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Scope of the Uniform Commercial Code: Advances in Technology and Survey of Computer Contracting Cases

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Scope of the Uniform Commercial Code: Advances in Technology and Survey of Computer Contracting Cases

By Amelia H. Boss,* Harold R. Weinberg,** and William J. Woodward, Jr.***

The Subcommittee on Scope of the Uniform Commercial Code ("Subcommittee") continues its work in a number of important areas at the cutting edge of the Uniform Commercial Code ("U.C.C." or "Code"). As a result of the report of the Computer Services Task Force, Software Licensing Contracts: Proposal for Study,  the National Conference of Commissioners on Uniform State Laws ("NCCUSL") appointed a study committee to consider whether to pursue the drafting of a computer software contracting statute. Professor Raymond Nimmer, the author of the Computer Services Task Force Report, served as Reporter to the study committee, which has recommended that NCCUSL undertake to draft a software contracting statute. The Subcommittee is actively monitoring and participating in this work of NCCUSL.

In addition to the Subcommittee's continuing work on intellectual property financing and services contracts, it has formed another task force to examine examples of conflict between the U.C.C. and other state and federal enactments...

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The following members of the Subcommittee on Scope of the U.C.C. contributed to this article: Ronald A. Anderson; W. Eugene Basanta; Michael S. Baum; Andrew Beckerman-Rodau; David M. Bosko; Robert Cantor; Michael Distelhorst; Henry C. Friend; Patricia B. Fry; Stephen M. Goodman; Samuel W. Gordon; Richard Harbus; Frederick B. Kruger; T. J. McCarthy; Bernard J. McNamee; Blake D. Miller; James F. Morgan; William J. O'Brien, Jr.; Mark F. Radcliffe; Jeffrey B. Ritter; Gary M. Schober; Brooke Schumm III; Dennis J. Wall; Benjamin Wright; and Julianna J. Zekan.

Unless otherwise specified, citations are to the 1987 Official Text of the Uniform Commercial Code.


2. Id. at 1516–18, 1521.
in the commercial law area. This task force will monitor proposed legislation and the attempts made to coordinate this legislation with existing or proposed U.C.C. provisions.

The work of the Electronic Messaging Task Force has continued at full speed and has resulted in the Subcommittee’s final adoption of an Electronic Messaging Report. The Subcommittee’s work in the electronic messaging and electronic data interchange areas is more fully developed in the following foreword to the Subcommittee’s contribution to the 1989 Uniform Commercial Code Annual Survey. Following the foreword is an update of current cases governing the law of computer contracting.

**FOREWORD: COPING WITH ADVANCES IN TECHNOLOGY; SHOULD THE LAW BE ACTIVE OR REACTIVE?**

The Subcommittee on Scope of the Uniform Commercial Code was created to examine legal transactions and legal issues at the edges or periphery of the Code. If one begins to think about the concepts of “scope” or “periphery,” a number of synonyms come to mind, such as border, circumference, or “the extent of one’s perception, understanding, knowledge or vision.” In many ways, these phrases describe the Subcommittee’s activities.

The Subcommittee has become intensively involved in the area of electronic messaging services and electronic data interchange. The Uniform Commercial Code was originally drafted as an attempt to treat, in a comprehensive and coherent manner, commercial transactions as they were being carried on between business (and non-business) entities. But times have changed since 1940, and with the change has come a veritable revolution in the way businesses do business. Two hundred years ago, the majority of business transactions were carried out on a face-to-face basis. With the advent and growth of the postal system, individuals began transacting business by mail through written correspondence. Later still, telephone and telegraph augmented the manner in which business was conducted. When the Code was drafted, these modes of communication had been around for some time and the Code rules were drafted with them in mind.

Since the 1940s, the technology revolution has enabled people to communicate electronically. Sitting at a computer terminal connected to a modem and a telephone wire, it is possible to send a message anywhere in the country (or throughout the world)—to another computer, to a telex machine, even to a telephone. Paper is being replaced by electronic signals as a mode of communication. This revolution calls into question some of the fundamental rules upon which our contracts and the U.C.C. were built. On a broader scale, electronic communication raises issues that include the rights and responsibili-

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3. That project is being headed by Professor William J. Woodward, Jr.
ties of providers and users of electronic mail systems, apportionment of respon-
sibility in the event of error, and authentication and privacy issues.

These developments challenge the legal community. Should the legal commu-
nity sit passively by, letting business struggle with the legal uncertainties of
these modes of communication, stepping in only to attempt to fashion airtight
agreements (where called upon to do so) or, more likely, to litigate controversies
when they arise? Or should the legal community become an active participant
in these developments, helping to channel and direct activity in the best interests
of all concerned? Indeed, these developments challenge the "extent of [our] percep-
tion, understanding, knowledge, or vision."

