a) of the Copyright Act. In resolving the motion, the district court concluded that CA alleged a lease agreement between National and the third parties: National permitted them to use the software in exchange for payment. The district court concluded that this cause of action, as pled, was "equivalent" to the exclusive copyright right of distribution of copies of the work, and held it was preempted.

The question then becomes whether CA's allegation that National breached their contract by using the program in a fashion not allowed under the contract protects a right equivalent to one of the exclusive copyright rights. We believe it does not.

We agree with the district court that the computer program in question is within the subject matter of copyright. Thus we focus on the second preemption issue: whether the right sought under state law is equivalent to the exclusive rights under copyright. We must consider whether a limitation

on the uses to which a licensee may put a licensed work are preempted even though those uses do not involve the exclusive copyright rights. As noted above, courts and commentators have framed this inquiry as whether the right in question is "infringed by the mere act of reproduction, performance, distribution or display." 1 Nimmer on Copyright § 1.01[B], at 1-13. Section 301 preempts only those state law rights that " 'may be abridged by an act which, in and of itself, would infringe one of the exclusive rights' provided by federal copyright law." *Computer Assocs. Int'l, Inc. v. Altai, Inc.,* 982 F.2d 693, 716 (2d Cir. 1992). If an extra element is "required, instead of or in addition to the acts of reproduction, performance, distribution or display, in order to constitute a state-created cause of action, then the right does not lie 'within the general scope of copyright' and there is no preemption." 1 Nimmer on Copyright § 1.01[B], at 1-14-15 (footnotes omitted); *see also Harper & Row,* 723 F.2d at 200 (where state law right is predicated upon an act incorporating elements beyond mere reproduction or the like, the [federal and state rights] are not equivalent and there is no preemption).

We conclude that the alleged contractual restriction on National's use of the licensed programs constitutes an extra element in addition to the copyright rights making this cause of action qualitatively different from an action for copyright.

National initially contends that any complaint alleging use of a copyrighted work that exceeds the uses allowable under the license must be brought as a copyright infringement claim; contract claims containing such allegations are preempted. In support of this proposition, National cites several cases finding copyright infringement when the licensee's "use" of a copyrighted and licensed work exceeded the uses allowed under the license. *See S.O.S., Inc. v. Payday, Inc.,* 886 F.2d 1081, 1087 (9th Cir. 1989); *Cohen v. Paramount Pictures Corp.,* 845 F.2d 851, 853 (9th Cir. 1988); *Gilliam v. American Broadcasting Cos., Inc.,* 538 F.2d 14, 20 (2d Cir. 1976); *Frank Music Corp. v. Metro-Goldwyn-Mayer, Inc.,* 772 F.2d 505, 512 (9th Cir. 1985); *Wolff v. Institute of Elec. & Elecs. Eng'rs, Inc.,* 768 F.Supp. 66, 69 (S.D.N.Y. 1991); *National Bank of Commerce v. Shaklee Corp.,* 503 F.Supp. 533, 544 (W.D.Tex. 1980).

We believe that National reads these cases too broadly. First, only one of these cases involved preemption. *See Wolff,* 768 F.Supp. at 69. In *Wolff,* the plaintiff alleged that the defendant had both infringed his copyright and breached their contract by republishing a photograph licensed for only one publication. The court held that the breach of contract cause of action was preempted because, as the court construed it, the plaintiff merely alleged that the defendant breached their contract by infringing his copyright.

Wolff, 768 F.Supp. at 69. . . . Moreover, the *Wolff* case stands at most for the proposition that a breach of contract claim alleging nothing more than an act of infringement is preempted. Given that we cannot read CA to allege that National engaged in one of the acts reserved to CA under § 106, these cases are inapposite.*

Because we find no general rule holding breach of contract actions such as this one preempted, we examine specifically whether this cause of action seeks to protect rights equivalent to the exclusive copyright rights. We conclude that the contractual restriction on use of the programs constitutes an additional element making this cause of action not equivalent to a copyright action.

National disagrees with this characterization and attempts to read the term "use" in the license agreement as synonymous with the rights given to the copyright holder. We believe it is not, as two recent cases make clear.

In a case very similar to this one, involving CA, the court held that a contractual restriction on use of a computer program was distinct from the exclusive copyright rights. In *Computer Assocs. v. State St. Bank & Trust,* 789 F. Supp. 470 (D. Mass. 1992), the parties had executed a license that provided, *inter alia:* "Customer agrees to refrain from using the Equipment . . . for other customer-sites or customers on a service basis." *Id.* at 475. CA argued that State Street violated the provisions of the license agreement by allowing customers direct access to the programs to gain information. Because of that alleged breach, Computer Associates claimed that it could cancel their maintenance contract. State Street moved for a preliminary injunction prohibiting CA from cancelling the maintenance contract. CA then claimed that the violation of the agreements constituted copyright infringement, preventing State Street from claiming irreparable harm. In denying this claim, the court stated:

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*Section 106 of the Copyright Act gives the owner of a copyright the exlusive right "(1) to reproduce the copyrighted work in copies or phonorecords; (2) to prepare derivative works based upon the copyrighted work; (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission."—*Ed.*

> infringement results only from the unauthorized copying of copyrighted material. A use of an authorized copy of copyrighted subject matter ordinarily is not infringing . . . . Therefore, applicable limitations on State Street's use of the programs, if any, must be derived initially from the license agreements, not copyright law.

Id. at 472.

The Ninth Circuit reached a similar conclusion in *G.S. Rasmussen & Assocs. v. Kalitta Flying Serv.,* 958 F.2d 896 (9th Cir. 1992). In *Kalitta,* the plaintiff had received from the FAA a certificate (STC) allowing him to modify a plane design. The defendant took the certificate from an existing, modified plane and used it to modify another plane, without paying the plaintiff for doing so. Plaintiff sued for unfair competition, and the defendant raised the defense of copyright preemption. The court first noted that there was no allegation of copying. It went on to hold that:

> Federal copyright law governs only copying. . . . Enforcement of Rasmussen's property right in his STC leaves Kalitta free to make as many copies of the certificate as it wishes; to the extent the manual supplement is not protected by the copyright laws, the same is true of it. That Kalitta is prevented from then using these copies to obtain an airworthiness certificate from the FAA does not interfere in any way with the operation of the copyright laws.

Id. at 904.

In both of these cases, the courts distinguished restrictions on use of a copyrightable work that did not involve "copying" from the exclusive rights in copyright. CA's situation is the same. CA does not claim that National is doing something that the copyright laws reserve exclusively to the copyright holder, or that the use restriction is breached "by the mere act of reproduction, performance, distribution or display." Instead, on this posture, CA must be read to claim that National's or EDS's processing of data for third parties is the prohibited act. None of the exclusive copyright rights grant CA that right of their own force. Absent the parties' agreement, this restriction would not exist. Thus, CA is alleging that the contract creates a right not existing under the copyright law, a right based upon National's promise, and that it is suing to protect that contractual right. The contractual restriction on use of the programs constitutes an extra element that makes this cause of action qualitatively different from one for copyright.

National contends, however, that such a conclusion fails to recognize the nature and value of computer software. According to National,

computer software has value because it performs a function. National thus claims an allegation that it used the program for another is in fact an allegation that it distributed the "functionality" of the program. This argument fails. First, National cites to no authority in support of this position. Second, even with respect to computer software, the distribution right is only the right to distribute *copies* of the work. As Professor Nimmer has stated, "[i]nfringement of [the distribution right] requires an actual dissemination of either copies or phonorecords." 2 Nimmer on Copyright § 8.11[A], at 8-124.1. Finally, courts have specifically held that copyright protection in computer software does not extend to the software's function. *See, e.g., Computer Assocs. Int'l, Inc. v. Altai, Inc.,* 982 F.2d 693, 704 (2d Cir. 1992). Thus, even if CA could be said to have alleged that National "distributed the functionality" of its program, such a claim would not protect a right equivalent to one of the exclusive rights in copyright.

Finally, National claims that CA's requested relief demonstrates its cause of action is equivalent to the exclusive rights under copyright. First, National notes that CA requested damages for unjust enrichment, damages National claims are preempted under § 301. National is correct in noting that certain courts have held claims for unjust enrichment preempted when based upon allegations that the defendant engaged in one of the acts reserved to the copyright holder under § 106. We do not read CA to allege that National was unjustly enriched as a result of a wrongful exercise of one of the § 106 rights. Rather, we read this allegation of damage as a further explanation of the damages CA intends to prove arising from the breach of contract. CA alleges generally that it has been damaged in an amount to be proved at trial, and it will have to prove those damages. In this context, we read its allegations of unjust enrichment as an attempt, albeit inartful, to allege that National received from Lend Lease and Tilden amounts that CA would have received had National not breached their contract. Second, National notes that CA requested return or destruction of any copies of its programs still in National's possession. It notes that the Copyright Act provides precisely that remedy, *see* 17 U.S.C. § 504, and claims that the request for destruction shows the claim is equivalent to a copyright claim. We disagree. The parties' contract specifically provides for the return or destruction of the licensed programs upon any breach of the license agreement. This remedy would apply equally to this asserted breach (improper use) as to an action for breach of an agreement to pay royalties or license fees, which National admits would not be preempted. Furthermore, the copyright remedy of return or destruction applies even absent a preexisting relationship between the parties: it does not have to be stated in a contract or license agreement. We cannot conclude that this

action is preempted simply because the parties' contract provides a remedy for breach identical to a remedy provided in copyright.

Note

Why does the court conclude that federal copyright law does not preempt the enforcement of the contract terms? Professor Nimmer writing about this case explains:

> Applying the "extra element" test, the contract restriction on the "licensed programs constitutes an extra element in addition to the copyright rights making this cause of action qualitatively different from an action for copyright." Engaging in acts prohibited under copyright law without a license infringes copyright. That copyright action does not preempt the contract action. The injured party can use either or both remedies.

Raymond T. Nimmer, 1 Info. Law § 2:38 (2012).

DAVIDSON & ASSOCIATES V. JUNG

422 F.3d 630 (8th Cir. 2005)

SMITH, Circuit Judge.

Davidson & Associates, Inc. d/b/a Blizzard Entertainment ("Blizzard") and Vivendi Universal Games, Inc. ("Vivendi"), owner of copyrights in computer game software and online gaming service software sued Ross Combs ("Combs"), Rob Crittenden ("Crittenden"), Jim Jung ("Jung"), and Internet Gateway, Inc. ("Internet Gateway") (collectively referred to as "Appellants"), for breach of contract, circumvention of copyright protection system, and trafficking in circumvention technology. Both parties moved for summary judgment. . . .

Blizzard, a California corporation and subsidiary of Vivendi, creates and sells software games for personal computers. This appeal concerns the particular Blizzard games "StarCraft," "StarCraft: Brood War," "WarCraft II: Battle.net Edition," "Diablo," and "Diablo II: Lord of Destruction." Combs and Crittenden are computer programmers, Jung is a systems administrator, and Internet Gateway is an Internet service provider based in St. Peters, Missouri. Jung is also the president, co-owner, and day-to-day operator of Internet Gateway.

In January 1997, Blizzard officially launched "Battle.net," a 24-hour online-gaming service available exclusively to purchasers of its computer games. The Battle.net service has nearly 12 million active users who spend

more that 2.1 million hours online per day. Blizzard holds valid copyright registrations covering Battle.net and each of its computer games at issue in this litigation. Battle.net is a free service that allows owners of Blizzard games to play each other on their personal computers via the Internet. Battle.net mode allows users to create and join multi-player games that can be accessed across the Internet, to chat with other potential players, to record wins and losses and save advancements in an individual password-protected game account, and to participate with others in tournament play featuring elimination rounds. Players can set up private "chat channels" and private games on Battle.net to allow players to determine with whom they wish to interact online. These Battle.net mode features are only accessible from within the games.

In order to play the Blizzard game contained on a CD-ROM, a user must first install the game onto a computer and agree to the terms of the End User License Agreement ("EULA")[4] and Terms of Use ("TOU"),[5] both of

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[4]The EULA contains the following language: "YOU SHOULD CAREFULLY READ THE FOLLOWING END USER LICENSE AGREEMENT BEFORE INSTALLING THIS SOFTWARE PROGRAM. BY INSTALLING, COPYING, OR OTHERWISE USING THE SOFTWARE PROGRAM YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE UNUSED SOFTWARE PROGRAM TO THE PLACE OF PURCHASE OR CONTACT BLIZZARD ENTERTAINMENT CUSTOMER SERVICE . . . FOR A FULL REFUND OF THE PURCHASE PRICE WITHIN THIRTY DAYS OF THE ORIGINAL PURCHASE. This software program (the "Program"), any printed materials, any on-line or electronic documentation, and any and all copies and derivative works of such software program and materials are the copyrighted work of Blizzard Entertainment. . . . Subject to that Grant of Licence hereinabove, you may not, in whole or in part, copy, photocopy, reproduce, translate, reverse engineer, derive source code, modify, disassemble, decompile, create derivative works based on the Program, or remove any proprietary notices or labels on the Program without the prior consent, in writing, of Blizzard."

[5] * * * The TOU states: "Battle.net(R) ("Battle.net") is the copyrighted work of Blizzard Entertainment(R) ("Blizzard") or its suppliers. All use of Battle.net is governed by the terms of use provided below ("Battle.net Terms of Use"). . . . Blizzard hereby grants, and by using Battle.net you thereby accept, a limited, personal, non-exclusive license and right to use Battle.net using either a home, work, or portable computer. . . . You are entitled to use Battle.net for your own personal use, but you shall not be entitled to[:] (i) sell or grant a security interest in or transfer reproductions of Battle.net to other parties in any way, nor to rent, lease, or license Battle.net to others without the prior written consent of Blizzard;(ii) copy, photocopy, reproduce, translate, reverse engineer, modify, disassemble, or

which prohibit reverse engineering. At the end of both the EULA and TOU, Blizzard includes a button with the text, "I Agree" in it, which the user must select in order to proceed with the installation. Users are also required to enter a name and the CD Key during installation of Battle.net and Blizzard games.

The users of Battle.net have occasionally experienced difficulties with the service. To address their frustrations with Battle.net, a group of non-profit volunteer game hobbyists, programmers, and other individuals formed a group called the "bnetd project." The bnetd project developed a program called the "bnetd.org server" that emulates the Battle.net service and permits users to play online without use of Battle.net. The bnetd project is a volunteer effort and the project has always offered the bnetd program for free to anyone. Combs, Crittenden, and Jung were lead developers for the bnetd project.

The bnetd project was organized and managed over the Internet through a website, www.bnetd.org, that was made available to the public through equipment provided by Internet Gateway. The bnetd.org emulator provides a server that allows gamers unable or unwilling to connect to Battle.net to experience the multi-player features of Blizzard's games. The bnetd.org emulator also provides matchmaking services for users of Blizzard games who want to play those games in a multi-player environment without using Battle.net. Bnetd.org attempted to mirror all of the user-visible features of Battle.net, including online discussion forums and information about the bnetd project, as well as access to the program's computer code for others to copy and modify.

To serve as a functional alternative to Battle.net, bnetd.org had to be compatible with Blizzard's software. In particular, compatibility required that bnetd.org speak the same protocol language that the Battle.net speaks. By speaking the same protocol language, the bnetd programs would be

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de-compile [sic] in whole or in part any Battle.net software;(iii) create derivative works based on Battle.net;(iv) host or provide matchmaking services for any Blizzard software programs or emulate or redirect the communication protocols used by Blizzard as part of Battle.net. . . ."

The terms of neither the EULA nor the TOU appear on the outside packaging. If the user does not agree to these terms, the game may be returned for a full refund of the purchase price within thirty (30) days of the original purchase. Combs, Crittenden, and Jung installed Blizzard games and agreed to the terms of the EULA. Crittenden and Jung logged onto Battle.net and agreed to the TOU.

interoperable with Blizzard games. Once game play starts, a user perceives no difference between Battle.net and the bnetd.org.

By necessity, Appellants used reverse engineering to learn Blizzard's protocol language and to ensure that bnetd.org worked with Blizzard games. Combs used reverse engineering to develop the bnetd.org server, including a program called "tcpdump" to log communications between Blizzard games and the Battle.net server. Crittenden used reverse engineering to develop the bnetd.org server, including using a program called "Nextray." Crittenden also used a program called "ripper" to take Blizzard client files that were compiled together in one file and break them into their component parts. Crittenden used the ripper program to determine how Blizzard games displayed ad banners so that bnetd.org could display ad banners to users in the format that Blizzard uses on the Battle.net service. Combs tried to disassemble a Blizzard game to figure out how to implement a feature that allowed bnetd.org to protect the password that a user enters when creating an account in Battle.net mode. Crittenden made an unauthorized copy of a Blizzard game in order to test the interoperability of the bnetd.org server with multiple games.

Blizzard designed its games to connect only to Battle.net servers. To enable a Blizzard game to connect to a bnetd.org server instead of a Battle.net server, bnetd had to modify the computer file that contained the Internet address of the Battle.net servers. As part of the bnetd project, Combs participated in the development of a utility program called "BNS" to allow Blizzard games to connect to bnetd.org servers more easily. Through the BNS program, the game sends the bnetd.org server information about its CD Key. An individual can thus play one of the Blizzard games at issue over the Internet via bnetd.org rather than Battle.net. According to Blizzard, the EULAs and TOUs prohibit this activity.

The Copyright Act provides the exclusive source of protection for "all legal and equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by . . . [§] 106" of the Copyright Act. See 17 U.S.C. § 301(a). The Copyright Act preempts state laws that attempt to protect rights exclusively protected by federal law. See *Nat'l Car Rental Sys., Inc. v. Computer Assocs. Intern., Inc.*, 991 F.2d 426, 428 (8th Cir. 1993). Conversely, the Copyright Act does not preempt state law from enforcing non-equivalent legal or equitable rights. *Id.* A state cause of action is statutorily or expressly preempted if: (1) the work at issue is within the subject matter of copyright as defined in §§ 102 and 103 of the Copyright Act, and (2) the state-law-created right is equivalent to any of the exclusive rights within the general scope of copyright as specified in § 106. *Id.* at 428-29 (citing *Harper & Row Pub., Inc. v. Nation Enter.*, 723 F.2d

195, 200 (2d Cir. 1983)). Express preemption is no longer at issue in this case.

This case concerns conflict preemption. Conflict preemption applies when there is no express preemption but (1) it is impossible to comply with both the state and federal law or when (2) the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress. *Pacific Gas & Elec. Co. v. Energy Res. Conservation and Dev. Com'n*, 461 U.S. 190, 204 (1983). Appellants, relying upon *Vault v. Quaid Software Ltd.*, 847 F.2d 255, 268-70 (5th Cir. 1988), argue that the federal Copyright Act preempts Blizzard's state law breach-of-contract claims. We disagree.

In *Vault*, plaintiffs challenged the Louisiana Software License Enforcement Act, which permitted a software producer to impose contractual terms upon software purchasers provided that the terms were set forth in a license agreement comporting with the statute. *Id.* at 268. "Enforceable terms [under the Louisiana statute] include the prohibition of: (1) any copying of the program for any purpose; and (2) modifying and/or adapting the program in any way, including adaptation by reverse engineering, decompilation or disassembly." *Id.* at 269 (citation omitted). The Louisiana statute defined reverse engineering, decompiling or disassembling as "any process by which computer software is converted from one form to another form which is more readily understandable to human beings, including without limitation any decoding or decrypting of any computer program which has been encoded or encrypted in any manner." *Id.* (citation omitted). The Fifth Circuit held that the Louisiana statute conflicted with the rights of computer program owners under the Copyright Act, specifically 17 U.S.C. § 117, which permits a computer program owner to make an adaptation of a program provided that the adaption is either created as an essential step in the utilization of the computer program in conjunction with a machine or is for archival purpose only. *Id.* at 270.

Unlike in *Vault*, the state law at issue here neither conflicts with the interoperability exception under 17 U.S.C. § 1201(f) nor restricts rights given under federal law. Appellants contractually accepted restrictions on their ability to reverse engineer by their agreement to the terms of the TOU and EULA. "[P]rivate parties are free to contractually forego the limited ability to reverse engineer a software product under the exemptions of the Copyright Act[,]" *Bowers v. Baystate Techs, Inc.*, 320 F.3d 1317, 1325-26 (Fed.Cir.2003), and "a state can permit parties to contract away a fair use defense or to agree not to engage in uses of copyrighted material that are permitted by the copyright law if the contract is freely negotiated." *Id.* at 1337 (Dyk, J., dissenting). *See also Nat'l Car Rental Sys., Inc.*, 991 F.2d

at 434 (holding that the Copyright Act does not preempt a breach of contract action based on prohibited use of software contained in a license agreement). While *Bowers* and *Nat'l Car Rental* were express preemption cases rather than conflict preemption, their reasoning applies here with equal force. By signing the TOUs and EULAs, Appellants expressly relinquished their rights to reverse engineer. Summary judgment on this issue was properly granted in favor of Blizzard and Vivendi.

Notes

1. Reverse Engineering. Merriam-Webster's online dictionary says that the verb "reverse engineer" means "to disassemble and examine or analyze in detail (as a product or device) to discover the concepts involved in manufacture usually in order to produce something similar." For example, a lawn mower manufacturer might disassemble a competitor's model to learn how it works. In this case, absent the software license terms, would the appellants have had the right to reverse engineer Blizzard's software?

2. Economic Considerations. Professor Molly Shaffer Van Houweling criticizes this decision and other decisions enforcing software licenses that prohibit reverse engineering of computer software on grounds that "reverse engineering for purposes of developing non-infringing products that inter-operate with existing software or hardware is a reasonably well-established example of privileged fair use that can generate socially beneficial competition." Molly Shaffer Van Houweling, *The New Servitudes*, 96 Geo. L.J. 885, 947 (Mar. 2008). Was the reverse engineering in this case socially beneficial? If so, is there nonetheless an argument for enforcing the software licenses?

3. Digital Millennium Copyright Act. The Digital Millennium Copyright Act (DMCA) added 17 U.S.C. § 1201 to the Copyright Act. This provision says in part:

> § 1201. Circumvention of copyright protection systems
>
> (a) *Violations regarding circumvention of technological measures.*—(1)(A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title. . . .
>
> . . .
>
> (f) *Reverse engineering.*—(1) Notwithstanding the provisions of subsection (a)(1)(A), a person who has lawfully obtained the right to use a copy of a computer program may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the

> program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title.

Section 1201(a) recognizes that producers of copyrighted works now often must rely on technology, in addition to threat of legal action, to prevent the unlawful copying of works. For example, the provision would prohibit hackers from taking steps to defeat the codes on movie DVDs that prevent their unauthorized copying. But section 1201(f) creates an exception that permits reverse engineering. The section does not address the question whether software licenses may contractually limit the right to engage in reverse engineering.

B. MISUSE OF COPYRIGHT

Section 1.09(c) of the American Law Institute's *Principles of Software Contracts* addresses misuse of intellectual property. An official comment to this section says:

> Misuse is an equitable doctrine that is a defense to infringement. It acts to prevent rightholders from extending the scope of their protection in an anti-competitive way. When a court holds particular conduct misuse, the rightholder cannot enforce its rights until it purges itself of the misuse. In subsection (c), the Principles take the position that, as a matter of intellectual property policy, when a claim in breach of contract is brought, courts should refuse to enforce any provision in the agreement that would have been considered misuse had the action been one for infringement.

Principles of the Law of Software Contracts § 1, cmt. d. The *Principles* give the following illustration:

> A's copyright on a spreadsheet program expires in 2090. A's standard form provides that its transferees agree not to implement the ideas contained in the program and/or develop a competing program independently for a period of 99 years from the date of the agreement. In 2009, A transfers its software to B using the standard form. The provision constitutes copyright misuse and is unenforceable. It would likely also be unenforceable under a preemption analysis.

Id. § 1.09 illus. 8.

LASERCOMB AMERICA, INC. V. REYNOLDS

911 F.2d 970 (4th Cir. 1990)

SPROUSE, Circuit Judge:

Appellants Larry Holliday and Job Reynolds appeal from a district court judgment holding them liable to appellee Lasercomb America, Inc., for copyright infringement and for fraud, based on appellants' unauthorized copying and marketing of appellee's software. We affirm in part, reverse in part, and remand for recomputation of damages.

I

Facts and Proceedings Below

Appellants and defendants below are Larry Holliday, president and sole shareholder of Holiday Steel Rule Die Corporation (Holiday Steel), and Job Reynolds, a computer programmer for that company. Appellee is Lasercomb America, Inc. (Lasercomb), the plaintiff below. Holiday Steel and Lasercomb were competitors in the manufacture of steel rule dies that are used to cut and score paper and cardboard for folding into boxes and cartons. Lasercomb developed a software program, Interact, which is the object of the dispute between the parties. Using this program, a designer creates a template of a cardboard cutout on a computer screen and the software directs the mechanized creation of the conforming steel rule die.[1]

In 1983, before Lasercomb was ready to market its Interact program generally, it licensed four prerelease copies to Holiday Steel which paid $35,000 for the first copy, $17,500 each for the next two copies, and $2,000 for the fourth copy. Lasercomb informed Holiday Steel that it would charge $2,000 for each additional copy Holiday Steel cared to purchase. Apparently ambitious to create for itself an even better deal, Holiday Steel circumvented the protective devices Lasercomb had provided with the software and made three unauthorized copies of Interact which it used on its computer systems. Perhaps buoyed by its success in copying, Holiday Steel then created a software program called "PDS-1000," which was almost entirely a direct copy of Interact, and marketed it as its own CAD/CAM die-making software. These infringing activities were accomplished by Job Reynolds at the direction of Larry Holliday.

There is no question that defendants engaged in unauthorized copying, and the purposefulness of their unlawful action is manifest from their deceptive practices. For example, Lasercomb had asked Holiday Steel to

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[1]This genre of software is called CAD/CAM, which stands for "computer assisted design and computer assisted manufacture."

use devices called "chronoguards" to prevent unauthorized access to Interact. Although defendants had deduced how to circumvent the chronoguards and had removed them from their computers, they represented to Lasercomb that the chronoguards were in use. Another example of subterfuge is Reynolds' attempt to modify the PDS-1000 program output so it would present a different appearance than the output from Interact.

II

Misuse of Copyright Defense

A successful defense of misuse of copyright bars a culpable plaintiff from prevailing on an action for infringement of the misused copyright. Here, appellants claim Lasercomb has misused its copyright by including in its standard licensing agreement clauses which prevent the licensee from participating in any manner in the creation of computer-assisted die-making software. The offending paragraphs read:

> D. Licensee agrees during the term of this Agreement that it will not permit or suffer its directors, officers and employees, directly or indirectly, to write, develop, produce or sell computer assisted die making software.
>
> E. Licensee agrees during the term of this Agreement and for one (1) year after the termination of this Agreement, that it will not write, develop, produce or sell or assist others in the writing, developing, producing or selling computer assisted die making software, directly or indirectly without Lasercomb's prior written consent. Any such activity undertaken without Lasercomb's written consent shall nullify any warranties or agreements of Lasercomb set forth herein.

The "term of this Agreement" referred to in these clauses is ninety-nine years.

A. *Does a "Misuse of Copyright" Defense Exist?*

The misuse of a patent is a potential defense to suit for its infringement, and both the existence and parameters of that body of law are well established. *E.g., United States Gypsum Co. v. National Gypsum Co.,* 352 U.S. 457, 465 (1957). Although there is little case law on the subject, courts from time to time have intimated that the similarity of rationales underlying the law of patents and the law of copyrights argues for a defense to an infringement of copyright based on misuse of the copyright. . . . The origins of patent and copyright law in England, the treatment of these two aspects of intellectual property by the framers of our Constitution, and the later statutory and judicial development of patent and copyright law in this country persuade us that parallel public policies underlie the protection of

both types of intellectual property rights. We think these parallel policies call for application of the misuse defense to copyright as well as patent law.

Because of the paucity of precedent in the copyright misuse area, some historical perspective of the elements underlying intellectual property law is helpful to our inquiry. Fortunately, respected treatise authors have captured well the essence of the relevant historical perspective.

