

Law of Software Contracting: New Rules Coming

Cem Kaner, J.D., Ph.D.

July, 2007

Abstract

The body of American laws governing software contracts has changed substantially over the past 12 years. Not yet clear:

- which changes will persist over the long term
- how long the ones that will not persist will survive beyond the expiration of the present Federal administration.

The American Law Institute

- drafting a new *Principles of the Law of Software Contracts*
- to replace the failed **Uniform Computer Information Transactions Act**.
- **If these Principles impact the next decade of legal development, what changes could we expect?**

This talk highlights the state of that project, with notes from the May 15, 2007 review meeting. The next review meeting is September 29. I would like to bring your comments (and maybe you) to the meeting.

This talk is context for you to think about this warranty

§ 3.05 (b) The transferor warrants to any party in the normal chain of distribution and to the end user that the software contains no material hidden defects of which the transferor was aware at the time of the transfer. This warranty may not be excluded. In addition, this warranty does not displace an action for misrepresentation or its remedies.

What is a material hidden defect?

(A defect that is not obvious on inspection but that causes failure or limits capability that would be a serious breach of contract.)

1. How serious is serious? Same standard for all products & contracts?
2. What criteria should apply to communication of the defect to the transferee (customer)? Do we care if the customer understands the disclosure?
3. When does the transferor become "aware" of a defect?
4. What about security by obscurity?
5. What about free / open software?

Background: How American commercial law works

The purpose of commercial law is to facilitate commerce.

- **Uniformity facilitates commerce.**
 - Same laws across states
 - Same laws across countries
 - Same laws across product families
 - Same laws across goods / services
- **Without uniformity, you need a lawyer when you sell (buy) your product or service in a new state and when you make decisions about the extent to which your (the vendor's) work should be built into the transaction as a product or as a service.**

Background: How American commercial law works

The purpose of commercial law is to facilitate commerce.

- Uniformity facilitates commerce.
- **Stability facilitates commerce.**
 - Legal rules persist over time
 - What you learn in school / seminars today, you don't have to unlearn next week
- **Without stability, you need a lawyer every time you do anything, because you never know what the current rules are.**

Background: How American commercial law works

The purpose of commercial law is to facilitate commerce.

- Uniformity facilitates commerce.
- Stability facilitates commerce.
- **Appropriate rules for accountability and allocation of risk facilitate commerce.**
 - When something bad happens, e.g.
 - product doesn't work
 - service fails to provide benefit
 - product doesn't live up to promises / expectations
 - how do we decide who to hold responsible?
- **There is no right without a remedy**

Background: How American commercial law works

The purpose of commercial law is to facilitate commerce.

- Uniformity facilitates commerce.
- Stability facilitates commerce.
- **Appropriate rules for accountability and allocation of risk facilitate commerce.**
 - Three heuristics for allocating liability:
 - **Fault:** If your product / service is defective, you pay
 - **Agreement:** Whoever the contract specifies
 - **Technology (Negligence):** The cost to the vendor of making a better product is much less than the cost to society created by this defect.
 - **Which is the right rule?**
- **Any decision rule less complex than the system it models will make mistakes.**

Background: Sources of American law

Statutes

- Passed by a legislative body (Congress / State legislature)
- Describe the general rule that courts are to apply

Regulations

- Set of rules that are more detailed than the statute, created by a regulatory agency that was created by a statute and empowered by statute to create these rules

Court decisions

- Trial court applies the law to the specific facts of this case
- Appellate courts decide whether the law was applied correctly—create precedent

Arbitration decisions: No public record, no precedent

Background: Sources of American law

Legal treatises and journals:

- Unlike scientific journals, which are records of new discoveries and new theories
 - Books of statutes and court decisions serve this purpose for lawyers
- Instead, these are summaries and advocacy documents

Restatements of the Law

- Authoritative studies of cross-jurisdictional history / trends on the specific issues of this subfield, e.g. Restatement of Contracts.
- The main source for this type of work is the American Law Institute.

Background: Sources of American law

Model statutes

- Legislative drafting group creates a proposed statute in a form that *can be* adopted, typically, across several states
- Uniform Commercial Code
 - American Law Institute (ALI)
 - National Conference of Commissioners on Uniform State Laws (NCCUSL)
 - (lesser role) American Bar Association (ABA)
- Uniform laws generally
 - (“Uniform”) National Conference of Commissioners on Uniform State Laws
 - “Model” law often ABA
 - “Principles of the Law” often ALI

Pre-UCITA (1970 – 1996 / 2001)

- Going into 1970, copyright and patent laws were not clearly applicable to software
 - Intellectual property rights are created by statute.
 - There is no long history of “natural property rights” in intellectual “property”
 - Government-created rights for authors and inventors are quite recent (e.g. Statute of Anne—1710).
- United States Constitution, Article 1, Section 8

The Congress shall have the 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.
- Note the tradeoff, rather than the unconditional right.

Pre-UCITA (1970 - 1996 / 2001)

Software vendors adopted licensing model to protect their rights

- A copyright license grants limited rights to the licensee to make copies without transferring the copyright itself.
- Because this is a contract between individuals (rather than a set of restrictions against the world), traditional licenses are not constrained by the Constitutional tradeoff or the fair use / first sale rights in the Copyright Act.

**Historically, technology licenses have been
between well-informed, well-represented
licensors / licensees**

(or fool(s) who should have gotten a lawyer)

Mass-Market Licensing?

Can you create a license that binds the whole world?

- A mass-market license is non-negotiable and binds every purchaser / user of a product. This is more like rewriting the base rules of copyright than like making a contract with an individual because it makes a copyrighted work available to the broad public (like a book or a record) but under different terms than the Copyright Act.
 - **Bobbs-Merrill v. Straus (1903)**: booksellers put a “license” on books saying that purchasers could not resell the book for less than \$1. Macy’s (Straus) put sold the books for less than \$1 and was repeatedly sued.
 - **Supreme Court** : Rejected the licenses, saying you cannot call a sale a license

Mass-Market Licensing



Publishers didn't just try (unsuccessfully) to license books.

They tried it with records, too.

Photo from http://www.natch.net/stuff/78_license/

Mass-Market Licensing



Photo from http://www.natch.net/stuff/78_license/

Just because they **claim** a right doesn't mean they **have** the right.

In *Straus v. Victor Talking Machine Co.* [243 U.S. 490 (1917)], the Supreme Court's opinion was that licenses of this type were "**mere shams to evade the general law governing sale of personal property.**"

Software enters the mass market

The Supreme Court also invalidated similarly restrictive patent licenses on machines (see MOTION PICTURE PATENTS CO. v. UNIVERSAL FILM MFG. CO., 243 U.S. 502, 1917, <http://supreme.justia.com/us/243/502/case.html>)

These types of restrictive licenses were tried by industry after industry in the 20th century. The courts repeatedly tossed them out as

- incompatible with the First Sale Doctrine (copyright) or the Doctrine of Alienation (patent) or
- abuse/misuse of copyright or patent, or
- incompatible with the Fair Use Doctrine (copyright).

It wasn't until 1995 that the courts accepted the idea of a binding mass-market copyright license (ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) at <http://www.law.emory.edu/7circuit/june96/96-1139.html>)

The primary statute written to validate this judicial stretch was the Uniform Computer Information Transactions Act.

Pre-UCITA (circa 1990)

- Uniform Commercial Code (Article 2) covers sales of goods, including of computer hardware and software
 - Courts often extended coverage to software services
 - Courts treated licenses as equivalent to sales contracts
 - For example, between the software license disclaimers and the implied / express warranties that normally come with a product, the warranties typically prevailed
 - Similarly, the Magnuson-Moss Warranty Improvement Act (federal consumer protection for sales of goods) was considered applicable to software, even by the Software Publishers Association

Pre-UCITA (circa 1990)

- Copyright doctrines:
 - **First sale**: buyer can sell, give, lend the buyer's copy
 - **Fair use**: buyers can sometimes make some copies without needing permission
 - In the mass market, the Fair Use and First Sale doctrines were applied despite license wording.
- For example, reverse engineering:
 - Courts repeatedly approved reverse engineering of software (**as fair use**)
 - Courts struck **mass-market** license restricting reverse engineering (Vault v. Quaid, 1988)
 - Courts generally enforced **negotiated** contracts that restricted reverse engineering

UCITA develops (1988 - 2002)

- Model statute starts in American Bar Association, partly in response to *Vault v. Quaid*
- Article 2 of UCC is under revision (normal maintenance) by Permanent Editorial Board for the UCC (NCCUSL/ALI) and they accept task of accommodating software licenses
- 1995—splits between software publishers' advocates and traditionalist commercial lawyers get so bitter that UCC-2 committee splits into UCC-2 (sales) and UCC-2B (licenses)
 - UCC 2 – attempts to stay neutral between customer / seller while clarifying some troublesome language (e.g. “basis of the bargain” for warranties) and updating for standard electronic forms.
 - UCC-2B (UCITA) – develops the perspective of large software vendors

UCITA

- Nonnegotiable clickwrap is broadly enforceable despite
 - Contract of adhesion
 - Terms not available pre-sale
- Because these are specifically permitted, such a contract cannot be considered procedurally unconscionable.
- Warranty disclaimers fully enforceable
- User documentation no longer creates an express warranty, and express warranties need only be “substantially” correct
- Use restrictions are enforceable unless they are unconscionable or against a fundamental public policy
 - Reverse engineering can be banned most of the time
 - First sale (transfer) restrictions are specifically enforceable
 - Restrictions on speech may be enforceable

UCITA

- In 1998, then 1999, American Law Institute membership passed two resolutions critical of UCC-2B:
 1. The contracting rules were out of step with the Uniform Commercial Code.
 - The normal UCC default rules were designed to create the deal that two parties of equal bargaining strength would create.
 - The UCC-2B rules allowed the vendor to create non-negotiable contracts that could not be seen until after the sale, that gave the vendor terms that no sensible customer (with bargaining power) would accept
 2. The intellectual property rules were fundamentally more favorable to licensors than the Copyright Act.

UCITA

- When NCCUSL refused to make significant changes, ALI left the process (killing the UCC-2B project)
- NCCUSL continued under a new name (UCITA), passing the draft in 1999, for presentation to the states in 2000
- Maryland and Virginia passed the bill
- Several other states not only rejected UCITA but passed laws voiding the application of UCITA to contracts made with their citizens
 - The last time some American states passed legislation refusing to honor the contract laws of other states, the United States had a civil war.
 - NCCUSL is no longer pushing UCITA, and it is no longer seen as a national legislation

UCITA

Despite UCITA's failure in the states, many courts (especially federal courts) have adopted UCITA's reasoning in a broad reinterpretation of UCC Article 2.

- (Even though UCC and UCITA are state law, when a person in one state sues a person in another state, the case can be tried in federal court.
- The federal judge is *supposed to* enforce the law of the (governing) state, but with the politicization of the American judiciary and Justice Department, the law of the particular state can be reinterpreted to conform to the political opinions of the trial judge and the appellate panel. These decisions carry weight as state and federal precedents.)

The shift

- Step-Saver Data Systems, Inc. v. Wyse Technology, 939 F.2d 91 (3d Cir. 1991) held that terms that are not available before the sale modify the sales contract rather than stating the original contract. Buyers have a right to reject modifications without abandoning their purchase, therefore the harshest terms of clickwrap and shrinkwrap contracts can be rejected by customers.
- This was widely accepted as “the leading case on shrinkwrap agreements.” (I.LAN Systems v Netscout Service Level, 183 F.Supp.2d 328, 337, Mass. 2002)

The shift

Step-Saver was gradually replaced by

- *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996).
- *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1148 (7th Cir. 1997) "terms inside a box of software bind consumers who use the software after an opportunity to read the terms and to reject them by returning the product."
- *M.A. Mortenson Co. v. Timberline Software*, 998 P.2d 305 (Wash. 2000)
- (*I.LAN Systems v Netscout Service Level*, 183 F.Supp.2d 328, 337, Mass. 2002)
- *Bowers v. Baystate Technologies*, 320 F.3d 1317 (Fed Cir. 2003)
Enforced a broad shrinkwrap definition of reverse engineering (bars even black box analysis): **"to study or analyze (a device, as a microchip for computers) in order to learn details of design, construction, and operation, perhaps to produce a copy or an improved version."**

Post-UCITA

In the meantime, NCCUSL/ALI attempted to complete the Article 2 revisions, which were less pro-vendor.

