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Principles of the Law of Software Contracts: Some Highlights

Robert A. Hillman
Cornell Law School, rah16@cornell.edu

Maureen O’Rourke
Boston University School of Law, morourke@bu.edu

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Principles of the Law of Software Contracts: Some Highlights

Robert A. Hillman*
Maureen A. O’Rourke†

I. INTRODUCTION ........................................................................... 1519

II. HIGHLIGHTS ............................................................................. 1522
   A. Nature of the Principles .................................................. 1522
   B. Enforcement of Terms Under Federal Intellectual Property Law ........................................ 1526
   C. Assent to Electronic Standard Forms ........................................ 1529
   D. Warranty Issues ................................................................. 1532
   E. The Implied Warranty of No Hidden Material Defects of Which the Transferor is Aware ........................................ 1534
   F. Automated Disablement .................................................... 1537

III. CONCLUSION .............................................................................. 1538

I. INTRODUCTION

The final draft of the Principles of the Law of Software Contracts (Principles) was approved by the American Law Institute (ALI) membership in May of 2009. The goal of the project is to “clarify and unify the law of software transactions.” However, the Principles will not become law in any jurisdiction unless and until a court adopts them, so only time will tell whether the project will accomplish this goal. (Of course, we believe that the Principles will be successful!) Nevertheless, one thing is certain. The current law of software transactions—a mish-mash of common law, Article 2 of the Uniform Commercial Code (UCC), and federal intellectual property law, among

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* Edward H. Woodruff Professor of Law, Cornell Law School. The author is the Reporter of the Principles of the Law of Software Contracts.
† Dean, Professor of Law, and Michaels Faculty Research Scholar, Boston University School of Law. The author is the Associate Reporter of the Principles of the Law of Software Contracts.


1519
other things—is in dire need of improvement.\(^2\) This should not be a surprise. Most of the bodies of law that courts draw upon to decide software contract cases predate software and are not responsive to its needs. But software transactions are too important to be relegated to a secondhand legal-subject-matter status.\(^3\)

In this Essay, we discuss the nature of the Software Principles and describe some of what we believe are their highlights. By highlights, we mean not only Principles that we believe are helpful contributions to the goal of clarification and unification of software contract law, but also those that have already received some attention because of their controversial nature. Specifically, we first explain the focus of our project, which itself presents some challenging issues. We then discuss several of the specific Principles. We present the Principles’ treatment of terms that may conflict with federal intellectual property law. We explain the Principles’ approach to the thorny issue of what constitutes assent to electronic standard forms. We illustrate how the Principles have modified some of the UCC’s warranty rules that, because of their fogginess, have created much litigation and controversy. Sticking with warranty issues, we discuss what is probably the most controversial Principle (at least among software vendors), namely, the nondisclaimable warranty of no material, hidden defects. Finally, we set forth the Principles’ treatment of automated disablement of software’s functionality.

We only have space for capsule discussions of the above Principles. For more complete treatment and, for that matter, for material on other important sections, we advise turning to the Principles themselves. But before we present our primer, here are two additional thoughts. First, some writers have noted that many of the Principles could apply more broadly to other subject matters, as if this were problematic.\(^4\) For example, our treatment of e-standard forms could apply not only to software transactions, but also, for example, to hard goods and services sold over the Internet. Relatedly, some scholars have written about the value of general contract law, arguing

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\(^2\) *Id.* introductory cmt. n.1 ("[A]cross most of the nation, software licenses exist in a legislative void. Legal scholars . . . have tried to fill that void, but their efforts have not kept pace with the world of business." (quoting I.LAN Sys., Inc. v. Netscout Serv. Level Corp., 183 F. Supp. 2d 328, 332 (D. Mass. 2002))).

\(^3\) *See id.* (discussing the importance of the software industry).

\(^4\) *See generally* Peter A. Ales & Chris Byrne, *Is It Time for the Restatement of Contracts, Fourth?*, 11 DUQ. BUS. L.J. 195 (2009). We do not comment here on most of the observations in other articles in this Symposium.
that something may be sacrificed in the process of specialization.\(^5\) Do these observations trouble us? Is there harm in breaking out from general contract law particular subject-matter principles?\(^6\) We think not. Indeed, we would welcome the application of the Principles to other subject matters where appropriate. Law reform has to start somewhere, and a focus on software transactions that are currently governed by law that predates even an inkling of the digital revolution, makes sense. In drafting the Principles (with great help from our ALI advisers, council members, and consultative group), we were able to focus on, among other things, the nature of software, the types of software transactions, and the parties to them. We could evaluate prospective rules in this field against the goals of clarity, efficiency, and fairness. We could avoid the level of generality in drafting that often produces legal ambiguity and limited usefulness, while nevertheless drafting rules that can accommodate future developments. We could consult with judges, lawyers, and software engineers in the field during over five years of receiving input and advice. And we could leave to other law reformers who are evaluating a new set of issues in another subject area, whether our rules makes sense in their domain. Ultimately, we believe that lawyers and judges engaged in software related issues are better off with the Principles as a resource to help guide them than without them.