During the sixteenth century, it became common for the English Crown to grant "letters patent" which gave individuals exclusive rights to produce, import and/or sell given items within the kingdom. 1 *Walker on Patents* §§ 1:1-1:2. These monopolies were granted for such commonplace items as salt, vinegar, and calfskins, to name but a few. *Id.* at § 1:2. The practice of granting monopolies led to widespread abuses, such as shortages and inflated prices for items that would otherwise be easily and cheaply available. *Id.* Consequently, Parliament passed the Statute of Monopolies (1623-24), prohibiting the creation of such monopolies by the Crown. *Id.* at § 1.5. An exception was made, however, to permit a patent to be granted for a period of fourteen years to the creator of a new invention. 21 Jac., ch. 3, § 6.

The rationale for allowing patents for new inventions was and is to encourage their creation for the benefit of society. 1 *Walker on Patents* §1:6. The monopolies granted by the Crown had been odious because they restrained trade in articles that had previously been a part of the public domain. An invention, however, does not withdraw anything from public traffic; rather, it introduces something new. To encourage and reward inventors for increasing the inventory of useful objects, the government grants them, for a limited time, the right to exclude others from making and selling their inventions. *Id.; United States v. Dubilier Condenser Corp.,* 289 U.S. 178, 186 (1933).

The development of copyright law in England likewise grew out of a differentiation by Parliament between a monopoly that restricts publication of works and a limited copyright that encourages the efforts of authors. In sixteenth-century England, the Crown granted to the Stationers' Company the exclusive right to publish and print all published works (apparently to enable censorship of Protestant materials). In the early 1700s, the Stationer's Company petitioned Parliament to recognize that these rights inured to it in perpetuity. Instead, Parliament passed the Statute of Anne (1709-10), the first known copyright legislation. A. Latman, *The Copyright Law: Howell's Copyright Law Revised and the 1976 Act* 2-3 (5th ed. 1979) [hereinafter *Howell's Copyright Law*]; R. Bowker, *Copyright: Its History and Its Law* 21-23 (1912). That statute gave authors the sole right of

publication for up to twenty-eight years. Thus, the English statutory treatment of copyright was similar to that of patent in that it granted the creator a monopoly for a limited time only.

It is significant, we think, that the framers of our Constitution continued the English development of intellectual property law and considered in tandem those property rights protectable by copyrights and those protectable by patents. In giving Congress the power to create copyright and patent laws, the framers combined the two concepts in one clause, stating a unitary purpose—to promote progress. Article I, section 8, clause 8 of the United States Constitution provides:

> [The Congress shall have power] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

This clause was adopted without debate, and material explaining the intention of the framers is limited. However, a comment in *The Federalist* papers indicates the public policy behind the grant of copyright and patent powers is essentially the same:

> The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged, in Great Britain, to be a right of common law. The right to useful inventions seems with equal reason to belong to the inventors. The public good fully coincides in both cases with the claims of individuals.

The Federalist, No. 43 at 279 (J. Madison) (Mod. Lib. ed. 1941).

Supreme Court comment has likewise equated the public policies of copyright and patent. For example, in *Mazer v. Stein,* 347 U.S. 201, 219 (1953), the Supreme Court stated:

> The economic philosophy behind the clause empowering Congress to grant *patents and copyrights* is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts." Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.

(Emphasis added.) The philosophy behind copyright, parallel to that discussed above for patent, is that the public benefits from the efforts of authors to introduce new ideas and knowledge into the public domain. To encourage such efforts, society grants authors exclusive rights in their works for a limited time.

2. The Misuse of Patent Defense

Although a patent misuse defense was recognized by the courts as early as 1917, most commentators point to *Morton Salt Co. v. G.S. Suppiger,* 314 U.S. 488 (1942), as the foundational patent misuse case. In that case, the plaintiff Morton Salt brought suit on the basis that the defendant had infringed Morton's patent in a salt-depositing machine. The salt tablets were not themselves a patented item, but Morton's patent license required that licensees use only salt tablets produced by Morton. Morton was thereby using its patent to restrain competition in the sale of an item which was not within the scope of the patent's privilege. The Supreme Court held that, as a court of equity, it would not aid Morton in protecting its patent when Morton was using that patent in a manner contrary to public policy. *Id.* at 490-92. The Court stated:

> The grant to the inventor of the special privilege of a patent monopoly carries out a public policy adopted by the Constitution and laws of the United States, "to promote the Progress of Science and useful Arts, by securing for limited Times to . . . Inventors the exclusive Right . . ." to their "new and useful" inventions. United States Constitution, Art. I, § 8, cl. 8, 35 U.S.C. § 31. But the public policy which includes inventions within the granted monopoly excludes from it all that is not embraced in the invention. It equally forbids the use of the patent to secure an exclusive right or limited monopoly not granted by the Patent Office and which it is contrary to public policy to grant.

Id. at 492. Thus, the Supreme Court endorsed "misuse of patent" as an equitable defense to a suit for infringement of that patent.

Since *Morton Salt,* the courts have recognized patent misuse as a valid defense and have applied it in a number of cases in which patent owners have attempted to use their patents for price fixing, tie-ins, territorial restrictions, and so forth. *See* Calkins, *Patent Law,* at 187-89 n. 38, 8*Walker on Patents* §§ 28:32-28:36; W. Holmes, *Intellectual Property and Antitrust Law* § 1.07 (1989) [hereinafter Holmes, *Intellectual Property*]. The patent misuse defense also has been acknowledged by Congress in the 1988 Patent Misuse Reform Act, Pub.L. No. 100-703, 102 Stat. 4676 (1988) (codified at 35 U.S.C. § 271(d)(4) & (5)), which limited but did not eliminate the defense.

3. The "Misuse of Copyright" Defense

Although the patent misuse defense has been generally recognized since *Morton Salt,* it has been much less certain whether an analogous copyright misuse defense exists. This uncertainty persists because no United States Supreme Court decision has firmly established a copyright misuse defense in a manner analogous to the establishment of the patent misuse defense by

Morton Salt. The few courts considering the issue have split on whether the defense should be recognized, *see* Holmes, *Intellectual Property* § 4.09 (collecting cases), and we have discovered only one case which has actually applied copyright misuse to bar an action for infringement. *M. Witmark & Sons v. Jensen,* 80 F.Supp. 843 (D.Minn. 1948), *appeal dismissed,* 177 F.2d 515 (8th Cir. 1949).

We are of the view, however, that since copyright and patent law serve parallel public interests, a "misuse" defense should apply to infringement actions brought to vindicate either right. As discussed above, the similarity of the policies underlying patent and copyright is great and historically has been consistently recognized. Both patent law and copyright law seek to increase the store of human knowledge and arts by rewarding inventors and authors with the exclusive rights to their works for a limited time. At the same time, the granted monopoly power does not extend to property not covered by the patent or copyright.

Thus, we are persuaded that the rationale of *Morton Salt* in establishing the misuse defense applies to copyrights. In the passage from *Morton Salt* quoted above, the phraseology adapts easily to a copyright context:

> The grant to the [author] of the special privilege of a [copyright] carries out a public policy adopted by the Constitution and laws of the United States, "to promote the Progress of Science and useful Arts, by securing for limited Times to [Authors] . . . the exclusive Right . . ." to their ["original" works]. United States Constitution, Art. I, § 8, cl. 8, [17 U.S.C.A. § 102]. But the public policy which includes [original works] within the granted monopoly excludes from it all that is not embraced in the [original expression]. It equally forbids the use of the [copyright] to secure an exclusive right or limited monopoly not granted by the [Copyright] Office and which it is contrary to public policy to grant.

Cf. Morton Salt, 314 U.S. at 492.

Having determined that "misuse of copyright" is a valid defense, analogous to the misuse of patent defense, our next task is to determine whether the defense should have been applied by the district court to bar Lasercomb's infringement action against the defendants in this case.

B. *The District Court's Finding that the Anticompetitive Clauses Are Reasonable*

In declining to recognize a misuse of copyright defense, the district court found "reasonable" Lasercomb's attempt to protect its software copyright by using anticompetitive clauses in their licensing agreement. In briefly expressing its reasoning, the court referred to the "delicate and

sensitive" nature of software. It also observed that Lasercomb's president had testified that the noncompete language was negotiable.

If, as it appears, the district court analogized from the "rule of reason" concept of antitrust law, we think its reliance on that principle was misplaced. . . . Certainly, an entity which uses its patent as the means of violating antitrust law is subject to a misuse of patent defense. However, *Morton Salt* held that it is not necessary to prove an antitrust violation in order to successfully assert patent misuse:

> It is unnecessary to decide whether respondent has violated the Clayton Act, for we conclude that in any event the maintenance of the present suit to restrain petitioner's manufacture or sale of the alleged infringing machines is contrary to public policy and that the district court rightly dismissed the complaint for want of equity.

314 U.S. at 494.

So while it is true that the attempted use of a copyright to violate antitrust law probably would give rise to a misuse of copyright defense, the converse is not necessarily true—a misuse need not be a violation of antitrust law in order to comprise an equitable defense to an infringement action. The question is not whether the copyright is being used in a manner violative of antitrust law (such as whether the licensing agreement is "reasonable"), but whether the copyright is being used in a manner violative of the public policy embodied in the grant of a copyright.

Lasercomb undoubtedly has the right to protect against copying of the Interact code. Its standard licensing agreement, however, goes much further and essentially attempts to suppress any attempt by the licensee to independently implement the idea which Interact expresses. The agreement forbids the licensee to develop or assist in developing *any* kind of computer-assisted die-making software. If the licensee is a business, it is to prevent all its directors, officers and employees from assisting in any manner to develop computer-assisted die-making software. Although one or another licensee might succeed in negotiating out the noncompete provisions, this does not negate the fact that Lasercomb is attempting to use its copyright in a manner adverse to the public policy embodied in copyright law, and that it has succeeded in doing so with at least one licensee.

The language employed in the Lasercomb agreement is extremely broad. Each time Lasercomb sells its Interact program to a company and obtains that company's agreement to the noncompete language, the company is required to forego utilization of the creative abilities of all its officers,

directors and employees in the area of CAD/CAM die-making software. Of yet greater concern, these creative abilities are withdrawn from the public. The period for which this anticompetitive restraint exists is ninety-nine years, which could be longer than the life of the copyright itself.

We previously have considered the effect of anticompetitive language in a licensing agreement in the context of patent misuse. *Compton v. Metal Products, Inc.,* 453 F.2d 38 (4th Cir. 1971). Compton had invented and patented coal auguring equipment. He granted an exclusive license in the patents to Joy Manufacturing, and the license agreement included a provision that Compton would not "engage in any business or activity relating to the manufacture or sale of equipment of the type licensed hereunder" for as long as he was due royalties under the patents. Suit for infringement of the Compton patents was brought against Metal Products, and the district court granted injunctive relief and damages. On appeal we held that relief for the infringement was barred by the misuse defense, stating:

> The need of Joy to protect its investment does not outweigh the public's right under our system to expect competition and the benefits which flow therefrom, and the total withdrawal of Compton from the mining machine business . . . everywhere in the world for a period of 20 years unreasonably lessens the competition which the public has a right to expect, and constitutes misuse of the patents.

Id. at 45.

We think the anticompetitive language in Lasercomb's licensing agreement is at least as egregious as that which led us to bar the infringement action in *Compton,* and therefore amounts to misuse of its copyright. Again, the analysis necessary to a finding of misuse is similar to but separate from the analysis necessary to a finding of antitrust violation. The misuse arises from Lasercomb's attempt to use its copyright in a particular expression, the Interact software, to control competition in an area outside the copyright, *i.e.,* the idea of computer-assisted die manufacture, regardless of whether such conduct amounts to an antitrust violation.

* * *

AFFIRMED IN PART, REVERSED IN PART, AND REMANDED.

Notes

1. Commentary. The commentary to the American Law Institute's *Principles of the Law of Software Contracts* says that the "scope of the misuse doctrine is uncertain," that the doctrine is a "fairly new develop-

ment in infringement actions under copyright law," and that *Lasercomb* is the "seminal case." *Id.* § 1.09, cmt. d.

2. Duration of the Contract. How important is the fact that the term of the contract is 99 years?

3. Problem. Suppose that Game Platform Inc. makes an electronic game console. Users play games by inserting game disks that the company also sells. The console uses software to read the disks and execute the programs they contain. How might a competitor, who wants to sell game disks that will work with Game Platform's console, determine the requirements of the console's software so that its disks will be compatible? To what extent will copyright law allow Game Platform to use licenses to prevent competitors from making competing games? Is there any reason that economics might dissuade Game Platform from wanting to discourage competitors who want to make competing games? The following case presents some answers.

ATARI GAMES CORP. V. NINTENDO OF AMERICA INC.

975 F.2d 832 (1992)

RADER, Circuit Judge.

Nintendo of America Inc., and Nintendo Co., Ltd. sell the Nintendo Entertainment System (NES). Two of Nintendo's competitors, Atari Games Corporation and its wholly-owned subsidiary, Tengen, Inc., sued Nintendo for, among other things, unfair competition, Sherman Act violations, and patent infringement. Nintendo sued Atari for, among other things, unfair competition, patent infringement, copyright infringement, and trade secret violations. The United States District Court for the Northern District of California consolidated the two cases and preliminarily enjoined Atari from exploiting Nintendo's copyrighted computer program. Because Nintendo has shown a likelihood of success on its copyright infringement claims, this court affirms.

BACKGROUND

Nintendo's home video game system—the NES—includes a monitor, console, and controls. The console is a base unit into which a user inserts game cartridges. These cartridges contain the various game programs for the NES. As dictated by the program on the cartridge, the console controls an image on a video monitor, often a television set. In response to this video display, the user interacts with the system by manipulating the

controls. Thus, by operating the controls in response to the video image, an individual plays the game on the cartridge in the NES console.

For instance, the game program may control a maze or set of obstacles on the video display. The user then manipulates the controls to guide an object through the maze or set of obstacles. The game program then awards the user points for proficiently passing through the maze or obstacles.

Nintendo designed a program—the 10NES—to prevent the NES from accepting unauthorized game cartridges. Both the NES console and authorized game cartridges contain microprocessors or chips programed with the 10NES. The console contains a "master chip" or "lock." Authorized game cartridges contain a "slave chip" or "key." When a user inserts an authorized cartridge into a console, the slave chip in effect unlocks the console; the console detects a coded message and accepts the game cartridge. When a user inserts an unauthorized cartridge, the console detects no unlocking message and refuses to operate the cartridge. Nintendo's 10NES program thus controls access to the NES.

Atari first attempted to analyze and replicate the NES security system in 1986. Atari could not break the 10NES program code by monitoring the communication between the master and slave chips. Atari next tried to break the code by analyzing the chips themselves. Atari analysts chemically peeled layers from the NES chips to allow microscopic examination of the object code.[1] Nonetheless, Atari still could not decipher the code sufficiently to replicate the NES security system.

In December 1987, Atari became a Nintendo licensee. Atari paid Nintendo to gain access to the NES for its video games. The license terms, however, strictly controlled Atari's access to Nintendo's technology, including the 10NES program. Under the license, Nintendo would take Atari's games, place them in cartridges containing the 10NES program, and resell them to Atari. Atari could then market the games to NES owners. Nintendo limited all licensees, including Atari, to five new NES games per year. The Nintendo license also prohibited Atari from licensing NES games to other home video game systems for two years from Atari's first sale of the game.

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[1]Object code is machine readable, binary code, represented on paper as a series of ones and zeroes. In actuality, those ones and zeroes represent "on" and "off" states of switches on a computer chip. In the 10NES chips, the object code, contained in chip memories, is implemented when the chips are operational. When operational, the chips generate a series of "ons" and "offs" in a particular sequence. That results in a pulsating signal which conveys messages to the computer.

In early 1988, Atari's attorney applied to the Copyright Office for a reproduction of the 10NES program. The application stated that Atari was a defendant in an infringement action and needed a copy of the program for that litigation. Atari falsely alleged that it was a present defendant in a case in the Northern District of California. Atari assured the "Library of Congress that the requested copy [would] be used only in connection with the specified litigation." In fact, no suit existed between the parties until December 1988, when Atari sued Nintendo for antitrust violations and unfair competition. Nintendo filed no infringement action against Atari until November 1989.

After obtaining the 10NES source code from the Copyright Office, Atari again tried to read the object code from peeled chips. Through microscopic examination, Atari's analysts transcribed the 10NES object code into a handwritten representation of zeros and ones. Atari used the information from the Copyright Office to correct errors in this transcription. The Copyright Office copy facilitated Atari's replication of the 10NES object code.

After deciphering the 10NES program, Atari developed its own program—the Rabbit program—to unlock the NES. Atari's Rabbit program generates signals indistinguishable from the 10NES program. The Rabbit uses a different microprocessor. The Rabbit chip, for instance, operates faster. Thus, to generate signals recognizable by the 10NES master chip, the Rabbit program must include pauses. Atari also programmed the Rabbit in a different language. Because Atari chose a different microprocessor and programming language, the line-by-line instructions of the 10NES and Rabbit programs vary. Nonetheless, as the district court found, the Rabbit program generates signals functionally indistinguishable from the 10NES program. The Rabbit gave Atari access to NES owners without Nintendo's strict license conditions.

Nintendo asked the district court to enjoin Atari's alleged infringement of its 10NES copyright. Atari sought in a separate motion to enjoin Nintendo's alleged antitrust violations and alleged misuse of its property rights. Nintendo prevailed on both motions. Atari appealed both rulings but subsequently moved to dismiss its appeal from the denial of its motion for a preliminary injunction. This court granted that motion. Atari asserts copyright misuse as a defense to copyright infringement.

ANALYSIS

[To sustain the preliminary injunction in this case] . . . , this court must determine whether Nintendo has shown a likelihood of success on its prima facie case of copyright infringement and a likelihood that it will overcome

Atari's copyright misuse defense. *See H.H. Robertson, Co. v. United Steel Deck,* 820 F.2d 384, 388-89 (Fed.Cir. 1987).

Reverse Engineering

Atari made copies of the 10NES program in its attempts to "reverse engineer" Nintendo's program. Atari made intermediate copies in two very different settings. Before obtaining the Copyright Office copy of 10NES, Atari tried to understand the program. Atari stripped some 10NES chips and copied portions of the 10NES object code from the chips.

After obtaining the copy of the code from the Copyright Office, Atari made other intermediate copies of the program. Atari made photocopies of the Copyright Office copy, deprocessed chips, and hand-copied the 10NES object code from the deprocessed chip. Atari then entered this copied 10NES object code into a computer which aided in understanding the ideas in the program. The district court determined that this intermediate copying infringed Nintendo's copyright.

The author does not acquire exclusive rights to a literary work in its entirety. Under the Act, society is free to exploit facts, ideas, processes, or methods of operation in a copyrighted work. To protect processes or methods of operation, a creator must look to patent laws. *See Bonito Boats v. Thunder Craft Boats,* 489 U.S. 141 (1989). An author cannot acquire patent-like protection by putting an idea, process, or method of operation in an unintelligible format and asserting copyright infringement against those who try to understand that idea, process, or method of operation. The Copyright Act permits an individual in rightful possession of a copy of a work to undertake necessary efforts to understand the work's ideas, processes, and methods of operation.

This permission appears in the fair use exception to copyright exclusivity. Section 107 of the Copyright Act states that "fair use of a copyrighted work, including such use by reproduction in copies . . . for purposes such as criticism, comment, news reporting, teaching . . . scholarship or research" is not infringement. 17 U.S.C. § 107. The legislative history of section 107 suggests that courts should adapt the fair use exception to accommodate new technological innovations. H.R.Rep. No. 1476, 94th Cong., 2d Sess. 66 (1976).

Thus, the Act exempts from copyright protection reproductions for "criticism, comment . . . or research." These activities permit public understanding and dissemination of the ideas, processes, and methods of operation in a work:

> The copyright holder has a property interest in preventing others from reaping the fruits of his labor, not in preventing the authors and thinkers of the future from making use of, or building upon, his advances. The process of creation is often an incremental one, and advances building on past developments are far more common than radical new concepts. *See Lewis Galoob Toys, Inc. v. Nintendo,* 964 F.2d 965 (9th Cir. 1992). Where the infringement is small in relation to the new work created, the fair user is profiting largely from his own creative efforts rather than free-riding on another's work. A prohibition on all copying whatsoever would stifle the free flow of ideas without serving any legitimate interest of the copyright holder.

New Kids on the Block v. News Am. Publishing, 971 F.2d 302, 307 n. 6 (9th Cir. 1992).

Section 107 also requires examination of the nature of the work when determining if a reproduction is a fair use. 17 U.S.C. § 107(2). When the nature of a work requires intermediate copying to understand the ideas and processes in a copyrighted work, that nature supports a fair use for intermediate copying. Thus, reverse engineering object code to discern the unprotectable ideas in a computer program is a fair use.

Fair use to discern a work's ideas, however, does not justify extensive efforts to profit from replicating protected expression. Subparagraphs 1 and 4 of section 107 clarify that the fair use in intermediate copying does not extend to commercial exploitation of protected expression. The fair use reproductions of a computer program must not exceed what is necessary to understand the unprotected elements of the work. This limited exception is not an invitation to misappropriate protectable expression. Any reproduction of protectable expression must be strictly necessary to ascertain the bounds of protected information within the work.

In this case, the source code obtained from the Copyright Office facilitated Atari's intermediate copying of the 10NES program. To invoke the fair use exception, an individual must possess an authorized copy of a literary work. Because Atari was not in authorized possession of the Copyright Office copy of 10NES, any copying or derivative copying of 10NES source code from the Copyright Office does not qualify as a fair use.

Reverse engineering, untainted by the purloined copy of the 10NES program and necessary to understand 10NES, is a fair use. An individual cannot even observe, let alone understand, the object code on Nintendo's chip without reverse engineering. Atari retrieved this object code from NES security chips in its efforts to reverse engineer the 10NES program.

Atari chemically removed layers from Nintendo's chips to reveal the 10NES object code. Through microscopic examination of the "peeled" chip, Atari engineers transcribed the 10NES object code into a handwritten list of ones and zeros. While these ones and zeros represent the configuration of machine readable software, the ones and zeros convey little, if any, information to the normal unaided observer. Atari then keyed this handwritten copy into a computer. The computer then "disassembled" the object code or otherwise aided the observer in understanding the program's method or functioning. This "reverse engineering" process, to the extent untainted by the 10NES copy purloined from the Copyright Office, qualified as a fair use.

The district court assumed that reverse engineering (intermediate copying) was copyright infringement. This court disagrees. Atari did not violate Nintendo's copyright by deprocessing computer chips in Atari's rightful possession. Atari could lawfully deprocess Nintendo's 10NES chips to learn their unprotected ideas and processes. This fair use did not give Atari more than the right to understand the 10NES program and to distinguish the protected from the unprotected elements of the 10NES program. Any copying beyond that necessary to understand the 10NES program was infringement. Atari could not use reverse engineering as an excuse to exploit commercially or otherwise misappropriate protected expression.

Copyright Misuse

As a defense to copyright infringement, Atari asserts Nintendo has misused its copyright of the lockout program. Atari alleges Nintendo has conditioned the license of its copyrighted lockout program on the acceptance of contract provisions that give it control over the games developed by independent, third-party software developers. The standard license exclusivity provision Nintendo includes in its contracts provides:

> *Exclusivity*: LICENSEE agrees to sell the Licensed Products for use only in conjunction with the NES. For a period of two (2) years following the date of first sale by LICENSEE of any Licensed Products pertaining to any particular video game program developed by LICENSEE under this Agreement, LICENSEE will not adapt or offer such video game program or any derivatives of such video game program, for use in any: (a) other home video system; or, (b) home computer system. . . .

Several circuit courts, including the Ninth Circuit, have entertained defenses of copyright misuse. *Lasercomb Am. v. Reynolds,* 911 F.2d 970 (4th Cir. 1990) . . . .

In the absence of any statutory entitlement to a copyright misuse defense, however, the defense is solely an equitable doctrine. Any party seeking equitable relief must come to the court with "clean hands." *Keystone Driller Co. v. General Excavator Co.,* 290 U.S. 240, 245 (1933). The Ninth Circuit has noted that the doctrine of unclean hands can also preclude the defense of copyright misuse. The district court states, "Atari lied to the Copyright Office in order to obtain the copyrighted 10NES program." *Atari Games v. Nintendo of Am.,* Nos. 88-4805, 89-0027, 89-0824, slip op. at 14, 1991 WL 57304 (N.D.Cal. Apr. 11, 1991). This record supports the district court's conclusion and suggests that Atari's unclean hands prevent it from invoking equity. Thus, even if the Ninth Circuit permits an equitable copyright misuse defense, Atari appears ineligible to invoke the defense. This court discerns no reversible error in the district court's assessment of Nintendo's likelihood of success on the merits of its copyright infringement claim.

AFFIRMED.

Note

Could the license have prohibited reverse engineering? If Atari had not acted with "unclean hands," would its copyright misuse claim have had merit?

ALCATEL USA, INC. V. DGI TECHNOLOGIES

166 F.3d 772 (5th Cir. 1999)

[DSC Communications Corporation (also known as Alcatel) manufactures telephone switching equipment. The switches are controlled by software written by DSC. When DSC sells the switches, the buyers receive a software license. The license provides, among other things, that the buyers have the right to use the software only to operate DSC switches and that they cannot use it with anyone else's equipment. DGI Technologies, Inc. bought a switch from DSC, used reverse engineering to learn how the switch and software worked, and then developed hardware (microprocessor cards) that would improve DSC's switch. DSC claimed that this conduct exceeded the terms of the software license and therefore violated the copyright on its software. DGI raised several defenses, including copyright misuse.]

b. Copyright Misuse

DGI . . . insists that, even assuming that it committed acts of copyright infringement, the "copyright misuse" doctrine precludes injunctive relief

based on that infringement. This doctrine—which has its historical roots in the unclean hands defense—"bars a culpable plaintiff from prevailing on an action for the infringement of the misused copyright." It "forbids the use of the [copyright] to secure an exclusive right or limited monopoly not granted by the [Copyright] Office and which it is contrary to public policy to grant." The copyright misuse defense is analogous to the patent misuse defense, which was originally recognized by the Supreme Court in *Morton Salt Co. v. G.S. Suppiger*. The Fourth Circuit was the first to extend the rationale behind patent misuse to copyrights. In *Lasercomb America, Inc. v. Reynolds*, the Fourth Circuit explained that, whereas "copyright law [seeks] to increase the store of human knowledge and arts by rewarding . . . authors with the exclusive rights to their works for a limited time . . ., the granted monopoly power does not extend to property not covered by the . . . copyright."

We recognized the copyright misuse defense in DSC I [a previous opinion in the litigation of this case]. We noted that "DSC seems to be attempting to use its copyright to obtain a patent-like monopoly over unpatented microprocessor cards." Speculating that DGI might prevail on a copyright misuse defense, we refused to expand the preliminary injunction issued by the district court.

Not surprisingly, DGI argues, based on DSC I, that on remand the district court abused its discretion when it ignored the jury's finding that DSC misused its operating system copyright and entered the permanent injunction. DGI reasons that, as DSC's software is licensed to customers to be used only in conjunction with DSC-manufactured hardware, DSC indirectly seeks to obtain patent-like protection of its hardware—its microprocessor card—through the enforcement of its software copyright. DSC responds that its actions do not constitute misuse, inasmuch as its licensing agreement does not prohibit the independent development of compatible operating system software. As DSC points out, it was this "attempt[] to suppress any attempt by the licensee to independently implement" competing software that the court condemned in Lasercomb.