- That failed ...
- Much narrower set of amendments to Article 2 passed:
 - Clarified some warranty rules (most manuals are express warranties, so are advertisements)
 - Restricted the effectiveness of post-sale terms
 - Attempted to distinguish between embedded and non-embedded software: Embedded within Article 2, non-Embedded outside of Article 2 scope
 - passed ALI/NCCUSL but not yet adopted in any state

http://www.nccusl.org/Update/uniformact_factsheets/uniformacts-fs-ucc22A03.asp

Time to try again...



**Principles of
the Law of
Software
Contracts**

ALI Project: Principles of the Law of Software Contracts

This is a status report on a multi-year project. These principles have not been adopted by the American Law Institute and will be revised significantly before they are adopted.

The following slides have

- my summary, or
- text from the Principles that is either main language (statement of the principles), explanatory comment, or Reporters' Notes (reference discussions).

The full Principles document is 300 pages (the final one will probably be 500 pages) and available for purchase from www.ali.org. I've tried to pull the 20 or so pages-worth that I think you might find most interesting.

Basic Definitions

The project focuses on contracts for software:

- UCITA attempted to cover all types of “information” and became unmanageably complex.
- In contrast, the Principles will carve out certain areas and handle them explicitly. The others will be left for judges to cope with by analogy to whatever bodies of law seem most relevant.
- The Principles choose to skip both the “sales” and the “licensing” terminology because they carry too much historical baggage. Instead, we have transferor (e.g. vendor) and transferee (e.g. customer).
 - If software transactions are truly different, changing the vocabulary allows legal analysts the freedom to explore the idea of software transactions in its own right

Basic definitions

1.01 (f) Digital Content

“Digital content” consists of “digital art” or a “digital database.”

- (1) “Digital art” is literary and artistic information stored electronically, such as music, photographs, motion pictures, books, newspapers, and other images and sounds.
- (2) A “digital database” is a compilation of facts arranged in a systematic manner and stored electronically. A digital database does not include digital art.

1.01 (i) Software

- (1) “Software” consists of statements or instructions that are executed by a computer to produce a certain result.
- (2) Software does not include digital content but does include a digital content player.

Basic definitions

1.01 (j) Standard-Form Transfer of Generally Available Software

A “standard-form transfer of generally available software” is a transfer of

- (1) small quantities of software to an end user; or
- (2) the right to access software to a small number of end users

if the software is generally available to the public under substantially the same standard terms.

1.01(k) Standard Form and Standard Term

- (1) A “standard form” is a record regularly used to embody terms of agreements of the same type.
- (2) A “standard term” is a term in a standard form relating to a particular matter that has not been negotiated.

101 (l) Transferor and transferee

- (1) A “transferor” is a party who, pursuant to an agreement, has provided or has agreed to provide software or access to software to a transferee.
- (2) A “transferee” is a party who, pursuant to an agreement, has a right to receive software or access to software from the transferor.

Scope

Included:

- Sales contracts, access contracts, paid licenses, open source licenses for software and software-related services

Excluded:

- Databases, clip art, online books, other digital content
- Embedded software

Can you really differentiate, in principle, between embedded and non-embedded software?

- No. See Koopman & Kaner (2001)
<http://www.kaner.com/pdfs/embedd1.pdf> and <http://www.kaner.com/pdfs/embedd2.pdf>
- But maybe you can write rules for the clear cases and leave the close ones for the judge.
- **Why is this important? → Differential legal consequences should have design consequences**

Scope

§ 1.06 Scope, Generally

(a) These Principles apply to agreements for the transfer of software or access to software for a consideration. Software agreements include agreements to sell, lease, license, access, or otherwise transfer or share software.

(b) These Principles do not apply to

- (1) the transfer of any disk, CD-ROM, or other tangible medium that stores the software, or
- (2) the transfer of a security interest in software.

§ 1.07 Scope; Embedded Software

(a) These Principles apply to the transfer of software embedded in goods if a reasonable transferor would believe the transferee's predominant purpose for engaging in the transfer is to obtain the software.

(b) These Principles apply to the transfer of software upgrades and replacements of embedded software only if these Principles applied to the transfer of the embedded software being upgraded or replaced.

Scope

§ 1.08 Scope; Mixed Transfers Including Non-Embedded Software

(a) For purposes of this section,

(1) “goods” include any embedded software, and

(2) a “mixed transfer” constitutes a single transaction that consists of the transfer of nonembedded software and any combination of goods, digital content, and services.

(b) In the case of a mixed transfer, these Principles apply to the transfer of the non-embedded software unless the transfer also includes digital content or services and a reasonable transferor would believe the transferee’s predominant purpose for engaging in the transfer is to obtain the digital content or services.

Contract formation

1.01 (e) Contract

A “contract” is the total legal obligation that results from the parties’ agreement.

- Many of the contracts are standard-form (non-negotiable, offered to individual transferees)
- The definition of contract is flexible.
 - The agreement itself merely lays the foundation for the contract, rather than being the contract itself. The agreement might or might not be negotiated. The agreement might not specify all the terms. The terms might change.
 - **However, anything that is not a legal obligation is not part of the contract.**

Unenforceable terms

§ 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.

§ 1.10 Public Policy

A term of an agreement is unenforceable if the interest in enforcement of the term is clearly outweighed in the circumstances by a public policy against its enforcement.

Unenforceable terms

§ 1.11 Unconscionability

(a) If the court as a matter of law finds the agreement or any term of the agreement to have been unconscionable at the time it was made, the court may refuse to enforce the agreement, or it may enforce the remainder of the agreement without the unconscionable term, or it may so limit the application of any unconscionable term to avoid any unconscionable result.

(b) When it is claimed or appears to the court that the agreement or any term thereof may be unconscionable, the parties shall be afforded a reasonable opportunity to present evidence as to its commercial setting, purpose, and effect to aid the court in making the determination.

Reverse engineering under the Principles

Typical standard form bans all forms of reverse engineering.

These don't just block development of competitive products (thought that **would be** fair game under U.S. history despite the loud whining from some industry spokespeople). They also block instructional use; creating interoperable products; optimizing regression testing of an application that interoperates with this one (when this one changes); investigation for fraud, copyright violation, spyware; black box study and documentation; etc.

- In a negotiated transaction, the ban would probably be enforced
- In a standard-form transaction, the ban would probably be unenforceable, therefore not part of the contract

Critical reviews under the Principles

Common use restrictions have included:

1. No benchmark studies (Oracle, Microsoft, McAfee) and no reporting of results of benchmarks
2. No published reviews without permission of the vendor
3. No use of screen shots or artifacts to criticize the vendor

Under the Principles, these are probably unenforceable in a standard-form transaction, but they are certainly enforceable in a negotiated transaction (as they should be).

Warranties

§ 3.02 Express Warranties

(a) In this Section “transferee” includes both an “immediate transferee” that enters a contract with the transferor and a “remote transferee” that receives the software or access to the software from any party in the normal chain of distribution.

(b) Except as provided in (d), the transferor creates an express warranty to the transferee as follows:

- (1) An affirmation of fact or promise made by the transferor to the transferee, including by advertising or by a record packaged with or accompanying the software, that relates to the software and on which a reasonable transferee could rely creates an express warranty that the software will conform to the affirmation of fact or promise.
- (2) Any description of the software made by the transferor to the transferee on which a reasonable transferee could rely creates an express warranty that the software will conform to the description.

Warranties

§ 3.02 Express Warranties

(3) Any sample, model, or demonstration of a final product shown by the transferor to the transferee on which a reasonable transferee could rely creates an express warranty that the software will conform to the sample, model, or demonstration.

(c) A transferor can create an express warranty without using formal words, such as “warrant” or “guarantee,” or without intending to create an express warranty. However, a mere opinion or commendation of the software does not create an express warranty.

(d) A distributor or dealer that merely transfers software covered by a warranty in a record made by another party, which warranty identifies the maker of the record as the warrantor, is not liable for breach of the warranty. The distributor or dealer is liable for any express warranties of its own or if it adopts the maker’s Warranty.

Warranties

§ 3.03 Implied Warranty of Merchantability

(a) Unless excluded or modified, a transferor that deals in software of the kind transferred or that holds itself out by occupation as having knowledge or skill peculiar to the software warrants to the transferee that the software is merchantable.

(b) Merchantable software

- (1) passes without objection in the trade under the contract description;
and
- (2) is fit for the ordinary purposes for which such software is used; and
- (3) is adequately packaged and labeled.

Warranties

§ 3.04 Implied Warranty of Fitness for a Particular Purpose

(a) Unless excluded or modified, if a transferor at the time of contracting has reason to know any particular purpose for which the transferee requires the software and the transferee relies on the transferor's skill or judgment to select, develop, or furnish the software, the transferor warrants that the software is fit for the transferee's purpose.

(b) Unless excluded or modified, if an agreement requires a transferor to provide or select a system of hardware and software and the transferor at the time of contracting has reason to know that the transferee is relying on the skill or judgment of the transferor to select the components of the system, the transferor warrants that the software provided or selected will function together with the hardware as a system.

Warranties

§ 3.05 Other Implied Warranties

(a) Unless modified or excluded, implied warranties may arise from course of dealing or usage of trade.

(b) The transferor warrants to any party in the normal chain of distribution and to the end user that the software contains no material hidden defects of which the transferor was aware at the time of the transfer. This warranty may not be excluded. In addition, this warranty does not displace an action for misrepresentation or its remedies.

Comment b. Hidden defects. See Cem Kaner, Why You Should Oppose UCITA, 17 Computer Lawyer 20, 23 (2000). “[L]et the new law reduce publisher risk for losses caused by previously undiscovered defects or defects that were disclosed to the customer, but reduce the customer’s risk of losses caused by defects that were known and left hidden.” *Id.* at 24. According to Kaner, “[i]n mass-market software, a large proportion of defects (often the vast majority of them) that reach customers are discovered and intentionally left unfixed by the publisher before the product is released.” *Id.* at 23.

Warranties

§ 3.06 Disclaimer of Warranties

- (a) A statement intending to exclude or modify an express warranty is unenforceable if a reasonable transferee would not expect the exclusion or modification.
- (b) Unless the circumstances suggest otherwise, all implied warranties **other than the warranty of no material hidden defects (§ 3.05(b))** are excluded by language in a record such as “as is,” “with all faults,” or other language that a reasonable transferee would believe excludes all implied warranties.
- (c) The implied warranty of merchantability is excluded if the exclusion is in a record, is conspicuous, and mentions “merchantability.”
- (d) The implied warranty of fitness for a particular purpose is excluded if the exclusion is in a record, is conspicuous, and mentions “fitness for a particular purpose.”

Warranties

§ 3.06 Disclaimer of Warranties

(e) If before entering an agreement a transferee has tested the software, sample, or model as fully as desired or unreasonably has refused to test it, there are no implied warranties with regard to defects that a test should have or would have revealed.

(f) An implied warranty may be excluded or modified by course of performance, course of dealing, or usage of trade.

(g) Remedies for breach of warranty may be limited in accordance with § 4.01 of these Principles.