The Subcommittee on Scope of the U.C.C. has accepted the challenge. In the
fall of 1988, the Subcommittee adopted its final report on Electronic Messag-
ing, produced by the Electronic Messaging Services Task Force. That report
dealt with one small but crucial part of the legal quagmire surrounding
electronic messaging.

What is electronic messaging, and why should commercial lawyers be con-
cerned with a development that appears to be within the province of intellectual
property?

Assume a buyer wishes to place a purchase order with a particular vendor. In
the past buyers routinely dispatched written purchase orders in such situations,
but today buyers may choose a quicker way, placing an order electronically and
routing it through a communications network like ABA/Net to a "mailbox" of
the vendor. That "mailbox" is in essence a storage area where electronic signals
are kept under the "name" of the vendor. The message is stored there and held
until the vendor checks its mailbox and reads its messages. Some systems
automatically notify the vendor when it receives mail, thus facilitating quick
access to the contents.

Under a variation of electronic messaging, the system will go even further:
The message (the purchase order), rather than being stored in a mailbox until it
is read, goes directly to the vendor's own computer. Indeed, the system may be
structured so that no human ever directly generates or reads the electronic
documents because the entire transaction is accomplished electronically. For
example, a computer may monitor the buyer's inventory. When the inventory
level falls to a specified level, a purchase order is automatically generated and
sent to the vendor. Upon receipt by the vendor's system, the vendor's computer
may generate the necessary acknowledgements, send the necessary manufacture
or shipment orders, and electronically bill the buyer.

The use of electronic messaging, even in a sales context, is not limited to the
buyer and the seller. Where a sales document requires a letter of credit to be
issued or goods to be shipped under a bill of lading, those documents also may
be electronically generated. Thus, the sales transaction, from the issuance of the

6. That report, Electronic Messaging Report, is available as Product No. 507-0210 through the
Order Fulfillment Department of the American Bar Association, 750 N. Lake Shore Drive,
Chicago, IL 60611.
original purchase order, through shipment of the goods, to the ultimate payment, may be entirely electronic rather than paper-based.\(^7\)

Such “paperless” transactions raise significant legal questions involving the rights of the parties to the transaction, the rights of third party transferees, and the rights and responsibilities of the electronic messaging system providing the services. These are legal issues which exist whether we choose to deal with them or not.

By becoming involved at an early stage, the Subcommittee on Scope of the U.C.C. hopes to channel and focus the issues—and perhaps even venture a solution or two. In 1986, the Subcommittee formed a Task Force on Electronic Messaging Services to consider the impact of electronic mail and electronic data interchange on the formation and enforcement of contracts and related issues. In the task force’s final report on electronic messaging, the Subcommittee focused on many of the contracting issues, including the timing of contract formation, the impact of the statute of frauds, the battle of the forms in electronic interchanges, and conflict of law problems. The report urges evaluation of the present provisions of U.C.C. article 2 on sales and full consideration of the impact of electronic messaging systems and electronic data interchange on present contract formation provisions of the Code. A present Article 2 Study Committee,\(^8\) appointed under the auspices of the Permanent Editorial Board of the U.C.C., is currently studying whether to recommend amendments to article 2; undoubtedly, one major area of consideration will be electronic messaging issues.

In addition, the task force has undertaken a study of electronic messaging systems, electronic data interchange, and value-added network customer agreements. It is now working on a model pre-authorization agreement to be used between trading partners. The task force is continuing its study of the liabilities and responsibilities of both customers and providers of electronic messaging services.

The implications of electronic messaging range beyond the simple contracting sphere. Recognizing the wide range of issues raised by technological developments in communication, the international as well as domestic forums in which the issues should be discussed, and the need for coordination between legal, technological and business groups, the Subcommittee formed a Technology Coordinating Group in the fall of 1988.\(^9\) This group is currently forging coalitions with other groups in the field to examine the impact of electronic

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7. The “electronically-based” sales transaction is not limited to the strictly commercial or business context. With the growth of home computers and the proliferation of various on-line services, consumers can purchase goods and other services from the privacy of their homes via computer.

8. The Article 2 Study Committee is chaired by Professor Richard E. Speidel of Northwestern University School of Law. Its members are Glenn Arendsen; Amelia H. Boss; Professor Steven L. Harris; Professor Frederick H. Miller; Professor Charles W. Mooney, Jr.; John E. Murray, Jr.; Robert W. Weeks; and Professor James J. White.