We agree with the DSC I panel's conjecture and the jury's finding that DSC's licensing agreement for its operating system constitutes misuse. The district court instructed the jury, in pertinent part:

> [I]f DSC has used its copyrights to indirectly gain commercial control over products DSC does not have copyrighted, then copyright misuse may be present. The grant to the author of the special privilege of a copyright carries out a public policy adopted by the Constitution and laws of the United States, "to promote the Progress of Science and

> useful arts, by securing for limited Times to [Authors] . . . the exclusive Right . . .” to their “original” works. United States Constitution, Art. I, § 8, cl. 8, 17 U.S.C. § 102. But the public policy which includes original works within the granted monopoly excludes from it all that is not embraced in the original expression. It equally forbids the use of the copyright to secure an exclusive right or limited monopoly not granted by the Copyright Office and which is contrary to public policy to grant.

A reasonable juror could conclude, based on the licensing agreement, that “DSC has used its copyrights to indirectly gain commercial control over products DSC does not have copyrighted,” namely, its microprocessor cards. The facts on which we based our misuse prediction in DSC I have not changed substantially. As we reasoned then:

> Any competing microprocessor card developed for use on DSC phone switches must be compatible with DSC’s copyrighted operating system software. In order to ensure that its card is compatible, a competitor such as DGI must test the card on a DSC phone switch. Such a test necessarily involves making a copy of DSC’s copyrighted operating system, which copy is downloaded into the card’s memory when the card is booted up. If DSC is allowed to prevent such copying, then it can prevent anyone from developing a competing microprocessor card, even though it has not patented the card.

Under these facts, DSC’s assertion that its licensing agreement does not prohibit the independent development of compatible software is simply irrelevant. Despite the presence of some evidence—the testimony of a DSC executive—that DGI could have developed its own software, there was also evidence that it was not technically feasible to use a non-DSC operating system because the switch has a “common control” scheme in which each microprocessor card in a network of such cards runs the same operating system. Hence, without the freedom to test its cards in conjunction with DSC’s software, DGI was effectively prevented from developing its product, thereby securing for DSC a limited monopoly over its uncopyrighted microprocessor cards. Furthermore, the jury instructions never mentioned that misuse could only be present if DSC’s agreement prohibited the independent development of software. Consequently, we conclude that the district court abused its discretion in awarding injunctive relief based on DGI’s infringing acts.

Note

The European Union generally requires member states to permit the reverse engineering of computer software. The key provision says:

Article 6. Decompilation

1. The authorization of the rightholder shall not be required where reproduction of the code and translation of its form within the meaning of Article 4 (a) and (b) are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, provided that the following conditions are met: (a) these acts are performed by the licensee or by another person having a right to use a copy of a program, or on their behalf by a person authorized to to so; (b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in subparagraph (a); and (c) these acts are confined to the parts of the original program which are necessary to achieve interoperability. . . .

European Union, Directive on Legal Protection of Computer Programs art. 6, OJ L. 122/42 (May 17, 1991).

APPLE INC. V. PSYSTAR CORP.

658 F.3d 1150 (9th Cir. 2011)

SCHROEDER, Circuit Judge:

This case raises important issues regarding the doctrine of "copyright misuse" as it has developed in the wake of the technological revolution of the last 30 years. Plaintiff–Appellee, Apple Inc. ("Apple"), is one of the leading producers of innovative technological hardware and software that has spurred enormous consumer demand for ever evolving technology. The Defendant–Appellant, Psystar Corp. ("Psystar"), is a small computer manufacturer. Apple brought this action against Psystar for copyright infringement because Psystar was using Apple's software on Psystar computers.

The district court in a published decision held that Psystar was infringing Apple's federally registered copyrights in its operating software, Mac OS X, because Psystar was copying Mac OS X for use in Psystar's computers. *Apple, Inc. v. Psystar Corp.* (*Apple I*), 673 F. Supp.2d 931, 935–40 (N.D. Cal.2009). This infringement finding is not challenged on appeal. The court rejected Psystar's copyright misuse defense that asserted the unenforceability of Apple's Software License Agreement ("SLA"), requiring Mac OS X users to run their copies on Apple computers. Id. at 939–40. . . .

Psystar's principal argument on appeal is that the district court should have held that the license agreement is an unlawful attempt to extend copyright protection to products that are not copyrightable. The heart of Psystar's argument is that the Copyright Act affords Apple protection only against unauthorized copying and distribution of the operating software, but not on its use once it is purchased. Thus, because Psystar purchased unopened copies of Mac OS X and included these copies when it sold its computers, Psystar argues the Copyright Act is inapplicable and its alterations permissible. Psystar contends that the Fifth Circuit's decision in *Alcatel USA, Inc. v. DGI Techs., Inc.*, 166 F.3d 772 (5th Cir.1999), involves a similar situation and that we should follow it.

Apple responds that to adequately demonstrate copyright misuse, Psystar must show either that the license agreement restricts creativity or that it restricts competition, and that this license agreement does neither. Apple distinguishes *Alcatel* as an attempt to stifle competition by preventing competitors from developing competing products, whereas here Psystar is free to develop both competing hardware and software. . . .

* * *

I. Background

Apple launched its Macintosh line of personal computers in 1984. This line of computers has included Mac Pro, iMac, Mac Mini, MacBook, MacBook Air, and MacBook Pro. Apple launched its Mac OS X operating system in 2001. Apple now sells all Mac computers with a preinstalled, licensed copy of Mac OS X. Apple's SLA requires that the Mac OS X be used exclusively on Apple computers. Apple also separately distributes Mac OS X in a stand-alone, retail-packaged DVD with licensed software for the sole purpose of enabling Apple's existing customers to upgrade their Mac computers to the latest version of the operating system. Apple owns a registered copyright for each version of its operating system and the SLA for each requires the system to be used only on Apple computers.

In addition to the SLA and the copyrights, Apple uses lock-and-key technological measures to prevent Mac OS X from operating on non-Apple computers. This involves the use of a "kernel" extension, which is software that is executed and becomes part of the operating system on an Apple computer. The kernel extension communicates with other kernel extensions to locate the decryption keys in Apple hardware, and to unlock the encrypted files.

In April 2008, Psystar began manufacturing and selling personal computers—originally named "OpenMac" and then renamed "Open

Computers." Psystar's Open Computers can run a variety of operating systems, but Psystar has chosen to sell Open Computers with Mac OS X. To do so, Psystar purchased a copy of Mac OS X, installed this copy of Mac OS X on a Mac Mini computer, and downloaded various software updates, using the automatic-update feature of Mac OS X. Psystar then imaged the Mac Mini with the OS X software, i.e., made a copy of the software, and transferred the copy to a non-Apple computer used as an imaging station. Psystar then added its own bootloader and kernel extensions to the Mac OS X on the imaging station, and this copy became the "master image." Psystar used this imaging station to reproduce the master image and install it on Open Computers for sale to the general public. Finally, Psystar shipped Open Computers with a copy of the master image installed, and with an unopened copy of Mac OS X, which Psystar purchased from Apple or third party vendors such as Amazon, in the box. The unopened copy enabled Psystar to maintain it had purchased a copy of Mac OS X for each computer it sold, but the computer actually was to run on the copy of the altered Mac OS X installed in the Psystar computer.

On July 3, 2008, Apple filed this action against Psystar in the Northern District of California, alleging breach and induced breach of its SLA for Mac OS X, direct and contributory copyright infringement, trademark and trade dress infringement, and violation of state and common law unfair competition laws. Apple later amended its complaint to add a DMCA claim arising from Psystar's circumvention of the technological protection measures employed by Apple to prevent unauthorized access to and copying of Mac OS X.

Psystar asserted a counterclaim for a declaratory judgment that Apple was misusing its copyright in Mac OS X by requiring purchasers to run their copies only on Apple computers. . . .

II. Psystar's Affirmative Defense of Copyright Misuse

* * *

Psystar's main contention of misuse is aimed at Apple's requirement that licensees of Mac OS X run their copies only on Apple computers. The relevant section of Apple's SLA for Mac OS X provides:

> This License allows you to install, use and run one (1) copy of the Apple Software on a single-Apple-labeled computer at a time. You agree not to install, use or run the Apple Software on any non-Apple labeled computer, or to enable others to do so.

Psystar contends that this language barring use of the Apple software on non-Apple computers impermissibly extends the reach of Apple's copyright

and constitutes misuse. We conclude that the district court correctly ruled that Apple had not engaged in copyright misuse. . . .

A. Software licensing agreements, rather than sales, have become ubiquitous in the software industry because they enable the licensor to control the use of the copyrighted material.

To understand why license agreements, rather than sales, have become the predominate form of the transfer of rights to use copyrighted software material, it is necessary to understand the legal principle that applies when copyrighted works are not licensed, but sold: the "first sale doctrine." The first sale doctrine allows owners of copies of copyrighted works to resell their copies without restriction.

The doctrine was first recognized by the Supreme Court in *Bobbs–Merrill Co. v. Straus*, 210 U.S. 339 (1908). At issue in *Bobbs–Merrill* was the exclusive right of a copyright owner to restrict the resale terms of its copyrighted material. The Supreme Court interpreted the then copyright statute's "sole right to vend" to bar a publisher from restricting future sales of a book by placing a notice on the book's cover that limited resale to $1 or more. *Id.* at 350. Congress codified the first sale doctrine in the 1909 Copyright Act, *see* 17 U.S.C. § 41 (1909), and then refined the doctrine in the 1976 Copyright Act and its subsequent amendments. *See* 17 U.S.C. § 109 (2008). As currently constituted, the doctrine exempts subsequent owners who then sell a legitimate copy of a copyrighted work from claims of infringing the original owner's exclusive distribution rights:

> Notwithstanding the provisions of Section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.

Id. at § 109(a). Thus, once a publisher sells a valuable, vellum-bound volume, for example, it forfeits its exclusive distribution privilege and enables the buyer, the new owner of the volume, to resell the copy to another buyer. *See* 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.12[B] [1][d] (rev. ed.2010).

The statute specifically excludes the doctrine's application, however, when the copy is transferred through "rental, lease, loan, or otherwise, without acquiring ownership of it." 17 U.S.C. at § 109(d). Thus, the first sale doctrine does not apply to a licensee. *See Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1107–08 (9th Cir.2010) ("The first sale doctrine does not apply to a person who possesses a copy of the copyrighted work without owning

it, such as a licensee."). Our court's application of § 109(d) in *Vernor* not only reconciled our prior cases and avoided a possible disagreement with the Federal Circuit, but also constituted a significant validation of license restrictions on transfer and use of software. *See* Marcelo Halpern, Yury Kapgan, & Kathy Yu, *Vernor v. Autodesk: Software and the First Sale Doctrine Under Copyright Law*, 23 No. 3 INTELL. PROP. & TECH.. L.J. 7, 10 (2011) (arguing that Vernor suggests that such restrictions "are likely to be more prevalent and powerful.").

Vernor involved a garage sale purchase by Timothy Vernor of sophisticated Autodesk software. Autodesk was a manufacturer of computer-aided design software used by architects, engineers, and manufacturers. *Vernor*, 621 F.3d at 1104. It offered its software to customers pursuant to an accompanying SLA, which customers were required to accept before installing the software. *Id.* The licensing agreement for the software provided, *inter alia*, that Autodesk retained title to all copies and that the customer had a nonexclusive and non-transferable license to use it. Id.

Vernor purchased a used copy of Autodesk's AutoCAD Release 14 software ("Release 14") at a garage sale and sold it on eBay. *Id.* at 1105. To enforce its SLA, Autodesk filed a number of DMCA take-down notices with eBay related to Vernor's initial eBay listing and his subsequent listing of four additional copies he acquired at an office sale. *Id.* at 1105–06. Eventually, eBay suspended Vernor's account. *Id.* at 1106.

Vernor then brought suit against Autodesk seeking a declaratory judgment to establish that he was a lawful owner of Release 14 copies and thus his sales were entitled to the first sale doctrine's protection. Id. We ruled that Vernor was not an owner of the software and, hence, not entitled to sell copies on eBay. *Id.* at 1111–112. We rejected Vernor's contention that because he was entitled to keep possession of the software he was a purchaser, rather than a licensee. *Id.* Relying on our prior interpretations of § 109(d) and its predecessors, we articulated a three factor test for distinguishing between a software licensee and an owner of a copy:

> We hold today that a software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions.

Id. at 1111. In applying this test to Autodesk's SLA, which explicitly reserved Autodesk's title to Release 14 copies and imposed significant transfer and use restrictions, we held that Autodesk's customer from whom Vernor acquired the used copies was a licensee, not an owner of the copies. *Id.* at 1111–12. Thus, neither Autodesk's original customer nor Vernor

could sell or resell copies of Release 14 under the first sale doctrine. *Id.* at 1116.

It is this distinction between sales and licenses that has caused the use of software licensing agreements to flourish and become the preferred form of software transactions. *See* Glen O. Robinson, *Personal Property Servitudes*, 71 U. Chi L. Rev. 1449, 1473 (2004) (detailing "[t]he emergence of software licensing [as a means] of contractual avoidance of the first sale doctrine."). The distinction is well established in this circuit. *See, e.g., Vernor*, 621 F.3d at 1108–09; *Wall Data, Inc. v. L.A. Cnty. Sheriff's Dep't*, 447 F.3d 769 (9th Cir. 2006); and *United States v. Wise*, 550 F.2d 1180, 1191 (9th Cir. 1977).

B. Licensees have reacted to the proliferation of software licensing agreements by asking the courts to apply copyright misuse defense to limit the scope of such agreements.

Copyright misuse is a judicially crafted affirmative defense to copyright infringement, derived from the long-standing existence of such a defense in patent litigation. The patent misuse defense was originally recognized by the Supreme Court in 1942, in holding that the owner of the patent on a salt tablet machine could not require licensees to use only unpatented salt tablets sold by the patent owner. *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488 (1942). The Court held that this improper tying of a patented product and an unpatented product constituted misuse, and prohibited the patent holder from maintaining infringement actions until the patent holder ceased misuse of the patent. *Id.* at 493 ("Where the patent is used as a means of restraining competition with the patentee's sale of an unpatented product . . . [e]quity may rightly withhold its assistance from such a use of the patent by declining to entertain a suit for infringement [until] the improper practice has been abandoned and [the] consequences of the misuse of the patent have been dissipated.").

In 1990, the Fourth Circuit became the first federal circuit to extend the misuse rationale to copyrights. *See Lasercomb Am., Inc. v. Reynolds*, 911 F.2d 970, 972 (4th Cir.1990). In *Lasercomb*, a software manufacturer required its customers to agree to a licensing agreement that barred the licensee from creating any competing software. *Id.* at 978 ("Each time Lasercomb sells its Interact program to a company . . . the company is required to forego utilization of the creative abilities of all its officers, directors and employees in the area of CAD/CAM die-making software."). Drawing on patent misuse jurisprudence, the Fourth Circuit concluded that Lasercomb's licensing agreement was an "egregious" anticompetitive

restraint, which amounted to copyright misuse. *Id.* at 979. It was aimed at preventing the creation of competing software.

Subsequently, our court recognized the existence of a copyright misuse doctrine. *See, e.g., Altera Corp. v. Clear Logic, Inc.*, 424 F.3d 1079, 1090 (9th Cir.2005); *Practice Mgmt. Info. Corp. v. Am. Med. Ass'n*, 121 F.3d 516, 521 (9th Cir.1997), *amended by* 133 F.3d 1140 (9th Cir.1998). In *Altera*, we made it clear that the defense is not a defense to state law claims, and in *A&M Records v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001), we rejected the applicability of the defense on the merits, upholding, in the circumstances of that case, the district court's conclusion that there was actionable copyright infringement.

We have thus applied the doctrine sparingly. The doctrine did not apply in *Altera* when there had been no allegation of copyright infringement. 424 F.3d at 1090. In *Napster*, we observed that the plaintiffs who sought to enjoin unlicensed use of copyrighted works were entitled to do so because they were not seeking to extend a copyright monopoly to other products or works. We described the purpose of the defense as preventing holders of copyrights "from leveraging their limited monopoly to allow them control of areas outside the monopoly." *Napster*, 239 F.3d at 1026.

Our decision in *Practice Management* is the only case in which we upheld a copyright misuse defense. We did so because the copyright licensor in that case prevented the licensee from using any other competing product. 121 F.3d at 520–21. In *Practice Management*, a publisher and distributor of medical books was using a coding system developed by the American Medical Association ("AMA") to enable physicians and others to identify particular medical procedures with precision. *Id.* Practice Management sued the AMA for a declaratory judgment that the AMA's copyright in its coding system, the Physician's Current Procedural Terminology ("CPT"), was not valid. *Id.* at 518. The CPT had become an industry standard, and the AMA had a licensing agreement that allowed the Health Care Financing Administration ("HCFA") to use the AMA system. The agreement provided, however, that HCFA use only the AMA system. *Id.* at 520–21 (the agreement required "HCFA to use the AMA's copyrighted coding system and prohibit[ed] HCFA from using any other.").

We held this was copyright misuse, because the AMA was not entitled to use the license agreement to prevent the use of all competitor's products. *Id.* at 521 ("Conditioning the license on HCFA's promise not to use competitors' products constituted a misuse of the copyright by the AMA."). In recognizing clear abuse of the copyright, we observed that the AMA's misuse was its limitation on the HCFA's right to decide whether or not to

use other systems as well. It was not necessary to decide whether the limitation, in the antitrust context, would have been reasonable or not. We said that "a defendant in a copyright infringement suit need not prove an antitrust violation to prevail on a copyright misuse defense." *Id.* (citing *Lasercom*, 911 F.2d at 978).

* * *

C. Psystar's Misuse Defense fails because it is an attempt to apply the First Sale Doctrine to a valid licensing agreement.

Psystar attempts to distinguish *Triad* from the present case by invoking the first sale doctrine. Psystar argues that Apple, unlike *Triad*, attempts to control the use of Mac OS X software after it has been sold, because Psystar purchased retail-packaged copies of the operating software. Psystar contends that while the copyright owner can refuse to sell copies, it cannot control their subsequent use. This argument falsely assumes that Apple transferred ownership of Mac OS X when it sold a retail-packaged DVD containing software designed to enable Apple's existing customers to upgrade to the latest version of the operating system. The buyers of that DVD purchased the disc. They knew, however, they were not buying the software. Apple's SLA clearly explained this.

The DVD purchasers were licensees, not owners, of the software. The Mac OS X SLA, states that the software is "licensed, not sold, to [the customer] by Apple Inc. (Apple) for use only under the terms of this License." Thus the SLA provides that Apple "retain[s] ownership of the Apple Software itself." The SLA also imposes significant use and transfer restrictions, providing, inter alia, that a licensee may only run one copy and "may not rent, lease, lend, redistribute or sublicense the Apple Software." *Cf. Wall Data*, 447 F.3d at 785 ("Generally, if the copyright owner makes it clear that she or he is granting only a license to the copy of software and imposes significant restrictions on the purchaser's ability to redistribute or transfer that copy, the purchaser is considered a licensee, not an owner, of the software."). The license thus satisfied *Vernor*'s three factor test for demonstrating the existence of a licensor/licensee relationship. 621 F.3d at 1111.

Contrary to Psystar's assertion, such licensing arrangements are also firmly rooted in the history of copyright law. While copyright owners may choose to simply exclude others from their work, i.e. not to transfer their rights, *see Stewart v. Abend*, 495 U.S. 207, 228–29 (1990); *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932), courts have long held that copyright holders may also use their limited monopoly to leverage the right to use their work on the acceptance of specific conditions, *see, e.g.,*

Metro–Goldwyn–Mayer Distrib. Corp. v. Bijou Theatre Co., 59 F.2d 70, 77 (1st Cir. 1932) (holding that if a motion picture license is subject to the condition that its exhibition must occur at specified times and places, the licensee's exhibitions at other times and places is without authority from the licensor and therefore constitutes copyright infringement).

D. The Fifth Circuit's Decision in Alcatel Unlike This Case Involved Restrictions Aimed At Stifling Competition.

The copyright misuse doctrine does not prohibit using conditions to control use of copyrighted material, but it does prevent copyright holders from using the conditions to stifle competition. Psystar relies on the Fifth Circuit's opinion in *Alcatel*. This reliance is inapposite. In *Alcatel*, the license conditions prevented development of competing products, and thus constituted copyright misuse. *See* 166 F.3d at 793–94.

In *Alcatel*, the plaintiff and copyright holder (formerly known as DSC) manufactured telephone switching systems consisting of copyrighted operational software and numerous non-copyrighted components. Id. at 777. The software license agreement provided that the software was "licensed to customers to be used only in conjunction with DSC-manufactured hardware," and such hardware included expansion cards. *Id.* at 793. To develop compatible cards, the defendant had to download and copy the software for testing and development purposes. *Id.* at 779. This would have been a breach of the licensing agreement. The Fifth Circuit held, however, that the restrictive terms of the licensing agreement constituted copyright misuse.

Unlike the licensing agreement in Alcatel, Apple's SLA does not restrict competitor's ability to develop their own software, nor does it preclude customers from using non-Apple components with Apple computers. Instead, Apple's SLA merely restricts the use of Apple's own software to its own hardware. As the district court properly concluded, Apple's SLA has "not prohibited others from independently developing and using their own operating systems." *Apple I*, 673 F. Supp.2d at 939. Psystar produces its own computer hardware and it is free to develop its own computer software.

Moreover, *Alcatel* was a complex case involving unfair competition, antitrust claims, as well as copyright infringement. It eventually went to a jury that found as a matter of fact on uncontested instructions. 166 F.3d at 779–80. The Fifth Circuit effectively upheld the misuse verdict. Id. at 793. Alcatel does not support Psystar's contention that it can copy Apple's copyrighted operating software and use it to run competing hardware. Apple was entitled to injunctive relief.

Alcatel appears to be more like our decision in *Practice Management* where we found an anti-competitive license condition. 121 F.3d at 520–21. In the agreement prohibited the licensee from using any competing system. In *Alcatel*, the agreement effectively prohibited the licensee from using any competing expansion cards. Therefore, Apple's SLA, like the one we reviewed in Triad, represents the legitimate exercise of a copyright holder's right to conditionally transfer works of authorship, and does not constitute copyright misuse.

* * *

CONCLUSION

The district court's grant of summary judgement in favor of Apple and its entry of a permanent injunction against Psystar's infringement of Mac OS X are affirmed. The district court's orders granting Apple's motion to seal litigation documents are vacated and remanded for further consideration.

AFFIRMED in part, REMANDED in part.

Note

Psyster Corp. unsuccessfully sought review in the U.S. Supreme Court by writ of certiorari, asserting that the case raised this question: "Is it copyright misuse to use a copyright in operating-system software to limit the use of the operating system to computers manufactured by the copyright owner?" It also argued that this case was in conflict with *Alcatel USA v. DGI Technology*. *See Psystar Corp. v. Apple Inc.*, No. 11-812, Petition for Writ of Certiorari, 2011 WL 6934738 (Dec. 27, 2011). Do you agree with each point?

TOPIC 4
SHRINK WRAP AND CLICK WRAP SOFTWARE LICENSES

A consumer buys a computer program in a store and pays for it in full. The consumer then takes the program home and installs it on a computer. During the installation process, the computer presents a screen with an elaborate license governing the use of the software. The computer asks the consumer whether he or she agrees to the license. The installation will not continue unless the consumer indicates agreement. The consumer was unaware of the terms of the license at the time of paying for the software. If the consumer indicates assent, is the consumer bound by the software license?

PROCD, INC. V. ZEIDENBERG

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

EASTERBROOK, Circuit Judge.

Must buyers of computer software obey the terms of shrinkwrap licenses? The district court held not, for two reasons: first, they are not contracts because the licenses are inside the box rather than printed on the outside; second, federal law forbids enforcement even if the licenses are contracts. 908 F.Supp. 640 (W.D. Wis. 1996). The parties and numerous amici curiae have briefed many other issues, but these are the only two that matter—and we disagree with the district judge's conclusion on each. Shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general (for example, if they violate a rule of positive law, or if they are unconscionable). Because no one argues that the terms of the license at issue here are troublesome, we remand with instructions to enter judgment for the plaintiff.

I

ProCD, the plaintiff, has compiled information from more than 3,000 telephone directories into a computer database. We may assume that this

database cannot be copyrighted, although it is more complex, contains more information (nine-digit zip codes and census industrial codes), is organized differently, and therefore is more original than the single alphabetical directory at issue in *Feist Publications, Inc. v. Rural Telephone Service Co.,* 499 U.S. 340 (1991). See Paul J. Heald, The Vices of Originality, 1991 Sup.Ct. Rev. 143, 160-68. ProCD sells a version of the database, called SelectPhone (trademark), on CD-ROM discs. (CD-ROM means "compact disc-read only memory." The "shrinkwrap license" gets its name from the fact that retail software packages are covered in plastic or cellophane "shrinkwrap," and some vendors, though not ProCD, have written licenses that become effective as soon as the customer tears the wrapping from the package. Vendors prefer "end user license," but we use the more common term.) A proprietary method of compressing the data serves as effective encryption too. Customers decrypt and use the data with the aid of an application program that ProCD has written. This program, which is copyrighted, searches the database in response to users' criteria (such as "find all people named Tatum in Tennessee, plus all firms with 'Door Systems' in the corporate name"). The resulting lists (or, as ProCD prefers, "listings") can be read and manipulated by other software, such as word processing programs.

The database in SelectPhone (trademark) cost more than $10 million to compile and is expensive to keep current. It is much more valuable to some users than to others. The combination of names, addresses, and SIC codes enables manufacturers to compile lists of potential customers. Manufacturers and retailers pay high prices to specialized information intermediaries for such mailing lists; ProCD offers a potentially cheaper alternative. People with nothing to sell could use the database as a substitute for calling long distance information, or as a way to look up old friends who have moved to unknown towns, or just as an electronic substitute for the local phone book. ProCD decided to engage in price discrimination, selling its database to the general public for personal use at a low price (approximately $150 for the set of five discs) while selling information to the trade for a higher price. It has adopted some intermediate strategies too: access to the SelectPhone (trademark) database is available via the America Online service for the price America Online charges to its clients (approximately $3 per hour), but this service has been tailored to be useful only to the general public.

If ProCD had to recover all of its costs and make a profit by charging a single price—that is, if it could not charge more to commercial users than to the general public—it would have to raise the price substantially over $150. The ensuing reduction in sales would harm consumers who value the

information at, say, $200. They get consumer surplus of $50 under the current arrangement but would cease to buy if the price rose substantially. If because of high elasticity of demand in the consumer segment of the market the only way to make a profit turned out to be a price attractive to commercial users alone, then all consumers would lose out—and so would the commercial clients, who would have to pay more for the listings because ProCD could not obtain any contribution toward costs from the consumer market.

To make price discrimination work, however, the seller must be able to control arbitrage. An air carrier sells tickets for less to vacationers than to business travelers, using advance purchase and Saturday-night-stay requirements to distinguish the categories. A producer of movies segments the market by time, releasing first to theaters, then to pay-per-view services, next to the videotape and laserdisc market, and finally to cable and commercial tv. Vendors of computer software have a harder task. Anyone can walk into a retail store and buy a box. Customers do not wear tags saying "commercial user" or "consumer user." Anyway, even a commercial-user-detector at the door would not work, because a consumer could buy the software and resell to a commercial user. That arbitrage would break down the price discrimination and drive up the minimum price at which ProCD would sell to anyone.

Instead of tinkering with the product and letting users sort themselves—for example, furnishing current data at a high price that would be attractive only to commercial customers, and two-year-old data at a low price—ProCD turned to the institution of contract. Every box containing its consumer product declares that the software comes with restrictions stated in an enclosed license. This license, which is encoded on the CD-ROM disks as well as printed in the manual, and which appears on a user's screen every time the software runs, limits use of the application program and listings to non-commercial purposes.

Matthew Zeidenberg bought a consumer package of SelectPhone (trademark) in 1994 from a retail outlet in Madison, Wisconsin, but decided to ignore the license. He formed Silken Mountain Web Services, Inc., to resell the information in the SelectPhone (trademark) database. The corporation makes the database available on the Internet to anyone willing to pay its price—which, needless to say, is less than ProCD charges its commercial customers. Zeidenberg has purchased two additional SelectPhone (trademark) packages, each with an updated version of the database, and made the latest information available over the World Wide Web, for a price, through his corporation. ProCD filed this suit seeking an injunction against further dissemination that exceeds the rights specified in the

licenses (identical in each of the three packages Zeidenberg purchased). The district court held the licenses ineffectual because their terms do not appear on the outside of the packages. The court added that the second and third licenses stand no different from the first, even though they are identical, because they *might* have been different, and a purchaser does not agree to—and cannot be bound by—terms that were secret at the time of purchase. 908 F.Supp. at 654.