Remedies

AGREEMENTS WITH RESPECT TO REMEDY

§ 4.01 Contractual Modification or Limitation of Remedy

(a) Subject to the provisions of subsections (b) and (c) of this Section and of § 4.02 (liquidation and limitation of damages),

(1) the agreement may provide for remedies in addition to or in substitution for those provided in these Principles and, except for damages for breach of the warranty provided in § 3.05(b), may limit or alter the measure of damages recoverable under these Principles, as by limiting the transferee's remedy to return of the software and repayment of the price or to repair and replacement of nonconforming software; and

(2) resort to a remedy as provided is optional unless the remedy is expressly agreed to be exclusive, in which case it is the sole remedy.

(b) 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.

Remedies

AGREEMENTS WITH RESPECT TO REMEDY

(c) **Except for damages for breach of the warranty provided in § 3.05(b)**, consequential damages may be limited or excluded unless the limitation or exclusion is unconscionable at the time of contracting or operates in an unconscionable way. This rule applies even if circumstances cause an exclusive or limited remedy to fail of its essential purpose under subsection (b). Limitation of consequential damages for personal injury in a consumer transaction is prima facie unconscionable.

Remedies

§ 4.05 Expectation Damages

Unless otherwise agreed, damages under these Principles should put the aggrieved party in as good a position as if the other party had fully performed.

Damages for lost expectancy include direct, incidental, and consequential damages, less expenses saved in consequence of the breach.

Excerpts from the Principles'
Comments and Reference Notes.

Unenforceable terms

§ 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.

§ 1.10 Public Policy

A term of an agreement is unenforceable if the interest in enforcement of the term is clearly outweighed in the circumstances by a public policy against its enforcement.

§ 1.11 Unconscionability

(a) If the court as a matter of law finds the agreement or any term of the agreement to have been unconscionable at the time it was made, the court may refuse to enforce the agreement, or it may enforce the remainder of the agreement without the unconscionable term, or it may so limit the application of any unconscionable term to avoid any unconscionable result.

(b) When it is claimed or appears to the court that the agreement or any term thereof may be unconscionable, the parties shall be afforded a reasonable opportunity to present evidence as to its commercial setting, purpose, and effect to aid the court in making the determination.

Comment (to Section 109) :

a. Scope. Software is clearly copyrightable subject matter, and decisions of the Federal Circuit indicate that it regards software as patentable subject matter. The federal intellectual property statutes sometimes place limits on enforceable contractual terms either explicitly or implicitly. Of course, many other federal statutes and regulations (e.g., the Federal Trade Commission Act and regulations thereunder) may also limit enforceable contractual terms. The Principles focus on federal intellectual property law because the relationship between it and breach-of-contract actions seeking to enforce particular terms has been highly contentious and courts could benefit from guidance in this area.

That guidance may be usefully derived from the preemption analysis that has developed under both copyright and patent law. Although neither law preempts the enforcement of a breach-of-contract cause of action as a general matter, both copyright and patent law may refuse to enforce particular terms under a preemption analysis. Because both copyright and patent law adopt conflict rather than field preemption (see below), the question is whether, in the circumstances, enforcement of a particular contract conflicts with federal intellectual property law or policy. Whether a particular contract conflicts with federal intellectual property law or policy depends on the terms of that contract. Thus, the Principles often refer to preemption of particular terms, a usage of the term “preemption” that may be unfamiliar to those outside of the intellectual property area, but one that is consistent with judicial analysis.

Unenforceable terms

Comment (to Section 109 continued):

Preemption may be either statutorily or constitutionally based and express or implied. In § 301, the Copyright Act contains an express preemption provision, stating that “all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright . . . And come within the subject matter of copyright . . . are governed exclusively by this title.” 17 U.S.C. § 301(a). Courts interpret this language to mean that a cause of action is preempted if the subject matter at issue is within the scope of the Act and the rights a party is seeking to enforce or protect are not qualitatively different from rights under the Act. The Patent Act, in contrast, contains no such express language.

The ultimate source of authority for implied preemption is the Supremacy Clause of the U.S. Constitution, which states, “Th[e] Constitution, and the Laws of the United States which shall be made in pursuance thereof . . . shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the contrary notwithstanding.” U.S. Const. Art. VI, cl. 2. Whether the Intellectual Property clause itself is an independent source of implied preemption is an open question. The Intellectual Property Clause states, “The Congress shall have Power . . . To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” *Id.*, Art. I, § 8, cl. 8. Because the intellectual property statutes are enacted pursuant to this power, the extent of Supremacy Clause preemption is necessarily related to the interpretation of the Intellectual Property Clause.

There are two types of implied preemption—field preemption and conflict preemption. Field preemption addresses situations in which federal law completely excludes the states from acting in the area. Field preemption does not apply to either copyright or patent law. Conflict preemption is relevant to both copyright and patent law, and applies when particular state statutory enactments or the enforcement of common-law claims for relief would impermissibly interfere or “conflict” with the purpose of the federal scheme. An impermissible conflict occurs when “either [] compliance with both state and federal regulation is a ‘physical impossibility’ or where state law stands as an ‘obstacle to the accomplishment and execution of the full purposes and objectives of Congress.’” *ASCAP v. Pataki*, 930 F. Supp. 873, 878 (S.D.N.Y. 1996) (citations omitted). In such cases, the state law will be preempted to the extent of the conflict. So, for example, a state may not by statute provide patent-like protection to mass-marketed unpatentable products because enforcement of the state statute would impermissibly interfere with the federal interests embodied in the patent system.

Generally, two types of agreements can raise preemption questions under both patent and copyright law. The first category includes terms that expand the affirmative exclusive rights that the intellectual property statutes would otherwise confer by, for example, providing additional rights in protected material or creating copyright or patentlike rights in unprotected material. The second group of terms consists of those that narrow or exclude statutory (such as fair use in copyright) or common-law limitations on the exclusive rights.

Unenforceable terms

Comment (to Section 109 continued):

As noted above, usually intellectual property law does not preempt the enforcement of terms of private agreements because restrictive provisions in agreements bind only the contracting parties, unlike state statutes which, by operating against the world, compete directly with the federal system. Nevertheless, intellectual property policy may exert a preemptive effect on agreements in certain circumstances. For example, preemption issues are heightened when software is distributed under take-it-or-leave-it standard-form agreements that, by virtue of state enforcement, more closely resemble state legislation competing with the federal scheme than a bargain between two parties.

Courts take a variety of approaches in analyzing contractual claims for preemption. Under copyright law, one approach is to hold that the mere existence of an agreement provides the “extra element” making the claim qualitatively different from one in copyright. The parties’ reciprocal promises and the transfer of consideration form an extra element under § 301 that avoids preemption of the breach-of-contract action and the particular clause sought to be enforced. Other courts analyze the particular provision at issue. If it merely restates or directly conflicts with copyright law then the breach-of-contract claim is preempted and the cause of action is one in copyright law. For example, if the alleged contractual breach is based solely on the licensee’s unauthorized copying of the software, some courts would hold the contractual claim preempted and require the plaintiff to proceed under copyright law.

Under patent law, courts have held certain provisions in agreements invalid, including a covenant not to contest a patent’s validity and a provision requiring a licensee to continue paying royalties after the patent’s expiration. Courts have also used the doctrine of patent misuse to police certain types of contractual provisions.

These Principles adopt the patent view and that of copyright courts that focus on the particular provision at issue. Merely because the agreement may be otherwise enforceable under the Principles does not shelter particular provisions from challenge.

If the parties have agreed on the consequences for the remainder of the agreement if a particular provision is severed, the court should enforce that agreement unless it is unreasonable. If the parties have not so agreed or their agreement is unreasonable, the court may enforce the remainder of the agreement or treat the entire agreement as unenforceable.

b. Mandatory rules. Section 1.09(a) emphasizes that parties cannot contract around mandatory rules of the intellectual property laws. For example, rules requiring a writing for transfer of copyright ownership and assignment of patents are mandatory. In some cases, the statutes expressly permit the parties to modify the statutory “default” rule. For example, the Copyright Act permits parties to contract in certain circumstances to treat a creation as a work made for hire. In such cases, the parties are free to bargain with respect to the particular issue.

Unfortunately, the intellectual property statutes often do not clearly delineate between mandatory and default rules. Courts should look to the language of the relevant statute in determining what rules are mandatory. The Uniform Commercial Code (U.C.C.) and relevant commentary about or interpretation of the U.C.C. may provide a helpful analogy. Under the U.C.C., rules are mandatory when their reason for existence is to restrict the parties’ conduct.

Unenforceable terms

Comment (to Section 109 continued):

Illustration:

1. *A, a software vendor, orally transfers ownership of its copyright to B. This agreement 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.”)*

c. Purposes and policies preemption. Section 1.09(b) makes it clear that a term of an agreement that impermissibly conflicts with the federal intellectual property law under the standards of the case law is also unenforceable. The parameters of “purposes and policies” preemption remain unclear, but certain types of contractual provisions are particularly troubling. Terms that strike at the heart of the intellectual property balance between promoting the public welfare by granting exclusive rights as an incentive to innovate, and promoting the public welfare through robust competition fueled in part by broad dissemination of information and a rich public domain, are most susceptible to challenge, and particularly so when part of a standard-form transfer of generally available software. Such preemption may occur under the copyright statute itself or the implied preemption analysis applicable to both copyright and patent law.

One approach the Principles could take would be to identify particular suspect terms in the “black letter.” This is difficult because preemption law is quite uncertain and results are sensitive to the particular factual circumstances. Nevertheless, some troublesome terms can be discerned from the cases. Again, particularly when contained in a standard form as part of a retail-like transaction, provisions that would purport to do any of the following can be problematic from an intellectual property perspective when contained in a software agreement:

- (1) *preclude the transferee generally from making fair uses of the work;*
- (2) *ban or limit reverse engineering;*
- (3) *restrict copying or dissemination of factual information; and*
- (4) *forbid transfer of the software.*

Examples 1-3 overlap to a certain extent. Fair use shelters more conduct, however, than just reverse engineering under certain circumstances. The general concern with all of the examples listed is that their enforcement may unduly limit dissemination of information and frustrate follow-on innovation.

Nor is the list exclusive. Other terms, particularly when ubiquitous, may be problematic. For example, a term requiring a transferee to grant back rights to the transferor in the transferee’s own independently created innovations can raise questions of enforceability under federal intellectual property law because it may create disincentives for the transferee to innovate. A term that prohibits a transferee from seeking federal intellectual property rights on its own independently created innovations raises similar issues.

Unenforceable terms

Comment (to Section 109 continued):

The goal here is not to direct a court to hold any of the terms noted above unenforceable, but rather to identify certain troublesome areas and to provide a mode of analysis. While this lack of certainty may be frustrating, it is particularly appropriate in a Principles project, which aims not to restate the law but rather to provide a set of principles for courts to consider. Factors a court should consider in deciding whether to hold a term of an agreement unenforceable include:

- (1) whether the agreement effectively expands the scope of the transferor's rights or contracts the scope of the transferee's rights to its own creations under federal law;*
- (2) whether the agreement was negotiated and the parties' relative bargaining power;*
- (3) the degree to which enforcement of the provision is likely to affect competition adversely; and*
- (4) the degree to which enforcement of the provision is likely to affect innovation adversely.*

Terms limiting decompilation

A term limiting decompilation (one form of reverse engineering) may be reasonable in the context of a negotiated agreement under which the transferor and transferee are in a confidential relationship, and the transferor seeks to maintain the trade-secrecy status of the source code. It is more troublesome when contained in a standard-form agreement in a retail-like transaction. Courts have reached different conclusions in that setting under copyright law, and have not addressed it under patent law. Some commentators argue that boilerplate provisions against reverse engineering are unenforceable under patent law.

In assessing these provisions under an intellectual property analysis, it is of course important to consider also the provisions of the Digital Millennium Copyright Act (DMCA) as incorporated into the Copyright Act. The DMCA contains provisions that, inter alia, prohibit circumvention of technological tools that control access to a copyrighted work except in limited circumstances. These limited circumstances include reverse engineering for purposes that have been found fair under the copyright case law. Thus, if a particular program is protected by a technological measure under the DMCA, the right to reverse engineer is governed by the DMCA not these Principles. Where, however, there is no such technological measure employed, merely a contractual provision prohibiting reverse engineering, these Principles apply.