9. The Technology Coordinating Group is chaired by Professor Patricia Brumfield Fry of the University of North Dakota Law School.
messaging in such areas as letters of credit, bills of lading, and international communications. The challenge is a monumental one.

Through its Technology Coordinating Group and Electronic Messaging Task Force, the Subcommittee is attempting to have the law join forces with business and technology in order to confront the future and master it.

SURVEY: COMPUTER CONTRACTING CASES

The Subcommittee considers areas on the periphery of the Uniform Commercial Code. Therefore, this survey is not limited to a discussion of cases directly applying the Code to computer contracts but generally discusses the underlying legal problems and solutions in the computer area. The discussion is not intended as an exhaustive review of computer law or the past year's developments. It highlights some of the more important recent developments and analyzes them in a broader conceptual framework.

APPLICABLE LAW

U.C.C. Article 2 and Computer Contracts

Article 2 applies to "transactions in goods." This scope provision is a persistent source of computer contract case law. The term "transaction" clearly includes "sales," but issues arise as to whether it encompasses a lease or a license. The limitation to "transactions in goods" raises questions such as whether article 2 applies to mixed transactions with both service and goods characteristics (e.g., a contract for the sale, installation, customizing, and maintenance of a computer). The question whether software is a good, a service, or an intangible also may confront counsel.

13. U.C.C. § 2-101. Article 2 is the "sales" article; U.C.C. § 2-106(1) provides that "[a] 'sale' consists in the passing of title from the seller to the buyer for a price."
15. U.C.C. § 2-102. U.C.C. § 2-105(1) provides in part: "'Goods' means all things (including specially manufactured goods) which are moveable at the time of identification to the contract for sale other than . . . things in action."
Word Management Corp. v. AT&T Information Systems\textsuperscript{16} involved an allegedly mixed sale and service transaction and illustrates some of the stakes that may depend on whether article 2 applies. AT&T, which sells and services communications equipment, contracted with Word, a computer typesetter, for the sale of equipment that would provide Word with telephone communications and information transfers between computers. The equipment did not function as required, and Word alleged negligence on the part of AT&T in failing to make it operational. The court stated that it had to decide whether the transaction was a sale of goods within article 2 because, if it were, Word would be limited to contract remedies and could not maintain tort causes of action.\textsuperscript{17} If the transaction were predominantly service-oriented, on the other hand, then the claims would fall outside the Code and Word would have no cause of action for breach of warranty but would only have actions sounding in tort (unless, perhaps, there was breach of an express warranty). The court determined that the contract was for a sale of goods, not services.\textsuperscript{18} There was nothing to indicate that AT&T was to perform any services other than installing the equipment and making it operational. While it was obvious that some services were involved, they were insufficient to make the contract one for services.\textsuperscript{19}

Sometimes a case raises multiple and overlapping article 2 scope issues. A recent example, Communications Groups, Inc. v. Warner Communications Inc.,\textsuperscript{20} arose out of an alleged breach of an agreement for the licensing, installation, and servicing of a computer software package. Subsequently, the parties entered into two contracts for additional software and related hardware. The threshold legal issue was whether the “software computer package or system” or “software equipment,” as it was referred to by the court, involved a transaction in goods.\textsuperscript{21} The court reasoned that, regardless of the specific form or use of the software, it generally is considered to be a tangible and movable item, not merely an intangible idea or thought. Therefore, the software qualified as goods. This was so even though the ideas and concepts of the specially designed software system remained the vendor’s intellectual and copyrightable property under the agreement.\textsuperscript{22}

The vendor also contended that the transaction was not a “sale” within U.C.C. section 2-106 because no title passed from the vendor to the vendee.\textsuperscript{23} The court disagreed, noting that other opinions liberally construe the meaning

\begin{itemize}
  \item \textsuperscript{16} 525 N.Y.S.2d 433 (N.Y. App. Div. 1988).
  \item \textsuperscript{17} Word had stated claims for both breach of warranty and negligence. The court raised the issue of article 2 applicability noting that if article 2 applied, then Word had no cause of action in negligence. The court raised the issue because Word alleged that the product did not perform as promised and sought recovery for economic loss but not personal injury or property damages. \textit{Id.} at 435–36.
  \item \textsuperscript{18} \textit{Id.} at 434.
  \item \textsuperscript{19} \textit{Id.} at 436.
  \item \textsuperscript{20} 527 N.Y.S.2d 341, 6 U.C.C. Rep. Serv. 2d (Callaghan) 636 (N.Y. Civ. Ct. 1988).
  \item \textsuperscript{21} \textit{Id.} at 343, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 638.
  \item \textsuperscript{22} \textit{Id.} at 344, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 639.
  \item \textsuperscript{23} \textit{Id.} at 345, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 640. \textit{See supra} note 13.
\end{itemize}
of "transaction" and analyze the underlying agreement to determine whether it sufficiently resembles a sale. The court observed that other courts apply article 2 to leases of chattels, even though the lessor retains title to the goods, where the rental payments under the lease are as large as the sales price of the same item. Such a transaction is sufficiently analogous to a sale to be covered by the U.C.C. and the Communications court adopted this mode of analysis. However, because the economic effect of the agreement was unclear from the agreement itself and the court lacked information as to the actual value of the software, the issues could not be resolved without a trial.24