II

Following the district court, we treat the licenses as ordinary contracts accompanying the sale of products, and therefore as governed by the common law of contracts and the Uniform Commercial Code. Whether there are legal differences between "contracts" and "licenses" (which may matter under the copyright doctrine of first sale) is a subject for another day. See *Microsoft Corp. v. Harmony Computers & Electronics, Inc.,* 846 F.Supp. 208 (E.D.N.Y. 1994). Zeidenberg does not argue that Silken Mountain Web Services is free of any restrictions that apply to Zeidenberg himself, because any effort to treat the two parties as distinct would put Silken Mountain behind the eight ball on ProCD's argument that copying the application program onto its hard disk violates the copyright laws. Zeidenberg does argue, and the district court held, that placing the package of software on the shelf is an "offer," which the customer "accepts" by paying the asking price and leaving the store with the goods. *Peeters v. State,* 154 Wis. 111, 142 N.W. 181 (1913). In Wisconsin, as elsewhere, a contract includes only the terms on which the parties have agreed. One cannot agree to hidden terms, the judge concluded. So far, so good—but one of the terms to which Zeidenberg agreed by purchasing the software is that the transaction was subject to a license. Zeidenberg's position therefore must be that the printed terms on the outside of a box are the parties' contract—except for printed terms that refer to or incorporate other terms. But why would Wisconsin fetter the parties' choice in this way? Vendors can put the entire terms of a contract on the outside of a box only by using microscopic type, removing other information that buyers might find more useful (such as what the software does, and on which computers it works), or both. The "Read Me" file included with most software, describing system requirements and potential incompatibilities, may be equivalent to ten pages of type; warranties and license restrictions take still more space. Notice on the outside, terms on the inside, and a right to return the software for a refund if the terms are unacceptable (a right that the license expressly extends), may be a means of doing business valuable to buyers and sellers alike. See E. Allan Farnsworth, 1 *Farnsworth on Contracts* § 4.26 (1990); *Restatement (2d) of Contracts* § 211 comment a (1981) ("Standardization of agreements serves many of the same functions as standardization of

goods and services; both are essential to a system of mass production and distribution. Scarce and costly time and skill can be devoted to a class of transactions rather than the details of individual transactions."). Doubtless a state could forbid the use of standard contracts in the software business, but we do not think that Wisconsin has done so.

Transactions in which the exchange of money precedes the communication of detailed terms are common. Consider the purchase of insurance. The buyer goes to an agent, who explains the essentials (amount of coverage, number of years) and remits the premium to the home office, which sends back a policy. On the district judge's understanding, the terms of the policy are irrelevant because the insured paid before receiving them. Yet the device of payment, often with a "binder" (so that the insurance takes effect immediately even though the home office reserves the right to withdraw coverage later), in advance of the policy, serves buyers' interests by accelerating effectiveness and reducing transactions costs. Or consider the purchase of an airline ticket. The traveler calls the carrier or an agent, is quoted a price, reserves a seat, pays, and gets a ticket, in that order. The ticket contains elaborate terms, which the traveler can reject by canceling the reservation. To use the ticket is to accept the terms, even terms that in retrospect are disadvantageous. See *Carnival Cruise Lines, Inc. v. Shute,* 499 U.S. 585 (1991); see also *Vimar Seguros y Reaseguros, S.A. v. M/V Sky Reefer,* 515 U.S. 528 (1995) (bills of lading). Just so with a ticket to a concert. The back of the ticket states that the patron promises not to record the concert; to attend is to agree. A theater that detects a violation will confiscate the tape and escort the violator to the exit. One *could* arrange things so that every concertgoer signs this promise before forking over the money, but that cumbersome way of doing things not only would lengthen queues and raise prices but also would scotch the sale of tickets by phone or electronic data service.

Consumer goods work the same way. Someone who wants to buy a radio set visits a store, pays, and walks out with a box. Inside the box is a leaflet containing some terms, the most important of which usually is the warranty, read for the first time in the comfort of home. By Zeidenberg's lights, the warranty in the box is irrelevant; every consumer gets the standard warranty implied by the UCC in the event the contract is silent; yet so far as we are aware no state disregards warranties furnished with consumer products. Drugs come with a list of ingredients on the outside and an elaborate package insert on the inside. The package insert describes drug interactions, contraindications, and other vital information—but, if Zeidenberg is right, the purchaser need not read the package insert, because it is not part of the contract.

Next consider the software industry itself. Only a minority of sales take place over the counter, where there are boxes to peruse. A customer may place an order by phone in response to a line item in a catalog or a review in a magazine. Much software is ordered over the Internet by purchasers who have never seen a box. Increasingly software arrives by wire. There is no box; there is only a stream of electrons, a collection of information that includes data, an application program, instructions, many limitations ("MegaPixel 3.14159 cannot be used with BytePusher 2.718"), and the terms of sale. The user purchases a serial number, which activates the software's features. On Zeidenberg's arguments, these unboxed sales are unfettered by terms—so the seller has made a broad warranty and must pay consequential damages for any shortfalls in performance, two "promises" that if taken seriously would drive prices through the ceiling or return transactions to the horse-and-buggy age.

According to the district court, the UCC does not countenance the sequence of money now, terms later. (Wisconsin's version of the UCC does not differ from the Official Version in any material respect, so we use the regular numbering system. Wis. Stat. § 402.201 corresponds to UCC § 2-201, and other citations are easy to derive.) One of the court's reasons—that by proposing as part of the draft Article 2B a new UCC § 2-203 that would explicitly validate standard-form user licenses, the American Law Institute and the National Conference of Commissioners on Uniform Laws have conceded the invalidity of shrinkwrap licenses under current law, see 908 F. Supp. at 655-56—depends on a faulty inference. To propose a change in a law's *text* is not necessarily to propose a change in the law's *effect*. New words may be designed to fortify the current rule with a more precise text that curtails uncertainty. To judge by the flux of law review articles discussing shrinkwrap licenses, uncertainty is much in need of reduction—although businesses seem to feel less uncertainty than do scholars, for only three cases (other than ours) touch on the subject, and none directly addresses it. See *Step-Saver Data Systems, Inc. v. Wyse Technology,* 939 F.2d 91 (3d Cir. 1991); *Vault Corp. v. Quaid Software Ltd.,* 847 F.2d 255, 268-70 (5th Cir. 1988); *Arizona Retail Systems, Inc. v. Software Link, Inc.,* 831 F.Supp. 759 (D.Ariz. 1993). As their titles suggest, these are not consumer transactions. Step-Saver is a battle-of-the-forms case, in which the parties exchange incompatible forms and a court must decide which prevails. See *Northrop Corp. v. Litronic Industries,* 29 F.3d 1173 (7th Cir. 1994) (Illinois law); Douglas G. Baird & Robert Weisberg, *Rules, Standards, andthe Battle of the Forms*: *AReassessment of* § 2-207, 68 Va. L.Rev. 1217, 1227-31 (1982). Our case has only one form; UCC § 2-207 is irrelevant. *Vault* holds that Louisiana's special shrinkwrap-license statute is preempted by federal law, a question to which we return.

And *Arizona Retail Systems* did not reach the question, because the court found that the buyer knew the terms of the license before purchasing the software.

What then does the current version of the UCC have to say? We think that the place to start is § 2-204(1): "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." A vendor, as master of the offer, may invite acceptance by conduct, and may propose limitations on the kind of conduct that constitutes acceptance. A buyer may accept by performing the acts the vendor proposes to treat as acceptance. And that is what happened. ProCD proposed a contract that a buyer would accept by *using* the software after having an opportunity to read the license at leisure. This Zeidenberg did. He had no choice, because the software splashed the license on the screen and would not let him proceed without indicating acceptance. So although the district judge was right to say that a contract can be, and often is, formed simply by paying the price and walking out of the store, the UCC permits contracts to be formed in other ways. ProCD proposed such a different way, and without protest Zeidenberg agreed. Ours is not a case in which a consumer opens a package to find an insert saying "you owe us an extra $10,000" and the seller files suit to collect. Any buyer finding such a demand can prevent formation of the contract by returning the package, as can any consumer who concludes that the terms of the license make the software worth less than the purchase price. Nothing in the UCC requires a seller to maximize the buyer's net gains.

Section 2-606, which defines "acceptance of goods", reinforces this understanding. A buyer accepts goods under § 2-606(1)(b) when, after an opportunity to inspect, he fails to make an effective rejection under § 2-602(1). ProCD extended an opportunity to reject if a buyer should find the license terms unsatisfactory; Zeidenberg inspected the package, tried out the software, learned of the license, and did not reject the goods. We refer to § 2-606 only to show that the opportunity to return goods can be important; acceptance of an offer differs from acceptance of goods after delivery, see *Gillen v. Atalanta Systems, Inc.,* 997 F.2d 280, 284 n. 1 (7th Cir. 1993); but the UCC consistently permits the parties to structure their relations so that the buyer has a chance to make a final decision after a detailed review.

Some portions of the UCC impose additional requirements on the way parties agree on terms. A disclaimer of the implied warranty of merchantability must be "conspicuous." UCC § 2-316(2), incorporating UCC § 1-201(10). Promises to make firm offers, or to negate oral modifications,

must be "separately signed." UCC §§ 2-205, 2-209(2). These special provisos reinforce the impression that, so far as the UCC is concerned, other terms may be as inconspicuous as the forum-selection clause on the back of the cruise ship ticket in *Carnival Lines*. Zeidenberg has not located any Wisconsin case—for that matter, any case in any state—holding that under the UCC the ordinary terms found in shrinkwrap licenses require any special prominence, or otherwise are to be undercut rather than enforced. In the end, the terms of the license are conceptually identical to the contents of the package. Just as no court would dream of saying that SelectPhone (trademark) must contain 3,100 phone books rather than 3,000, or must have data no more than 30 days old, or must sell for $100 rather than $150—although any of these changes would be welcomed by the customer, if all other things were held constant—so, we believe, Wisconsin would not let the buyer pick and choose among terms. Terms of use are no less a part of "the product" than are the size of the database and the speed with which the software compiles listings. Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy. *Digital Equipment Corp. v. Uniq Digital Technologies, Inc.,* 73 F.3d 756 (7th Cir. 1996). ProCD has rivals, which may elect to compete by offering superior software, monthly updates, improved terms of use, lower price, or a better compromise among these elements. As we stressed above, adjusting terms in buyers' favor might help Matthew Zeidenberg today (he already has the software) but would lead to a response, such as a higher price, that might make consumers as a whole worse off.

III

The district court held that, even if Wisconsin treats shrinkwrap licenses as contracts, § 301(a) of the Copyright Act, 17 U.S.C. § 301(a), prevents their enforcement. 908 F.Supp. at 656-59. The relevant part of § 301(a) preempts any "legal or equitable rights [under state law] that are equivalent to any of the exclusive rights within 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 subject matter of copyright as specified by sections 102 and 103." ProCD's software and data are "fixed in a tangible medium of expression," and the district judge held that they are "within the subject matter of copyright." The latter conclusion is plainly right for the copyrighted application program, and the judge thought that the data likewise are "within the subject matter of copyright" even if, after Feist, they are not sufficiently original to be copyrighted. 908 F.Supp. at 656-57. *Baltimore Orioles, Inc. v. Major League Baseball Players Ass'n,* 805 F.2d 663, 676 (7th Cir. 1986), supports that conclusion, with which commentators agree. E.g., Paul Goldstein, III *Copyright* § 15.2.3 (2d ed.

1996); Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 101[B] (1995); William F. Patry, II *Copyright Law andPractice* 1108-09 (1994). One function of § 301(a) is to prevent states from giving special protection to works of authorship that Congress has decided should be in the public domain, which it can accomplish only if "subject matter of copyright" includes all works of a *type* covered by sections 102 and 103, even if federal law does not afford protection to them. Cf. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.,* 489 U.S. 141 (1989) (same principle under patent laws).

But are rights created by contract "equivalent to any of the exclusive rights within the general scope of copyright"? Three courts of appeals have answered "no." *National Car Rental System, Inc. v. Computer Associates International, 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 (4th Cir. 1988). The district court disagreed with these decisions, 908 F.Supp. at 658, but we think them sound. Rights "equivalent to any of the exclusive rights within the general scope of copyright" are rights established *bylaw*—rights that restrict the options of persons who are strangers to the author. Copyright law forbids duplication, public performance, and so on, unless the person wishing to copy or perform the work gets permission; silence means a ban on copying. A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create "exclusive rights." Someone who found a copy of SelectPhone (trademark) on the street would not be affected by the shrinkwrap license—though the federal copyright laws of their own force would limit the finder's ability to copy or transmit the application program.

Think for a moment about trade secrets. One common trade secret is a customer list. After *Feist,* a simple alphabetical list of a firm's customers, with address and telephone numbers, could not be protected by copyright. Yet *Kewanee Oil Co. v. Bicron Corp.,* 416 U.S. 470 (1974), holds that contracts about trade secrets may be enforced—precisely because they do not affect strangers' ability to discover and use the information independently. If the amendment of § 301(a) in 1976 overruled *Kewanee* and abolished consensual protection of those trade secrets that cannot be copyrighted, no one has noticed—though abolition is a logical consequence of the district court's approach. Think, too, about everyday transactions in intellectual property. A customer visits a video store and rents a copy of *Night of the Lepus*. The customer's contract with the store limits use of the tape to home viewing and requires its return in two days. May the customer keep the tape, on the ground that § 301(a) makes the promise unenforceable?

A law student uses the LEXIS database, containing public-domain documents, under a contract limiting the results to educational endeavors; may the student resell his access to this database to a law firm from which LEXIS seeks to collect a much higher hourly rate? Suppose ProCD hires a firm to scour the nation for telephone directories, promising to pay $100 for each that ProCD does not already have. The firm locates 100 new directories, which it sends to ProCD with an invoice for $10,000. ProCD incorporates the directories into its database; does it have to pay the bill? Surely yes; *Aronson v. Quick Point Pencil Co.,* 440 U.S. 257 (1979), holds that promises to pay for intellectual property may be enforced even though federal law (in *Aronson,* the patent law) offers no protection against third-party uses of that property. See also *Kennedy v. Wright,* 851 F.2d 963 (7th Cir. 1988). But these illustrations are what our case is about. ProCD offers software and data for two prices: one for personal use, a higher price for commercial use. Zeidenberg wants to use the data without paying the seller's price; if the law student and Quick Point Pencil Co. could not do that, neither can Zeidenberg.

Although Congress possesses power to preempt even the enforcement of contracts about intellectual property—or railroads, on which see *Norfolk & Western Ry. v. Train Dispatchers,* 499 U.S. 117 (1991)—courts usually read preemption clauses to leave private contracts unaffected. *American Airlines, Inc. v. Wolens,* 513 U.S. 219 (1995), provides a nice illustration. A federal statute preempts any state "law, rule, regulation, standard, or other provision . . . relating to rates, routes, or services of any air carrier." 49 U.S.C.App. § 1305(a)(1). Does such a law preempt the law of contracts—so that, for example, an air carrier need not honor a quoted price (or a contract to reduce the price by the value of frequent flyer miles)? The Court allowed that it is possible to read the statute that broadly but thought such an interpretation would make little sense. Terms and conditions offered by contract reflect private ordering, essential to the efficient functioning of markets. Although some principles that carry the name of contract law are designed to defeat rather than implement consensual transactions, the rules that respect private choice are not preempted by a clause such as § 1305(a)(1). Section 301(a) plays a role similar to § 1301(a)(1): it prevents states from substituting their own regulatory systems for those of the national government. Just as § 301(a) does not itself interfere with private transactions in intellectual property, so it does not prevent states from respecting those transactions. Like the Supreme Court in *Wolens,* we think it prudent to refrain from adopting a rule that anything with the label "contract" is necessarily outside the preemption clause: the variations and possibilities are too numerous to foresee. *National Car Rental* likewise recognizes the possibility that some applications of the law

of contract could interfere with the attainment of national objectives and therefore come within the domain of § 301(a). But general enforcement of shrinkwrap licenses of the kind before us does not create such interference.

Aronson emphasized that enforcement of the contract between Aronson and Quick Point Pencil Company would not withdraw any information from the public domain. That is equally true of the contract between ProCD and Zeidenberg. Everyone remains free to copy and disseminate all 3,000 telephone books that have been incorporated into ProCD's database. Anyone can add SIC codes and zip codes. ProCD's rivals have done so. Enforcement of the shrinkwrap license may even make information more readily available, by reducing the price ProCD charges to consumer buyers. To 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. *Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.,* 925 F.2d 174, 180 (7th Cir. 1991). Licenses may have other benefits for consumers: many licenses permit users to make extra copies, to use the software on multiple computers, even to incorporate the software into the user's products. But whether a particular license is generous or restrictive, a simple two-party contract is not "equivalent to any of the exclusive rights within the general scope of copyright" and therefore may be enforced.

REVERSED AND REMANDED.

Notes

1. Market Pressure? Does the market prevent producers of software from placing unreasonable terms in their shrink wrap licenses? The commentary to the American Law Institute's *Principles of the Law of Software Contracts* considers two arguments on this issue. The argument that the market will police the terms of this licenses is as follows:

> Notwithstanding the high probability that few transferees will read standard forms beyond a few salient terms, and regardless of the mode of presentation, some analysts assert that a small number of readers may be sufficient representatives in competitive markets to deter overreaching by transferors. If these analysts are correct, software transferors will draft reasonable terms and will present them fairly in order to establish good reputations and to preserve a market share. In fact, the Internet may increase competition because readers and watchdog groups can easily spread the word about the content of standard forms. Further, e-businesses should want to establish good reputations so that transferees do not mistake them for one of the many disreputable businesses with homepages on the Internet.

Principles of the Law of the Software Contracts ch. 2, topic 2, summary overview (footnotes omitted). The counterargument is:

> But market pressure may be insufficient to discipline transferors. Most obviously, the number of readers of terms may be too small and watchdog groups may be ineffectual. Further, transferors lacking competition may not care about losing the few readers of terms, while transferors in competitive industries, through new information-gathering technologies, can isolate readers and offer them better terms: "Careful segregation of consumers on the basis of their willingness to read and shop for terms would ensure that the small number of careful consumers would not discipline businesses concerning terms they offer to the rest of the consumers and would allow businesses to take advantage of the latter." In addition, e-commerce provides transferors with new, relatively inexpensive strategies for manipulating transferees. Transferors can experiment with styles of presenting terms and determine which best discourage reading. Finally, in the context of shrinkwrap, the costs in time and effort of returning software because of unfavorable terms may outweigh the benefits even if transferees would receive a full refund.

Id.(footnotes omitted). Which argument is more persuasive?

2. Terms in the Box. As the opinion notes, many consumer products come with contractual terms included inside packaging that the consumer does not read until after purchasing the product. For example, a box containing a television may include a slip of paper containing terms regarding the warranty or whether disputes must be arbitrated. Should shrinkwrap licenses be treated differently?

Some software is sold over the internet. In many cases, before a buyer commits to buy the software, a web page presents contractual terms. Nicknames have arisen to distinguish software contracts formed on the internet from "shrink wrap" licenses of the kind at issue in *ProCD*. If the web page presents the terms but does not require any affirmative assent to them, the agreement is called a "browser wrap" contract. If the web page asks the buyer to "click here" to agree to the contract terms, the agreement is called a "click wrap" contract. Whether browser wrap and click wrap contracts are enforceable is also a subject of dispute.

SPECHT V. NETSCAPE COMMUNICATIONS CORP.

306 F.3d 17 (2d Cir. 2002)

SOTOMAYOR, Circuit Judge.

This is an appeal from a judgment of the Southern District of New York denying a motion by defendants-appellants Netscape Communications Corporation and its corporate parent, America Online, Inc. (collectively, "defendants" or "Netscape"), to compel arbitration and to stay court proceedings. In order to resolve the central question of arbitrability presented here, we must address issues of contract formation in cyberspace. Principally, we are asked to determine whether plaintiffs-appellees ("plaintiffs"), by acting upon defendants' invitation to download free software made available on defendants' webpage, agreed to be bound by the software's license terms (which included the arbitration clause at issue), even though plaintiffs could not have learned of the existence of those terms unless, prior to executing the download, they had scrolled down the webpage to a screen located below the download button. We agree with the district court that a reasonably prudent Internet user in circumstances such as these would not have known or learned of the existence of the license terms before responding to defendants' invitation to download the free software, and that defendants therefore did not provide reasonable notice of the license terms. In consequence, plaintiffs' bare act of downloading the software did not unambiguously manifest assent to the arbitration provision contained in the license terms.

* * *

III. Whether the User Plaintiffs Had Reasonable Notice of and Manifested Assent to the SmartDownload License Agreement

Whether governed by the common law or by Article 2 of the Uniform Commercial Code ("UCC"), a transaction, in order to be a contract, requires a manifestation of agreement between the parties. *See Windsor Mills, Inc. v. Collins & Aikman Corp.,* 25 Cal.App.3d 987, 991, 101 Cal.Rptr. 347, 350 (1972) ("[C]onsent to, or acceptance of, the arbitration provision [is] necessary to create an agreement to arbitrate."); *see also*Cal. Com.Code § 2204(1) ("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.").[13] Mutual manifesta

[13]The district court concluded that the SmartDownload transactions here should be governed by "California law as it relates to the sale of goods, including the Uniform Commercial Code in effect in California." *Specht,* 150 F.Supp.2d at 591. It is not obvious, however, that UCC Article 2 ("sales of goods") applies to the

tion of assent, whether by written or spoken word or by conduct, is the touchstone of contract. *Binder v. Aetna Life Ins. Co.,* 75 Cal.App.4th 832, 848, 89 Cal.Rptr.2d 540, 551 (1999); *cf.*Restatement (Second) of Contracts § 19(2) (1981) ("The conduct of a party is not effective as a manifestation of his assent unless he intends to engage in the conduct and knows or has reason to know that the other party may infer from his conduct that he assents."). Although an onlooker observing the disputed transactions in this case would have seen each of the user plaintiffs click on the SmartDownload "Download" button, *see Cedars Sinai Med. Ctr. v. Mid-West Nat'l Life Ins. Co.,* 118 F.Supp.2d 1002, 1008 (C.D.Cal.2000) ("In California, a party's intent to contract is judged objectively, by the party's outward manifestation of consent."), a consumer's clicking on a download button does not communicate assent to contractual terms if the offer did not make clear to the consumer that clicking on the download button would signify assent to those terms, *see Windsor Mills,* 25 Cal. App.3d at 992, 101 Cal.Rptr. at 351 ("[W]hen the offeree does not know that a proposal has been made to him this objective standard does not apply."). California's common law is clear that "an offeree, regardless of apparent manifestation of his consent, is not bound by inconspicuous contractual provisions of which he is unaware, contained in a document whose contractual nature is not obvious." *Id.; see also Marin Storage & Trucking, Inc. v. Benco Contracting & Eng'g, Inc.,* 89 Cal.App.4th 1042, 1049, 107 Cal.Rptr.2d 645, 651 (2001) (same).

Arbitration agreements are no exception to the requirement of manifestation of assent. "This principle of knowing consent applies with particular force to provisions for arbitration." *Windsor Mills,* 101 Cal.Rptr. at 351. Clarity and conspicuousness of arbitration terms are important in securing informed assent. "If a party wishes to bind in writing another to an agreement to arbitrate future disputes, such purpose should be accomplished in a way that each party to the arrangement will fully and clearly comprehend that the agreement to arbitrate exists and binds the parties thereto." *Commercial Factors Corp. v. Kurtzman Bros.,* 131 Cal.App.2d

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licensing of software that is downloadable from the Internet. *Cf. Advent Sys. Ltd. v. Unisys Corp.,* 925 F.2d 670, 675 (3d Cir.1991) ("The increasing frequency of computer products as subjects of commercial litigation has led to controversy over whether software is a 'good' or intellectual property. The [UCC] does not specifically mention software."); We need not decide today whether UCC Article 2 applies to Internet transactions in downloadable products. The district court's analysis and the parties' arguments on appeal show that, for present purposes, there is no essential difference between UCC Article 2 and the common law of contracts. We therefore apply the common law, with exceptions as noted.

133, 134-35, 280 P.2d 146, 147-48 (1955) (internal quotation marks omitted). Thus, California contract law measures assent by an objective standard that takes into account both what the offeree said, wrote, or did and the transactional context in which the offeree verbalized or acted.

A. The Reasonably Prudent Offeree of Downloadable Software

Defendants argue that plaintiffs must be held to a standard of reasonable prudence and that, because notice of the existence of SmartDownload license terms was on the next scrollable screen, plaintiffs were on "inquiry notice" of those terms. We disagree with the proposition that a reasonably prudent offeree in plaintiffs' position would necessarily have known or learned of the existence of the SmartDownload license agreement prior to acting, so that plaintiffs may be held to have assented to that agreement with constructive notice of its terms. *See*Cal. Civ.Code § 1589 ("A voluntary acceptance of the benefit of a transaction is equivalent to a consent to all the obligations arising from it, so far as the facts are known, or ought to be known, to the person accepting."). It is true that "[a] party cannot avoid the terms of a contract on the ground that he or she failed to read it before signing." *Marin Storage & Trucking,* 89 Cal.App.4th at 1049, 107 Cal.Rptr.2d at 651. But courts are quick to add: "An exception to this general rule exists when the writing does not appear to be a contract and the terms are not called to the attention of the recipient. In such a case, no contract is formed with respect to the undisclosed term." *Id.; cf. Cory v. Golden State Bank,* 95 Cal.App.3d 360, 364, 157 Cal.Rptr. 538, 541 (1979) ("[T]he provision in question is effectively hidden from the view of money order purchasers until after the transactions are completed. . . . Under these circumstances, it must be concluded that the Bank's money order purchasers are not chargeable with either actual or constructive notice of the service charge provision, and therefore cannot be deemed to have consented to the provision as part of their transaction with the Bank.").

Most of the cases cited by defendants in support of their inquiry-notice argument are drawn from the world of paper contracting. *See, e.g., Taussig v. Bode & Haslett,* 134 Cal. 260, 66 P. 259 (1901) (where party had opportunity to read leakage disclaimer printed on warehouse receipt, he had duty to do so); *In re First Capital Life Ins. Co.,* 34 Cal.App.4th 1283, 1288, 40 Cal.Rptr.2d 816, 820 (1995) (purchase of insurance policy after opportunity to read and understand policy terms creates binding agreement); *King v. Larsen Realty, Inc.,* 121 Cal.App.3d 349, 356, 175 Cal.Rptr. 226, 231 (1981) (where realtors' board manual specifying that party was required to arbitrate was "readily available," party was "on notice" that he was agreeing to mandatory arbitration); *Cal. State Auto. Ass'n Inter-Ins. Bureau v. Barrett Garages, Inc.,* 257 Cal.App.2d 71, 76, 64 Cal.Rptr. 699,

703 (1967) (recipient of airport parking claim check was bound by terms printed on claim check, because a "ordinarily prudent" person would have been alerted to the terms); *Larrus v. First Nat'l Bank,* 122 Cal.App.2d 884, 888, 266 P.2d 143, 147 (1954) ("clearly printed" statement on bank card stating that depositor agreed to bank's regulations provided sufficient notice to create agreement, where party had opportunity to view statement and to ask for full text of regulations, but did not do so); *see also Hux v. Butler,* 339 F.2d 696, 700 (6th Cir. 1964) (constructive notice found where "slightest inquiry" would have disclosed relevant facts to offeree); *Walker v. Carnival Cruise Lines,* 63 F.Supp.2d 1083, 1089 (N.D.Cal. 1999) (under California and federal law, "conspicuous notice" directing the attention of parties to existence of contract terms renders terms binding) (quotation marks omitted); *Shacket v. Roger Smith Aircraft Sales, Inc.,* 651 F.Supp. 675, 691 (N.D.Ill. 1986) (constructive notice found where "minimal investigation" would have revealed facts to offeree).