Second, we admit to feeling a bit uncomfortable with the organizers’ title of this symposium: The Principles of the Law of Software Contracts: A Phoenix Rising from the Ashes of Article 2B and UCITA? We doubt that any work, at least on something as daunting as software transactions, merits the “phoenix” moniker. In addition, although the Uniform Computer Information Transactions Act (UCITA) has not been widely adopted, we relied on many of its ideas and provisions in drafting our Principles.\(^7\) We hardly think UCITA belongs in the ashes.

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7. See ALI PRINCIPLES, supra note 1, introductory cmt.
TULANE LAW REVIEW [Vol. 84:1519

II. HIGHLIGHTS
A. Nature of the Principles

The project is not an ALI restatement of the law, but as the name suggests, "Principles." We were inspired by other ALI projects such as Principles of Corporate Governance and Principles of the Law of Family Dissolution. As we state in the introduction to the Principles,

In light of the many percolating legal issues that pertain to the formation and enforcement of software agreements, an attempt to "restate" this law would be premature... Instead of restating the law, a "Principles" project accounts for the case law and recommends best practices, without unduly hindering the law's adaptability to future developments.

Accordingly, many of the "black letter" Principles are broadly drafted, with elaboration in the comments.

The Principles apply to software transfers supported by consideration, meaning software contracts, including contracts denominated as licenses, sales, or access contracts. For those who need a brief refresher on consideration, a promisor receives consideration for a promise if the promisor extracts from the promisee a return promise or a performance in exchange for the promise. The promisor's motive to gain something as the price of its promise (called consideration) need be only one of many reasons for making the promise.

Focusing on software contracts, regardless of the type, avoids issues arising from the label the parties place on a transaction. Regardless of whether the parties call their transaction a license, sale, lease, or something else, the Principles would apply and courts would avoid the question of whether the UCC's Article 2, common law, UCITA, or some other law governs the transaction. Further,

9. ALI PRINCIPLES, supra note 1, introductory cmt.
10. Id. § 1.06(a), § 1.06 cmt. b. For application of the consideration principle to software transactions, see Robert A. Hillman & Maureen A. O'Rourke, Rethinking Consideration in the Electronic Age, 61 HASTINGS L.J. 311 (2009).
12. Id. at 18 (citation omitted).
13. The Principles thus define "transfer" to include all methods of exchange, whether a sale, license, or something else. See ALI PRINCIPLES, supra note 1, § 1.01(m). Defining transfer in this way may be troubling to some who associate a specialized meaning with the term from intellectual property law or elsewhere. We, however, are not troubled. It is common for drafters of documents, including contracts and statutes, to define terms for the specific effort.
transactors' rights under the Principles generally do not depend on the label a drafter places on a transaction, but on "the legitimacy of the process of contracting and the meaning and appropriateness of the substantive terms." For example, an end user's right to ignore a term forbidding reverse engineering of the software should not depend on whether the parties labeled their transaction a sale or a license, but on the true substance of the deal and the term itself, including whether the term contradicts, for example, federal intellectual property law, state public policy or whether it is unconscionable. Of course, the distinction between a sale and a license may still be relevant. For example, an end user's right to ignore a term forbidding transfer of the software should depend in part on whether a "first sale" or an exhaustion of rights has occurred under federal intellectual property law. When relevant, courts can look to case law to make the distinction between a sale and license.

One scope issue that stands out is whether the Principles should apply to open source software transfers. The answer is "yes" for several reasons. On the formal legal side, as long as the transferee supplies consideration for the software and assents to the terms of the license, the parties have formed a contract, open source or not. So, for example, if a transferee pays money for open source software, the Principles apply. Very often, however, no money changes hands in open source transactions. The Principles also apply if an agreement

14. Id. ch. 1, topic 2, summary overview.
15. Id.
16. The Principles' position is that even if the transfer resembles a sale, in which case the intellectual property interest in freedom from restrictions on resale is at its height, courts should consider a number of factors before holding the restriction unenforceable. See id. § 1.09.
17. For a discussion of open source software, see Hillman & O'Rourke, supra note 10, at 313-14:

Although there are many different open source licenses, the General Public License (GPL) is likely the most common. To achieve the goal of creating a software commons, the GPL authorizes copyholders to transfer, copy, or modify the software subject to a series of restrictions. The restrictions are designed to further an environment of openness by requiring copyholders to reveal the source code to transferees of any software products that are derived from the original source code (often referred to as the "copyleft" provision) and to transfer such software under the same terms as the GPL ("same terms" provision), making the terms themselves "viral" in nature.

Id. (footnotes omitted).