Terms restricting distribution of factual information

A term restricting distribution of factual information may be reasonable when the licensor has invested a substantial sum in gathering the information, has not released the information generally to the public, and would lose all or most of its market if a transferee copied and marketed the information in competition with the originator. It is less likely to pass muster if the transferor seeks to use intellectual property rights in the software to exert control over non-copyrightable data.

Unenforceable terms

Comment (to Section 109 continued):

Terms limiting transfer

Terms forbidding transfer of the software implicate both copyright and patent policy regarding when the intellectual property owner's rights are exhausted. The transferor may have legitimate reasons for not wishing to grant the transferee the ability to further transfer the code. Often, negotiated agreements limit the transferee's right to transfer the software because the transferor may not wish to deal with competitors or others. This is not problematic unless the transferor has monopoly power, and even then, the term is most likely enforceable. Or the agreement may have granted rights in confidential source code, which the transferor does not wish the transferee to further transfer. Generally, such restrictions on transfer in negotiated agreements should be enforceable.

Restrictions on transfer are more problematic in the standard-form, retail-like market context. Even in that case, however, such restrictions may be pro-competitive. For example, use and transfer restrictions may permit the licensor to price discriminate efficiently. Price discrimination is not, however, always efficient. In such cases, courts should be more willing to refuse to enforce the provision.

Assuming the transferee has a right to transfer the software, the question arises as to what conditions the transferor may impose on further transfer. Generally, agreements granting rights to both proprietary and open-source software provide for their terms to "run with" the software and bind transferees. Both types of agreements often place restrictions on use, copying, and modification of the software although the nature of the restrictions is different: Proprietary software agreements seek to protect the original transferor's intellectual property rights, while open-source licenses seek to keep the software from being subject to assertions of proprietary rights. Conditions on transfer should generally be enforceable until the relevant intellectual property right expires unless the particular restriction is problematic.

Other terms

An agreement under which the transferee must grant back rights in improvements may enhance competition by enabling both the transferor and transferee to compete or, depending on its terms, may represent an attempt by the transferor to extend the scope of its monopoly. Terms that place restrictions on the marketing of the transferee's independently developed product may discourage the transferee from innovating or may be part of a pro-competitive collaborative development model.

Summary

In cases involving troublesome terms like those discussed above, it is relevant whether the agreement is negotiated or standard form. When an agreement is negotiated, it does not create rights against the world like the exclusive copyright or patent rights. A court might still analyze the relative bargaining power of the parties, but should generally not upset freely bargained-for transfers. When an agreement is not negotiated, and the opportunity to obtain the software free of the restriction at a reasonable price does not exist, the "agreement" effectively creates rights against the world that may place it at odds with intellectual property policy.

Another factor is the effect of preempting the restriction. If the conduct the provision restricts were to become widespread, would it adversely affect incentives to innovate in the first place? Or is the restriction an attempt to control markets beyond that which the exclusive federal rights give to the right owner?

Unenforceable terms

Comment (to Section 109 continued):

A useful model for determining relevant factors is the rule of reason in antitrust law, which also considers a number of factors in assessing the desirability of conduct. Preemption, however, is broader—a provision may be preempted even though its enforcement would not result in a violation of the antitrust laws. For example, a term requiring a royalty to extend past the expiration of a patent may not violate antitrust law, but it is nevertheless preempted. Still, however, antitrust law’s rule-of-reason analysis may help courts to identify what factors are relevant in a preemption inquiry. By focusing on the anti-competitive effects of a restrictive contractual provision versus its pro-competitive justifications, the rule of reason invites courts to undertake a detailed analysis of the particular restriction at issue within the relevant market context. Many restrictions may enhance competition by helping the rightholder to more efficiently develop and commercialize technology including, for example, by facilitating production that otherwise would not occur (as in the case where the holders of blocking patents engage in cross-licensing). On the other hand, restrictive provisions can frustrate competition as well as follow-on innovation. A similar analysis may help courts decide whether, within the particular market context, a provision will unduly interfere with federal policy reflected in intellectual property law. Of course, this does not occur when the provision at issue is within the scope of the federally granted right. Thus, courts must be careful not to use antitrust law to undermine contractual provisions reflecting those rights. They may, however, find the law’s modes of analysis useful in assessing provisions that attempt to extend those rights.

Illustrations:

- A, a large electronic-game manufacturer, produces a software program that prevents its game console from accepting game cartridges manufactured by other companies. B, a start-up game manufacturer with little bargaining power, concludes that to be profitable its games must work on A’s console. A grants rights to B in software that “unlocks” the console so that B’s games will work on A’s console. The agreement prohibits B in perpetuity from marketing any of its games that work on A’s console for use on any other company’s game console. Because of its unreasonable duration and restriction on competition, the term frustrates the intellectual property balance and is preempted. (It likely also constitutes misuse. See Comment d.) If the restriction were in effect only until the relevant intellectual property right expired, it would not frustrate the intellectual property balance to the same extent, but it may be preempted because it prohibits B from marketing its own, independently created expression on consoles other than A’s and narrows the population of end users to owners of A’s console.*
- B, an electronic-game manufacturer, acquires through a shrinkwrap license a copy of software developed by A, another electronic-game manufacturer. The license precludes reverse engineering of the software for any purpose. B nonetheless reverse engineers the software in order to understand the software’s unprotected ideas and develops its own software that is not in competition with A’s. The contract term disallowing all reverse engineering is enforceable if A has a patent that would protect against such reverse engineering. If not, the term is likely preempted by copyright or patent law. If, however, A’s software contains a technological measure controlling access that is protected under the DMCA, B’s ability to reverse engineer is governed by the DMCA.*

Unenforceable terms

Comment (to Section 109 continued): Illustrations (continued):

4. *A, a producer of software programs that arrange raw data, agrees to provide B, a municipality, with a software application for the storage and sorting of property-tax-valuation information. C, a real-estate listings company, seeks access to the raw, non-copyrightable data compiled by B, but A seeks to bar B from giving C access to the data based on a term of the software agreement between A and B forbidding such a dispersal. A court might consider such a term preempted or misuse (see Comment d) because the software provider has attempted to use its copyright to control uncopyrighted data that it has not collected. Because the data is uncopyrightable, however, the more appropriate approach might be to consider the restriction void on state public-policy grounds. See § 1.10.*
 5. *Organization A licenses source code under standard terms that permit the licensee to modify and distribute the software provided that the licensee distributes its modifications under terms that replicate those in A's standard form (including the term authorizing modifications provided they are distributed only with A's terms). The term placing conditions on distribution of modifications is likely enforceable as long as those modifications are a derivative work of the original code. It is more troublesome if the modifications are independently developed and separable from the original code.*
 6. *A, a producer of databases, spends more than \$10 million to compile an electronic database of telephone numbers and markets the database bundled with search and retrieval software. A term in A's agreement with B, a consumer, restricts B's usage of the bundle to the household. The agreement also bars B from making backup copies of the software and database. The agreement is likely not governed by these Principles because the transferee's predominant purpose is most likely to obtain the database rather than the search and retrieval software. Nevertheless, a court may apply these Principles by analogy. In that case, the term restricting use to the household is enforceable, but the term barring backup copies likely is not. Enforcement of the household-use restriction creates incentives for parties such as A to produce databases. But the term barring backup copies of both the software and database is unnecessary to protect A, and is in conflict with federal policy embodied in § 117 of the Copyright Act. If not preempted, the term barring backup copies may be unenforceable as against state public policy. See § 1.10.*
 7. *A makes its software generally available to the public. A's standard-form contract prohibits transferees from benchmarking the software and distributing the information so obtained. (Benchmarking involves testing the product against others as well as establishing facts about its performance. Such a term implicates copyright rights because benchmarking normally requires running the software, which in turn requires loading the software into RAM. Loading the software into RAM creates a copy according to some courts and the Copyright Office.) Because there is a strong public interest in permitting customers to evaluate the software's performance and in disseminating the information obtained in part to encourage the production of other innovative, competitive software modules, the term may be preempted by copyright law. It may also be unenforceable on grounds of state public policy.*
- d. Intellectual property misuse.* Subsection (c) directs a court in a contract claim to strike a provision that would constitute misuse if the action were one for infringement of the relevant intellectual property right. [...]

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment a. Scope. [...]

For decisions discussing the test of copyright preemption under § 301 of the Copyright Act, see, e.g., *Kabehie v. Zoland*, 102 Cal. App. 4th 513, 521 (2002) (“One approach is that breach of contract actions are never preempted. This approach is based on the theory that a breach of contract includes a promise and the existence of the promise is the extra element avoiding preemption. *Taquino v. Teledyne Monarch Rubber* (5th Cir. 1990) 893 F.2d 1488, 1501; *Architectronics, Inc. v. Control Systems, Inc.* (S.D.N.Y. 1996) 935 F. Supp. 425, 438-439.) A second approach is a fact-specific analysis of the particular promise alleged to have been breached and the particular right alleged to have been violated. (*National Car Rental v. Computer Associates* (8th Cir. 1993) 991 F.2d 426, 429-430.”). See also *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1454 (7th Cir. 1996) (“Contracts . . . generally affect only their parties; strangers may do as they please, so contracts do not create ‘exclusive rights.’”).

Commentators and courts assume that constitutional preemption supplements § 301 preemption. *ASCAP v. Pataki*, 930 F. Supp. 873, 878 (S.D.N.Y. 1996) (applying constitutional preemption principles in a copyright case); Robert P. Merges, Peter S. Menell & Mark A. Lemley, *Intellectual Property in the New Technological Age* 846-848 (3d ed. 2003). In *Pataki*, the court addressed *New York statutes (i) requiring* copyright owners to provide proprietors of venues allegedly engaging in copyright infringement with notice within 72 hours of their entry into the venue to investigate infringement; and (ii) providing the venues with remedies for a copyright owner’s failure to comply with the notice requirement. 930 F. Supp. at 876. The court stated, “Both the deterrent effect of . . . the notice requirement and the nullification of federal remedies [by providing a counterclaim in an infringement action for failure to comply with a state statute] create an obstacle to the accomplishment and execution of the full purposes and objectives of Congress in enacting the federal copyright statute. This obstacle gives rise to conflict preemption under the Supremacy Clause.” *Id.* at 880.

The Supreme Court’s patent-law preemption doctrine has ostensibly vacillated between conflict and field preemption. . . conflict preemption seems to be the rule in patent law.

Comment b. Mandatory rules. See, e.g., 17 U.S.C. § 204 (2004) (requiring a writing for transfer of copyright ownership); 35 U.S.C. § 261 (2004) (requiring a writing for the assignment of a patent).

See 17 U.S.C. § 101 (defining “work made for hire”).

See Revised U.C.C. § 1-303, Comment 3 (2004) (describing rules as mandatory when their “very office is to control and restrict the actions of the parties. . .”).

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. For a helpful discussion of implied preemption, see Mark A. Lemley, Beyond Preemption: The Law and Policy of Intellectual Property Licensing, 87 Cal. L. Rev. 111, 136-151 (1999).

UCITA's drafters found efforts to codify preemption law difficult in part because of its uncertainty. For discussions of UCITA's widely criticized preemption provision, see Jacques De Werra, Moving Beyond the Conflict Between Freedom of Contract and Copyright Policies: In Search of a New Global Policy for On-Line Information Licensing Transactions, 25 Colum. J.L. & Arts 239 (2003) (criticizing UCITA's preemption provision); Garry L. Founds, Shrinkwrap and Clickwrap Agreements: 2B Or Not 2B?, 52 Fed. Comm. L.J. 99 (1999) (suggesting that UCITA underestimated the scope of the preemption problem and that federal legislation would be preferable); James S. Heller, UCITA: Still Crazy After All These Years, and Still Not Ready for Prime Time, 8 Rich. J. L. & Tech. 5 (2001) (arguing that UCITA's preemption section provides inadequate protection for information users including consumers and libraries); Pamela Samuelson, How Tensions Between Intellectual Property and UCITA are Likely to be Resolved, 570 PLI/Pat 741 (1999) (discussing UCITA's drafting history and problems with its approach to intellectual property law).