As the foregoing cases suggest, receipt of a physical document containing contract terms or notice thereof is frequently deemed, in the world of paper transactions, a sufficient circumstance to place the offeree on inquiry notice of those terms. "Every person who has actual notice of circumstances sufficient to put a prudent man upon inquiry as to a particular fact, has constructive notice of the fact itself in all cases in which, by prosecuting such inquiry, he might have learned such fact." Cal. Civ.Code § 19. These principles apply equally to the emergent world of online product delivery, pop-up screens, hyperlinked pages, clickwrap licensing, scrollable documents, and urgent admonitions to "Download Now!". What plaintiffs saw when they were being invited by defendants to download this fast, free plug-in called SmartDownload was a screen containing praise for the product and, at the very bottom of the screen, a "Download" button. Defendants argue that under the principles set forth in the cases cited above, a "fair and prudent person using ordinary care" would have been on inquiry notice of SmartDownload's license terms. *Shacket,* 651 F.Supp. at 690.

We are not persuaded that a reasonably prudent offeree in these circumstances would have known of the existence of license terms. Plaintiffs were responding to an offer that did not carry an immediately visible notice of the existence of license terms or require unambiguous manifestation of assent to those terms. Thus, plaintiffs' "apparent manifestation of . . . consent" was to terms "contained in a document whose contractual nature [was] not obvious." *Windsor Mills,* 25 Cal.App.3d at 992, 101 Cal.Rptr. at 351. Moreover, the fact that, given the position of the scroll bar on their computer screens, plaintiffs may have been aware that an unexplored portion of the Netscape webpage remained below the

download button does not mean that they reasonably should have concluded that this portion contained a notice of license terms. In their deposition testimony, plaintiffs variously stated that they used the scroll bar "[o]nly if there is something that I feel I need to see that is on-that is off the page," or that the elevated position of the scroll bar suggested the presence of "mere[ ] formalities, standard lower banner links" or "that the page is bigger than what I can see." Plaintiffs testified, and defendants did not refute, that plaintiffs were in fact unaware that defendants intended to attach license terms to the use of SmartDownload.

We conclude that in circumstances such as these, where consumers are urged to download free software at the immediate click of a button, a reference to the existence of license terms on a submerged screen is not sufficient to place consumers on inquiry or constructive notice of those terms. The SmartDownload webpage screen was "printed in such a manner that it tended to conceal the fact that it was an express acceptance of [Netscape's] rules and regulations." *Larrus,* 266 P.2d at 147. Internet users may have, as defendants put it, "as much time as they need[ ]" to scroll through multiple screens on a webpage, but there is no reason to assume that viewers will scroll down to subsequent screens simply because screens are there. When products are "free" and users are invited to download them in the absence of reasonably conspicuous notice that they are about to bind themselves to contract terms, the transactional circumstances cannot be fully analogized to those in the paper world of arm's-length bargaining. In the next two sections, we discuss case law and other legal authorities that have addressed the circumstances of computer sales, software licensing, and online transacting. Those authorities tend strongly to support our conclusion that plaintiffs did not manifest assent to SmartDownload's license terms.

B. Shrinkwrap Licensing and Related Practices

Defendants cite certain well-known cases involving shrinkwrap licensing and related commercial practices in support of their contention that plaintiffs became bound by the SmartDownload license terms by virtue of inquiry notice. For example, in *Hill v. Gateway 2000, Inc.,* 105 F.3d 1147 (7th Cir. 1997), the Seventh Circuit held that where a purchaser had ordered a computer over the telephone, received the order in a shipped box containing the computer along with printed contract terms, and did not return the computer within the thirty days required by the terms, the purchaser was bound by the contract. *Id.* at 1148-49. In *ProCD, Inc. v. Zeidenberg,* the same court held that where an individual purchased software in a box containing license terms which were displayed on the computer screen every time the user executed the software program, the

user had sufficient opportunity to review the terms and to return the software, and so was contractually bound after retaining the product. *ProCD,* 86 F.3d at 1452;*cf. Moore v. Microsoft Corp.,* 293 A.D.2d 587, 587, 741 N.Y.S.2d 91, 92 (2d Dep't 2002) (software user was bound by license agreement where terms were prominently displayed on computer screen before software could be installed and where user was required to indicate assent by clicking "I agree"); *Brower v. Gateway 2000, Inc.,* 246 A.D.2d 246, 251, 676 N.Y.S.2d 569, 572 (1st Dep't 1998) (buyer assented to arbitration clause shipped inside box with computer and software by retaining items beyond date specified by license terms); *M.A. Mortenson Co. v. Timberline Software Corp.,* 93 Wash.App. 819, 970 P.2d 803, 809 (1999) (buyer manifested assent to software license terms by installing and using software), *aff'd,*140 Wash.2d 568, 998 P.2d 305 (2000); *see also I.Lan Sys.,* 183 F.Supp.2d at 338 (business entity "explicitly accepted the clickwrap license agreement [contained in purchased software] when it clicked on the box stating 'I agree' ").

These cases do not help defendants. To the extent that they hold that the purchaser of a computer or tangible software is contractually bound after failing to object to printed license terms provided with the product, *Hill* and *Brower* do not differ markedly from the cases involving traditional paper contracting discussed in the previous section. Insofar as the purchaser in *ProCD* was confronted with conspicuous, mandatory license terms every time he ran the software on his computer, that case actually undermines defendants' contention that downloading in the absence of conspicuous terms is an act that binds plaintiffs to those terms. In *Mortenson,* the full text of license terms was printed on each sealed diskette envelope inside the software box, printed again on the inside cover of the user manual, and notice of the terms appeared on the computer screen every time the purchaser executed the program. *Mortenson,* 970 P.2d at 806. In sum, the foregoing cases are clearly distinguishable from the facts of the present action.

Notes

1. Comparison to *ProCd*. Does the court disagree with *ProCD*'s reasoning or does it distinguish its facts?

2. Click Wrap or Browser Wrap. Would this case have come out differently if it had involved click wrap instead of browser wrap?

3. Business Reality. Ronald J. Mann and Travis Siebeneicher have conducted a study to find out how consumers and businesses actually form contracts on the internet. They found that 88% of contracts formed in consumer retail contracts (mostly for non-software) involved pure browser

wrap instead of click wrap. Apparently, businesses were not overly concerned about the possibility that their contracts would be unenforceable. But they also found that businesses generally did not try to take advantage of their customers with one-sided terms. Fewer than half of the contracts waived warranties or disclaimed consequential damages, and even fewer required arbitration or shortened the period of limitations. *See* Ronald J. Mann & Travis Siebeneicher, *Just One Click: The Reality of Internet Retail Contracting*, 108 Colum. L. Rev. 984 (2008).

Sometimes consumers use clickwrap to agree to terms of software that they buy. In other instances, the software is given for free. But few things in life are truly free, as many internet users have discovered. The following case concerns efforts to look after consumers who inadvertently agreed to have annoying software placed on their computers.

PEOPLE EX REL. SPITZER V. DIRECT REVENUE, LLC

862 N.Y.S.2d 876 (Sup. Ct. 2008)

HERMAN CAHN, J.

This is a special proceeding brought pursuant to Executive Law § 63(12), General Business Law §§ 349 and 350, Penal Law § 156.20 and New York common law. Petitioner Attorney General seeks injunctive and monetary relief against respondent Direct Revenue, LLC ("Direct Revenue") and its principals for allegedly deceptive and illegal practices relating to the installation of pop-up advertising software on consumers' computers.

Respondents move to dismiss (CPLR 3211[a][7], CPLR 3013) on the grounds that: (1) the transactions complained of were either authorized by contract or initiated by independent third parties outside of respondents' control; . . . [and other grounds].

For the following reasons, the petition is dismissed in its entirety.

Facts

Respondent Direct Revenue is a Delaware corporation with its primary place of business in New York. The individual respondents Joshua Abram, Rodney Hook, Daniel Kaufman and Alan Murray are the officers and shareholders of Direct Revenue who founded the company in 2002.

Direct Revenue is engaged in the business of advertising. Specifically, the company produces software, including software that delivers advertisements to consumers' computer screens through the Internet. Although the petition characterizes its products as "spyware," at oral argument petitioner

conceded that the software at issue does not collect consumer computer usage information for publication to third parties. Rather, the parties agree that the software merely generates pop-up ads geared to a consumer's Internet usage.

Direct Revenue does not charge fees to consumers. Instead, it receives compensation from the companies whose products and services it advertises. To induce consumers to view the ads, the company offers them popular software applications, such as screensavers or games, free. When the free application is downloaded by the consumer, the applications install another piece of software from Direct Revenue known as an "advertising client," which generates the pop-up ads. The ads may be discarded by clicking on an "X" in the upper right-hand corner of the box in which they appear.

In many cases, Direct Revenue contracts with third-party distributors to disseminate the "advertising client." Those distributors, in turn, contract with subdistributors to assist in the process. The third parties bundle Direct Revenue's advertising client software along with their own software programs which they offer to internet users. The distributors leave a "stub" file on consumers' computer, which sends a message to Direct Revenue's servers to facilitate installation and updating of the advertising software.

In response to consumers who complained that Direct Revenue's ad-generating software was being installed on their computers without notice or consent, the Attorney General ("AG") commenced an investigation in November 2004. Between November 2004 and March 2006, AG investigators conducted 29 tests of websites which distributed Direct Revenue's advertising client. The transactions were conducted over the Internet from computers located in New York City.

Seven of the 29 transactions were conducted directly with Direct Revenue, either through a Direct Revenue website, or a Direct Revenue advertisement appearing at a website operated by a third party. In each of the seven cases, the investigator was presented with a computer hyperlink which specifically referred to Direct Revenue's end-user license agreement ("EULA"). A dialog box labeled "Security Warning" appeared each time, offering the user the option of accepting the terms of the EULA by clicking "Yes" or declining it by clicking "No." The accompanying message explained that by clicking on "Yes," the user acknowledged that he or she had read the EULA and agreed to be bound by its terms.

The pertinent provisions of the EULA are as follows:

Section 1 ("Acceptance of Agreement")

The Software will collect information about websites you access and

> will use that information to display advertising on your computer.
> * * *
> By clicking Yes,' install' or downloading, installing or using the Software, you acknowledge that you have read and understood this Agreement, agree to be bound by its terms, and represent that you have the necessary rights and permissions to install the Software on the computer being used. If you do not agree to be bound by the terms of this Agreement . . . you may not download or use the software.

Section 2 ("Functionality"):

> This Software delivers advertising and various information and promotional messages to your computer screen while you view Internet web pages.
> * * *
> By installing the Software, you understand and agree that the Software may, without further notice to you, automatically perform the following: display advertisements of advertisers who pay a fee to [Direct Revenue], in the form of pop-up ads, interstitial ads and various other ad formats . . . automatically update the Software and install added features or functionality or additional software.

Section 3 ("Uninstall and Remove Software"):

> You may uninstall the Software at any time by visiting www.mypctuneup.com.

Section 11 ("Disclaimer of Warranty"):

> [Respondent] DISCLAIM ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED.

Section 12 ("Limitation of Liability"):

> [Respondent shall not] BE LIABLE TO YOU OR TO ANY THIRD-PARTY FOR ANY DIRECT, INDIRECT INCIDENTAL, CONSEQUENTIAL, SPECIAL PUNITIVE OR OTHER DAMAGES.

In six of the seven cases involving transactions with Direct Revenue, the OAG investigator clicked "Yes" and downloaded the free software. In one case, the investigator declined to accept it and no software was installed on the computer.

The remaining 22 of the 29 transactions were conducted with websites or advertisements of third party distributors. Direct Revenue's advertising client, along with other companies' advertising software, was installed on the investigator's computer in 21 of those transactions. In twelve of those instances, the software was installed without the investigator clicking on "Yes" or otherwise signaling consent. In sixteen of those instances, no link

to the EULA was provided. Ten of the instances involved installations via subdistributors.

Direct Revenue entered into a Standard Distribution Agreement (the "SDA") with the distributors of its advertising client. Section 2.2 of the SDA provides that respondent's software "will not be installed until after each potential Registered User has agreed to . . . by means of legally valid affirmative consent" Direct Revenue's EULA or its equivalent. That section also requires distributors "to represent[ ] and warrant[ ] that each potential Registered User will be specifically informed that they are downloading [Direct Revenue's software] prior to the time such download commences and will receive any other disclosures as required by law. Section 11.1 provides that "neither [party] shall have the right, power or authority at any time to act on behalf of, to impose any obligation on or to represent the other, except as expressly set forth herein."

In addition to the specific instances identified in the course of the AG's investigation, petitioner alleges that Direct Revenue's software has been installed 150 million times in computers all over the world. The petition asserts five causes of action, alleging deceptive acts and practices under General Business Law § 349 (Count I), false advertising under GBL § 350 (Count II), negligent supervision (Count III), trespass to chattels (Count IV) and computer tampering in the fourth degree as defined by Penal Law § 156.20 (Court V). In addition to injunctive relief against respondents' allegedly unlawful advertising and installation practices, petitioner seeks disgorgement of revenues under a theory of unjust enrichment, a monetary penalty of $500 per deceptive or unlawful action under GBL § 350-d and a judgment of $2,000 against each respondent under CPLR § 8303(a)(6).

Discussion

The petition is dismissed. Under CPLR 409, applicable to special proceedings, "[w]here no triable issue of fact is raised, a summary determination is appropriate based on the pleadings, papers and admissions in accordance with the standards for granting summary judgment" (*10 West 66th St. Corp. v. New York State Div. of Hous. and Cmty. Renewal,* 184 A.D.2d 143, 148 [1st Dept 1992]). As discussed below, petitioner has not established any deceptive conduct or false advertising in connection with the seven specifically identified transactions with Direct Revenue, insofar as all of the completed installations were authorized by the AG investigators in accordance with the terms of the EULA. As to the remaining enumerated transactions with distributors and subdistributors, petitioner has not shown that respondent should be held liable for the actions of those third parties under a theory of agency or ratification, or otherwise. . . .

Transactions with Direct Revenue

In each case that the AG's investigators successfully installed respondents' advertising client, they first clicked on the "Yes" button on a dialog box to assent to the terms of the EULA. This conduct created a binding "click-wrap" agreement which bars any claim for deceptive or unlawful conduct. Under New York law, such contracts are enforced so long as the consumer is given a sufficient opportunity to read the EULA, and assents thereto after being provided with an unambiguous method of accepting or eclining the offer (*Moore v. Microsoft Corp.,* 293 A.D.2d 587, 588 [2d Dept 2002]; see *I. Lan Sys. Inc. v. Netscout Svc. Level Corp.,* 183 F Supp2d 328, 329 [D. Mass 2002] [click-wrap license enforced where plaintiff "explicitly accepted the clickwrap license agreement when it clicked on the box stating I agree'"]; *Forrest v. Verizon Comm., Inc.,* 805 A.2d 1007, 1011 [a "contract is no less a contract simply because it is entered into via a computer"]). Claims that a consumer was not aware of the agreement or did not actually read it must be disregarded where, as here, it is undisputed that the agreement was acknowledged and accepted by clicking on the relevant icon (see, *Mortgage Plus, Inc. v. DocMagic, Inc.,* 2004 WL 2331918 [D Kans Aug. 23, 2004]). It is not necessary that it be made impossible for the consumer to signal assent or proceed to installation without being first forced to read the EULA; rather, it is sufficient that a separate hyperlink leading to the agreement is available (see, e.g., *Eslworldwide.com, Inc. v. Interland, Inc.,* 2006 WL 1716881 [SDNY 2006]; *EF Cultural Travel BV v. Zefer Corp.,* 318 F3d 58 [1st Cir2003]).

Given the disclosures made in the EULA regarding the pop-up ads and respondents' relevant policies, no GBL § 349 for a deceptive practice may be asserted. Petitioner does not identify anything in the EULA that is false, deceptive or misleading. Furthermore, the clear disclaimers and waivers of liabilities bar any remedy (see, *Moore,* 293 A.D.2d at 587). There is no allegation that respondents made prior or other representations to consumers that contradicted the terms of the EULA (see, *Goshen v. Mut. Life Ins. Co.,* 98 N.Y.2d 314 [2002]; *Gaidon v. Guardian Life Ins. Co. of Amer.,* 94 N.Y.2d 330 [1999]).

Acceptance of the EULA also bars the common law claim of trespass to chattel. Such a cause of action requires that the interference with the plaintiff's property occur without consent (see, *JetBlue Airways Corp. Privacy Litig.,* 379 F Supp2d 299, 328-29 [EDNY 2005]). Although consent may be found invalid where procured by affirmative fraudulent misrepresentations (see, e.g., *Shiffman v. Empire Blue Cross & Blue Shield,* 256 A.D.2d 131, 131 [1st Dept 1998]), no such deception is alleged here.

For similar reasons, the claim for computer tampering under Penal Law §156.20 fails because consent is a defense under the statute.

The false advertising claim under GBL § 350 must also be dismissed. There is no dispute that four of the six completed installations were not preceded by any advertisement at all. The advertisements for the remaining two merely described Direct Revenue's software as "free," and it is conceded that no consumer was ever charged for it. To the extent that the obligation to receive the advertising client can be construed as a qualification on the word "free," respondent did disclose that condition by reference to the EULA as permitted by the Federal Trade Commission ("FTC") guidelines regarding the use of the word (see, FTC Guide § 251.1[c]). Under GBL § 350-d, "it is a complete defense that the advertisement is subject to and complies with the rules and regulations of, and the statues administered by the Federal Trade Commission."

Finally, petitioner does not dispute that no recovery may be sought for the remaining transaction with respondent which did not conclude with the installation of the allegedly offensive advertising client.

Transactions with Third Parties

Dismissal is required with respect to the 22 transactions conducted with third parties, who petitioner concedes were independent contractors rather than agents of Direct Revenue. A principal is generally not liable for the acts of an independent contractor because of the lack of control over how the contractor's work is performed (*Chainani v. Bd. of Educ.,* 87 N.Y.2d 370, 380-81 [1995]). Neither may the principal be charged with the conduct of even more remote subcontractors (*People v. Synergy6, Inc.,* Index No 404027/03 [Sup Ct N.Y. Co 2006][unpublished disposition] [Attorney General's action for deceptive practices and false advertising under GBL dismissed as against email marketing company where fraudulent emails were sent by company retained by agent]). Although exceptions exist, such as where the contractor was negligently retained or supervised (*Saini v. Tonju Assocs.,* 299 A.D.2d 244, 245 [1st Dept 2002]) or where the principal has ratified the wrongful acts (*Kormanyos v. Champlain Valley Fed. Sav. and Loan Assoc. of Plattsburgh,* 182 A.D.2d 1036, 1038 [3d Dept 1992]), the record here does not support any grounds for departure from the usual rule.

As noted, under the SDA, Direct Revenue contractually required its distributors to obtain consent of consumers consistent with the terms of the EULA. The SDA also forbade the distributors from holding themselves out as respondent's agents. Respondent was not authorized or obligated to control their work, particularly since many of them additionally acted as

distributors for various other advertisers. Although in *Sotelo v. Direct Revenue,* 384 Supp2d 1219 (ND Ill 2005) the court upheld a cause of action against respondent for negligent supervision of distributors, the issue arose on a motion to dismiss and the court thus restricted its inquiry to the four corners of the complaint. Notably, the court stated that it was precluded at that procedural juncture from considering respondent's evidence that the distributors were independent contractors, evidence which, as here, included the SDA.

Petitioner nevertheless argues that Direct Revenue is responsible for every installation of its advertising client, noting that its servers interact with the consumer's computer regardless of which distributor or subdistributor caused the original stub file to be present. However, mere participation in the installation is insufficient, absent proof of involvement in the original deceptive conduct which induced the installation. Moreover, since 2005 respondent has provided consumers with a means of uninstalling the advertising client if they desire, by clicking on the "?" icon appearing on each advertising and visiting a website offering the necessary software. Of the 150 million claimed installations, the record reflects that only between 1.4 million and 2.4 million (between .9% and 1.6%) have remained installed on consumer computers.

The theory that respondents ratified the alleged third party misconduct also fails. The allegations that respondent had general and/or constructive knowledge of some distributors' wrongful practices are insufficient to impose liability (see, *Synergy6,*supra;*Del Signore v. Pyramid Sec. Servs., Inc.,* 147 A.D.2d 759, 760-61 [3d Dept 1989][mere knowledge of litigation and complaints against security company for undue force by guards insufficient to impose liability upon hiring firm]; see also *Hamilton v. Beretta USA Corp.,* 96 N.Y.2d 222, 237 [2001]). Moreover, it is conceded that in those few instances in which respondent obtained actual knowledge of a distributor's misconduct, it took significant steps to modify its procedures. A finding of ratification cannot be found upon such facts, notwithstanding that respondent may have benefited financially from its relationship with the distributors before remedial measures were implemented (see *Synergy6,*supra).

* * *

Accordingly, it is

ADJUDGED that the petition is denied and the proceeding is dismissed.

Note

If clicking is sufficient to form an agreement, is there a solution to the problem of "spyware" and other unwelcome software that unwitting consumers agree to allow to be installed on their computers?

TOPIC 5
PUBLIC LICENSES AND OPEN SOURCE SOFTWARE

Most software falls into one of two basic categories of distribution: marketed software and free software. Marketed software is software that the user has to pay for. Free software is software that the user does not have to pay for. Within each of these two categories, there are additional subcategories. Each subcategory has different characteristics in terms of copyright protection and what the user of the software receives.

Marketed Software

A good example of marketed software might be a word processing program like Microsoft Word or WordPerfect. Marketed software is almost always subject to copyright. This software is sold, not given away. The buyer of the software can only use and copy the software in accordance with the license that the user has paid for.

In addition, the buyer of marketed software usually receives only the "object code" and not the "source code" of the software. The source code of a computer program consists of instructions written by computer programmers in a programming language to tell a computer what to do. Ordinarily, computers cannot execute this source code. Instead, the software developer must compile the source code into object code that a computer can process. The object code usually consists only of numbers and is difficult, if not impossible, for a person to follow. For example, the first ten bytes of the object code of the version of Microsoft Word on my computer (file "winword.exe") are "CD 20 FF 9F 00 9A EE FE 1D F0." If the end user of a computer program only has the object code, he or she typically can execute the software but cannot determine easily how the software works or modify the software.[1]

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[1]Although "decompiler" programs can convert object code back to source code, the results are usually confusing because the generated source code contains none of the comments, variable names, labels, etc., that make programs easier to follow. Recall that, in *Atari v. Nintendo*, Atari faced this problem when it tried to make game cartridges for Nintendo's gaming

Some custom-made software may be sold with both the source and object code. For example, in *Advent Systems v. Unisys*, 925 F.2d 670 (3d Cir. 1991), discussed in Topic 1 above, Unisys most likely contracted to receive both the source and object code from Advent Systems so that the program could be modified later on. But this is uncommon for mass-marketed software.

Free Software

Free software comes in three main subcategories (with possible variations). "Free download" software, like the Adobe Acrobat reader or the Google Chrome browser, does not cost anything, but is subject to copyright. The user must agree to the terms of the license before installing and using the software. In addition, like marketed software, the user only receives the object code. Typically the owner of the copyright gives away the right to use the software to gain users, perhaps to facilitate the sale of other software or as a vehicle for advertising.

Other free software is the opposite. "Freeware," as the term is commonly used, is software that does not cost anything, that is in the public domain, and that often comes with the source code. A good example might be a simple Java applet that plays chess. Anyone can download and modify the code without violating anyone else's rights. Freeware is often written by hobbyists for fun. But sometimes freeware is distributed by malicious hackers seeking to sneak malware onto unsuspecting users' computers.

A third major subcategory of free software is "open source software subject to a general public license." This software, as its name suggests, comes with the source code. The software, however, is subject to copyright, and the user must assent to a license. The license generally allows the user to copy or modify the software subject to conditions. The most common condition is that the user will share any source code additions or modifications with the public.

Over the past two decades, open source software subject to a general public license has become more common. One prominent example of an open source program is the Linux operating system, which competes with Microsoft Windows. The source code of this program, like many other open source programs, is subject to a model general public license written

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consoles. Its programmers tried to understand the object code that made Nintendo's games work, but they could not. Atari ultimately resorted to fraud to obtain the source code!

by the Free Software Foundation. The following materials address some questions raised by general public licenses and open-source software.

TESTIMONY OF CAROL A. KUNZE ON BEHALF OF RED HAT, INC.

"OPEN SOURCE/FREE SOFTWARE, COPYLEFT, AND SECTION 109 OF THE COPYRIGHT ACT"

Hearing before the U.S. Copyright Office, Library of Congress and the National Telecommunications and Information Administration, Department of Commerce on November 29, 2000.[*]

. . . Open source and free software is distinct from traditional (proprietary) software in that it is produced by a generally voluntary, collaborative process, and accompanied by a license which grants users the right to:

1) have the source code,

2) freely copy the software,

3) modify and make derivative works of the software, and

4) transfer or distribute the software in its original form or as a derivative work, *without paying copyright license fees*. . . .

Many open source and free software licenses also embody the concept known as *copyleft*. Simply put, this is the condition that all versions of the product, including derivative works, be distributed along with, and subject to the conditions *and rights* in the license under which they were received. This concept is central to the ability of a licensor to ensure that its product *remains* open source or free software.

The underlying principle is that improvements to a product are given back to the open source and free software community. In this way, open source and free software is continually improved, with the modifications being made available to all.

Without the ability to impose this condition on further distribution a copy, or a derivative work made pursuant to the authorization granted in the license, could be distributed without the right to copy, modify, distribute or

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[*]http://www.copyright.gov/reports/studies/dmca/testimony/kunze.pdf

have the source code—in effect it would be transformed into a proprietary work. It would cease to be "free."

The benefits of open source and free software are numerous. In practical and commercial terms, open source and free software is stable, high quality software, which users are free to tailor to their own purposes. As the source code is available to all, a user is free to remedy any bugs it may find, maintain the software itself, or hire a third party to do so. The availability of the source code also allows the creation of complementary and interoperable programs by anyone and everyone, with no need to reverse engineer the product.

From the point of view of the purposes underlying the Copyright Act, open source and free software allows the user to study the program not only to fully understand the underlying ideas, but also in order to adapt, and improve the program, to freely build upon the original product to create new derivative works, and to make those derivative works available for others in turn to study, modify and redistribute.

Open source/free software is becoming increasingly important in the commercial and non-commercial worlds, and is poised to begin playing a critical role in support of national security, as well as the federal government's science and engineering research. Recently, the President's Information Technology Advisory Committee recommended to President Clinton the adoption of a "research strategy that uses free software development as the new model for answering America's high end computing software needs." In order for open source/free software to retain the characteristics that made the Committee conclude that "the Federal government should aggressively encourage the development of open source software for high end computing" the copyleft concept is needed so that the software remains open and free when improved and distributed.

Note

Can a software developer hope to make money by creating and distributing open source software? If not, what is the motivation for producing open source software?

THE GNU GENERAL PUBLIC LICENSE (GPL)

Version 2, June 1991[1]

Copyright (c) 1989, 1991 Free Software Foundation, Inc.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software.

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[1] Although version 3 of the GNU General Public License was released in 2007, version 2 is included in these materials because it is much more widely used. Version 3 contains several important legal advancements but is considerably more complicated than version 2.

If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

* * *

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of

this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

* * *

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

* * *

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

* * *

Notes

1. Agreement. Paragraph 5 says: "You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works." What is the logic of this provision? See the summary of *Harald Welte v. *** Deutschland GmbH* below.

2. Other Model Public Licenses. The GPL is a model public license. It is perhaps the most popular and widely used. But other, slightly different model public licenses are published on the internet. *See* Open Source Initiation, http://www.opensource.org.