"Copyleft" also refers to the overall system consisting of a number of terms that effectively prevent a licensee from asserting proprietary rights in the original open source software and any derivative works thereof. See Ira V. Heffan, Note, Copyleft: Licensing Collaborative Works in the Digital Age, 49 STAN. L. REV. 1487, 1507-08 (1997).
includes nonmonetary consideration, such as a promise to pay for maintenance of the software or ancillary services, or to provide the transferor with the source code of the transferee’s own software.18

Open source licenses also often include terms such as requiring the licensee to distribute derivative software under the same terms as the initial transfer (same terms provision) or requiring the licensee to keep the source code open if it transfers the software (copyleft provision).19 Such terms also should constitute consideration under contract law because the terms “go beyond simply defining the boundaries of the license[s]” by creating affirmative obligations if the transferee itself distributes the software.20 Further, licensors have multiple motives for “bargaining for” these provisions. For example, many licensors of open source software seek to further their philosophy of openness by creating a software commons to increase the uses of software for the benefit of society.21 Courts have found that such altruistic motives constitute evidence of bargained-for consideration.22 Licensors may benefit more directly by entering lucrative service contracts or by enhancing their reputations, which may lead to successful entrepreneurial activities.23

Technicalities of the consideration doctrine aside, it is an open secret that the consideration doctrine is sufficiently pliable to embrace enforcement of promises that increase society’s welfare, at least when the promises are capable of efficient judicial administration.24 And the value of open source software is not debatable. Open source software products are useful and important, and the movement has achieved its goal of increasing public access to software.25 In addition, “[T]he collaborative model arguably promotes better quality and reliable software in large part because skilled participants have . . . the luxury of ample spare time to devote to software development . . .”26

Still, open source licenses raise novel issues and some vendors have sought their exclusion from the Principles. But a comment to the

18. ALI PRINCIPLES, supra note 1, § 1.06 cmt. d.
20. Id. at 329.
21. Id. at 330.
24. Id. at 321-22.
25. Id. at 330.
26. Id.
Principles further explains why the project should apply to open-source licenses:

The open-source movement clearly raises novel issues, and some rules applicable to proprietary software apply awkwardly to open-source software. For example, open-source agreements generally do not restrict use, transfer, copying, or modification of the software, whereas such terms are common in agreements for the transfer of proprietary software and raise enforcement issues. Open-source software also raises unique issues of its own, for example, with respect to warranties and remedies. Unlike proprietary software, where warranties and remedies fit comfortably within a legal framework, the development of open-source software is often a large, dispersed group effort and, despite the quality and reliability of some open-source products, transferors often have little control over product quality.

Nevertheless, open-source software transfers share many characteristics with proprietary software. For example, the legality of restrictions on the use of open-source software, such as the "copyleft" requirement that a transferee provide the source code to recipients of the transferee's products derived from the transferor's source code, raise questions analogous to the enforcement of proprietary software's various restrictions on use. In addition, open-source licenses often announce that copying, exchanging, or modifying software constitutes acceptance of the terms of the license. This formation strategy raises issues analogous to the enforcement of shrinkwrap agreements in the proprietary setting. These Principles therefore can accommodate open source, with carve-outs and special rules as necessary.\(^{27}\)

As long as the Principles fulfill their goal of facilitating software exchanges, open source transfers belong in the Principles.

Here is one final thought before we turn to specific substantive Principles: Despite some assertions to the contrary, the underlying normative theory that guides the Principles is freedom of contract.\(^{28}\) The Principles contain only a few mandatory rules and many of these follow UCC Article 2 or common law.\(^{29}\)

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27. ALI PRINCIPLES, supra note 1, § 1.06 cmt. d (internal reference omitted).
28. See, e.g., Florencia Marotta Wurgler, Presentation at AALS Annual Meeting, Section on Commercial and Related Consumer Law (Jan. 9, 2010). Marotta-Wurgler asserts that the Principles assume market failure in the context of e-standard forms. But the Principles apply the common-law objective test of assent and set out a safe harbor that would satisfy this objective test. See ALI PRINCIPLES, supra note 1, § 2.02 & cmts. a-h.
29. Mandatory rules include id. §§ 1.13 (choice of law), 1.14 (forum selection), 2.03 (contract modification), 3.05(b) (warranty of no material hidden defects), 4.02 (liquidated damages), and 4.03 (automated disablement).
B. Enforcement of Terms Under Federal Intellectual Property Law

As with issues of scope, questions of enforceability of contractual provisions in light of federal intellectual property policy are complex. Aspects of software are often protected by state trade-secret law as well as federal copyright and patent law, and these sets of law are not necessarily consistent in their view of what contractual clauses are troublesome. Moreover, courts and commentators disagree on when, if ever, a court should hold a contractual provision unenforceable because it conflicts in some way with federal intellectual property law.\textsuperscript{3} This situation leaves a state court in a difficult position when faced with a challenge to enforceability of a contractual provision based on federal law. The Principles provide such courts with guidance.