Word and Communications are examples of cases where courts have applied U.C.C. article 2 to computer contracts after giving deliberate consideration to the scope issue. Other times the Code has not been applied or has been supplemented by extra-Code principles of law.25 For example, one recent opinion relied on real property law to determine the rights of the assignee of a computer lessor upon default by the lessee.26 The special remedies and relief available to buyers under the deceptive practices and consumer protection laws of some jurisdictions are additional examples of supplemental extra-Code law which have been applied.27

THE BARGAINING PROCESS

Enforceability: Satisfying the Statute of Frauds

Computer contracts for which there is absolutely no writing are probably unusual, given the substantial and variable price of most software, hardware, and computer-related components and services. However, in the interests of reducing contracting costs, parties often use standardized forms, informal memoranda, or other documentation that is not carefully tailored to the transaction or prepared with the statute of frauds in mind. This can lead to a statute of frauds challenge, as illustrated by Procyon Corp. v. Components Direct, Inc.28

Components agreed to sell 1,000 computer memory chips to Procyon, guaranteeing delivery within six weeks from the date of the oral agreement. Because Procyon cancelled several previous orders, Components required Procyon to obtain an irrevocable letter of credit issued to Components's bank. The letter of credit included a description of the chips, sales price, date of delivery, names of parties, and the issuing bank's warranty that proper payments would be made under the terms of the agreement. Components, however, failed to deliver the chips at the proper time, and Procyon sued Components for breach of the contract. Components asserted that the contract was unenforceable under

24. Id. at 346, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 641.
25. See U.C.C. § 1-103.
27. U.C.C. § 2-102 (article 2 does not "impair or repeal statutes regulating sales to consumers or other specified classes of buyers"); see infra text accompanying notes 123–25.
U.C.C. section 2-201(1) because Components had not signed any writing sufficient to indicate a contract for sale. Components also argued that the letter of credit did not constitute a written confirmation "sufficient against the sender" under the "merchant's confirmation" exception in U.C.C. section 2-201(2) because it lacked the signature of Procyon's authorized agent.

The California Court of Appeal disagreed, reasoning that this exception does not require the sender's own signature on the writing because this requirement would be inconsistent with the exception's policy of encouraging rapid confirmations. The court stated that for a writing to be "sufficient against the sender" the confirmation must satisfy the general statute of frauds requirements of section 2-201(1). The letter of credit was sufficient to establish a contract enforceable against Procyon under this standard. The "signing" requirement of section 2-201(1) was met because Procyon's bank was acting as Procyon's agent and, under the U.C.C. definition of "signed," the bank's signature on the letter of credit was equivalent to Procyon's and was "adopted by [Procyon] with present intention to authenticate" the writing. The description of the transaction in the letter met the requirement of a writing sufficient to indicate that a contract had been made. The court stated that one purpose of section 2-201(2) is to equalize the positions of both parties to a contract so that the party who did not sign the written confirmation should not be able to "watch a fluctuating market knowing he can bind but not be bound." Because the very purpose of the letter of credit was to bind Procyon, Components should not be able to assert that it is not bound.

Establishing Contractual Relations

Unenforceability under the statute of frauds is not the only risk of using standard forms or informal memoranda in the bargaining process. Contract

29. Id. at 814, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 656. For purposes of the issue presented in the case, the California statute is identical to the U.C.C. The relevant part of U.C.C. § 2-201(1) provides:

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

30. 249 Cal. Rptr. at 815, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 657. The relevant part of this exception provides:

Between merchants if within a reasonable time a writing in confirmation of the contract and sufficient against the sender is received and the party receiving it has reason to know its contents, it satisfies the requirements of subsection (1) against such party . . . .

U.C.C. § 2-201(2).

31. Cf. J. White & R. Summers. Uniform Commercial Code 81 (3d ed. 1988) ("the writing must be 'sufficient against the sender,' that is, it must be signed by him . . .").