HARALD WELTE V. *** DEUTSCHLAND GMBH

Landgericht München I (District Court of Munich)
May 19, 2004

Summary of Facts: An open-source program called "netfilter/iptables" was made available on the internet. The program was subject to the standard General Public License (GPL). The defendant copied and modified the software. The defendant then distributed the modified program. The distribution violated the GPL because the defendant did not include the source code of the software or include the GPL with the distribution. The plaintiff, who had the right to enforce the GPL, asked the court to enjoin the distribution.

Summary of Holding and Reasoning: The court held that the GPL was not a waiver of copyright. Therefore, the software was still protected by copyright. If the defendant did not agree to the terms of the GPL, then the defendant had no right to use the copyrighted software. Alternatively, if the defendant did agree to the GPL, then the defendant was bound by its terms. The court did not believe that the terms of the GPL were invalid under German copyright law or other law. The court therefore granted the injunction.

Notes

1. Waiver. If the court had concluded that the GPL was a waiver of copyright, how would the case come out?

2. Agreement. The court concluded that it did not make any difference in this case whether there was an agreement. Either way, the defendant lost. Is the court's reasoning correct? Would it ever matter whether there was an agreement?

WALLACE V. INTERNATIONAL BUSINESS MACHINES CORP.

467 F.3d 1104 (7th Cir. 2006)

EASTERBROOK, Circuit Judge.

Does the provision of copyrighted software under the GNU General Public License ("GPL") violate the federal antitrust laws? Authors who distribute their works under this license, devised by the Free Software Foundation, Inc., authorize not only copying but also the creation of derivative works—and the license prohibits charging for the derivative work. People may make and distribute derivative works if and only if they

come under the same license terms as the original work. Thus the GPL propagates from user to user and revision to revision: neither the original author, nor any creator of a revised or improved version, may charge for the software or allow any successor to charge. Copyright law, usually the basis of limiting reproduction in order to collect a fee, ensures that open-source software remains free: any attempt to sell a derivative work will violate the copyright laws, even if the improver has not accepted the GPL. The Free Software Foundation calls the result "copyleft."

One prominent example of free, open-source software is the Linux operating system, a derivative of the Unix operating system written by AT & T in the 1960s and now available without cost. (UNIX® is a trademark of The Open Group, but the source code to many variants of AT & T's work is freely available.) Linux is one of many modern derivatives of Unix—which is not itself under the GPL. Thus Apple Computer, which uses the Berkeley Software Distribution variant of Unix as the foundation for the Mac OS X operating system, is entitled to charge for its software. Linux, initially the work of Linus Torvalds, is maintained by a large open-source community. International Business Machines offers Linux with many of its servers, or customers can install it themselves. IBM has contributed code to the Linux project and furnishes this derivative work to anyone else with an interest. Red Hat, Inc., sells media (such as DVDs), manuals, and support for the installation and maintenance of Linux. The GPL covers only the software; people are free to charge for the physical media on which it comes and for assistance in making it work. Paper manuals, and the time of knowledgeable people who service and support an installation, thus are the most expensive part of using Linux.

Daniel Wallace would like to compete with Linux—either by offering a derivative work or by writing an operating system from scratch—but maintains that this is impossible as long as Linux and its derivatives are available for free. He contends that IBM, Red Hat, and Novell have conspired among themselves and with others (including the Free Software Foundation) to eliminate competition in the operating system market by making Linux available at an unbeatable price. Under the GPL, which passes from user to improver to user, Linux and all software that incorporates any of its source code will be free *forever,* and nothing could be a more effective deterrent to competition, Wallace maintains. The GPL *is the conspiracy* as Wallace sees things; it is a joint undertaking among users and creators of derivative works to undercut the price of any potential rival. But the district judge dismissed the complaint, ruling that Wallace does not suffer antitrust injury, see *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.,* 429 U.S. 477 (1977), because he is a would-be producer rather than a consumer.

Although antitrust law serves the interests of consumers rather than producers, the Supreme Court has permitted producers to initiate predatory-pricing litigation. See *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.,* 509 U.S. 209 (1993); *Matsushita Electric Industrial Co. v. Zenith Radio Corp.,* 475 U.S. 574 (1986). This does not assist Wallace, however, because his legal theory is faulty substantively.

Predatory pricing is a three-stage process: Low prices, followed by the exit of producers who can no longer make a profit, followed by monopoly prices. The law's worry is the final period in which the survivor (or cartel of survivors) recoups losses incurred during the low-price period. When exit does not occur, or recoupment is improbable even if some producers give up the market, there is no antitrust problem. So the Court held in both *Brooke Group* and *Matsushita.* See also, e.g., *R.J. Reynolds Tobacco Co. v. Cigarettes Cheaper!,* 462 F.3d 690 (7th Cir.2006); *Schor v. Abbott Laboratories,* 457 F.3d 608 (7th Cir.2006). Either prices will stay low (reflecting efficient production and enduring benefits to consumers) or the practice will be self-deterring (because the predator loses more during the low-price period than it gains later, and consumers are net beneficiaries). When monopoly does not ensue, low prices remain—and the goal of antitrust law is to use rivalry to keep prices low for consumers' benefit. Employing antitrust law to drive prices up would turn the Sherman Act on its head.

Wallace does not contend that software available for free under the GPL will lead to monopoly prices in the future. How could it, when the GPL keeps price low forever and precludes the reduction of output that is essential to monopoly? "[I]f a manufacturer cannot make itself better off by injuring consumers through lower output and higher prices, there is no role for antitrust law to play." *Schor,* 457 F.3d at 612.

Software that is not maintained and improved eventually becomes obsolete, and the lack of reward may reduce the resources devoted to maintenance and improvement of Linux and other open-source projects. If that occurs, however, then proprietary software will enter or gain market share. People willingly pay for quality software even when they can get free (but imperfect) substitutes. Open Office is a free, open-source suite of word processor, spreadsheet and presentation software, but the proprietary Microsoft Office has many more users. Gimp is a free, open-source image editor, but the proprietary Adobe Photoshop enjoys the lion's share of the market. Likewise there is a flourishing market in legal treatises and other materials, plus reference databases such as LEXIS and Westlaw, even though courts give away their work (this opinion, for example, is not covered by copyright and may be downloaded from the court's web site and

copied without charge). And so it is with operating systems. Many more people use Microsoft Windows, Apple OS X, or Sun Solaris than use Linux. IBM, which includes Linux with servers, sells mainframes and supercomputers that run proprietary operating systems. The number of proprietary operating systems is growing, not shrinking, so competition in this market continues quite apart from the fact that the GPL ensures the future availability of Linux and other Unix offshoots.

It does not help to characterize people who accept the GPL as "conspirators." Although the antitrust laws forbid conspiracies "in restraint of trade," 15 U.S.C. § 1, § 26, the GPL does not restrain trade. It is a cooperative agreement that facilitates production of new derivative works, and agreements that yield new products that would not arise through unilateral action are lawful. See, e.g., *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.,* 441 U.S. 1 (1979); *Polk Bros., Inc. v. Forest City Enterprises, Inc.,* 776 F.2d 185 (7th Cir. 1985).

Nor does it help to call the GPL "price fixing." Although it sets a price of zero, agreements to set maximum prices usually assist consumers and therefore are evaluated under the Rule of Reason. See *State Oil Co. v. Khan,* 522 U.S. 3 (1997). Intellectual property can be used without being used up; the marginal cost of an additional user is zero (costs of media and paper to one side), so once a piece of intellectual property exists the efficient price of an extra copy is zero, for that is where price equals marginal cost. Copyright and patent laws give authors a *right* to charge more, so that they can recover their fixed costs (and thus promote innovation), but they do not *require* authors to charge more. No more does antitrust law require higher prices. Linux and other open-source projects have been able to cover their fixed costs through donations of time; as long as that remains true, it would reduce efficiency and consumers' welfare to force the authors to levy a charge on each new user.

Wallace does not contend that Linux has such a large market share, or poses such a threat to consumers' welfare in the long run, that evaluation under the Rule of Reason could lead to condemnation. A "quick look" is all that's needed to reject Wallace's claim. See, e.g., *California Dental Association v. FTC,* 526 U.S. 756 (1999); *National Collegiate Athletic Ass'n v. University of Oklahoma,* 468 U.S. 85 (1984); *Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc.,* 784 F.2d 1325 (7th Cir. 1986) (unless a firm with market power can increase its profits by curtailing output, the practice is lawful under the Rule of Reason). The GPL and open-source software have nothing to fear from the antitrust laws.

AFFIRMED

Note

Suppose the court had concluded that distributing free software under the GPL did violate the antitrust laws. What remedy would be appropriate? If a court enjoined free distribution, could developers sell the software under the GPL?

COMPUTER ASSOCIATES INTERNATIONAL v. QUEST SOFTWARE

333 F. Supp.2d 688 (N.D. Ill. 2004)

[Computer Associates (CA) copied and modified an open source program called "GNU Bison" subject to the General Public License (GPL) granted by the Free Software Foundation (FSF). CA used the modified software to write a new program called EDBA, used for parsing databases. CA later sued Quest Software for copying EDBA. Quest argued, in part, that Bison's GPL authorized it to copy EDBA.]

. . . Bison is open source code, meaning that it is distributed by the FSF at no cost. Any user of that code is, however, bound by the terms of the GNU General Public License (GPL). The GPL puts restrictions on the modification and subsequent distribution of freeware programs. Essentially, once the programs are freely released into the public domain, the creators intend for them to stay free. Defendants claim that plaintiffs are violating the GPL by attempting to claim a copyright in a program that contains Bison source code.

Defendants' argument fails because plaintiff is not attempting to claim a copyright in the Bison source code. Instead, the creators of EDBA used the Bison utility program to create the parser source code. While doing so they made modifications to the Bison program to suit the specific task of creating a parser to use in database administration software. The GPL would prevent plaintiff from attempting to claim a copyright in that modified version of Bison. The output of that program (the parser source code), however, is not subject to the restrictions of the GPL—it is the creation of plaintiff.

Notes

Open Office is an open source software package that contains a word processor. Because Open Office is subject to the GPL, I could modify the source code of the word processor without violating anyone's rights. But under the GPL, I could not claim a copyright in any modifications that I might make. Now suppose that I modify the source code and then use the

modified word processing program to write a novel. Can I claim a copyright in the novel?

The *SCO Group v. IBM* Litigation

As previous cases have discussed, Linux is a open source operating system. Millions of businesses and consumers use Linux in United States and foreign countries. Some companies, like Red Hat, sell the Linux software along with manuals and installation disks. Customers buying the software, however, are mostly paying for convenience and support. No one has to pay for the actual use of Linux because the software is covered by the standard GPL.

In 2003, important litigation arose over Linux. SCO Group sued IBM, asking for $1 billion in damages. SCO claimed that it owned the copyright to the Unix operating system, used on many scientific computers. SCO further claimed that, in violation of its copyright, IBM had copied substantial portions of the Unix source code into the widely-distributed Linux source code.

This allegation caused concern not only for IBM, but for all users of the Linux operating system. If SCO's allegations proved true, IBM would have to pay damages for the copying. But perhaps more importantly, no one could use Linux without SCO Group's permission, even though they had thought that they were using open source software.

SCO's claim, however, ultimately did not go anywhere. A federal court determined that Novell rather than SCO owned the relevant copyright to the Unix operating system. Novell immediately claimed that it did not believe impermissible copying actually had taken place and that it had no intention of bringing lawsuits concerning Linux.

Although this story had a happy ending for everyone, except SCO, it did raise a substantial concerns: What happens if software, which is distributed for free as open source software, turns out to contain copyrighted material? Does everyone have to stop using the software? Can users of the software, who may have relied heavily in setting up their systems, recover damages from anyone? Is there any way that users can know whether open source software contains copyright violations?

TOPIC 6
LIMITATIONS ON THE BUYER'S REMEDIES

Just as many contracts for the sale of traditional goods attempt to limit the remedies available to the buyer when the seller breaches, so too do many contracts for the sale of software. An important question is whether these attempted limits and disclaimers are enforceable. This question is very important to software developers. As experts have testified in numerous cases and authors of many law review articles have written, software almost never works perfectly; despite diligent efforts at debugging, some errors almost always remain. *See, e.g., Adams v. Teck Cominco Alaska, Inc.*, 414 F. Supp.2d 925, 937 (D. Alaska 2006) (testimony that "software packages are almost always subject to some degree of error"); Paul Ohm, *The Myth of the Superuser: Fear, Risk, and Harm Online*, 41 U.C. Davis L. Rev. 1327, 1371 (2008) ("[S]oftware will always be imperfect. All commercial software programs have bugs because it would be too expensive to drive them all away."). Software developers worry that their risk of liability is too great and they want to limit their exposure through contractual terms. *Chatlos Systems* may illustrate this concern. Do limits on damages necessarily hurt buyers? Or may they have some benefits?

CHATLOS SYSTEMS, INC. V. NATIONAL CASH REGISTER CORP.

U.S. Court of Appeals for the Third Circuit
670 F.2d 1304 (3d Cir. 1982)

PER CURIAM.

This appeal from a district court's award of damages for breach of warranty in a diversity case tried under New Jersey law presents two questions: whether the district court's computation of damages under [Uniform Commercial Code § 2-714(2)] was clearly erroneous, and whether the district court abused its discretion in supplementing the damage award with pre-judgment interest. We answer both questions in the negative and, therefore, we will affirm.

Plaintiff-appellee Chatlos Systems, Inc., initiated this action in the Superior Court of New Jersey, alleging, inter alia, breach of warranty regarding an NCR 399/656 computer system it had acquired from defendant National Cash Register Corp. [The defendant warranted the system would perform six functions: (1) accounts receivable, (2) payroll, (3) order entry, (4) inventory deletion, (5) state income tax, (6) cash receipts. In the end, only the payroll function ever worked properly.] . . . [A]pplying the "benefit of the bargain" formula of [§ 2-714(2)[1]], the district court determined the damages to be $201,826.50, to which it added an award of prejudgment interest. Defendant now appeals from these damage determinations, contending that the district court erred in failing to recognize the $46,020 contract price of the delivered NCR computer system as the fair market value of the goods as warranted, and that the award of damages is without support in the evidence presented.

Waiving the opportunity to submit additional evidence as to value on the remand which we directed, appellant chose to rely on the record of the original trial and submitted no expert testimony on the market value of a computer which would have performed the functions NCR had warranted. Notwithstanding our previous holding that contract price was not necessarily the same as market value, appellant faults the district judge for rejecting its contention that the contract price for the NCR 399/656 was the only competent record evidence of the value of the system as warranted. The district court relied instead on the testimony of plaintiff-appellee's expert, Dick Brandon, who, without estimating the value of an NCR model 399/656, presented his estimate of the value of a computer system that would perform all of the functions that the NCR 399/656 had been warranted to perform. Brandon did not limit his estimate to equipment of any one manufacturer; he testified regarding manufacturers who could have made systems that would perform the functions that appellant had warranted the NCR 399/656 could perform. He acknowledged that the systems about which he testified were not in the same price range as the NCR 399/656. Appellant likens this testimony to substituting a Rolls Royce for a Ford, and concludes that the district court's recomputed damage award was therefore clearly contrary to the evidence of fair market value-which in NCR's view is the contract price itself.

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[1][Section 2-714(2)] states: "The measure of damages for breach of warranty is the difference at the time and place of acceptance between the value of the goods accepted and the value they would have had if they had been as warranted, unless special circumstances show proximate damages of a different amount."

Appellee did not order, nor was it promised, merely a specific NCR computer model, but an NCR computer system with specified capabilities. The correct measure of damages, under N.J.Stat.Ann. s 12A:2-714(2), is the difference between the fair market value of the goods accepted and the value they would have had if they had been as warranted. Award of that sum is not confined to instances where there has been an increase in value between date of ordering and date of delivery. It may also include the benefit of a contract price which, for whatever reason quoted, was particularly favorable for the customer. Evidence of the contract price may be relevant to the issue of fair market value, but it is not controlling. *Mulvaney v. Tri State Truck & Auto Body, Inc.*, 235 N.W.2d 460, 465 (Wis. 1975). Appellant limited its fair market value analysis to the contract price of the computer model it actually delivered. Appellee developed evidence of the worth of a computer with the capabilities promised by NCR, and the trial court properly credited the evidence.

Appellee was aided, moreover, by the testimony of Frank Hicks, NCR's programmer, who said that he told his company's officials that the "current software was not sufficient in order to deliver the program that the customer (Chatlos) required. They would have to be rewritten or a different system would have to be given to the customer." Hicks recommended that Chatlos be given an NCR 8200 but was told, "that will not be done." Gerald Greenstein, another NCR witness, admitted that the 8200 series was two levels above the 399 in sophistication and price. This testimony supported Brandon's statement that the price of the hardware needed to perform Chatlos' requirements would be in the $100,000 to $150,000 range.

Essentially, then, the trial judge was confronted with the conflicting value estimates submitted by the parties. Chatlos' expert's estimates were corroborated to some extent by NCR's supporters. NCR, on the other hand, chose to rely on contract price. Credibility determinations had to be made by the district judge. Although we might have come to a different conclusion on the value of the equipment as warranted had we been sitting as trial judges, we are not free to make our own credibility and factual findings. We may reverse the district court only if its factual determinations were clearly erroneous. *Krasnov v. Dinan*, 465 F.2d 1298 (3d Cir. 1972).

Upon reviewing the evidence of record, therefore, we conclude that the computation of damages for breach of warranty was not clearly erroneous. We hold also that the district court acted within its discretion in awarding pre-judgment interest.

The judgment of the district court will be affirmed.

Notes

1. Are the damages in this case excessive? Or did the defendant simply make a very bad bargain?

2. Is the court announcing a special rule for software and computer systems or is it simply applying a general measure of damagess?

RRX INDUSTRIES, INC. v. LAB-CON, INC.

772 F.2d 543 (9th Cir. 1985)

EUGENE A. WRIGHT, Circuit Judge.

Thomas E. Kelly and Associates (TEKA), Lab-Con, Inc., and Thomas E. Kelly (Kelly) appeal from the district court's judgment awarding RRX Industries, Inc. general and consequential damages for breach of contract. Appellants challenge the district court's fact findings on liability and contend that the award of consequential damages was improper. We affirm.

This action arises out of a computer software contract negotiated between RRX and TEKA. TEKA agreed to supply RRX with a software system for use in its medical laboratories. The contract obligated TEKA to correct any malfunctions or "bugs" that arose in the system, but limited TEKA's liability to the contract price.

TEKA began installing the software system in January 1981 and completed it in June 1981. Bugs appeared in them soon after installation. TEKA attempted to repair the bugs by telephone patching. Subsequently, TEKA upgraded the system to make it compatible with more sophisticated hardware. The system, however, remained unreliable because defects continued to exist.

After contracting with RRX, Kelly formed Lab-Con, Inc. in order to market TEKA's software system. Lab-Con was a successor corporation to TEKA. TEKA assigned the RRX software contract to Lab-Con.

In September 1982, RRX instituted this diversity action against TEKA, Lab-Con, Kelly, and other defendants alleging breach of contract and fraud. Following a bench trial, the district court concluded that TEKA had materially breached the software contract. It found Lab-Con and Kelly individually liable and awarded RRX the amount paid under the contract, plus consequential damages. TEKA, Lab-Con, and Kelly (collectively appellants) timely appeal the judgment and award of damages.

* * *

D. *Consequential Damage Award*

1. *California Commercial Code.* The district court relied on the California Commercial Code to award RRX consequential damages. Such reliance was proper only if the computer software system may be characterized as a "good" rather than a service.

The California Commercial Code defines a good as "all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities (Division 8) and things in action. . . ." Cal.Com.Code § 2105 (West 1964).

In determining whether a contract is one of sale or to provide services we look to the essence of the agreement. *See Pittsburgh-Des Moines Steel Co. v. Brookhaven Manor Water Co.,* 532F.2d 572, 581 n. 6 (7th Cir. 1976). When a sale predominates, incidental services provided do not alter the basic transaction. *Id.; see also North Am. Leisure Corp. v. A & B Duplicators, Ltd.,* 468 F.2d 695, 697 (2d Cir. 1972). Because software packages vary depending on the needs of the individual consumer, we apply a case-by-case analysis. *See generally* Note, *Computer Programs as Goods Under the UCC,* 77 Mich.L.Rev. (1979).

Here, the sales aspect of the transaction predominates. The employee training, repair services, and system upgrading were incidental to sale of the software package and did not defeat characterization of the system as a good. *See Chatlos Systems, Inc. v. National Cash Register Corp.,* 479 F.Supp. 738 (D.N.J. 1979), *aff'd,*670 F.2d 1304 (3d Cir. 1982).

2. *Damage Limitation Clause.* Under the Code, a plaintiff may pursue all of the remedies available for breach of contract if its exclusive or limited remedy fails of its essential purpose. Cal.Com.Code § 2719(2) (West 1985 Supp.). Appellants argue that the award of consequential damages was nevertheless improper because the contract limited damages to the amount paid.

In *S.M. Wilson & Co. v. Smith Int'l., Inc.,* 587 F.2d 1363 (9th Cir. 1978), this court held that the failure of a repair remedy does not require permitting the recovery of consequential damages. *Id.* at 1375. The court reasoned that where parties agree to a limitation of damages provision, courts should not alter the bargained-for risk allocation unless a breach of contract is so fundamental that it causes a loss which is not part of that allocation. *Id.*

The district court's award of consequential damages is consistent with *S.M. Wilson.* The court concluded that "since the defendants were either unwilling or unable to provide a system that worked as represented, *or* to

fix the 'bugs' in the software, *these* limited remedies failed of their essential purpose. . . ." (emphasis added). This is a finding that *both* limited remedies failed of their essential purpose. The trial judge did not state that *because* the repair remedy failed, the limitation of damages provision should not be enforced.

AFFIRMED.

NORRIS, Circuit Judge, concurring in part and dissenting in part,

I concur in the majority opinion except to the extent that it affirms the award of consequential and incidental damages by the district court. Given the plain language of the contract, the applicable California law, and the district court's findings of fact, I would reverse the award of damages to the extent it exceeds the actual amount RRX paid Lab-Con for the software.

Because the consequential damages issue is essentially a dispute over the meaning of the contract, I begin with the contract itself. The relevant provision reads:

> "4. Kelly [now Lab-Con] warrants that the software shall be free of programming "bugs" for the term of the license, and that Kelly shall correct any such programming "bugs" (whether discovered by Kelly, User or others) at no cost to User. *The liability of Kelly under this warranty, or under other warrant expressed or implied shall be limited in amount to $52,300.00 or such lesser sum that shall have actually been paid by User* to Kelly pursuant to Paragraph 5 of this Agreement."

Thus, under the contract, Lab-Con undertakes to correct programming bugs, i.e. to "repair," but the parties agree that Lab-Con's liability for consequential damages for failure to correct the "bugs" shall in no event exceed the contract price. The bargain struck by the parties was that, while Lab-Con would be obligated to keep the software free of "bugs," there would be a precise "cap" on Lab-Con's liability.

In this case I see no legitimate reason to ignore the bargain struck by the parties. This is precisely the type of risk that RRX agreed to bear. Lab-Con and RRX were both sophisticated commercial enterprises bargaining at arms length. The limitation on consequential damages, viewed ex ante, seems to be a reasonable accommodation of interests. There is no suggestion that Lab-Con acted in bad faith in failing to repair the "bugs." The district court found that Lab-Con's failure to make repairs was not deliberate but resulted from the loss of two key TEKA employees. Findings of Fact 35, No. CV-82-5375 (C.D.Cal. Dec. 12, 1983). There is no suggestion that the contract was unconscionable in any respect. Therefore,

there is simply no good reason for the court to intrude on the bargaining process by shifting to Lab-Con the risk of RRX's loss in excess of the contract price.

The Official Comment to subsection (3) suggests that a central purpose of the subsection is to facilitate "the allocation of unknown or undeterminable risks." U.C.C. section 2-719, Official Comment 3, Cal. Comm. Code section 2719 at 682 (West 1964). Parties should be free to bargain. And yet, the majority's sweeping interpretation of subsection (2) undermines this freedom and provides parties no moorings in negotiating an allocation of risk by imposing limits on recoverable consequential damages.

I respectfully dissent.

Notes

1. Special Rule? Did the court apply a special rule for computer software or did it apply the ordinary rules that would apply to any contract for the sale of goods? Should a special rule apply to computer software given the difficulty of making it perfect?

2. Open Source Software. Must open source software public licenses provide an essential remedy? The American Law Institute's *Principles of the Law of Software Contracts* adopted a rule consistent with *RRX Technology*. Section 4.01(b) says: "If circumstances cause an exclusive or limited remedy to fail of its essential purpose, the aggrieved party may recover a remedy as provided in these Principles or applicable outside law." But ALI also thought that open source software should not necessarily come with any remedy. The ALI said:

> For example, software "hobbyists" . . . may provide open-source software without charge under terms that disclaim all responsibility for performance and provenance. Under the circumstances, no remedy at all may be the appropriate result when the software does not perform or infringes a third party's intellectual property.

Principles of the Law of Software Contracts, ch. 4, summary overview. Are these positions consistent?

PIPER JAFFRAY & CO. V. SUNGARD SYSTEMS INTERN., INC.

2005 WL 999975 (D. Minn. 2005)

KYLE, J.

This case arises out of a contract dispute. Plaintiff Piper Jaffray & Company ("Piper Jaffray") and Defendant SunGard Systems International, Inc. ("SunGard") executed an agreement whereby SunGard would license computer software and provide related services to Piper Jaffray. Because the software never performed as expected, Piper Jaffray has sued SunGard seeking, among other things, direct, consequential, and incidental damages. This Court previously granted SunGard's motion to dismiss Piper Jaffray's claims for consequential and incidental damages based upon a contractual waiver. Now before the Court is SunGard's Motion for Partial Summary Judgment on Piper Jaffray's claims for direct damages in excess of an alleged contractual cap. For the reasons set forth below, the Court will grant SunGard's Motion.

SunGard contends that Piper Jaffray's claims for direct damages in excess of the license fee paid must be dismissed based upon the Damages Cap. (Mem. in Supp. at 2.) The Damages Cap, found in Section 6.10 of the Agreement, provides in pertinent part:

> 6.10. Limitations. . . . WITH RESPECT TO EACH SOFTWARE SCHEDULE NEITHER PARTY'S TOTAL LIABILITY UNDER THIS AGREEMENT SHALL UNDER ANY CIRCUMSTANCES EXCEED THE INITIAL LICENSE FEES ACTUALLY PAID BY CUSTOMER TO SUNGARD UNDER THIS AGREEMENT WITH RESPECT TO SUCH SOFTWARE SCHEDULE.

Piper Jaffray responds that the Damages Cap is unenforceable under § 2719 of Pennsylvania's UCC because the Warranty has failed of its essential purpose, which then entitles it to all the remedies available under the UCC—including direct damages without limitation.

Before more fully addressing the arguments, it is first necessary to lay out the statutory groundwork. Both parties agree that Pennsylvania law applies (*see* Agreement § 10.16) and the Court will assume that Pennsylvania's UCC governs. Section 2719 of the UCC contains three subsections, but only subsections (a) and (b) are at issue here. Subsection (a) provides that an agreement may contain remedies in addition to or in substitution for those contained in the UCC. *See*13 Pa. Cons.Stat. Ann. § 2719(a). It also provides that an agreement may limit or alter the measure of damages recoverable by, for example, limiting the buyer's remedy to return of the goods and repayment of the price or to repair and replacement of non-conforming goods. *See id.*Under Pennsylvania law, provisions limiting damages in commercial settings are generally enforced. *Borden, Inc. v. Advent Ink Co.,* 701 A.2d 255, 262 (Pa.Super.Ct. 1997).

Subsection (b) provides that where circumstances cause an exclusive or limited remedy to "fail of its essential purpose, remedy may be had as provided" under the UCC. *See*13 Pa. Cons.Stat. Ann. § 2719(b). Generally, a remedy fails of its essential purpose in situations where the exclusive remedy involves replacement or repair of defective goods and the seller, because of negligence in repair or because the goods are beyond repair, is unable to put the goods in warranted condition. *SeeNew York State Elec. & Gas Corp. v. Westinghouse Elec. Corp.,* 564 A.2d 919, 929 (Pa.Supe r.Ct. 1989) (citing James J. White & Robert S. Summers, *Uniform Commercial Code* at 269 (2d ed. 1980)).