Doubtlessly, some will find this guidance lacking in one way or another.\textsuperscript{31} Like UCITA's drafters, we found it difficult to provide definitive rules that would satisfy all interested groups. UCITA eventually settled on a provision stating simply: "A provision of this [Act] which is preempted by federal law is unenforceable to the extent of the preemption."\textsuperscript{32} In our earliest meetings, we attempted to provide more guidance and even discussed including in the "black letter" a list of certain common contractual provisions that would be presumptively unenforceable. Our advisers and the members convinced us that this approach was inappropriate not so much because it failed to reflect the law as it is but because of the changing nature of courts' interpretations of relevant federal doctrine and the always-fuzzy contours of preemption law generally. They felt this to be an area particularly appropriate for development through the common law. This approach resulted in "black letter," comments, and Reporters' Notes that an ALI Council member once said resembles a "research paper." This does not trouble us because we believe that the section outlines the relevant policy considerations and factors courts should consider in assessing a challenge to enforceability of a contractual provision based on inconsistency with intellectual property law.

The Principles take the position that courts should respect freedom of contract and generally enforce provisions affecting

\begin{itemize}
\item \textsuperscript{30} \textit{Id.} § 1.09 cmt. a.
\item \textsuperscript{32} \textit{Uniform Computer Information Transactions Act} § 105 (2002) (alteration in original).
\end{itemize}
intellectual property rights unless they conflict with a mandatory rule of intellectual property law. For example, parties cannot contract around the rule that an oral transfer of copyright ownership is unenforceable.\(^{33}\)

The Principles also recognize that not all contracts are alike and that how a contract is formed may have implications for the enforceability analysis. In short, case law reveals that courts are most concerned with state laws that have the effect of setting up a scheme of protection that would compete with the federal system.\(^{34}\) Because contracts affect only the parties to them, federal interests are generally not implicated in state enforcement of a private contract. However, when software is marketed under standard-form nonnegotiated agreements that modify rights the transferee would otherwise have under intellectual property law, state court enforcement of the agreement begins to look much more like a state scheme that competes with the federal system: End users cannot bargain to obtain the product with the rights the federal law would provide.

Thus, the Principles state, “A term of an agreement is unenforceable if it . . . conflicts impermissibly with the purposes and policies of federal intellectual property law . . . .”\(^{35}\) Some find this formulation odd—what is the difference between a conflict and an impermissible conflict? But the issue of conflict is, indeed, a matter of degree. If state enforcement of a term is likely to encourage providers to forego or routinely modify the federal law, the term may be unenforceable. If a provision conflicts in some minor way, it is enforceable. The Principles therefore set forth considerations for courts to assess in determining the extent of the conflict.\(^{36}\)

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34. *ALI Principles, supra* note 1, § 1.09 cmt. c.
35. *Id.* § 1.09.
36. *Id.* § 1.09 cmt. c. The comment provides in part:

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. whether and to what degree enforcement of the provision is likely to affect competition adversely;
4. whether and to what degree enforcement of the provision is likely to affect innovation adversely; and
5. whether the transferee has the opportunity to obtain the software free of the restriction at a reasonable price.
Others may argue that “purposes and policies” preemption is too uncertain, and will increase costs to transferors who will not know in advance what provisions are enforceable. We are not troubled by this objection. First, we are simply restating existing law. Second, we provide many examples to guide courts in assessing particular provisions.

The Principles differ from UCITA in their treatment of an important topic: the enforceability of contractual provision against reverse engineering. Section 118 of UCITA provides that such contractual provisions are unenforceable in certain circumstances without regard to the nature of the contract. We chose not to adopt this approach because we believe that the kind of contract should matter. For example, the argument for preemption of a provision against reverse engineering is stronger in the context of a standard-form nonnegotiated agreement and when the transferee cannot purchase the right to reverse engineer at a reasonable price than in the context of a negotiated agreement.

Id. § 118(b) (alterations in original).

40. Professors Moringiello and Reynolds note that we could have done more to provide guidance regarding the enforceability of provisions that restrict or place conditions on transfer. Moringiello & Reynolds, supra note 31. However, we decided that this area was best left to further common law development against the backdrop of the policy considerations we note. The case law determining whether a transfer is one of ownership rights in the intellectual property is reasonably well-developed and we saw no need to comment on it or to interfere with decisions of state courts on whether a particular transaction—for example, a merger—constitutes a transfer of ownership. The more difficult questions arise when a transfer is prohibited or severely restricted. Here again, the policy concerns are paramount in the context of a nonnegotiated, standard-form agreement when the transferee cannot purchase those rights for a reasonable price. The law here is inconsistent in both copyright and patent law. A state court will have to work with the federal precedent as it is and we hope that our guidance will assist them in that interpretation.
The Principles depart from the existing cases (which are small in number) that hold that a party defending against a breach of contract claim may not use a right holder’s misuse of the right as a defense. Misuse is an equitable doctrine developed first under patent law and later imported by courts into copyright law. An accused infringer may use misuse as a defense when the right holder has exceeded the scope of its rights in an anticompetitive way. If a court finds misuse, the right holder may not enforce its rights until it has purged itself of the misuse. We believe that the policy bases that support the misuse doctrine are essentially the same as those that underlie the preemption analysis and thus that the law would be better served by allowing parties to use misuse as a defense in a breach of contract action. Ultimately, state law would frustrate the goals of the intellectual property system if a right holder could enforce a provision in a breach of contract action that constitutes misuse under federal intellectual property law.