32. Procyon Corp., 249 Cal. Rptr. at 815, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 658; U.C.C. § 1-201(39).

33. Procyon Corp., 249 Cal. Rptr. at 816, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 658.
formation issues continue to arise in cases involving the computer industry. As
the plaintiff in United States Leasing Corp. v. City of Chicopee\textsuperscript{34} discovered, one
must ensure that a contract with a governmental unit has been properly
executed under local government law. In that case, the plaintiff lessor agreed to
buy a computer system and lease it to the city for five years. After two annual
payments, the city became dissatisfied with the system and stopped paying.
When the lessor sued, the city moved for summary judgment on the grounds
that there was no valid contract because the mayor had not signed the contract
as required by the city charter. Citing its strong rule that "one dealing with a
city or town cannot recover if statutory requirements such as are contained in
the [city] charter have not been observed," the court ruled for the city even
though the contract had been signed by the school superintendent and the city
purchasing agent and was supported by the city solicitor's statement that the
agreement was binding.\textsuperscript{35}

Alloy Computer Products v. Northern Telecom, Inc.\textsuperscript{36} is another contract
formation case, involving the application of U.C.C. section 2-207.\textsuperscript{37} In that case,
the plaintiff Alloy regularly purchased tape drive units from defendant North-
ern, a manufacturer. Alloy alleged that one shipment failed to conform to
express warranties of quality, damaging both Alloy and its customers. During
derailings Alloy sent purchase orders to Northern, which then shipped tape
drives with a document stating "General Terms and Conditions of Sale." These
documents included a "limited warranty" clause limiting the buyer's remedy to
replacement or repair of defective goods. In analyzing this pattern the court
relied on the earlier, much-maligned case of Roto-Lith, Ltd. v. F.P. Bartlett &
Co.,\textsuperscript{38} which, in applying U.C.C. section 2-207, declared that "a response
which states a condition materially altering the obligation solely to the disadvan-

\textsuperscript{34} 521 N.E.2d 741 (Mass. 1988).
\textsuperscript{35} Id. at 743.
\textsuperscript{37} The relevant portions of this section provide:

(1) A definite and seasonable expression of acceptance or a written confirmation which is sent
within a reasonable time operates as an acceptance even though it states terms additional to or
different from those offered or agreed upon, unless acceptance is expressly made conditional on
assent to the additional or different terms.

(2) The additional terms are to be construed as proposals for addition to the contract. Between
merchants such terms become part of the contract unless:

(a) the offer expressly limits acceptance to the terms of the offer;
(b) they materially alter it; or
(c) notification of objection to them has already been given or is given within a reasonable
time after notice of them is received.

U.C.C. § 2-207.

\textsuperscript{38} 297 F.2d 497, 1 U.C.C. Rep. Serv. (Callaghan) 73 (1st Cir. 1962). The Alloy court noted
that Roto-Lith has been widely criticized but said it was nonetheless binding in the circuit. Alloy
tage of the offeror is an acceptance... expressly... conditional on assent to the additional... terms.'

Under this approach Alloy's purchase order was an offer and Northern's document an acceptance containing a condition that materially altered an obligation solely to the disadvantage of Alloy by limiting its remedies to repair or replacement. Alloy assented to this material alteration in terms when it accepted the tape drives even though the goods were defective. Although the Alloy case may be justified as one in which the parties had a continued pattern of doing business and therefore the receipt of a shipment accompanied by a limitation on warranties was to be expected by the buyer, it nonetheless demonstrates the dangers in ignoring the form documents routinely exchanged in sales transactions.

Conduct of the parties to an alleged computer agreement and language in the relevant documents can lead a court to the conclusion that there is no contract at all. In Jim L. Shetakis Distributing Co. v. Centel Communications Co., language in the sales agreement required that signatures be affixed in a particular manner. The court applied the long-standing rule that, where circumstances indicate that a particular manner of contract formation is contemplated by the parties, a binding contract is not formed without compliance with the contemplated procedure.

**Silence as Acceptance: The Enforceability of "Shrink-Wrap" Licenses**

Special contract formation problems arise in connection with the sale of mass-market software. Typically a license agreement on matters such as the copying, sale, and disassembly of the program is included in the packaging or documentation that accompanies the software. The license purports to condition the right to use the program on acceptance of its terms and provides that opening the package legally constitutes acceptance of the license. This approach is problematic under U.C.C. article 2 or other contract formation principles. The terms are neither called to the attention of nor signed by the purchaser at the time of the transaction, and the purchaser's silence may reflect ignorance or misunderstanding rather than informed acquiescence. As a result, there is serious question whether an "acceptance" and contract formation (on whatever terms happen to be printed by the manufacturer on the wrapper) can arise from

39. Alloy Computer Prods., 683 F. Supp. at 14, 5 U.C.C. Rep. Serv. 2d (Callaghan) at 1304 (quoting Roto-Lith, 297 F.2d at 500, 1 U.C.C. Rep. Serv. (Callaghan) at 76). The Alloy court noted that, despite the criticism of the Roto-Lith case, it continues as binding precedent in the circuit and has been cited several times without modification or abandonment.