Comment c above identifies particular troublesome provisions that may upset the intellectual property balance:

(i) *In a copyright infringement action, fair use functions as an equitable defense. The essential notion is that not all uses of a copyrighted work constitute infringement lest "rigid application of the copyright statute [would] on occasion . . . stifle the very creativity which that law is intended to foster." Stewart v. Abend, 495 U.S. 207, 236 (1990). Indeed, the exclusive rights of the copyright owner defined in § 106 of the Copyright Act are expressly "[s]ubject to section[] 107" on fair use. 17 U.S.C. § 106. Section 107 lists examples of types of uses (e.g., commentary, criticism, news reporting, and education) often considered fair, and four nonexclusive factors for a court to weigh in evaluating a claim of fair use (the nature of the use and of the copyrighted work itself, the quantity and importance of what the infringer took, and the effect on the copyright owner's market). There is an important public interest in permitting fair uses, making contractual provisions prohibiting behavior that the Copyright Act would protect subject to scrutiny for preemption.*

Fair use is a heavily fact-intensive inquiry, and no list could enumerate all of the types of activity that might be restricted by agreement that could under certain circumstances be considered fair. Thus, Comment c above lists terms restricting fair use as ones that merit scrutiny. The exact content of those provisions would be determined on a case-by-case basis. The next two examples in Comment c discussed immediately below identify conduct often—but not always—considered fair that is also often addressed in software agreements.

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. (continued)

(ii) Under copyright law, it is fair use to engage in reverse engineering to develop an independently created computer program that interoperates with the one reverse engineered if the requisite compatibility information is not available otherwise. *Sony Computer Enter., Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000); *Atari Games Corp. v. Nintendo of America, Inc.*, 975 F.2d 832 (Fed. Cir. 1992); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992). The Digital Millennium Copyright Act (DMCA), while generally prohibiting circumvention of technological tools that control access to copyrighted works, permits circumvention for reverse engineering under the same circumstances as the case law. 17 U.S.C. § 1201(f) (2004); see also S. Rep. No. 105-190, at 13 (explaining that the exception was to adopt the rule of current case law). In 2002, NCCUSL adopted a resolution adding a § 115 to UCITA. Jonathan Band, *Closing the Interoperability Gap: NCCUSL's Adoption of a Reverse Engineering Exception in UCITA*, 19 No. 5 *Computer & Internet Law* 1, *4 (2002). Section 115, modeled on the DMCA, provides that contractual provisions against reverse engineering are unenforceable in certain circumstances. UCITA § 115 and Comment 5. The European Union, in its Software Directive, adopted a similar approach, permitting decompilation for interoperability purposes and prohibiting enforcement of contractual provisions nullifying that right. Council Directive of 14 May 1991 on the Legal Protection of Computer Programs, 1991 O.J. (L-122) 42, art. 6(1); art. 9(1).

In *Vault Corp. v. Quaid Software Ltd.*, the Fifth Circuit used a constitutional analysis to hold preempted under copyright law a provision of the Louisiana Software License Enforcement Act that enforced provisions against decompilation and disassembly (both types of reverse engineering) in standard-form agreements. 847 F.2d 255 (5th Cir. 1988). The decision left open the question whether a court could enforce such a provision under state common law rather than statute and avoid preemption. Some commentators argued not. See, e.g., David A. Rice, *Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering*, 53 *U. Pitt. L. Rev.* 543, 602, 606 (1992). (Note that the Vault court stated that the shrinkwrap "is a contract of adhesion which could only be enforceable if the Louisiana [statute] is a valid and enforceable statute." *Vault Corp. v. Quaid Software, Ltd.*, 655 F. Supp. 750, 761 (E.D. La. 1987), *aff'd*, 847 F.2d 255 (5th Cir. 1988)).

Since that time, a number of courts have held shrinkwrap licenses enforceable in the absence of an enabling statute, although most of these decisions did not involve questions of preemption. See, e.g., these Principles § 2.01, Reporters' Note to Comment b; *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1449 (7th Cir. 1996) (addressing a preemption issue, and stating, "Shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general"); *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569 (App. Div. 1998) (enforcing an arbitration provision in a boilerplate contract); *M.A. Mortenson Co. v. Timberline Software Corp.*, 998 P.2d 305, 313 (Wash. Sup. Ct. 2000). Other courts have held to the contrary. See, e.g., *Specht v. Netscape Comms. Corp.*, 306 F.3d 17 (2d Cir. 2002) (refusing to enforce an agreement under California law when the user did not have notice of its terms before engaging in the downloading intended to signal acceptance of the terms); *Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332 (D. Kan. 2000); *Arizona Retail Systems, Inc. v. The Software Link, Inc.*, 831 F. Supp. 759 (D. Ariz. 1993); *Step Saver Data Sys., Inc. v. Wyse Technology*, 939 F.2d 91, 102 (3d Cir. 1991) (holding a license unenforceable when the buyer was "assured" that the license did not apply and the terms did not constitute a conditional acceptance under U.C.C. § 2-207).

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. (continued)

(ii) *In Bowers v. Baystate Technologies, Inc.*, the Federal Circuit held that § 301 of the copyright law did not preempt a provision against reverse engineering in a shrinkwrap agreement. 320 F.3d 1317, 1325 (Fed. Cir. 2003) (implying also that Vault's preemption holding did not extend to "private contractual agreements supported by mutual assent and consideration"). The mutual assent and consideration that characterizes a contract claim provided the "extra element" to render the breach-of-contract claim qualitatively different from one sounding in copyright infringement. *Id.* The dissent would have followed Vault's constitutional preemption analysis and held the provision preempted:

A state is not free to eliminate the fair use defense. Enforcement of a total ban on reverse engineering would conflict with the Copyright Act itself by protecting otherwise unprotectable material. If state law provided that a copyright holder could bar fair use of the copyrighted material by placing a black dot on each copy of the work offered for sale, there would be no question but that the state law would be preempted. A state law that allowed a copyright holder to simply label its products so as to eliminate a fair use defense would "substantially impede" the public's right to fair use and allow the copyright holder, through state law, to protect material that the Congress has determined must be free to all under the Copyright Act. See *Bonito Boats*, 489 U.S. at 157, 109 S. Ct. 971.

I nonetheless agree with the majority opinion that 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. A freely negotiated agreement represents the "extra element" that prevents preemption of a state law claim that would otherwise be identical to the infringement claim barred by the fair use defense of reverse engineering. . . .

However, state law giving effect to shrinkwrap licenses is no different in substance from a hypothetical black dot law. Like any other contract of adhesion, the only choice offered to the purchaser is to avoid making the purchase in the first place. . . . State law thus gives the copyright holder the ability to eliminate the fair use defense in each and every instance at its option. In doing so, as the majority concedes, it authorizes "shrinkwrap agreements . . . [that] are far broader than the protection afforded by copyright law."

. . . I respectfully dissent.

Id. at 1335-1338.

Under the Kewanee Oil case, the ability of parties to reverse engineer under trade-secret law is one factor that led the Court to hold that patent law does not preempt state trade secret law:

If a State, through a system of protection, were to cause a substantial risk that holders of patentable inventions would not seek patents, but rather would rely on the state protection, we would be compelled to hold that such a system could not constitutionally continue to exist . . .

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. (continued)

Trade secret law provides far weaker protection in many respects than the patent law. While trade secret law does not forbid the discovery of the trade secret by fair and honest means, e.g., independent creation or reverse engineering, patent law operates “against the world,” forbidding any use of the invention for whatever purpose for a significant length of time.

Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 489-490 (1974). *The Bonito Boats case also emphasized the importance of reverse engineering, holding that a state statute could not remove from the public one way of reverse engineering a mass-marketed unpatented product.*

That the Florida statute does not remove all means of reproduction and sale does not eliminate the conflict with the federal scheme. . . . In essence, the Florida law prohibits the entire public from engaging in a form of reverse engineering of a product in the public domain. This is clearly one of the rights vested in the federal patent holder, but has never been a part of state protection under the law of unfair competition or trade secrets. See *Kewanee*, 416 U.S. at 476, 94 S. Ct. at 1883

Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 160 (1989).

Commentators who argue that provisions against reverse engineering in software license agreements are preempted under patent law include Rice, Public Goods, supra, at 581; John Mauk, Note, The Slippery Slope of Secrecy: Why Patent Law Preempts Reverse-Engineering Clauses in Shrink-Wrap Licenses, 43 Wm. & Mary L. Rev. 819 (2001). The same question arises as in copyright law (most acutely under the Vault case)—does it make a difference that Bonito Boats dealt with a state statute rather than a contract action?

Because the law on preemption of reverse engineering is in a state of flux, the Principles do not adopt a blanket rule, but instead recognize that terms that ban reverse engineering are problematic particularly because of the strong patent policy that permits reverse engineering in the absence of a patent right.

(iii) *Under copyright law, facts are not protected although their original selection or arrangement may be. Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991). *A software vendor may grant rights in its software under terms that restrict the dissemination of a fact-based database built using the software. See Illustration 4 above. Such a term is vulnerable to preemption.*

The lack of protection for facts can, however, present a problem for certain firms like database providers who market a fact-based product that is expensive to create but also easily copied once made available. A term restricting copying or distribution of factual information may be reasonable under the circumstances. Although digital databases are outside the scope of these Principles, courts may nevertheless find the multi-factor test discussed here helpful in addressing a preemption challenge to restrictions in a digital database agreement. In assessing, for example, a provision that creates copyright-like rights in a fact-based database, it would be relevant to show the extent of the database proprietor's investment in gathering the information, whether the transferee's use free-rides on the proprietor's efforts and directly competes with it, and whether, if such conduct were widespread, it would undercut incentives to create such information in the first place. See NBA v. Motorola, Inc., 105 F.3d 841 (2d Cir. 1997)

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. (continued)

(iv) *Both copyright and patent law contain a first-sale doctrine. Under copyright law, the copyright owner has the exclusive right to distribute copies of the copyrighted work publicly. 17 U.S.C. § 106(3). The first-sale doctrine, codified in § 109(a), permits “the owner of a particular copy . . . lawfully made . . . or any person authorized by such owner . . . without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy . . .” without infringing the public-distribution right. The general first-sale doctrine of § 109(a) is limited in the case of software. Section 109(b) prohibits the owner of a copy of software from renting, leasing, or lending that copy for direct or indirect commercial advantage. Congress enacted this limitation to respond to copyright owners’ fears that software rentals would encourage unauthorized copying by customers who would rent the software for less than its retail price, copy it, and return it to the lender for another to copy. See H.R. Rep.No. 101-735, 101st Cong., 2d Sess. 8 (1990), reprinted in 1990 U.S.C.C.A.N. 6935, 6939 (noting that some software with a retail price of \$495 had a rental price of \$35).*

For a discussion of the first-sale doctrine applied to software, see Christian H. Nadan, Software Licensing in the 21st Century: Are Software “Licenses” Really Sales, and How Will the Software Industry Respond, 32 A.I.P.L.A. Q.J. 555 (2004); David A. Rice, Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine, 30 Jurimetrics J. 157 (1990) (arguing that the first-sale doctrine applies to mass-marketed software); see also generally Thomas M.S. Hemnes, Restraints on Alienation, Equitable Servitudes, and the Feudal Nature of Computer Software Licensing, 71 Denv.U. L. Rev. 577 (1994) (suggesting that the law of equitable servitudes provides a useful guide for deciding what license terms should be enforceable against transferees). For suggestions of how a license term might facilitate price discrimination, see ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449-1450 (7th Cir. 1996).