The Principles’ treatment of public policy supplements the section on unenforceability of terms under federal intellectual property law. Here we draw from the work of Jonathan Franklin and Professor Jerome Reichman. They suggest that public policy has a role to play in policing contractual provisions in standard forms that conflict with traditional federal and state intellectual property policies. We believe that their approach is essentially sound but do caution against judicial refusals to enforce terms in cases in which the public policy is not clearly fundamental.

C. Assent to Electronic Standard Forms

This problem addressed by the Principles hardly needs an explanation. It is common knowledge (and well-documented) that people do not read their standard forms before signing them and that the electronic age has not mitigated the problem, but may have exacerbated it. Entering contracts over the Internet is easy and fun.

41. ALI PRINCIPLES, supra note 1, § 1.09 cmt. d.
42. Id.
43. Id. § 1.10.
45. See id.
People seduced by the speed and ease of such transactions expect instant gratification, which hardly portends careful reading and analysis of standard forms. Yet the forms sometimes include "dangerous terms" that a careful reader would want to reject, such as automatic renewals, the right to modify the agreement without notice, and the right to download spyware on the transferee's computer. Further, more and more people download software over the Internet and click "I agree" to the governing e-standard forms so that the problem is now ubiquitous. What to do?

The Principles adopt the common law contract-formation rule based on whether a reasonable person would believe the transferee intends to contract. Of course, this provision hardly resolves the issue of assent raised by e-standard forms. However, the Principles also set forth a safe harbor transferors can follow to ensure enforcement of their forms. The goal is to encourage practices that promote disclosure and reading of terms before a transferee commits to a transfer.

We admit to being somewhat baffled by some analysts' resistance to the Principles' disclosure orientation. Even if transferees continue not to read—and we have no illusions that reading will increase


49. *Id.* § 2.02(b).

50. *Id.* § 2.02(c). In part, the section provides:

(c) A transferee will be deemed to have adopted a standard form as a contract if the standard form is reasonably accessible electronically prior to initiation of the transfer at issue;

(1) upon initiating the transfer, the transferee has reasonable notice of and access to the standard form before payment or, if there is no payment, before completion of the transfer;

(3) in the case of an electronic transfer of software, the transferee signifies agreement at the end of or adjacent to the electronic standard form, or in the case of a standard form printed on or attached to packaged software or separately wrapped from the software, the transferee does not . . . return the software unopened . . . within a reasonable time after the transfer; and

(4) the transferee can store and reproduce the standard form if presented electronically.

*Id.*

significantly—the practices increase the opportunity to read. This may be all we can hope for:

Increasing the opportunity to read supports autonomy reasons for enforcing software standard forms and substantiates Karl Llewellyn’s conception of transferees’ “blanket assent” to reasonable standard terms, so long as they have had a reasonable opportunity to read them. Blanket assent means that transferees have delegated to the drafter the duty of drafting reasonable boilerplate terms, just as they delegate to software transferors and engineers the duty of creating the appropriate software for the task at hand.52

Not only does disclosure increase the opportunity to read and enrich the concept of assent, it is consistent with notions of fair play and fundamental due process. For example, due process requires “fair warning,” which in the context of criminal law means that citizens can be punished only for violating laws on the books that “explicit[ly] . . . inform those who are subject to [the law] what conduct on their part will render them liable to its penalties.”53 But, of course, people rarely read or understand most criminal statutes. The point is that people could read them, just as increasing access to standard forms creates an opportunity for people to read them.54 To cite another example, “the importance of the common law principle of stare decisis does not depend on the proposition that people actually know and understand precedent, but on the notion that the legal texts are available to them.”55

The particulars of the safe harbor are not onerous and should cost transferors very little. To ensure enforcement of a standard form (assuming it does not violate federal law, state public policy, or the unconscionability standard), a transferor must make its standard form reasonably accessible electronically prior to any particular transaction, the transferee must receive reasonable notice of and access to the standard form upon initiating a transaction and prior to payment or completion of the transaction, the transferee must signify agreement at the end of or adjacent to an e-standard form, and the form must be capable of storage and reproduction, such as by printing a hard copy.56 (The Principles also provide analogous requirements for packaged

52. ALI PRINCIPLES, supra note 1, ch. 2, topic 2, summary overview (footnote omitted).
54. Thanks to Sherry Colb for this observation.
56. ALI PRINCIPLES, supra note 1, § 2.02(c).
Based on these requirements, the transferee can shop around and compare standard forms prior to initiating a purchase. Further, the safe harbor's requirement of what amounts to (under current technology) a "clickwrap" method of completion of a transaction, in which the transferee must click "I agree" adjacent to or at the end of the standard form, most closely resembles the signature requirement of a paper contract. Clickwrap therefore supports the presumption borrowed from the paper world that a signatory has read the contract. "Browsewrap," in which the transferee has to browse to find the governing form, would not suffice to satisfy the safe harbor.