42. Id. at 1188. The court found the governing legal principle in U.C.C. § 2-206(1) (an offer to make a contract may be accepted in any reasonable manner unless otherwise unambiguously indicated by the language or circumstances) and non-Code law.


44. Id.
the licensee's opening the plastic. To remedy this and other problems, some jurisdictions have enacted so-called "shrink-wrap" statutes that mandate the enforceability of certain license terms notwithstanding problems of traditional contract formation.\footnote{45}

Vault Corp. v. Quaid Software, Ltd.\footnote{46} involved the Louisiana "shrink-wrap" statute.\footnote{47} Vault produced and copyrighted a very effective anticopying program, "ProLok," and marketed it under shrink-wrap licenses. Quaid used ProLok not to achieve anticopying protection, but to develop a software program that would defeat ProLok's anticopying purpose and permit copying of the very software that ProLok was intended to protect. Vault asserted that Quaid infringed its copyright and violated the license agreement and the Louisiana shrink-wrap statute.\footnote{48} The Fifth Circuit held that the Louisiana statute's severe restrictions against all copying and sales impermissibly conflicted with the federal Copyright Act\footnote{49} and that the private license agreement would be required to conform to the federal statute where, as in this case, the state statute was preempted.\footnote{50} Vault apparently did not raise the contract formation issue or assert that tearing open the wrapper constituted valid acceptance of the terms of the license. Thus the question remains open as to whether the shrink-wrap license can support a claim for breach of contract when the contract terms are more restrictive than the Copyright Act. One might interpret this opinion as suggesting that prudent vendors of software should draft shrink-wrap licenses to be no more restrictive than the federal law allows. To the extent that technological advances and Vault have eroded the copy protections in the software industry, software developers may seek new federal legislation. This may be the best approach.\footnote{51}

\footnote{45} "Shrink-wrap" licenses derive their name from the manner of packaging and mode of acceptance. The terms of the license agreement are prominently displayed beneath the transparent cellophane wrapper of the software package. Since the cellophane is heat shrunk to fit the package, the agreement is known as a "shrink-wrap license." See generally Note, The "Soft" Existing Legal Protection of Software and the Preemption of State Shrink-Wrap License Enforcement Acts, 8 N. Ill. U.L. Rev. 531 (1988); Note, The Protection of Computer Software Through Shrink-Wrap License Agreements, 42 Wash. & Lee L. Rev. 1347, 1350 n.9 (1985).

\footnote{46} 655 F. Supp. 750 (E.D. La. 1987), aff'd, 847 F.2d 255 (5th Cir. 1988). See also Vault Corp. v. Quaid Software, Ltd., 775 F.2d 638 (5th Cir. 1985) (order of dismissal for lack of personal jurisdiction reversed). There were virtually no legal precedents confirming the validity of shrink-wrap licenses for software. Thus, the case generated considerable interest among software vendors and users. See Ruby, Breaking the Copy-Protection Barriers, PC Week, Apr. 8, 1986, at 45.


\footnote{48} Initially there was also a claim that Quaid had violated the Louisiana trade secrets act. 847 F.2d at 268.


\footnote{50} 847 F.2d at 269-70. See 17 U.S.C. § 301; C. Knapp, Commercial Damages § 39.02 (1)(a) (1986). The Vault court further held that a copyright owner's exclusive rights under the Copyright Act are limited by the user's rights to load the software into its computer and to make an archival copy of the program. 847 F.2d at 260-67. See 17 U.S.C. §§ 106, 117.

\footnote{51} Nonuniform state legislative efforts with respect to shrink-wrap licenses could have a potentially adverse impact on the computer industry. See generally Boss & Woodward, supra note 1, at 1519. Legislative efforts in Arizona, California, Georgia, Hawaii, Massachusetts, and
Merger Clauses and Contract Terms

Very often in the negotiation of a computer contract, written technical specifications are exchanged by the parties but are not expressly incorporated into the main contract. *Hoover Universal, Inc. v. Brockway Imco, Inc.*, although not a computer contracting case, demonstrates the perils in such a situation. In connection with its purchase of a machine for manufacturing plastic bottles (the "ORB VI"), Hoover Universal was presented with a handout by Imco which summarized certain technical data relating to the operation of the ORB VI. The handout was distributed by Imco and reviewed by Hoover Universal during their preliminary negotiations. The final agreement, however, contained both a broad warranty disclaimer, disavowing any and all warranties and representations as to the ORB VI, and a merger clause stating, in relevant part: "This Agreement represents the entire understanding between the parties."