Against this backdrop, Piper Jaffray argues that the Warranty is a limited or exclusive remedy that has failed of its essential purpose because SunGard has been unable to put Global Trader in the warranted condition. For the purposes of this Motion, the Court will assume that this is true. Piper Jaffray further argues that because the Warranty has failed of its essential purpose, it is entitled under subsection (b) to all remedies provided by the UCC—including direct damages without limitation. (*See id.* at 7, 13.) In other words, Piper Jaffray contends that the failure of the Warranty effectively voids the Damages Cap. (*See id.* at 11, 13.) SunGard replies that the Warranty and the Damages Cap are two separate and distinct provisions, and that the Damages Cap is enforceable even if the Warranty fails of its essential purpose. (*See* Mem. in Supp. at 13-16; Reply Mem. at 1-8.)

Upon consideration of the language of the Agreement, the statutory text, the official comments thereto, and persuasive case law, this Court concludes that the Damages Cap is enforceable even if the Warranty has failed. First, there is no support in the Agreement itself for Piper Jaffray's contention that the failure of the Warranty voids the Damages Cap. The Warranty and the Damages Cap are two separate provisions and neither mentions the other or conditions its operation upon the operation of the other. (*Compare* Agreement § 6.1, *with* Agreement § 6.10.) Piper Jaffray asserts that the Warranty and Damages Cap are "inextricably intertwined" and that "SunGard lost the ability to enforce [the] cap when it caused the limited remedy of repair to fail." But the Agreement is unambiguous —nothing in the Agreement's language indicates that the Warranty and the Damages Cap are intertwined. Had the parties intended otherwise, they could have easily said so either initially in the Agreement or certainly later in the Addendum (which was negotiated after Global Trader's problems had surfaced and litigation had begun in state court).

Second, there is no support in the text of § 2719 or its official comments for the argument that the failure of an exclusive or limited

remedy voids an authorized damages limitation. Subsection (a) provides two mechanisms by which parties can shape their agreement. Parties may "[1] provide for *remedies* in addition to or in substitution for those provided in this division *and* [2] may limit or alter the measure of *damages* recoverable under this division."13 Pa. Cons.Stat. Ann. § 2719(a) (alterations and emphasis added). By joining the two mechanisms with the conjunction "and" the text indicates that they are separate concepts that may be used alone or in combination. There is no indication that when both mechanisms are used the operation of a damages limitation is automatically conditioned upon the success of a substituted remedy.

Third, the purposes underlying the statute would not be fulfilled if the failure of the Warranty voided the Damages Cap. Under § 2719, parties are free to shape their remedies to suit their particular needs. *See* 13 Pa. Cons.Stat. Ann. § 2719, cmt. 1. Reasonable agreements limiting or modifying remedies are to be given effect. *Id.* As the Third Circuit has recognized, "[l]imitation of liability clauses are a way of allocating unknown or undeterminable risks . . . and are a fact of everyday business and commercial life." *Valhal Corp. v. Sullivan Assocs., Inc.,* 44 F.3d 195, 204 (3d Cir. 1995) (citing Pennsylvania cases).

Here, the parties shaped their remedies by negotiating a Warranty and a separate Damages Cap. They allocated unknown or undeterminable risks, and there is no argument that either provision is unconscionable. . . .

In sum, this Court concludes that the Damages Cap is valid and enforceable even if the Warranty to repair Global Trader has failed of its essential purpose. Accordingly, under the Damages Cap, SunGard's total liability may not exceed the initial license fees actually paid by Piper Jaffray as provided in Section 6.10 of the Agreement.

Note

Consider the following commentary on this case by authors who generally approve the result:

> When sophisticated parties contract in the face of a clear risk of consequential damages, courts should honor their risk allocations in the absence of fraud or the like. Still, one may applaud the result and deprecate the method. Just because the subsections use different standards does not mean they must be independent; it merely means that a limitation of only consequential damages may properly be treated differently than a limitation of other sorts of damages. In addition, one may ask whether reading the clauses as independent truly gives effect to the parties' intent. A buyer's willingness to give up consequential damages may be linked to the seller's willingness to repair defective

goods within a reasonable time, so the seller should not be able to avoid its own duties and still insist on the liability limitation.

Robyn L. Meadows *et al., Survey—Uniform Commercial Code: Sales*, 60 Bus. Lawyer 1639, 1653 (2005).

TOPIC 7
SELF-HELP REMEDIES IN SOFTWARE CONTRACTS

As we have seen, software licenses often specify the terms upon which a licensee may use computer software. Suppose the owner of the copyright believes that the licensee has violated the terms of the license. What options does the owner have? Surely the owner may bring a lawsuit against the licensee and ask the court to award damages or impose an injunction. But may the owner also take self-help measures? In particular, can the copyright owner include a mechanism in the computer program by which the copyright owner can render the software non-operable as a means of deterring or remedying perceived breaches by the licensee?

The American Law Institute's *Principles of the Law of Software Contracts* recommends the following rules on automated disablement:

§ 4.03 Use of Automated Disablement to Impair Use

(a) "Automated disablement" means the use of electronic means to disable or materially impair the functionality of software.

(b) A transferor may not use automated disablement if the process results in the loss of: (i) rights granted in the agreement unless the transferee has materially breached and such rights do not survive the material breach; or (ii) the use of other software or digital content.

(c) Notwithstanding anything to the contrary in the agreement, a transferor may not use automated disablement as a remedy for breach if the agreement is a standard-form transfer of generally available software or if the transaction is a consumer agreement.

(d) Subject to subsection (c), if the transferor has a right to cancel under § 4.04, it may do so using automated disablement only if such authorization is provided for in the agreement and under the following circumstances:

(1) the term authorizing automated disablement is conspicuous;

(2) the transferor provides timely notice of the breach and its intent to use automated disablement and provides the transferee with a

reasonable opportunity to cure the breach and the transferee has not so cured; and

(3) the transferor has obtained a court order permitting it to use automated disablement.

(e) A transferee may recover direct, incidental, and consequential damages caused by use of automated disablement in violation of this Section notwithstanding any agreement to the contrary.

The Uniform Computer Information Transactions Act (UCITA) contains similar rules. *See* UCITA § 816 (b) ("Electronic self-help is prohibited.")

Notes

1. Context of Software. Why might a special rule on self-help contracts be necessary for software contracts as opposed to contracts for the sale of other goods? Is self-help easier with software?

2. Problem. Illustration 1 to § 4.03 says: "1. Company A, unbeknownst to Company B, includes a 'drop-dead' device in software that A licenses to B for B's use in its transportation business. If implemented, the device would disable the software and would cause B to lose track of its entire fleet of trucks (about 90) across the U.S. and Canada, and leave it unable to compute drivers' compensation. A and B enter into a dispute, and A activates the drop-dead device remotely." Is this permissible?

3. Benefits of Automated Disablement. What would you do if you lost your cell phone and worried that who ever found it would use up your minutes or run up a large bill? Would you call the phone service provider? Could the phone service provider disable your telephone remotely? Would the remote disablement violate § 4.03?

FRANKS & SONS, INC. V. INFORMATION SOLUTIONS, INC.

1988 U.S. Dist. LEXIS 19356 (N.D. Okla. 1988)

[Information Solutions, Inc. sold software to a trucking company called Franks & Sons. The software contained a "drop dead device" which could cause the software to stop working. Franks & Sons sought a preliminary injunction to prevent Information Systems from activating the device. The court issued the following short order.]

Injunctive Relief

In order for the Plaintiff to be granted the extraordinary relief of an injunction it must prove the following:

> "1. Substantial likelihood that movant will eventually prevail on the merits;
>
> 2. A showing that the movant will suffer irreparable injury unless the injunction issues;
>
> 3. Proof that the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing party; and
>
> 4. A showing that the injunction, if issued would not be adverse to the public interest."

Amoco Oil Co. v. Rainbow Snow, 748 F.2d 556, 557 (10th Cir. 1984).

1. Substantial likelihood that movant will eventually prevail on the merits.

Evidence was presented by Plaintiff that the computer system that is the subject of this lawsuit was not operational in the manner that they understood was required under the contract. Defendants presented evidence that in the opinion of its employees who had been out to work on the system (after it was supposed to be fully on-line) that the system was operational. They did admit, however, that the system was not 100% functional. Plaintiff has paid all monies due under the contract to the appropriate entity. Additionally the parties agree that the so-called "drop-dead" device was not contained within the original agreement signed by the parties. Thus the Court finds it likely that the Plaintiff would succeed on the merits on its breach of contract claim due to a failure of consideration.

2. Irreparable Injury:

The movant has shown that if the drop-dead device was to be activated, this would shut down Plaintiff's operation. If this occurred for even a day it would cause Plaintiff to lose business and cause havoc within its records. Plaintiff would lose track of some ninety (90) trucks across the United States and Canada and the drivers' compensation would be unfigurable as well as computations regarding reimbursement for driver expenses. The long-reaching irreversible effect on the drivers in conjunction with the extreme difficulties this would create for Plaintiff in carrying on of its business is obvious. The competition in the trucking business is intense, the harm to Plaintiff's reputation for reliability would be irreparably damaged and they would lose business in an unmeasurable amount. The Court finds the potential harm to Plaintiff would be irreparable.

3. Proof that the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing party:

The only injury to Defendant is that it loses some of its previously undisclosed bargaining leverage against Plaintiff. Clearly the harm to Plaintiff, as discussed above, outweighs that to Defendant. Thus this requirement has been proven.

4. A showing that injunction would not be adverse to public interest:

Public policy favors the non-enforcement of abhorrent contracts. Here, without the knowledge of Plaintiff, Defendants have included a surprise in their product which chills the functioning of any business whose operation is a slave to a computer. If the Plaintiff had known about this device at the time it entered into the contract with the Defendant then the result would be different. Here it would be unconscionable for the Court to give credence to this economic duress. As a matter of public policy, this Court must find that this injunction would be in the public best interest.

Notes

1. Express Agreement. Would (or should) the result be the same if the contract agreement had expressly provided that the software contains a drop dead device and had specified when the seller could use it?

2. Concerns of Sellers and Buyers. What might motivate sellers to include remote disablement provisions in software? What legitimate concerns might buyers have about the remote disablement of their software even if the contract says that the sellers may use remote disablement only in cases of breach?

AMERICAN COMPUTER TRUST LEASING v. JACK FARRELL IMPLEMENT CO.

763 F. Supp. 1473 (D. Minn. 1991)

[Plaintiff American Computer Trust Leasing (ACTL) sued Jack Farrell Implement Co. (Farrell) and another defendant to collect payments for computer hardware leased from ACTL. Farrell responded that its obligation should be excused because the hardware did not work properly. Farrell also brought counterclaims against ACTL, Automatic Data Processing, Inc. (ADP), and other companies. It alleged in part that ADP wrongfully deactivated its software.]

It is undisputed that ADP did deactivate Farrell's software. The deactivation occurred, however, as a result of Farrell's nonpayment under

the terms of the software license agreement. Both Boerboom and Farrell signed agreements providing that the licenses granted by ADP for software could be canceled upon the client's default. Moreover, the software license agreements expressly provided that ADP retain full ownership of the software used by Boerboom and Farrell. Both Boerboom and Farrell stopped paying the software license fees due under the software license agreements. Steven Farrell testified that Farrell was aware of the fact that software services would be discontinued if payments were not made. After Farrell's account had fallen significantly past due, ADP notified Farrell on June 30, 1987 that it would terminate all processing and support services on July 8, 1987 if payment was not received by that date. On July 8, 1987, ADP deactivated Farrell's software as previously warned. After Farrell discovered that its software had been shut off for nonpayment, Farrell paid the amounts past due on its account and ADP promptly reactivated the software. At that point, ADP contends that Farrell disconnected its modem so that ADP could no longer access the system for service and support. Farrell made no further payments to ADP although ADP contends that Farrell continued to use ADP software and hardware.

* * * The defendants assert that the software deactivation constitutes "extortion" in violation of Minn. Stat. §§ 609.27, 609.275 and 18 U.S.C. §§ 875, 1951. . . . As discussed above, ADP suspended the defendants' use of its software . . . because Farrell stopped paying ADP the license fees due under its software license agreement. ADP had a legal right to deactivate the defendants' software pursuant to the contracts and the extortion statutes do not apply. The federal statute defines extortion as the "obtaining of property from another, without his consent, induced by wrongful use of actual or threatened force, violence, or fear, or under color of official right." 18 U.S.C. § 1951(b)(2). The Minnesota statute similarly requires "unlawful" activities. Minn.Stat. § 609.27. Because ADP's deactivation was not unlawful or wrongful but merely an exercise of its rights under the software license agreement, its deactivation does not violate either extortion statute and thus is not a racketeering activity.

In Count VIII, Farrell seeks damages pursuant to Minn. Stat. § 548.05 for trespass, claiming trespass occurred when ADP wrongfully entered Farrell's computer system and also appropriated and destroyed Farrell's accounting and inventory records. The Minnesota statute provides for damages for trespass as follows:

> Whoever shall carry away, use or destroy any wood, timber, lumber, hay, grass, or other personal property of another person, without lawful authority, shall be liable to the owner thereof for treble the amount of damages assessed therefor in the action to recover such damages.

Minn.Stat. § 548.05. Minnesota courts hold that property must be "produced by and grown upon land" to come within the terms of this statute. *Mondt v. Sexter Realty Co.*, 293 N.W.2d 376, 377 (Minn. 1980). The Mondt court further held that home furnishings, toys and clothing do not constitute such personal property. *Id.* Moreover, the term "or other personal property" has been confined to property similar to property previously enumerated in the statute, limiting trespass to things which are the product of the soil. Berg v. Baldwin, 31 Minn. 541, 542-43, 18 N.W. 821, 822 (1884). The alleged deactivation is not the taking of the type of property governed by this statute and thus ADP's motion for summary judgment on that claim is granted.

In Count IX, Farrell claims that ADP/ACTL and/or Harvester/Case made "wrongful entry into Farrell's property and by use of direct force appropriated and destroyed its accounting and/or inventory and/or accounting records." Farrell contends that those actions obstructed its free use of its property and thus constitutes statutory nuisance in violation of Minn. Stat. § 561.01. The Minnesota nuisance statute provides that:

> Anything which is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, is a nuisance.

Minn.Stat. § 561.01. Private nuisance has been defined as:

> an interference with the use and enjoyment of land. The ownership or rightful possession of land necessarily involves the right not only to unimpaired condition of the property itself, but also to some reasonable comfort and convenience in its occupation.

W. Keeton, D. Dobbs, R. Keeton & D. Owen, Prosser and Keeton on the Law of Torts § 87, at 619 (5th ed. 1984). There can be no nuisance if a party cannot show an injury stemming from an interest in land. The alleged deactivation, even if it occurred as defendants contend, is not the type of injury which courts have found to violate the nuisance statute because the use of a computer system is not the type of property protected by the statute. Based on the foregoing, ADP's motion for summary judgment on the statutory nuisance claim is granted.

Note

What would be the appropriate cause of action if the seller wrongfully deactivates software? Could a software contract itself address this issue by providing for liquidated damages?

CLAYTON X-RAY CO. V. PROFESSIONAL SYS. CORP.

812 S.W.2d 565 (Mo. App. 1991)

KENNEDY, Presiding Judge.

Clayton X-Ray Company was in the business of selling x-ray machines, x-ray film and chemicals used to develop the film to doctors and hospitals. It entered into a contract for the purchase of a computer system from Professional Systems Corporation, including the machine itself and software for the management and control of Clayton X-Ray Company business operations.

The written contract, entitled "Agreement to Purchase" was actually signed by John Clayton, Clayton X-Ray's president, in February, 1983. He had had the contract in his possession, however, since March 15, 1982, and the computer system had been delivered to Clayton X-Ray in May, 1982, and was in use well before Mr. Clayton signed the purchase agreement.

The contract price was $42,800, including $32,800 for equipment and $10,000 for software. Clayton made a down payment of $4,280, and later, in mid-1982, paid $30,000. The $10,000 balance was never paid, and PSC recovered judgment on a counterclaim for that amount in this lawsuit.

After the installation of the equipment and part of the software, a PSC employee, over a space of two years, worked 1100 hours at the Clayton X-Ray premises in an effort to get the bugs out of the software and adapt it to Clayton X-Ray operations. In early 1984 PSC informed Clayton X-Ray that it would not work on the computer any more. Bugs continued to cause difficulties and in 1985 PSC began once more to work on the system to correct 119 bugs that had appeared. In a January, 1986, letter, PSC told Clayton X-Ray that most of the bugs had been fixed.

PSC did additional work on the computer from April 15, 1986, to July, 1986. In July, PSC wrote to Clayton that the situation had "moved past the bug-fixing phase into a standard support and possible modification-need phase." This letter also reminded Clayton X-Ray of its unpaid account of $11,628.06, which included $10,000 of the original purchase price.

Clayton did not pay its bill. PSC, unknown to Clayton, put into the computer system a lockup program which at a pre-set time, October 31, 1986, locked up the computer programs so that Clayton could not access its files. The message on the computer was "Call Professional Systems Corporation About Your Bill." Clayton hired a person who was able to unlock the system and give Clayton access to its files.

Clayton brought suit against PSC for damages due to PSC's alleged breach of express warranty and, in another count, for actual and punitive damages for conversion in its lock up of the computer programs.

PSC counterclaimed for $11,628.06, which included the $10,000 balance owing on the original contract, and $1,628.06 for other goods.

The jury returned verdicts in favor of Clayton and against PSC on the breach of warranty claim for $60,000 and on the conversion claim for $1,050 actual damages and $10,000 punitive damages. As noted above, the jury returned a verdict for $10,000 on PSC's counterclaim and judgment was entered therefor.

* * *

We turn now to PSC's appeal from the $60,000 breach of warranty judgment, and the $1050 actual damages and $10,000 punitive damages judgment on the conversion claim. PSC says the verdicts are inconsistent and mutually destructive which give PSC $10,000 upon its contract claim against Clayton and also give Clayton damages upon its breach of warranty claim against PSC. This inconsistency—or rather the trial court's acceptance of the verdicts, and its failure to instruct the jury to deliberate further—entitles it, says PSC, to a new trial.

When the verdicts were returned and their inconsistency suggested, PSC did not ask that the jury be instructed to deliberate further, and in fact objected to that course, PSC thereby waived any error based upon inconsistency of verdicts. *Douglass v. Safire*, 712 S.W.2d 373, 374 (Mo. 1986) (en banc); *Holmes v. Drakey*, 759 S.W.2nd 610, 611 (Mo.App. 1988). We do not, of course, hold the two verdicts were inconsistent and mutually destructive.

PSC says the evidence makes no submissible case of conversion, nor a submissible case for punitive damages on Clayton's conversion claim. PSC does not present any argument or authority for the statement that the evidence did not support the conversion submission. It argues, though, that the evidence does not show defendant's conduct was outrageous because of "defendant's evil motive or reckless indifference to the rights of others" in its lock up of Clayton's computer system. See *Walker v. Gateway Nat. Bank*, 799 S.W.2d 614, 617 (Mo. App. 1990); MAI No. 10.01. If PSC is correct in this position, it would follow that the punitive damages verdict on the conversion claim was unsupported by the evidence.

We hold, however, that the evidence was sufficient for the submission of punitive damages. PSC had no legal right, or any colorable legal right, to lock up Clayton's computer system. PSC's president had told a PSC

employee to take a disk to Clayton's place of business, to tell the people at Clayton that there were some program changes that needed to be done, but then to load the computer instead with instructions to lock up on October 31, 1986. The effect of the lockup was to prevent Clayton's access to the records of its business. Only by the fortuity of being able to enlist the aid of a former employee of PSC was Clayton able to regain access to the records of its business in fairly short order, and PSC's stratagem did not accomplish the intended paralysis of Clayton's business. This evidence made a submissible case for punitive damages.

The judgment is affirmed.

Notes

1. Summary. Surveying these three cases, Professor Thomas Ward writes: "The only clear message in the early cases is that courts do not like the use of these deactivation devices and that they will only be upheld when the seller or lessor using them is enforcing a clear and obvious legal right to retake the software and when that right has been spelled out in the prior license or the prior security agreement with the buyer or licensee." Thomas Ward, *Intellectual Property in Commerce* § 3:31 (2007).

2. European Law. The European Union's 1993 Directive on Unfair Contract Terms requires member states to adopt legislation to restrict terms in contracts that cause a significant imbalance between the rights and obligations under the contract. In *Union Fédérale des Consommateurs v. AOL France*, Court of Appeal of Versailles (15 September 2005) addressed the issue of disablement. AOL France was a major internet service provider in France. Subscribers not only gained access to the internet, but also received proprietary software to use on their computers. Applying a French law that implements the European directive, the French court held that provisions purporting to give AOL France's a right to terminate the agreement and service at will were invalid.

APPENDIX A
SELECTED PROVISIONS OF THE U.S. COPYRIGHT LAW

Title 17, U.S. Code

§ 101. Definitions

Except as otherwise provided in this title, as used in this title, the following terms and their variant forms mean the following:

* * *

A "computer program" is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

"Copies" are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

* * *

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title if a fixation of the work is being made simultaneously with its transmission.

* * *

§ 102. Subject matter of copyright: In general

(a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced,

or otherwise communicated, either directly or with the aid of a machine or device. . . .

* * *

§ 106. Exclusive rights in copyrighted works

Subject to sections 107 through 122, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

(1) to reproduce the copyrighted work in copies or phonorecords;

(2) to prepare derivative works based upon the copyrighted work;

(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;

* * *

§ 107. Limitations on exclusive rights: Fair use

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

* * *

§ 109. Limitations on exclusive rights: Effect of transfer of particular copy or phonorecord

(a) Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright

owner, to sell or otherwise dispose of the possession of that copy or phonorecord. . . .

(b)(1)(A) Notwithstanding the provisions of subsection (a), unless authorized by the owners of copyright in the sound recording or the owner of copyright in a computer program (including any tape, disk, or other medium embodying such program), and in the case of a sound recording in the musical works embodied therein, neither the owner of a particular phonorecord nor any person in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord or computer program (including any tape, disk, or other medium embodying such program) by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending. . . . The transfer of possession of a lawfully made copy of a computer program by a nonprofit educational institution to another nonprofit educational institution or to faculty, staff, and students does not constitute rental, lease, or lending for direct or indirect commercial purposes under this subsection.

(B) This subsection does not apply to—

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

(ii) a computer program embodied in or used in conjunction with a limited purpose computer that is designed for playing video games and may be designed for other purposes.

* * *

(d) The privileges prescribed by subsections (a) and (c) do not, unless authorized by the copyright owner, extend to any person who has acquired possession of the copy or phonorecord from the copyright owner, by rental, lease, loan, or otherwise, without acquiring ownership of it.

* * *

§ 117. Limitations on exclusive rights: Computer programs

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

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

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

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

(c) Machine maintenance or repair.—Notwithstanding the provisions of section 106, it is not an infringement for the owner or lessee of a machine to make or authorize the making of a copy of a computer program if such copy is made solely by virtue of the activation of a machine that lawfully contains an authorized copy of the computer program, for purposes only of maintenance or repair of that machine, if—

(1) such new copy is used in no other manner and is destroyed immediately after the maintenance or repair is completed; and

(2) with respect to any computer program or part thereof that is not necessary for that machine to be activated, such program or part thereof is not accessed or used other than to make such new copy by virtue of the activation of the machine.

(d) Definitions.—For purposes of this section—

(1) the "maintenance" of a machine is the servicing of the machine in order to make it work in accordance with its original specifications and any changes to those specifications authorized for that machine; and

(2) the "repair" of a machine is the restoring of the machine to the state of working in accordance with its original specifications and any changes to those specifications authorized for that machine.

* * *

§ 204. Execution of transfers of copyright ownership

(a) A transfer of copyright ownership, other than by operation of law, is not valid unless an instrument of conveyance, or a note or memorandum of the transfer, is in writing and signed by the owner of the rights conveyed or such owner's duly authorized agent.

* * *

§ 301. Preemption with respect to other laws

(a) On and after January 1, 1978, all legal or equitable rights that are equivalent to any of the exclusive rights within 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 subject matter of copyright as specified by sections 102 and 103, whether created before or after that date and whether published or unpublished, are governed exclusively by this title. Thereafter, no person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.

* * *

§ 504. Remedies for infringement: Damages and profi

(a) In General.—Except as otherwise provided by this title, an infringer of copyright is liable for either—

(1) the copyright owner's actual damages and any additional profits of the infringer, as provided by subsection (b); or

(2) statutory damages, as provided by subsection (c).

(b) Actual Damages and Profits.—The copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement and are not taken into account in computing the actual damages. In establishing the infringer's profits, the copyright owner is required to present proof only of the infringer's gross revenue, and the infringer is required to prove his or her deductible expenses and the elements of profit attributable to factors other than the copyrighted work.

(c) Statutory Damages.—

(1) Except as provided by clause (2) of this subsection, the copyright owner may elect, at any time before final judgment is rendered, to recover, instead of actual damages and profits, an award of statutory damages for all infringements involved in the action, with respect to any one work, for which any one infringer is liable individually, or for which any two or more infringers are liable jointly and severally, in a sum of not less than $750 or more than $30,000 as the court considers just. For the purposes of this subsection, all the parts of a compilation or derivative work constitute one work.

(2) In a case where the copyright owner sustains the burden of proving, and the court finds, that infringement was committed willfully, the court in its discretion may increase the award of statutory damages to a sum of not more than $150,000. In a case where the infringer sustains the burden of proving, and the court finds, that such infringer was not aware and had no reason to believe that his or her acts constituted an infringement of copyright, the court in its discretion may reduce the award of statutory damages to a sum of not less than $200. The court shall remit statutory damages in any case where an infringer believed and had reasonable grounds for believing that his or her use of the copyrighted work was a fair use under section 107, if the infringer was: (i) an employee or agent of a nonprofit educational institution, library, or archives acting within the scope of his or her employment who, or such institution, library, or archives itself, which infringed by reproducing the work in copies or phonorecords; or (ii) a public broadcasting entity which or a person who, as a regular part of the nonprofit activities of a public broadcasting entity (as defined in section 118(f)) infringed by performing a published nondramatic literary work or by reproducing a transmission program embodying a performance of such a work.

* * *

§ 1201. Circumvention of copyright protection systems

(a) Violations regarding circumvention of technological measures.—(1)(A)No person shall circumvent a technological measure that effectively controls access to a work protected under this title.

* * *

(f) Reverse engineering.—(1) Notwithstanding the provisions of subsection (a)(1)(A), a person who has lawfully obtained the right to use a copy of a computer program may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title.

(2) Notwithstanding the provisions of subsections (a)(2) and (b), a person may develop and employ technological means to circumvent a technological measure, or to circumvent protection afforded by a technological measure, in order to enable the identification and analysis under paragraph (1), or for the purpose of enabling interoperability of an independently

created computer program with other programs, if such means are necessary to achieve such interoperability, to the extent that doing so does not constitute infringement under this title.

(3) The information acquired through the acts permitted under paragraph (1), and the means permitted under paragraph (2), may be made available to others if the person referred to in paragraph (1) or (2), as the case may be, provides such information or means solely for the purpose of enabling interoperability of an independently created computer program with other programs, and to the extent that doing so does not constitute infringement under this title or violate applicable law other than this section.

(4) For purposes of this subsection, the term "interoperability" means the ability of computer programs to exchange information, and of such programs mutually to use the information which has been exchanged.

APPENDIX B
PAST FINAL EXAMINATIONS AND GRADING GUIDES

I previously taught this course in 2008 and 2012. Below are the actual final examinations from these years, followed by the grading guides used to score them.

2008 EXAMINATION

INSTRUCTIONS:

1. You have 1 hour to complete this examination.

2. This examination consists of 2 problems of equal weight (i.e., 50% each). I recommend that you spend about 30 minutes on each problem, but you may divide your time as you wish.