For a discussion of how to distinguish between efficient and inefficient price discrimination, see Michael J. Meurer, Copyright Law and Price Discrimination, 23 Cardozo L. Rev. 55 (2001). [...]

For discussions about the enforceability of open-source licenses, see Michael J. Madison, Reconstructing the Software License, 35 Loy.U. Chi. L.J. 275 (2003); David McGowan, Legal Implications of Open Source Software, 2001 U. Ill. L. Rev. 241; Daniel B. Ravicher, Facilitating Collaborative Software Development: The Enforceability of Mass-Market Public Software Licenses, 5 Va. J.L. & Tech. 11 (2000); Jason B. Wacha, Taking the Case: Is the GPL Enforceable?, 21 Santa Clara Computer & High Tech. L.J. 451 (2005); Greg R. Vetter, “Infectious” Open Source Software: Spreading Incentives or Promoting Resistance?, 36 Rutgers L.J. 53 (2004).

Because preemption is essentially a decision reflecting a balancing of competing interests, it is perhaps inevitable that courts will have to employ a multi-factored test to determine whether enforcement of a particular contractual provision is preempted. The factors listed in Comment c are relevant. See generally, J.H. Reichman & Jonathan A. Franklin, Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information, 147 U. Pa. L. Rev. 875, 930 (1999) (suggesting a doctrine of public-interest unconscionability and noting that “such factors as the market power of the party imposing the term in question, the extent to which the specific contractual transaction is associated with the exercise of intellectual property rights, the extent to which a . . . standard form contract fairly and reasonably attempts to differentiate between specific classes of users . . . and the potential harm to public-interest uses of information” as relevant to whether a term should be enforced).

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment c. Purposes and policies preemption. (continued)

For a discussion of the relationship between antitrust law and intellectual property rights, and the use of the rule of reason to assess many common restrictive license provisions in an antitrust setting, see Antitrust Guidelines for the Licensing of Intellectual Property, Issued by the U.S. Dept. Of Justice and the F.T.C., Apr. 6, 1995 and sources cited therein.

Comment d. Intellectual property misuse. The scope of the misuse doctrine is uncertain. It is a fairly new development in infringement actions under copyright law. The seminal case is *Lasercomb America, Inc. v. Reynolds*, 911 F.2d 970 (4th Cir. 1990) (holding the copyright owner engaged in misuse when it licensed its software under terms prohibiting licensees and their employees from developing a competitive product for 99 years). See also *Alcatel USA, Inc. v. DGI Technologies, Inc.*, 166 F.3d 772 (5th Cir. 1999) (finding misuse when a licensing agreement prohibited copying necessary to test compatibility between a microprocessor card and an operating system, and stressing that the copyright owner could not “indirectly seek[] to obtain patent-like protection of its hardware—its microprocessor card—through the enforcement of its software copyright”); *Practice Management Information Corp. v. American Medical Association*, 121 F.3d 516 (9th Cir. 1997) (holding an exclusivity clause misuse); *In re Napster, Inc. Copyright Litigation*, 191 F. Supp. 2d 1087 (N.D. Cal. 2002) (identifying two approaches to misuse: (1) requiring a finding of an antitrust violation before misuse can apply; and (2) focusing on the question whether the right holder has expanded the scope of its statutory rights; and noting that both tests generally rely on antitrust law to a certain extent).

Misuse has a longer history under patent law. [...]

Because misuse analyzes the same types of factors as a preemption inquiry generally, the Principles provide for preemption of a term that would constitute misuse if the proceeding were one for infringement. But see *Davidson & Assocs., Inc. v. Internet Gateway*, 334 F. Supp. 2d 1164, 1182-1183 (E.D. Miss. 2004) (stating that copyright misuse is not a defense to a breach-of-contract claim), *aff'd*, *Davidson & Assocs. v. Jung*, 422 F.3d 630 (8th Cir. 2005).

Illustration 3. Cf. *Atari Games Corp. v. Nintendo of America Inc.*, 975 F.2d 832 (Fed Cir. 1992). But see *Bowers v. Baystate Technologies, Inc.*, 320 F.3d 1317, 1325 (Fed. Cir. 2003).

Illustration 4. See *Assessment Technologies of WI, LLC., v. WIREdata Inc.*, 350 F.3d 640, 647 (7th Cir. 2003) (contractual limitation on licensees’ right to reveal “their own data, especially when . . . the complete data are unavailable anywhere else, might constitute copyright misuse.”).

Illustration 6. See Pamela Samuelson, *Legally Speaking: Does Information Really Want to be Licensed*, *Communications of the ACM*, September, 1998.

Unenforceable terms

REPORTERS' NOTES (to Section 109):

Comment d. Intellectual property misuse. (continued)

Illustration 7. See Judge Orders Software Developer to Remove and Stop Using Deceptive and Restrictive Clauses, available at http://www.oag.state.ny.us/press/2003/jan/jan17a_03.html (visited Oct. 26, 2005). New York State Attorney General Eliot Spitzer successfully sued Network Associates, makers of the popular McAfee anti-virus software, under New York State's General Business Law for including a clause prohibiting transferees from publishing product reviews or the results of benchmark tests without permission. For the proposition that loading software into RAM creates a copy within the meaning of the Copyright Act, see *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993), cert. dismissed, 510 U.S. 1033 (1994).

Illustration 8. See *Lasercomb America, Inc. v. Reynolds*, 911 F.2d 970 (4th Cir. 1990).

=====

§ 1.10 Public Policy

A term of an agreement is unenforceable if the interest in enforcement of the term is clearly outweighed in the circumstances by a public policy against its enforcement.

Comment:

a. In general. As a general rule, policing agreements using state public-policy considerations should occur only when the policy itself is fundamental. There are many public policies that apply to the enforcement of agreements. Freedom of contract is itself an important public policy. Freedom of contract allows private parties to govern themselves and, in the absence of a market failure, to move goods and services to their highest-valued uses. Still, several contravening public policies, derived from statute or case law, bar enforcement of substantive contract terms when those policies outweigh freedom of contract. For example, courts strike terms that negate long-standing rights of the general population, such as a lessor's disclaimer of liability for negligence in maintaining common areas and an employer's overly broad restriction on employee competition.

Public policy focuses on substantive terms and their effect on public welfare, not on the process of contract formation, which is the province of procedural unconscionability and related policing doctrines. See § 1.11. Still, in balancing freedom of contract against the public policy at issue, courts should not ignore whether an agreement was negotiated or the product of a take-it-or-leave-it standard form. Freedom of contract, of course, is entitled to more weight in the former case.

The guidance of the Restatement Second of Contracts is helpful. In § 178, the Restatement provides a list of factors to weigh in assessing the enforcement or nonenforcement of a term, and in § 179, it provides factors to assist courts in determining sources from which they may derive public policy. [...]

Unenforceable terms

COMMENTS (to Section 110):

b. State public policy and software agreements. Public policy issues may arise in the context of software agreements. Some terms that would be suspect in software agreements, such as an overly broad exculpatory clause or limitation-of-actions term, cause concern no matter the subject

matter of the agreement. Other terms, discussed in Comment c, are problematic in the software-agreement setting in particular.

To date, few courts have struck a term or terms in a software agreement on state public-policy grounds.[...]

Illustrations:

1. *A, a developer of software that assists mechanical engineers in product development, and B, a manufacturer of mechanical switchboards, enter into an agreement under which A transfers software to B. The software is defective and B seeks damages, including for gross negligence in developing the software. The agreement includes a term barring damages for gross negligence. The term may be unenforceable because unconscionable or unenforceable on state public-policy grounds.*
2. *Company A makes its software generally available to the public. A's standard-form contract prohibits transferees from criticizing the performance of the software. The term may be unenforceable on public-policy grounds because it interferes with the transferee's First Amendment rights and also hampers competition by restricting the availability of information about the product. In contrast, where Company A's software is an early version distributed to only a few customers for testing, a provision barring criticism of performance would be unlikely to implicate public policy concerns.*
3. *See Illustration 7 in § 1.09, discussing boilerplate provisions against benchmarking. Such terms may be void as against public policy because they hamper the dissemination of relevant product information to consumers, frustrating competition.*

c. Federal intellectual property policy and state public policy. Public policy also polices terms that may contradict federal intellectual property law. Federal patent and copyright law seek to balance the rights of owners to exploit their property, which creates incentives for further invention, and the rights of copyholders to build on already existing works. See § 1.09 of these Principles. [...] When federal law is unclear (likely the bulk of the cases), state law may refuse to enforce a provision based on state public policy, including consideration of the intellectual property balance.[...]

d. Guidance for state public policy derived from federal policy. Terms in software agreements can expand or narrow the rights of copyholders. A term that allows a copyholder to use software on a network, such as the use of WordPerfect on a law-school network, expands the rights of copyholders. Most of the controversy, however, involves terms that narrow copyholders' rights.

(1) First sale. Section 1.09 and its Comment c discuss copyright law's first-sale doctrine and why licensors of software might seek to contract around it. Such efforts are not clearly unenforceable and a state public-policy analysis is therefore appropriate.

Unenforceable terms

COMMENTS (to Section 110):

d. Guidance for state public policy derived from federal policy. (continued)

Illustrations:

4. *B, a consumer, buys a package containing A's word-processing software. A term accompanying the package bars all transfers of the software. B gives her copy of the software to C, a neighbor, after deleting the program from B's computer. Preemption is likely but uncertain (see § 1.09). A state may refuse to enforce the restriction on transfer on public-policy grounds. Public policy disfavors restraints on alienation. The copyright law's first-sale doctrine reflects that policy. In the case of software, however, transfers between parties such as B and C are problematic because the transferor may retain a copy of the software that it also provides to the transferee. Thus, preemption is uncertain, and a public-policy analysis that considers the circumstances—B has deleted the software—may be preferable.*
5. *A, a software vendor, transfers software to B that is integral to B's small-machine manufacturing business. The agreement bars all transfers of the software. B seeks to sell its business. The restriction on transfer may or may not be enforceable. If A provided source code to B containing trade secrets, A should not be forced to deal with another in B's place. Additionally, A has no obligation to deal with someone other than B as a general matter. If, however, the software is in object-code form and distributed under a standard form, and forbidding its transfer unreasonably impedes the marketability of B's business, the restriction is not enforceable against B.*
6. *See Illustration 1 in § 1.09 and the accompanying commentary. A state cannot enforce the transfer even if enforcement would accord with the state's public policy.*

(2) **Fair use.** Whether vendors through contract can limit federal first-sale rights constitutes only one of many issues that require balancing the interests of vendors and users of software. Another set of issues involves the narrowing of fair use. See § 1.09. As with the first-sale controversy, all-or-nothing responses are unsatisfactory, and a public-policy analysis may be preferable to preemption. For example, the law should allow vendors to restrict students from using a legal database for commercial purposes, but not teachers from using software for instruction or research.

Illustrations: [...]

8. *A, a software developer, transfers software to B, a consumer. The terms prohibit B from installing multiple copies of the software. Another term prohibits B from using the software for commercial purposes. B challenges the use restrictions as unreasonable under public policy embodied in either the first-sale provision or the fair-use provision of the Copyright Act. Both terms are likely enforceable. The Copyright Act does not permit B to install multiple copies of the software nor does it prohibit A from limiting use. There is unlikely to exist a relevant overriding state public policy pointing to a different result.*

Unenforceable terms

REPORTERS' NOTES (to Section 110):

Comment a. In general. This Section is similar to the Restatement Second of Contracts § 178(1); see also id. § 179; *Gomez v. Chua Medical Corp.*, 510 N.E.2d 191, 195 (Ind. Ct. App. 1987) (“[W]e respect and believe in individual freedom to contract. That freedom, if it is to be real, must necessarily include the freedom to enter into enforceable contracts that are unwise or even foolish. . . . If an individual agrees to be bound by a covenant against competition under circumstances where he is terminated at will, we see no compelling reason to deny enforcement of his promise.”).