Other proposals to deal with the problem of the lack of reading of standard forms include establishing a government agency to review terms, requiring more extensive clicking (at least of suspect terms), or creating a Web site that lists onerous terms or rates standard forms. Suffice it to say here that these approaches are either too expensive, intrusive, or unwieldy, or could easily supplement the disclosure approach of the Principles. For an example of the latter, the Principles' disclosure orientation that would make standard forms easily accessible should facilitate the creation of watchdog sites that would effectively collect terms that may overreach. If instituted, such Web sites should create incentives for software vendors to draft fair terms.

D. Warranty Issues

The Principles replace two impenetrable UCC Article 2 express warranty rules that have produced a great deal of litigation. Instead of the basis-of-the-bargain test of UCC section 2-313, the Principles provide that a promise or representation creates an express warranty if

57. Id.
58. Id. ch. 2, topic 2, summary overview. For more on clickwrap, see id. section 2.01 comment b.
59. Id. For more on browsewrap, see id. section 2.01 comment b. For further elaboration on the merits of disclosure, see Hillman & O'Rourke, supra note 55.
60. See Hillman & O’Rourke, supra note 55; ALL PRINCIPLES, supra note 1, ch. 2, topic 2, summary overview; Clayton P. Gillette, Preapproved Boilerplate, in BOILERPLATE: THE FOUNDATIONS OF MARKET CONTRACTS (Omri Ben-Shahar ed., 2006); Ben-Shahar, supra note 51.
61. UCC section 2-313(1) provides in part:
Express warranties by the seller are created as follows: (a) Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise.
a reasonable transferee could rely on it.\textsuperscript{62} Courts and commentators have debated endlessly whether “basis of the bargain” requires actual reliance on a representation or something else.\textsuperscript{63} Comment 3 to the section does not help in stating that “no particular reliance on [an affirmation of fact or promise] need be shown in order to weave them into the fabric of the agreement.”\textsuperscript{64} “[N]o particular reliance” and “weave them into the fabric of the agreement” seem like phrases calculated to cause confusion.\textsuperscript{65}

The basis-of-the-bargain test's lack of clarity “invites overreaching by sellers and manipulation by courts.”\textsuperscript{66} The Principles therefore drop the test and replace it with an objective test of whether reliance on the promise or representation would be reasonable.\textsuperscript{67} This test embraces and applies the factors necessary to distinguish between creating an express warranty and mere puffing or sales talk and would therefore be met when a representation is clear, specific, verifiable and unconditional.\textsuperscript{68} As one of us wrote elsewhere, “[s]uch a rule would clarify that the UCC’s ‘no particular reliance need be shown’ language really means that no actual reliance must be shown.”\textsuperscript{69}

The Principles also replace UCC section 2-316(1), which states in part: “Words or conduct relevant to the creation of an express warranty and words or conduct tending to negate or limit warranty shall be construed wherever reasonable as consistent ... but ... negation or limitation is inoperative to the extent that such construction is unreasonable.”\textsuperscript{70} Language creating warranties and disclaiming them cannot be “consistent,” and the meaning of this mysterious rule has also been fought out in the courts.\textsuperscript{71} The Principles therefore adopt a test alluded to in a comment to section 2-313 that ties enforcement of

\begin{itemize}
\item \textsuperscript{62} See ALI PRINCIPLES, supra note 1, § 3.02(c), § 3.02 cmt. f.
\item \textsuperscript{63} See, e.g., id. § 3.02 & reporters’ notes, cmt. a (and cases cited therein); see also Robert A. Hillman, U.C.C. Article 2 Express Warranties and Disclaimers in the Twenty-First Century, 11 Duq. Bus. L.J. 167, 168-70 (2009).
\item \textsuperscript{64} U.C.C. § 2-313 cmt. 3.
\item \textsuperscript{65} Hillman, supra note 63, at 168-70.
\item \textsuperscript{66} Id. at 170.
\item \textsuperscript{67} Section 3.02(b)(1) through (3) of the Principles provide that an express warranty may arise if a “reasonable transferee could rely” on an affirmation of fact or promise, a description, or a demonstration. ALI PRINCIPLES, supra note 1, § 3.02(b)(1)-(3).
\item \textsuperscript{68} Id. § 3.02 cmt. f.
\item \textsuperscript{69} Hillman, supra note 63, at 170.
\item \textsuperscript{70} U.C.C. § 2-316(1) (2004).
\item \textsuperscript{71} See, e.g., ALI PRINCIPLES, supra note 1, § 3.06 & reporters’ notes, cmt. a (and cases cited therein); see also Hillman, supra note 63, at 170-71.
\end{itemize}
disclaimers to whether they are "expected." This test is also objective,
meaning that if a reasonable buyer would not expect the disclaimer, it
should not be enforceable. Courts should compare the clarity and
distinctiveness of the language of warranty and disclaimer and the
context in which the seller presents each to determine whether a buyer
should be surprised by the seller's disclaimer.