As could be expected, the ORB VI failed to perform in accordance with the specifications contained in the handout, and Hoover Universal sued on an express warranty theory.

The court's analysis was simple. As the sales contract contained a standard merger clause and made no reference to the specifications relied upon by Hoover Universal, the parol evidence rule precluded the buyer from establishing an express warranty based upon statements in the handout. Furthermore, Hoover Universal's attempt to introduce evidence of trade usage to explain or supplement the provisions of the agreement was not permitted, as the court determined that such information would contradict the limitation of warranties provision contained in the definitive agreement. As a result, Hoover Universal was left with a piece of equipment that did not perform as expected and without any way of proving its breach of warranty claim.

The lesson is simple for those who acquire computer hardware or software systems. If a written specification or other document describing the technical performance standards of the computer system is important enough to form part of the basis of the bargain between the parties, make sure that such materials are specifically incorporated into the final agreement between the parties.

Washington appear to have been abandoned, and the Illinois shrink-wrap statute has been repealed. Pub. Act 85-254, 1987 Ill. Laws vol. 1 at 1538. Alternative legal and marketing strategies also seem to be developing. For example, users with multiple computer needs may be offered deep discounts for additional copies of software to be used in the same company. See generally Taylor, *The Master Copiers*, PC Mag., Jan. 14, 1986, at 178.

52. 809 F.2d 1039 (4th Cir. 1987).
53. *Id.* at 1042.
55. 809 F.2d at 1043. The statements in the handout were in fact incorrect, but neither Hoover Universal nor Imco was aware of the inaccuracy.
56. *Id.*
The Problem of Meaning: Interpreting the Contract

The great majority of computer contracts provide little opportunity to dispute the actual existence of an enforceable agreement. However, the written and oral language and conduct which clearly create a contract of some sort may still be ambiguous as to the exact terms. Computer contracts may be a particularly rich source for disputes concerning the interpretation of bargains\textsuperscript{57} because the subject matter of these contracts is often very complex and expensive, yet market pressures force the parties to negotiate the contracts quickly and with a minimum of deliberation. Determining the meaning of many computer contracts may also be difficult because the rapidly changing technology and standards of the industry give little guidance to the courts. Moreover, the specialized terms used in the industry often have multiple meanings. For example, "software" lacks a uniform meaning and is defined differently by different experts in the computer field.\textsuperscript{58} Of course, all of this highlights the need for careful drafting to minimize disputes.\textsuperscript{59}

Storage Technology Corp. v. Trust Co. of New Jersey\textsuperscript{60} illustrates the importance in contract interpretation of accepted and provable industry standards. This case involved cross allegations of default under a lease of peripheral computer hardware and software. Trust Company, as lessee of the equipment, had invoked a lease provision for upgrade of the equipment to make it compatible with a new computer. Storage Technology, the lessor, refused, claiming that the lease did not require it to make the requested upgrade but only required it to make "field installable upgrades."\textsuperscript{61} Trust Company contended that the provision was unambiguous and could be construed from the plain meaning in the lease to cover any equipment substitution (presumably because all upgrades are ultimately installed in the field). However, the court accepted Storage Technology's view that the phrase was not "plain and unambiguous."\textsuperscript{62} It thereby allowed expert testimony to show that the lease required only an equipment upgrade which could be installed on an existing piece of equipment in the field by an engineer without shipment of that equipment to another location. Since

\textsuperscript{57} See, e.g., Brook Mays Music Co. v. National Cash Register Co., 838 F.2d 1396 (5th Cir. 1988) (whether an arbitration clause applies to the sale of a second computer system); Cullinet Software, Inc. v. McCormack & Dodge Corp., 400 Mass. 775, 511 N.E.2d 1101 (1987) (whether a software license included worldwide rights to use and sublicense the software at the end of a five-year period).


\textsuperscript{60} 842 F.2d 54 (3d Cir. 1988).

\textsuperscript{61} Id. at 55.

\textsuperscript{62} Id. at 56.
the requested upgrade could not be done in the field, Storage Technology's interpretation of the lease prevailed.63

Another recent interpretation case involved the issue of acceptance of the supplier's performance under a contract for the construction and delivery of a complex computer-controlled navigational aid.64 In the course of its analysis, the court examined the contract's terms and extrinsic evidence including course of performance.65 The case highlights how important it is for vendor and vendee in a computer contract to define explicitly when acceptance of the vendor's performance occurs.66 Contracts for computer hardware and software often include clauses requiring performance testing after installation. Although it seems obvious that a vendee would not "accept" computer products before they undergo contractually specified tests, parties to these agreements should specify in their writing that acceptance of hardware and software will occur only after testing is concluded. In addition, the contract should clearly define how completion of the testing is to be documented. Even though the negotiation of performance testing and acceptance criteria is perhaps one of the most difficult and controversial considerations in any contract, the benefits from anticipating and addressing the problems are apparent.