3. This is an open-book examination. In writing your answers, you may consult any written materials that you have brought with you.

4. You must write your answers in essay form, using complete sentences and proper paragraphs.

5. You should make reasonable assumptions about any facts not stated in the problems. If you find the problems ambiguous in any sense, describe the ambiguity in your answer.

6. Keep your answers concise so that you have time to complete the entire examination.

7. Students in this class may be taking the examination on different days. Therefore, you must return this copy of the examination at the end of the examination period and you must not discuss this examination with any students who have not yet taken it.

PROBLEM I. **(30 minutes)**

Please read the following edited statement of facts from a recent case:

> Altera and Clear Logic are competitors in the semiconductor industry. Altera manufactures programmable logic devices ("PLDs"), which are chips that can be programmed to perform

various logic functions. A customer uses Altera's software to program the PLD to perform the desired function.

Clear Logic manufactures a different type of chip: Application-Specific Integrated Circuits ("ASICs"). These chips are designed to perform one specific function and cannot be programmed by the customer. They use less power, are smaller and, for a customer with a large order, are often cheaper. Customers will sometimes start with PLDs and switch to ASICs once they have determined exactly what they need the chips to do.

When customers program Altera devices, using the Altera software, a file called a bitstream is generated. Clear Logic asks customers to send the bitstream to Clear Logic, and Clear Logic uses the bitstream to create an ASIC for the customer. Clear Logic only produces ASICs that are compatible with Altera chips.

Faced with the loss of millions of dollars in business, Altera has challenged Clear Logic's business model. [Altera has asserted a violation of] a permitted use provision in its software licensing agreement. The current version of the use provision provides that customers may "use the Licensed Programs for the sole purpose of programming logic devices manufactured by ALTERA."

Based on that provision, Altera asserted state law claims for inducing Altera's customers to intentionally breach their license agreements with Altera and also for intentionally interfering with those contractual relations. Clear Logic argued that those claims were preempted by federal copyright law and additionally alleged that the licensing agreements constitute copyright misuse.

On the basis of these facts and the materials considered in class, please answer separately each of the following questions:

A. What arguments should Clear Logic and Altera make with respect to the copyright preemption issue?

B. What arguments should Clear Logic and Altera make with respect to the copyright misuse issue?

C. If Clear Logic had discovered the logic functions of the customers' PLDs by reverse engineering without relying on Altera's software, would Clear Logic's liability be different?

PROBLEM II. **(30 minutes)**

Please read the following edited excerpt from a recent newspaper article:

LAPTOP PROGRAM FOR KIDS IN POOR COUNTRIES TEAMS UP WITH MICROSOFT'S WINDOWS

by Steve Stecklow, Wall Street Journal, May 16, 2008

The goal three years ago was to provide by now millions of the world's poorest schoolchildren with a $100 laptop that ran free, open-source software. But amid disappointing sales and cost issues, the nonprofit project called One Laptop Per Child (OLPC) is turning to Microsoft Corp. and its proprietary Windows operating system to try to stage a turnaround.

In an agreement announced Thursday, OLPC will begin testing its laptop running Windows XP and other proprietary Microsoft software in several developing countries next month. The test machines will be Windows-only, with Microsoft selling the operating system to OLPC as part of a software package for just $3. Mr. Negroponte says OLPC's nonproprietary software hindered sales, with some countries reluctant to commit to a nonstandard machine that didn't run Windows.

The marriage between OLPC and Microsoft has already drawn heated accusations from open-source supporters that Mr. Negroponte has abandoned the nonprofit's core mission of fostering collaborative learning. They say that unlike Windows, the OLPC software was designed to encourage students to work together and tinker with the operating system and child-friendly interface.

By using only open-source software, OLPC might have hurt Microsoft's long-term ability to dominate personal computing in emerging economies. If millions of young students learned to use a computer that ran only free software, they might have been less likely to buy Microsoft software later on when they entered the work force.

The agreement with OLPC underscores Microsoft's eagerness to market its software in emerging markets, where it has tried to seed Windows in schools—the target of OLPC's machines. The $3 price represents a big discount to what the company charges in the U.S. Until now, the OLPC laptop came packaged with Linux, as well as open-source educational software that could be freely modified.

To date, OLPC has sold about 600,000 units, mostly to Peru, Uruguay and North American consumers who participated late last year in a donation program. Mr. Negroponte, who unveiled the

$100-laptop plan with great fanfare in 2005, had originally predicted the project would sell 100 million to 150 million machines in 2008.

On the basis of this article and the materials considered in class, please answer separately each of the following questions:

A. Assume that Microsoft is concerned that the inexpensive computers with their Windows operating systems will be diverted from educating schoolchildren to other uses. Microsoft is considering both restrictive licensing and self-help remedies to protect its interests. What legal advice might you offer Microsoft?

B. The article suggests that Microsoft is trying to stave off competition in emerging markets. Can Microsoft rely on the Wallace v. International Business Machines decision for the proposition that selling an operating system at a low price is not anti-competitive?

C. What legal and economic advantages and disadvantages might come from using proprietary software as opposed to software subject to a public license?

2008 GRADING GUIDE

The final examination consisted of two problems. Each of these two problems included three specific questions. In grading the examination, points were determined based on how well the answers: (a) identified the governing legal doctrines; (b) applied these doctrines to the specific facts of the problems; (c) compared the facts of the problems to precedents considered in the course; and (d) provided supporting arguments, explanations, and examples as appropriate.

PROBLEM I.

A. What arguments should Clear Logic and Altera make with respect to the copyright preemption issue?

The license agreements say that the customers can use licensed programs only for programming Altera's logic devices. The customers have violated these agreements because they have allowed Clear Logic to use the licensed programs to develop ASICs. Altera has claimed that Clear Logic is liable under state law for inducing Altera's customers to breach their software license agreements and for interfering with these agreements. Clear Logic is defending on grounds that the state law claims are preempted. In these circumstances, the parties should make the following arguments:

Clear Logic's Arguments: Clear Logic should argue that § 301 of the Copyright Act supports its preemption claim. Section 301 preempts "legal or equal rights [under state law] that are equivalent to any exclusive rights within the general scope of copyright." Clear Logic might assert that this section preempts any state law that would give effect to contracts that are designed to prevent copying. In this case, Altera is trying to use the licenses to prevent duplication of the logic functions on the programmable logic devices. Rules regarding this kind of duplication, Clear Logic will assert, fall within the general scope of copyright law. If protection is not available under copyright law, it should not be available under state contract law.

Altera's Arguments: Altera should argue in response that § 301 does not preempt the state law claims based on three decisions included in the reading. First, § 301 does not forbid contractual waivers of rights. Here, the customers simply have waived their right to use the licensed programs for any purpose other than programming Altera's chips. See Davidson & Assocs. v. Jung (upholding licenses in which customers "expressly relinquished their rights to reverse engineer"). Second, the rights granted to Altera under the license are not equivalent to the rights under copyright because, absent an agreement, copyright law by itself would not give Altera the right to disallow specific uses of its programs. See National Car Rental System Inc. v. Computer Associates Int'l (upholding software licenses that impose a "contractual restriction on the use of . . . programs"). Third, the rights under the license agreement are not equivalent to rights under copyright law because, unlike rights granted under copyright law, the rights granted under the software license apply only to the parties who agreed to the license. See ProCD v. Zeidenberg (rejecting a copyright preemption argument using this same reasoning).

B. What arguments should Clear Logic and Altera make with respect to the copyright misuse issue?

Clear Logic's arguments: Clear Logic should argue that the software licenses constitute a misuse of copyright law because Altera is attempting to extend its rights in "an anti-competitive way." Principles of the Law of Software Contracts § 1.09(c). It should assert that Altera is impermissibly attempting to use its copyright in the programs to create patent-like protection for its PLDs. See Alcatel USA v. DGI Technologies. Although Altera may have an exclusive right to copy its program for designing logic circuits, Altera cannot extend this exclusive right to prevent competitors from making circuits that perform the same function.

Altera's arguments: Altera should make three arguments in response. First, it should assert that no copyright misuse doctrine exists. See

Lasercomb America v. Reynolds (noting that the Supreme Court has not ruled on the issue and only some federal circuits have recognized the doctrine); Atari Games Corp. v. Nintendo of America (same). Second, even if the doctrine exists, Clear Logic cannot assert the doctrine because it does not have clean hands given its interference with the customer's contracts. See Atari Games. Finally, no misuse occurred because Clear Logic could make ASICs without using the licensed programs; the licensed programs just make the task easier. Accordingly, the facts differ from Alcatel, where a competitor necessarily had to use licensed software to make a competing device.

C. If Clear Logic had discovered the logic functions of the customers' PLDs by reverse engineering without relying on Altera's software, would Clear Logic's liability be different?

In these circumstances Clear Logic would have no liability.

First, Clear Logic would not have violated (or assisted Altera's customers in violating) the customers' software licensing agreements because those agreements only restrict the use of software. They do not restrict any reverse engineering that does not involve the software (e.g., electronic examination of the PLDs).

Second, Clear Logic also would not have violated copyright law because, absent an agreement, nothing in the copyright law prohibits reverse engineering of computer chips. Davidson & Associates v. Jung. (Note: § 1201(f) of the Digital Millennium Copyright Act specifically permits reverse engineering of software, but this question does not involve the reverse engineering of software.)

PROBLEM II

A. Assume that Microsoft is concerned that the inexpensive computers with their Windows operating systems will be diverted from educating schoolchildren to other uses. Microsoft is considering both restrictive licenses and self-help remedies to protect its interests. What legal advice might you offer Microsoft?

Restrictive licenses: Many cases have upheld restrictive licenses that limit the use of software for specific purposes. See, e.g., National Car Rental System v. Computer Associates Int'l; Wall Data Inc. v. Los Angeles County Sheriff's Dept. Microsoft, however, may face at least three difficulties in using restrictive licenses to prevent diversion of the software from educational purposes. First, the end users of the software must agree to the restrictions. Microsoft should use clickwrap agreement that require an affirmative act of assent instead of merely presenting the agreements to

the end users. See ProCD v. Zeidenberg; Specht v. Netscape Communications Corp. Second, Microsoft may have difficulty detecting impermissible uses and enforcing the licenses. The computers will be used in foreign countries where monitoring the computers or bringing lawsuits might be prohibitively expensive. (In addition, although we did not discuss this point in class, some students observed that, if the end users are children, they may not be bound to their contracts.)

Self-Help Remedies: Some software providers have attempted to use automated disablement as a self-help remedy. Automated disablement has an important practical advantage for software developers; namely, they can use automated disablement to vindicate their rights without the need for judicial action. But software developers like Microsoft face several legal limitations. First, § 4.03(c) of the Principles of the Law of Software Contracts recommends that courts should not permit automated disablement as a remedy in consumer contracts. Second, Microsoft could not use automated disablement if the users did not agree to its use in the software license. See American Computer Trust v. Jack Farrell Implement. Third, Microsoft might face liability, including punitive damages, if it wrongfully locks up a computer. See Clayton X-Ray v. Professional Sys. Corp.

B. The article suggests that Microsoft is trying to stave off competition in emerging markets. Can Microsoft rely on the Wallace v. International Business Machines decision for the proposition that selling an operating system at a low price is not anti-competitive?

Microsoft cannot rely on Wallace v. IBM for this proposition. In Wallace, the court explained that predatory pricing is a three-step process: "Low prices, followed by the exit of producers who can no longer make a profit, followed by monopoly prices." The court was convinced that predatory pricing could not occur because the software was subject to a public license. Therefore, the price could never go up. But this case is different. Microsoft could always raise its prices after driving out competition. Windows is proprietary software and is not subject to a public license.

C. What legal and economic advantages and disadvantages might come from using proprietary software as opposed to software subject to a public license?

Legal Advantages of Proprietary Software: Proprietary software generally comes with at least some warranty. In contrast, public license software generally comes with no warranty. If something goes wrong, the user has no remedy.

Legal Disadvantages of Proprietary Software: Proprietary software generally cannot be modified and copied. In addition, most proprietary software comes with use restrictions. For example, Microsoft wants the software at issue here to be used only for educational purposes. In contrast, public license software can be copied and modified without liability and is not subject to use restrictions.

Economic Advantages of Proprietary Software: To date, the standard software used on most microcomputers generally is proprietary software. Using standard software has several economic advantages. Windows provides a good example. Students who use windows will learn how to use most computers in the world. They will not have difficulty obtaining assistance in using Windows because so many people also use it. In addition, more software packages are compatible with Windows than with other operating systems.

Economic Disadvantages of Proprietary Software: The major economic disadvantage of propriety software is that every copy costs money. But if Microsoft is selling Windows for only $3, this disadvantage seems rather minimal.

2012 FINAL EXAMINATION

Instructions:

1. You have 1 hour to complete this examination.

2. This examination consists of 2 problems of equal weight (i.e., 50% each). I recommend that you spend about 30 minutes on each problem, but you may divide your time as you wish.

3. This is an open-book examination. In writing your answers, you may consult any written materials that you have brought with you.

4. You must write your answers in essay form, using complete sentences and proper paragraphs.

5. You should make reasonable assumptions about any facts not stated in the problems. If you find the problems ambiguous in any sense, describe the ambiguity in your answer.

6. Keep your answers concise so that you have time to complete the entire examination.

7. You may keep this copy of the examination at the end of the examination period. Good luck!

PROBLEM I. (30 minutes)

Please read the following edited excerpt from Brian X. Chen, *Reading the Fine Print on Apple's Book-Making Software*, N.Y. Times Blogs (Bits), Jan. 20, 2012:

> Apple's free book-creation tool, iBooks Author, seemed too good to be true: it gives anyone the ability to easily lay out an interactive book with no programming required, slap it up for sale in Apple's iBooks Store [which sells electronic books] and ideally make a quick buck. But hours after Apple released the software on Thursday, people noticed that they were not allowed to sell these books outside Apple's store.
>
> That's according to iBooks Author's fine print, better known in the software industry as the end-user license agreement. It reads: "If you charge a fee for any book or other work you generate using this software (a 'Work'), you may only sell or distribute such Work through Apple (e.g., through the iBookstore) and such distribution will be subject to a separate agreement with Apple."
>
> . . . The clause immediately provoked controversy on the Web, even from some of Apple's biggest enthusiasts, like John Gruber, who runs Daring Fireball, a popular blog for Apple watchers. . . . "This is Apple at its worst," Mr. Gruber wrote. He later published a follow-up post explaining that this rule was most likely designed to prevent authors from using iBooks Author to make e-books for competing digital book stores, like Amazon's or Barnes & Noble's. It would also ensure that Apple received its 30 percent of the cut for every e-book title made with iBooks Author.
>
> But Dan Wineman, who first reported on the license agreement, compared this to Adobe telling people that they could not sell images they produced with its Photoshop software to a third party. . . . Apple declined to comment.
>
> In the technology world, the end-user license agreement is known as the stuff that hardly anyone reads before clicking "Agree." Written by a company's lawyers, these agreements occasionally contain curveballs that people wouldn't expect. . . .

On the basis of this article and the materials considered in class, please answer separately each of the following questions:

A. What arguments, based in copyright law or contract law, might a user of the iBooks Author software raise for why the quoted term in the end-user license agreement is unenforceable, and how might Apple respond to these arguments?

B. In response to complaints about the quoted term, Apple amended the end-user license agreement to include this sentence: "You [the author] retain all your rights in the content of your works, and you may distribute such content by any means when it does not include files in the iBooks format generated by iBooks Author." Which objections are eliminated by this term and which remain?

C. Books published in the iBooks format can be read using iReader software, which Apple distributes and updates without cost. Could Apple update iReader to prevent iReader from being used to read any books in iBook format that were not bought from Apple's iBookstore?

PROBLEM II. (30 minutes)

Please read the following edited excerpt from a recent case:

> [Surplus.com, the plaintiff in this lawsuit, wanted to create a website through which it would sell surplus merchandise.] Plaintiff alleges that it purchased a software program called "eAuction" from Siebel Systems. It also obtained a product entitled "Siebel Systems Maintenance and Support." The program came with an End User License Agreement ("EULA"). Siebel's e-Business senior account executive, Aaron Schmidt, "informed Surplus.com that the Software was not fully operational 'out of the box,' and that Surplus.com would have to hire a separate company to develop and implement the Software." Mr. Schmidt directed Plaintiff to retain a company called Dynamic Quest ("DQ") to develop and implement the software. Plaintiff hired DQ.
>
> Plaintiff alleges that DQ "never properly implemented or developed the Software," that "Mr. Schmidt did not assist Surplus.com in resolving the issue, and did not provide any support." Through these and other alleged acts, Plaintiff contends that [Siebel] breached their contract.
>
> [Siebel responded that the case should be dismissed because it was not brought within the 4-year period for suing on contracts for the sale of goods, which was shorter than the general period of limitations applicable to other kinds of contracts.] Plaintiff alleges that, "[d]ue to the extensive development and implementation required to get the Software to become operational . . . Siebel did not sell a software product to Surplus.com. Rather, Siebel sold Surplus.com intangible intellectual property rights that DQ used to create Surplus.com's custom-made auction website to meet Surplus.com's specific individualized requirements."
>
> [In the EULA], Siebel agreed "[t]o use its commercially reasonable efforts to correct or provide a workaround for Program errors that cause

a breach of this warranty, or if Siebel is unable to make the Program operate as warranted within a reasonable time, Customer shall be entitled to return the Program to Siebel and recover the fees paid to Siebel for the Program license."

On the basis of these facts and the materials considered in class, please answer separately each of the following questions:

A. Assume there is no binding precedent in the jurisdiction on whether the law governing contracts for the sale of goods or the general law of contracts should apply to software contracts. What arguments might Siebel and Surplus.com make about which law should apply in this case?

B. Surplus.com claimed that problems with the software delayed its business and caused Surplus.com to incur substantial expenses in correcting the software. What arguments might the parties make about whether Surplus.com can recover for these losses?

C. An alternative to eAuction is NDOT, which is open-source software subject to a general public license. What might have been advantages and disadvantages to Surplus.com in using NDOT instead of eAuction, especially if both software packages required custom-made adaptations?

2012 GRADING GUIDE

The final examination consisted of two problems. Each of these two problems included three specific questions. Each question was worth a total of 7 points. In grading the examination, points were awarded based on how well the answers: (a) identified the governing legal doctrines; (b) applied these doctrines to the specific facts of the problems; (c) compared the facts of the problems to precedents considered in the course; and (d) provided supporting arguments, explanations, and examples as appropriate.

Discussed below are the subjects that the best answers addressed. (Please note that student answers were not expected to be as complete given time constraints in completing the examination.) Partial credit was awarded for answers that addressed only some of these subjects or that advanced other relevant ideas.

PROBLEM I.

A. What arguments, based in copyright law or contract law, might a user of the iBooks Author software raise for why the quoted term in the end-user license agreement is unenforceable, and how might Apple respond to these arguments?

Conflict with Copyright Policy. Users of the software might argue that the quoted term is unenforceable because it impermissibly conflicts with copyright policy. See Principles of the Law of Software Contract § 109(b) [Materials, p. 51]. The users might explain that the fundamental policy of copyright law is to encourage the production of creative works. Contract terms of this kind, however, tend to stifle creation. To see this point, imagine what would happen if the developers of all word processing programs (and perhaps typewriters and pens) required authors to agree to contracts that limited where they could publish their works. Authors would be greatly inhibited from creating new books because they would be restricted in what they could do with their creations. Apple, however, would respond that this concern is exaggerated because there will always be many ways to write books and that freedom of contract should allow authors who want to use special software to agree to this kind of term. Apple also might argue the analysis of what will encourage or discourage the production of creative works must consider not only the creation of books but also the creation of software; Apple might assert that software like iBooks Author might not be created absent the quoted term, which allows Apple to distribute the software without cost.

Copyright Misuse. Users of the software also might argue that the quoted term constitutes copyright "misuse." See Principles of the Law of Software Contract § 1.09(c) [Materials, p. 64]; Lasercomb America v. Reynolds; Atari Games v. Nintendo. They might contend that Apple is trying to extend the monopoly that copyright law gives Apple in the iBook Author software to gain monopoly control over works created with iBooks Author. They would distinguish cases like Apple Inc. v. Psystar, which found no copyright misuse, by arguing that imposing restrictions on works produced with software is qualitatively different from limiting the hardware on which the software can be used. Apple might present two counterarguments. First, Apple will respond that the Supreme Court has not decided whether a copyright misuse defense exists. See Lasercomb America v. Reynolds. Second, Apple will argue that it is not attempting to gain complete monopoly control over works created by iBooks Author because it allows copying and distribution so long as the distribution is not done for a "fee."

Copyright Preemption. Users of the software might argue that the term is preempted under Copyright Law § 301 because it attempts to give Apple rights that are "equivalent to [one] of the exclusive rights within the general scope of copyright." An exclusive right of copyright is the right to control distribution of copyrighted works. Users might argue that Apple is attempting by contract to give itself control over the distribution of works in which Apple does not have a copyright. But Apple would respond that most courts hold that contract rights are not preempted under § 301 because

they are not equivalent to copyright rights. See Raymond T. Nimmer, Information Law § 2:38 (2012) [Materials, p. 51]. In addition, Apple does not prevent distributing books created with the software; it restricts only distribution for a fee.

Unconscionability. Terms in contracts may be unconscionable if they are substantively unfair or if they constitute an unfair surprise. See ProCD Inc. v. Zeidenberg; UCC 2-302. The comments from the bloggers suggest that some people may see the quoted term as substantively unfair because Apple should not control works that Apple did not create; it would be like the manufacturer of painting supplies claiming rights in a portrait painted by an artist. They might also argue that the terms are so surprising that users would not understand them even if they were aware of them in the license. Copyright licenses usually restrict use of software, not works created using the software. Cf. Computer Associates v. Quest. But Apple would respond that the software is distributed for free and the terms do not attempt to excuse Apple from any standard of care. Apple also has an economic reason for the term. Apple can make money from the software only if it receives a percentage of sales of works created with the software. Apple also wants to provide something that its competitors, Amazon and Barnes & Noble, are not providing.

No proper Offer and Acceptance. Users might argue that the term at issue is unenforceable because there was no proper acceptance if the quoted license term were presented merely as "browser wrap" and a reasonably prudent person would not have noticed it. Specht v. Netscape Communications. But this seems unlikely because Apple probably uses clickware to obtain assent (as most software developers do) and because users in fact did notice the term shortly after the application was made available.

Note: The term at issue does not appear to conflict with mandatory (i.e. non-waivable) copyright rules.

B. In response to complaints about the quoted term, Apple amended the end-user license agreement to include this sentence: "You [the author] retain all your rights in the content of your works, and you may distribute such content by any means when it does not include files in the iBooks format generated by iBooks Author." Which objections are eliminated by this term and which remain?

What the Amendment would not Address. The Amendment by itself would not address any issue relating to offer and acceptance of the license terms (see above). Accordingly, those objections, if valid, would remain.

What the Amendment would Address. The Amendment would reduce all of the other concerns identified above, but would not entirely eliminate

them. The new policy does not give Apple the right to prevent all distribution of works created with iBooks Author, but instead only distribution of the works in the special formatting achieved through the iBooks Author software. If users could replicate the formatting by another means, then Apple would have no control over copying and distribution, and therefore the term clearly would not be preempted under § 301, would not conflict with copyright law policy, and would not constitute copyright misuse. True, users might have difficulty replicating the appearance of the work without using the iBooks Author software, but the same could be true of anything created with a special software package. The Amendment also lessens any argument that the license is unconscionable because it gives additional rights to users.

C. Books published in the iBooks format can be read using iReader software, which Apple distributes and updates without cost. Could Apple update iReader to prevent iReader from being used to read any books in iBook format that were not bought from Apple's iBookstore?

Offer and Acceptance. The question does not make clear how Apple would attempt to implement this new restriction. Apple presumably could not unilaterally modify a license agreement that it had with users of iReader. And even going forward with new users, the term would have to be presented in a way that a reasonable person would have notice of it before accepting it. Specht v. Netscape Communications.

Automated Disablement. Automated disablement as a remedy is not permitted in consumer contracts. See Principles of the Law of Software Contracts § 4.03(c) [Materials, p. 140]; Franks & Sons v. Information Solutions. If the restriction modified iReader such that it prevented the iReader from reading iBooks that it previously could read, users might argue that Apple has engaged in automated disablement. Apple might respond that it is not using automated disablement as a remedy but instead is merely establishing a new policy. Users, however, may reply that automated disablement is effectively a remedy for violations of Apple's new policy.

PROBLEM II.

A. Assume there is no binding precedent in the jurisdiction on whether the law governing contracts for the sale of goods or the general law of contracts should apply to software contracts. What arguments might Siebel and Surplus.com make about which law should apply in this case?

Arguments for applying the law governing the sale of goods to sales of software. The arguments for applying the law governing the sale of goods to software are those found in Advent Systems v. Unisys. First, although software is an intellectual creation, it is often subsumed into a tangible medium like a disk--a good--when it is bought and sold. Accordingly, the law governing sales of goods should apply. Second, software is an important item of commerce and, therefore as a policy matter, sales of software should be governed by a uniform well-developed law, like article 2 of the Uniform Commercial Code.

Arguments for not applying the law governing the sale of goods to sales of software. There are also several arguments against concluding that a software contract should be treated as a contract for the sale of goods. First, software does not meet the definition of goods. Goods are defined as things that are movable. Software is not a thing because it does not have tangible physical properties. Although software is sometimes subsumed into a tangible medium when it is sold, software is often simply downloaded. Second, software contracts do not fit within the definition of sales. A sale is defined as a passing of title from a seller to a buyer for a price; it is difficult to see how a buyer can acquire title to something that is not subsumed into a medium. In addition, software licenses regularly say that the software is licensed and not sold. Third, this contract seems to involve custom-made software; some authorities, especially those interpreting the Convention on the International Sale of Goods, say that a contract for custom-made software should be treated like a contract for services. [Materials, p. 6.]

B. Surplus.com claimed that problems with the software delayed its business and caused Surplus.com to incur substantial expenses in correcting the software. What arguments might the parties make about whether Surplus.com can recover for these losses?

Arguments against Liability. The seller might argue that this is not a sale of goods and therefore the software did not come with a warranty. If there is no breach of warranty, then there are no damages, consequential or otherwise.

Arguments against Recovery of Consequential Damages. The losses claimed appeared to be consequential damages. An argument that consequential damages cannot be recovered is that the contract limits recovery to correcting or working around errors or return of fees. If the errors cannot be corrected or worked around, then the remedy would be return of fees.

Arguments for Recovery of Consequential Damages. The argument for recovery of consequential damages is that consequential damages are available for breach of contract if they are foreseeable and not avoidable and not effectively disclaimed. Here, the damages were foreseeable, and the disclaimer should be viewed as ineffective because the remedy provision has failed its essential purpose. The purpose of the clause was to give the buyer a choice between having the problem corrected or having payment returned. If the software cannot be repaired, one of the two key choices, then consequential damages should be available because the contract has failed to provide an essential remedy the contract specified it should provide.

C. An alternative to eAuction is NDOT, which is open-source software subject to a general public license. What might have been advantages and disadvantages to Surplus.com in using NDOT instead of eAuction, especially if both software packages required custom-made adaptations?

Advantages of Open Source Software. Open source software has several advantages. First, the user has the practical ability and the legal right to make modifications. The software comes with the source code and the license does not prohibit making derivative works. Second, the software is free. Third, unlike most commercial software, software subject to a general public license does not come with significant restrictions on its use.

Disadvantages of Open Source Software. Open source software also has some disadvantages. First, it typically comes with no warranty, so the user has no remedy if it does not work. Second, the user cannot claim a copyright in a modification. The user therefore cannot make money by selling modifications. Third, because it is created by multiple persons, some more reliable than others, open source software sometimes contains improperly copyrighted software; as a result, a court conceivably could enjoin its use immediately and the user would have no remedy. Cf. SCO Group v. IBM.