The Restatement Second of Contracts § 178(2) and (3) provide:

(2) In weighing the interest in the enforcement of a term, account is taken of (a) the parties’ justified expectations, (b) any forfeiture that would result if enforcement were denied, and (c) any special public interest in the enforcement of the particular term. (3) In weighing a public policy against enforcement of a term, account is taken of (a) the strength of that policy as manifested by legislation or judicial decisions, (b) the likelihood that a refusal to enforce the term will further that policy, (c) the seriousness of any misconduct involved and the extent to which it was deliberate, and (d) the directness of the connection between that misconduct and the term.

The Restatement Second of Contracts § 179 provides in part:

. . . A public policy against the enforcement of promises or other terms may be derived by the court from (a) legislation relevant to such a policy, or (b) the need to protect some aspect of the public welfare, as is the case for the judicial policies against, for example, (i) restraint of trade (§§ 186-188), (ii) impairment of family relations (§§ 189-191), and (iii) interference with other protected interests (§§ 192-196, 356”).

Comment b. State public policy and software agreements. For a general discussion see J. H. Reichman & Jonathan A. Franklin, *Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information*, 147 U. Pa. L. Rev. 875, 926, 930 (1999) (Public policy could apply when standard forms conflict with longstanding federal and state intellectual property policies, including the protection of the “public interest in education, science, research, technological innovation, freedom of speech, and the preservation of competition”); UCITA § 105(b) and Comment 3. [...]

Another court held that contractual limitations on tort damages and the statute of limitations on tort claims violated public policy. See *NMP Corp. v. Parametric Technology Corp.*, 958 F. Supp. 1536, 1544 (N.D. Okl. 1997).

Comment c. Federal intellectual property policy and state public policy. For an argument that a state public-policy approach is preferable to an approach focusing on preemption, see Reichman & Franklin, *supra*.

Comment d. Guidance for state public policy derived from federal policy. See Cem Kaner, *Why You Should Oppose UCITA*, 17 *Computer Lawyer* 20, 27 (2000) (arguing that certain transfers in violation of transfer restrictions would violate UCITA).

Unenforceable terms

REPORTERS' NOTES (to Section 110):

For a discussion of the ability to contract around fair use, see Charles R. McManis, *The Privatization (or "Shrink-Wrapping") of American Copyright Law*, 87 Cal. L. Rev. 173 (1999) (discussing an ALI vote when that organization was contemplating UCITA's forerunner); Nim Razook, *The Politics and Promise of UCITA*, 36 Creighton Law Rev. 643, 653 n.36 (2003); Joel R. Wolfson, *Contract and Copyright are Not at War: A Reply to "The Metamorphosis of Contract into Expand,"* 87 Cal. L. Rev. 79, 92 (1999). [...]

Illustrations 2-3. See Annalee Newitz, *Dangerous Terms*, available at <http://www.eff.org/wp/eula.php> (visited Feb. 11, 2006) (describing standard forms prohibiting public criticism).

§ 1.11 Unconscionability

(a) **If the court as a matter of law finds the agreement or any term of the agreement to have been unconscionable at the time it was made, the court may refuse to enforce the agreement, or it may enforce the remainder of the agreement without the unconscionable term, or it may so limit the application of any unconscionable term to avoid any unconscionable result.**

(b) **When it is claimed or appears to the court that the agreement or any term thereof may be unconscionable, the parties shall be afforded a reasonable opportunity to present evidence as to its commercial setting, purpose, and effect to aid the court in making the determination.**

Comment:

a. In general. This Section is based on § 2-302 of the Uniform Commercial Code. This Section is also consistent with § 208 of the Restatement Second of Contracts.

b. Unconscionability generally. Unconscionability is intended to permit courts to police overreaching contractual behavior without having to contort other doctrines, such as those of offer and acceptance or rules on contract interpretation, to arrive at a just result. With some exceptions, courts usually require a showing of both procedural (defects in the contract-formation process) and substantive (the agreement or term unfairly surprises or oppresses one party) unconscionability before refusing to enforce an agreement or term thereof.

Examples of conduct that have been held procedurally unconscionable include conduct approaching misrepresentation and duress, as well as hidden or obscure terms.

Examples of substantively unconscionable terms include a virtually incomprehensible cross-collateral clause and a clause unreasonably limiting the time within which a buyer must notify the seller about claims involving latent defects.

In short, the doctrine of unconscionability is not intended to correct disparities in bargaining power but rather to avoid oppression and unfair surprise. Some courts, do, however, require a lesser showing of procedural unconscionability when the term at issue is grossly unfair.

Standard-form agreements present difficult questions because, while they allow both the drafter and the other party to realize efficiencies, they may also provide an opportunity for the drafter to foist unfavorable terms on transferees who are unlikely to read or understand the standard form.

Reputational concerns, however, may limit the drafter's ability to exploit transferees in this way. See Chapter 2, Topic 1, Summary Overview.

Unenforceable terms

COMMENTS (to Section 111):

c. Unconscionability and software agreements. Traditional unconscionability law should apply in the context of software agreements, and will likely be most relevant in retail standard-form transfers. Even if an agreement is enforceable under Chapter 2 of these Principles because it meets the formation requirements set forth there, it should not be sheltered from challenge. Requiring a lesser degree of procedural unconscionability when terms are particularly onerous may help to counteract the market reality that licensees do not read terms, often do not understand them when they are aware of them, and underestimate the probability that the product will be defective. Additionally, in the clickwrap context, consumers often do not consider the click as signifying the same assent as a signature. Thus, when a term is particularly onerous, the court should require a lesser showing of procedural unconscionability or, if a term is outrageous, even none at all.

The European Union in its 1993 Directive on Unfair Contract Terms took the approach of enumerating a nonexclusive list of terms that may be considered unfair when not individually negotiated. The relevant question is similar to that of a substantive unconscionability inquiry, namely whether a term creates a significant imbalance in the bargain to the consumer's detriment. The European Union, however, takes a more pro-regulatory stance to consumer protection generally and contract terms specifically than U.S. law. Indeed, as a practical matter, firms doing business in Europe may find it less expensive to develop standard forms that comply with European law for use worldwide than to use different forms in the U.S. and Europe. Nevertheless, these Principles opt to rely on traditional unconscionability doctrine rather than defining which terms are enforceable and which are not. A court may, however, find the Directive's list useful in evaluating unconscionability claims. Indeed, terms that authorize the transferor to add spyware to a transferee's computer, that allow the transferor to modify the contract without notice or an opportunity to contest, that extend obligations automatically and without notice, that allow the transferor to change the nature of the software unilaterally, and that authorize cancellation without notice are suspect under these Principles.

Illustrations:

1. *B, a consumer, buys a computer with loaded software from A, a direct marketer, by telephone. A includes its standard form with the software, and displays the form on its website. The form includes 26 paragraphs, and paragraph 25 provides for arbitration in Chicago under the rules of the International Chamber of Commerce. Even assuming the transaction complies With § 2.02 of these Principles, a court might nonetheless hold the arbitration provision unconscionable if the arbitration clause is hidden in small print and arbitration in Chicago is unduly burdensome because, for example, Chicago is a distant forum and arbitration there or with the selected arbitrator is unduly expensive.*
2. *Company A markets software for preparing construction bids. In a negotiated exchange, Company B acquires the software and uses it to submit a bid. B loses a business opportunity because the software is defective and causes an inaccurate bid. The standard form agreement limits consequential damages to the price of the software. The agreement is likely enforceable between the two commercial parties. See also § 4.01(c) of these Principles.*

Unenforceable terms

COMMENTS (to Section 111):

c. Unconscionability and software agreements. (CONTINUED)

Illustration 3. *Company A makes software available for download via a clickwrap agreement that satisfies § 2.01 of these Principles. The agreement provides, “ Except for any refund Company A decides to give you, YOU ARE NOT ENTITLED TO ANY DAMAGES, INCLUDING BUT NOT LIMITED TO CONSEQUENTIAL DAMAGES, if the software does not meet Company A’s limited warranty and even if any troubleshooting by us fails of its essential purpose.” A court might hold such a term unconscionable because it leaves to Company A’s discretion whether to refund the software’s price (so that there is no minimum adequate remedy, see § 4.01 of these Principles) and it provides no relief if the limited remedy (if there is one) fails of its essential purpose. Id.*

4. *Company A includes in an otherwise enforceable software agreement a provision stating, “You agree to every change in future versions of this agreement. This agreement is subject to change without notice.” A court might hold such a term unconscionable because it attempts to bind the transferee to terms of which it is not and cannot be aware at the time of contracting.*
5. *Company A provides movie-making software that includes third-party software. The agreement states that the transferee agrees that Company A and/or the third-party software providers may “automatically download updates on your computer that relate to security. Such security related updates may impair the software (and any other software on your computer that depends on the software we provide) including by disabling your ability to use the software.” A court might hold such a term unconscionable because the transferee bears the risk of an inability to use the downloaded software as well as other software already on its computer and must grant access to its personal computer to Company A and third parties on an ongoing basis. Likewise, a term that permits the software transferor to install software without notice to the transferee raises issues of unconscionability. For example, if, without the transferee’s knowledge, the transferor installs software, including spyware, that monitors the transferee’s browsing habits, results in pop-up ads appearing, or damages the transferee’s computer, a court may find such a clause unconscionable.*
6. *Same facts as Illustration 5. Instead of providing a term permitting it to install software without notice, Company A simply installs software as part of the initial installation process. This software includes hidden files that can damage other software, report back to Company A, or otherwise compromise the security and usability of the transferee’s system. There is no term in the agreement to which a court could apply the unconscionability doctrine. The failure to disclose the installation of hidden files may, however, be actionable under tort or other law.*
7. *Company A provides software on a subscription basis. Its standard terms provide, “Upon expiration of your subscription, Company A may automatically renew your subscription at the then prevailing price using credit-card information you have previously provided.” A court might hold such a term unconscionable because it largely deprives the transferee of the ability to refuse to enter into a subscription extension. It might also hold a term that provides for cancellation without notice unconscionable.*

Unenforceable terms

REPORTERS' NOTES (to Section 111):

Comment a. In general. See U.C.C. § 2-302 (2000); see also Restatement Second, Contracts § 208.

Comment b. Unconscionability generally. For a discussion of the purposes of unconscionability doctrine and how courts apply it, see U.C.C. § 2-302, Comment 1. See also Robert A. Hillman, *The Richness of Contract Law* 129-143 (1997); *infra* § 2.01, Reporters' Note to Comment *h*.

Most courts entertaining an unconscionability or related claim, including those involving e-commerce, look for both procedural and substantive unconscionability. See § 1.11 of these Principles; e.g., *In re RealNetworks, Inc., Privacy Litigation*, No. 00 C 1366, 2000 WL 631341 (N.D. Ill., May 8, 2000); *Strand v. U.S. Bank National Association* ND, 693 N.W.2d 918, 924 (N.D. 2005); *Comb v. PayPal, Inc.*, 218 F. Supp. 2d 1165, 1172-1176 (N.D. Cal. 2002); Arthur Allan Leff, *Unconscionability and the Code—The Emperor's New Clause*, 115 U. Pa. L. Rev. 485, 487-488 (1967); Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. Chi. L. Rev. 1203, 1254 (2003) ("Courts usually search for 'substantive unconscionability' only when there is evidence of a procedural defect in the bargaining process.") Substantive unconscionability focuses on whether the transfer is grossly imbalanced. Arthur Allan Leff, *Unconscionability and the Code—The Emperor's New Clause*, 115 U. Pa. L. Rev. 485, 487 (1967). Procedural unconscionability deals with the manner in which a contract was formed and polices conduct approaching duress, misrepresentation, or, most important here, an unfair presentation of the terms. *Id.* "[T]he more substantively oppressive the contract term, the less evidence of procedural unconscionability is required to come to the conclusion that the term is unenforceable, and vice versa." *Armendariz v. Foundation Health Psychare Servs., Inc.*, 6 P.3d 669, 690 (Cal. 2000).