E. The Implied Warranty of No Hidden Material Defects of Which
the Transferor is Aware

This warranty may be the most controversial Principle, at least
based on the reaction of some software providers. But we take solace
in the fact that business rarely likes new consumer (and here other end-
user) protection laws. Further, as the comment to section 3.05 points
out, subsection (b) does nothing more than memorialize existing law,
"including the contract obligation of good faith, the contract duty to
disclose, and fraudulent-concealment law."

72. Section 2-316(1) "protect[s] a buyer from unexpected and unbargained language
of disclaimer." U.C.C. § 2-316 cmt. 1. Courts often rely on this comment. See, e.g.,
Wis. 2006); Morningstar v. Hallett, 858 A.2d 125, 130-31 (Pa. Super. Ct. 2004); S. Energy

73. Hillman, supra note 63, at 171 (footnote omitted). For example:
[I]f a seller's agent very distinctly "guarantees" that a car will get 30 miles per
gallon, a reasonable buyer would expect the seller to stand behind the claim.
However, if a seller clearly states that its promises or representations are not legally
binding, and the seller includes a disclaimer in the written contract, a reasonable
buyer should understand that there are no express warranties. In addition, a
reasonable buyer would not be surprised by a disclaimer if the buyer was involved
in drafting the contract.

Id.

74. ALI PRINCIPLES, supra note 1, § 3.05(b).

75. See, e.g., Letter from the Linux Foundation and Microsoft to authors and
folders/5090/download.aspx.

76. ALI PRINCIPLES, supra note 1, § 3.05(b), 3.05 cmt. b & reporters' notes, cmt. b
(and cases cited therein).

Under the common law, a contracting party must disclose material facts if they are
under the party's control and the other party cannot reasonably be expected to learn
the facts. Failure to disclose in such circumstances may amount to a representation
that the fact does not exist and may be fraudulent. See, e.g., Hill v. Jones, 725 P.2d
1115, 1118-1119 (Ariz. Ct. App. 1986) ("Under certain circumstances there may
be a 'duty to speak'. . . [N]ondisclosure of a fact known to one party may be
equivalent to the assertion that the fact does not exist. . . . Thus, nondisclosure may
be equated with and given the same legal effect as fraud and misrepresentation.").
The Restatement Second of Contracts § 161(b) supports the Hill dictum: "A
person's non-disclosure of a fact known to him is equivalent to an assertion that the
The title of this warranty gives away its content. The transferor must know of the defect at the time of the transfer, the defect must be material, and it must be hidden. Some large software manufacturers such as Microsoft claim these tests will "increase[] litigation," a cry often heard by business in the face of regulation." But the Principles define each of these elements and largely rely on already tested standards. The comments elaborate:

The *time of the transfer* is the time of conveyance of rights in the software or of authorization to access software. If a transferor delivers a new version of software pursuant to an existing contract, the time of the transfer of the new version is the time of delivery. However, the transferor makes a § 3.05(b) warranty only with respect to the new version. The transferor is not liable under this Section for material defects in the original version if it did not know of them at the time of the transfer of the original version.

A *material* defect consists of a software error serious enough to constitute a material breach of the contract. Section 3.11 of these Principles and the well-established common-law material-breach doctrine, which ask whether the injured party received substantially what it bargained for and reasonably expected, inform the court's decision on whether a defect is material. Software that requires major workarounds to achieve contract-promised functionality and that causes long periods of downtime or never achieves promised functionality ordinarily would constitute a material defect.

A *hidden* material 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) of these Principles. Negligence on the part of transferors in failing to discover defects is not covered by the Section and is the subject of products-liability law. Nor does the subsection displace the law of misrepresentation, which applies to affirmative statements meant to deceive. As with fraudulent-concealment law, ordinarily § 3.05(b) should require an intent to deceive, which may be inferred if a transferor licenses software it knows is materially defective and knows the user cannot discover it upon an inspection.

Putting together the requirements of transferor actual knowledge of the defect at the time of the transfer, transferee reasonable lack of knowledge, and a defect that constitutes a material breach means that a transferor would not be liable if the transferor has received reports of problems but reasonably has not had time to investigate them, if the transferee’s problems are caused by uses of which the transferor is unaware, if the transferor learns of problems only after the transfer, if the problems are benign or require reasonable workarounds to achieve functionality. 78

Not only does existing law support this disclosure Principle, but it is wise law for many reasons. First, although software is often not perfect, and users should expect some flaws, software vendors should disclose known material hidden defects because they are better able to bear those risks or avoid them. “Hidden material defects, known to the software transferor but not disclosed, shift costs to the transferee who cannot learn of the defects until it is too late and therefore cannot protect itself.” 79 Further, disclosure increases welfare in that it “increases . . . the likelihood that each party will value what they get more than what they give up.” 80 In addition, disclosure reduces transaction costs, such as a duplicative (and by definition unavailing) search by the transferee to ascertain the quality of software. 81 Finally, disclosure will not reduce the transferor’s incentive to produce information in the first place because transferors inevitably will learn

78. ALI PRINCIPLES, supra note 1, § 3.05 cmt. b (internal reference omitted).
79. Id.
80. Hillman & O’Rourke, supra note 55; see also Alan Strudler, Moral Complexity in the Law of Nondisclosure, 45 UCLA L. REV. 337, 350 (1997) (“[T]he more information individuals possess about goods they buy and sell, the more reason society has to think that these goods will go to those who most value them, and hence, the better off society will be.”).
81. See, e.g., MICHAEL J. TREBILCOCK, THE LIMITS OF FREEDOM OF CONTRACT 112 (1993) (“[T]here should be a general presumption in favour of disclosure of material facts known to one party and unknown to the other;” because otherwise people will “invest in wasteful precautions to generate information about the asset that is already possessed by the first party.”). The transferee’s search will be unavailing because the disclosure principle applies only if the transferee cannot reasonably detect the problem itself.
about defects in the process of engineering and manufacturing the software. 82

The implied warranty of no material hidden defects cannot be disclaimed. A party should not be able to disclaim liability for what amounts to fraud, and case law supports this idea, too. 83 Further, the obligation of good faith means that a party cannot hide behind an "as is" clause or the like when it knows of a material defect that makes the software largely worthless to the transferee and knows that the transferee cannot reasonably detect the problem. 84 Instead, an "as is" clause should mean that the transferor is not liable for express promises or implied warranties of merchantability when it does not know that the software is materially defective and largely worthless. But a transferor can disclose material defects to insulate itself from liability under the subsection. 85

F. Automated Disablement

According to section 4.03 of the Principles, "Automated disablement" means the use of electronic means to disable or materially impair the functionality of software. 86 As a general matter, electronic self-help was one of the most contentious issues in the drafting of UCITA. Those who seek to disable software in an automated way fear that they may have no other effective remedy. 87 Those who wish to limit or prohibit automated disablement worry about security breaches that the disabling code may make more likely, damage to other files, and the harm to the business of the transferee who relies on the software to keep the business running. 88

The drafters of UCITA eventually prohibited the use of electronic self-help. 89 But the Principles acknowledge the differing views and strike a compromise. Section 4.03 and its comments clarify that the primary focus is on a transferor that reaches in and disables the software's functionality after an alleged breach by the transferee. 90 In such circumstances, the transferor may use automated disablement as

82. See Hillman & O'Rourke, supra note 55.
83. ALI PRINCIPLES, supra note 1, § 3.05 reporters' notes, cmt. b.
85. ALI PRINCIPLES, supra note 1, § 3.05 cmt. b.
86. Id. § 4.03(a).
87. Id. § 4.03 cmt. a.
88. Id.
89. See UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT § 816(b) (2002).
90. ALI PRINCIPLES, supra note 1, § 4.03(a).
long as it does not result "in the loss of: (i) rights granted in the agreement unless the transferee has materially breached and such rights do not survive the material breach; or (ii) the use of other software or digital content." Automated disablement under the Principles is also permissible under the same standards if the transferor is not using it as a remedy after breach, such as when a transferor builds a "time bomb" into software to reflect a term permitting use for a limited time.

The Principles place a number of restrictions on the use of automated disablement as a remedy for breach. It is not available at all in a standard-form transfer of generally available software (as those terms are defined in the Principles) or in a consumer agreement. A transferor may use automated disablement as a remedy outside of these contexts if the transferee's breach is material and automated disablement is permitted by a conspicuous term in the agreement; the transferor provides notice and time to cure; and the transferor has obtained a court order authorizing the disablement.

Regardless of the context in which a transferor uses automated disablement, parties cannot contract around the rules for automated disablement. Additionally a transferee may recover damages for the transferor's failure to comply with the section regardless of any term to the contrary in the agreement.

III. CONCLUSION

There is, of course, much more in the Principles, including an implied indemnification obligation against infringement, streamlined parol evidence and interpretation rules focusing on issues that arise in the software licensing setting, and guidance on breach and remedies in

91. Id. § 4.03(b). A "loss of . . . rights granted in the agreement" would occur, for example, if the transferor used a time bomb to disable software before expiration of the agreed term. Id.
92. Id. § 4.03 cmt. a.
93. Id. § 4.03(c)-(d).
94. Id. § 4.03(c).
95. Id. § 4.03(d).
96. Id. § 4.03(f).
97. Id. § 4.03(e). The provisions on automated disablement depart from the Principles' usual approach of freedom of contract. They reflect our belief that a provision authorizing automated disablement in the event of breach is unexpected, and disclosure is insufficient in the context of a consumer agreement or standard-form transfer. These are contexts in which disclosure is unlikely to be effective in bringing home to the transferee the possibility of automated disablement. The Principles also limit freedom of contract even in negotiated agreements. We adopted this approach after consideration of all of the conflicting interests involved and the input of the advisers, consultative group, and ALI members.
the software context. We believe the entire package should serve lawyers and judges well. As with any proposal that goes through many rounds of editing—in our case, over the course of five years of meetings with the advisers, ALI Members’ Consultative Group, the ALI Council and the ALI membership—it will not make everyone happy. Now that the ALI membership has adopted the Principles, we welcome particularly suggestions to courts on how to apply it and how it might provide further guidance as the law evolves.