Generally, courts in California adopt the view that "the more substantively oppressive the contract term, the less evidence of procedural unconscionability is required to come to the conclusion the term is unenforceable, and vice versa." *Davidson & Assocs., Inc. v. Internet Gateway*, 334 F. Supp. 2d 1164, 1179 (E.D. Miss. 2004), citing *Freeman v. Wal-Mart Stores, Inc.*, 111 Cal.App. 4th 660, 3 Cal. Rptr. 3d 860, 866-867 (2003), *aff'd*, *Davidson & Assocs. v. Jung*, 422 F.3d 630 (8th Cir. 2005); see also *Armendariz v. Foundation Health Psychare Servs., Inc.*, 6 P.3d 669, 690 (Cal. 2000).

"[G]ross inequality of bargaining power, together with terms unreasonably favorable to the stronger party, may confirm indications that the transaction involved elements of deception or compulsion, or may show that the weaker party had no meaningful choice, no real alternative, or did not in fact assent or appear to assent to the unfair terms." Restatement Second, Contracts § 208, Comment *d*.

See, e.g., *Williams v. Walker-Thomas Furniture Co.*, 350 F.2d 445 (D.C. Cir. 1965) (involving a cross-collateral clause drafted in nearly incomprehensible language); *Faber v. Menard, Inc.*, 267 F. Supp. 2d 961 (N.D. Iowa 2003) (noting that the clarity of a term's language and its location in the agreement is relevant in assessing procedural unconscionability); *Scheele v. Mobil Oil Corp.*, 510 F. Supp. 633 (D. Mass. 1981) (relevance of duress); *Maxwell v. Fidelity Fin. Servs.*, 184 Ariz. 82, 907 P.2d 51 (1995) (relevance of grossly excessive price); *Davis v. Kolb*, 563 S.W.2d 438 (Ark. Sup. Ct. 1978) (holding a timber deed unconscionable when the buyer misrepresented his experience and knowledge regarding timber, and the seller relied on the buyer's estimate); *Kansas City Wholesale Grocery Co. v. Weber Packing Corp.*, 94 Utah 414, 73 P.2d 1272 (1937) (holding clause limiting time for inspection and making claims for defects unenforceable in case involving a latent defect)....

Unenforceable terms

REPORTERS' NOTES (to Section 111):

Comment c. Unconscionability and software agreements. For a discussion of the EU's Directive on Unfair Contract Terms, see Jane K. Winn, Contracting Spyware by Contract, 20 Berk.Tech. L.J. 1345, 1358-1361 (2005). The list of terms that may be considered unfair is extensive, and includes, for example, unreasonable limitations on remedies, lack of notice of various material terms, and generally granting excessive power to the seller to determine conformity and other contractual terms. See *id.* at 1359-1360 n.58. See also Jane K. Winn & Mark Webber, The Impact of EU Unfair Contract Terms Law on US Business-to-Consumer Internet Merchants (July 24, 2006 draft, on file with Reporters); *Aral v. Earthlink, Inc.*, 36 Cal. Rptr. 3d 229 (Cal. Ct. App. 2005).

Illustration 1 is based on *Brower v. Gateway 2000, Inc.*, 246 A.D.2d 246, 676 N.Y.S.2d 569 (1998) (holding that substantive unconscionability alone may justify an unconscionability finding, and that the expense of arbitrating before the ICC rendered an arbitration term in a standard-form agreement unconscionable). See also *In re RealNetworks, Inc. Privacy Litigation*, 2000 WL 631341, *6 (N.D. Ill. 2000) (upholding an arbitration provision in a clickwrap agreement against an unconscionability challenge where the user had an opportunity to review and understand it and despite the distance of the forum).

Illustration 2 is based on *M.A. Mortenson Co. v. Timberline Software*, 998 P.2d 305 (Wash. 2000).

Illustrations 3-5 and 7 are based on terms described in Annalee Newitz, *Dangerous Terms*, available at <http://www.eff.org/wp/eula.php>; see also John Borland & Rachel Konrad, *PC Invaders*, c/net News.com, Apr. 18, 2002, available at <http://news.com.com/2009-1023-885144.html>; Lydia Pallas Loren, *Slaying the Leather-Winged Demons in the Night: Reforming Copyright Owner Contracting with Clickwrap Misuse*, 30 Ohio N.U. L. Rev. 495 (2004). See also *Sony BMG Ends Legal Nightmare*, *Bus.Wk. Online*, Dec. 30, 2005 (describing Sony's settlement of a class-action suit brought by consumers over a hidden file Sony had installed on many of its music CDs). The file, designed to prevent making multiple copies of the CD, was "secretly installed" and opened computers on which it was installed to attacks by hackers. *Id.* In *Comb v. PayPal, Inc.*, 218 F. Supp. 2d 1165, 1172 (N.D. Cal. 2002), the court held that the clause in *Illustration 4* contributed to the agreement's substantive unconscionability.

Warranty and known defects

§ 3.05 Other Implied Warranties

(b) The transferor warrants to any party in the normal chain of distribution and to the end user that the software contains no material hidden defects of which the transferor was aware at the time of the transfer. This warranty may not be excluded. In addition, this warranty does not displace an action for misrepresentation or its remedies.

COMMENTS

b. Hidden defects. Subsection (b) applies when a transferor fails to disclose material hidden defects of which it is aware. A hidden defect means that the defect would not surface upon any testing that was or should have been performed by the transferee. See § 3.06(e). Negligence on the part of transferors in failing to discover defects is not covered by the Section and is the subject of product-liability law. Nor does the subsection displace the law of misrepresentation, which applies to affirmative statements meant to deceive. Under general contract principles, the mere failure to disclose may not be actionable as fraud or a misrepresentation, but inroads in the common law support the approach in subsection (b).

The nature of software means that end users should not expect perfection. Several Sections of these Principles shield publishers from inordinate liability, such as by enforcing disclaimers and remedy limitations. However, software transferors should have a duty to disclose known material hidden defects in order to allocate those risks to the party best able to accommodate or avoid them. Hidden material defects, known to the software transferor but not disclosed, shift their costs to the transferee who cannot learn of the defects for itself until it is too late and therefore cannot protect itself.

A material defect consists of a software error serious enough to constitute a material breach of the contract. As such, §*** and the common-law material-breach cases, Ch. 3. Performance § 3.05 which ask whether the injured party received substantially what it bargained for, inform the court's decision on whether a defect is material. Software that causes long periods of downtime or requires major workarounds to achieve contract-promised functionality ordinarily would constitute a material defect.

Unlike other implied warranties, the warranty of no hidden material defects may not be excluded. This too is in accord with common law. Disclosure duties generally cannot be controlled by contract. In addition, presumably software publishers, influenced by market concerns, would hesitate to exclude liability for defects of which they are aware. Instead, they would post a list of known defects on their website to insulate themselves from liability under subsection (b).

Warranty and known defects

§ 3.05 Other Implied Warranties

Illustrations:

2. B, a manufacturer of computer products, foresees the need for additional computer capability. B becomes interested in replacing its “Prime” operating system with an “Ultrix” system, but wants to continue using certain business-applications software for accounting and inventory tracking needs. This software is not compatible with the Ultrix system, so B acquires software from A called “uniVerse” that A claims in advertising and in statements to B will allow B to run its accounting and inventory software on the Ultrix system. At the time of the transfer of the uniVerse software, A knew of a defect in uniVerse that caused several previous problems with its use on an Ultrix system. In fact, B encountered difficulties using uniVerse almost immediately and A was not able to fix the problems. A has breached an express warranty and has misrepresented the capabilities of its product. A also has breached the implied warranty of no material hidden defects.
3. Same facts as Illustration 2, except that A has made no express warranties nor misrepresented the capabilities of “uniVerse.” Nevertheless, if A knew that uniVerse does not run on Ultrix systems because of a hidden defect in the software, A has breached the implied warranty of no material hidden defects. A did not breach the implied warranty of fitness for a particular purpose because B did not rely on A in selecting uniVerse.
4. Company A markets software for preparing construction bids. In a negotiated exchange in which A disclaims all warranties, Company B acquires the software and uses it to submit a bid. B loses a business opportunity because the software is defective and causes an inaccurate bid. An internal memo of A, written prior to the transfer, notes that an important bug exists in the software. A knew of the bug and fails to disclose it. A has breached the implied warranty of no material hidden defect. If the memo indicated that the bug was minor and that is all A knew, A has not breached the warranty.

REPORTERS’ NOTES

Comment a. Course of dealing and usage of trade. U.C.C. § 2-314(3), Comment 12, states in part that course of dealing and trade custom “can create warranties . . . that . . . are implied rather than express warranties and thus subject to exclusion or modification under Section 2-316.”

Comment b. Hidden defects. See Cem Kaner, Why You Should Oppose UCITA, 17 Computer Lawyer 20, 23 (2000). “[L]et the new law reduce publisher risk for losses caused by previously undiscovered defects or defects that were disclosed to the customer, but reduce the customer’s risk of losses caused by defects that were known and left hidden.” Id. at 24. According to Kaner, “[i]n mass-market software, a large proportion of defects (often the vast majority of them) that reach customers are discovered and intentionally left unfixed by the publisher before the product is released.” Id. at 23. See also M.A. Mortenson Co. v. Timberline Software Corp., 998 P.2d 305, 313 (Wash. Sup. Ct. 2000) (internal memo of software publisher notes that a “bug has been found”).

Warranty and known defects

Under the common law, a contracting party must disclose facts if they are under the party's control and the other party cannot reasonably be expected to learn the facts. See, e.g., *Bear Hollow, L.L.C. v. Moberk, L.L.C.*, 2006 WL 1642126 (W.D.N.C. 2006) (“[A] party negotiating at arm’s length has a duty to disclose . . . where one party has knowledge of a latent defect in the subject matter of the negotiations of which the other party is ignorant and which it is unable to discover through reasonable diligence.”); *Everts v. Parkinson*, 555 S.E.2d 667, 672 (N.C. Ct.App. 2001) (“[W]here a material defect is known to the seller, and he knows that the buyer is unaware of the defect and that it is not discoverable in the exercise of the buyer’s diligent attention or observation, the seller has a duty to disclose the existence of the defect to the buyer.”) (quoting *Carver v. Roberts*, 337 S.E.2d 126, 128 (N.C. Ct.App. 1985)); *Shapiro v. Sutherland*, 76 Cal. Rptr. 2d 101, 107 (Cal. Ct. App. 1998) (“Generally, where one party to a transaction has sole knowledge or access to material facts and knows that such facts are not known or reasonably discoverable by the other party, then a duty to disclose exists.”); *Johnson v. Davis*, 480 So. 2d 625, 629 (Fla. 1985) (“[W]here the seller of a home knows of facts materially affecting the value of the property which are not readily observable and are not known to the buyer, the seller is under a duty to disclose them to the buyer.”) For a discussion of materiality, see Restatement Second, Contracts § 241.

Illustration 1 is based on *Gindy Mfg. Corp. v. Cardinale Trucking Corp.*, 268 A.2d 345 (N.J. Super. Ct. Law Div. 1970).

Illustrations 2 and 3 are based on *Vmark Software, Inc. v. EMC Corporation*, 642 N.E.2d 587 (Mass. 1994) (“Delivery of a defective product without revealing the defects, to the extent they are known and material, is surely market disruptive . . .”).

Illustration 4 is based on *M.A. Mortenson Co. v. Timberline Software Corp.*, 998 P.2d 305, 313 (Wash. Sup. Ct. 2000) (internal software publisher notes that a “bug has been found”).

Acknowledgment

This work was partially supported by NSF Grant 0629454, Learning Units on Law & Ethics in Software Engineering.

Any opinions, findings and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.