Similarly, computer leases commonly contain termination clauses relating to obsolescence of equipment, and their interpretation is frequently a cause of dispute which might be avoided by cautious drafting.67 Ambiguous express warranties also can lead to litigation.68

63. Id. Although the court did not rely on the U.C.C., this result could have been reached under the Code. U.C.C. § 2-202(a) provides that a written agreement intended by the parties as a final expression of their agreement can be explained or supplemented "by course of dealing, usage of trade, or by course of performance." See also U.C.C. §§ 1-205, 2-208. Storage Technology submitted expert evidence as to a specific meaning within the computer industry of the phrase "field installable upgrade," and that view was accepted by the court. Until the adoption of U.C.C. article 2A, which deals with this in § 2A-202, if a lease of goods is involved, it may be appropriate to apply an article 2 sale of goods analysis to computer leases.


65. Id. at 968-70. U.C.C. § 2-208 permits evidence of course of performance for interpretive purposes.

66. The significance of this for article 2 purposes is that, with limited exceptions, acceptance of the goods ends the vendee's option to return the goods to the vendor following breach. Unless the vendee "revoke acceptance," the vendee will be limited to the remedy of damages for breach. U.C.C. § 2-608. In Sperry, 845 F.2d at 968, the significance was that the government had to exercise an option within 120 days following "acceptance," the parties in litigation disagreed on whether the government's attempted exercise of the option was timely.


68. See, e.g., Word Management Corp. v. Information Sys., 525 N.Y.S.2d 433 (N.Y. App. Div. 1988). The court there noted that neither the contract's merger clause nor the parol evidence rule (U.C.C. § 2-202) would prohibit collateral evidence concerning express warranties because such evidence would not modify or contradict the terms of the contract but would explain ambiguities in the contract. See also U.C.C. § 2-316(1). The contract referred to the seller's "standard specifications," indicating that it was not the entire agreement of the parties. 525 N.Y.S.2d at 435.
The court resolved several interpretation problems arising from contract language in Shauers v. Board of County Commissioners. The case involved a programmer and customer fighting over ownership of the programmer's work product. Shauers agreed with Sweetwater County that she would provide programming services. She developed several programs, some of which were sold to other counties with her oral (but not written) consent although the contract required written consent for any transfer. In the later dispute between Shauers and Sweetwater County, the court split ownership of the software into three components. Since neither the contract nor the works-for-hire doctrine covered the material objects embodying the programs and since the deal contained elements of a sale, the material objects belonged to the county. As to the ideas and concepts behind the programs, the court held, based on the contract language, that these belonged to Shauers. As to the right to transfer the programs, the court held that a triable question of fact existed, and it reversed the district court's order granting summary judgment. While the contract language clearly reserved this right for Shauers, there was disagreement about the exact terms of the oral agreement allowing sales to other counties.

**COMPUTER PRODUCTS LIABILITY**

Claims by dissatisfied vendees typically present a cluster of U.C.C. article 2 issues concerning the existence or breach of express or implied warranties, the efficacy of warranty disclaimer or limitation of remedy clauses, and so forth. There is a continuing trend of cases in which purchasers attempt to avoid limitations imposed by the Code and obtain "justice" outside its scope. These cases also commonly include tort claims sounding in misrepresentation or negligence. The frequency of fraud claims in the computer field may be related to numerous factors, including the industry's rapid technological change (which can make once-attractive bargains look less desirable) and, perhaps, excessive "puffery." The service component of many computer contracts (e.g., the modification of hardware or customizing of software) may be a source of claims sounding in negligence. Tort claims may also be brought to avoid either contractual limits on the vendor's warranty liability or very heavy-handed vendor documentation.

69. 746 P.2d 444 (Wyo. 1987).
70. Id. at 446.
71. The agreement in Shauers contained the following clause:

In addition, Sydney [Shauers] shall not be required to keep confidential any ideas, concepts, or techniques relating to data processing which are submitted or developed in the course of this agreement by Sydney or jointly by Sydney and Customer's personnel. . . . This agreement and any of the programs or materials to which it applies may not be assigned or otherwise transferred without prior written consent from Sydney.

Id. at 446.
72. Id. at 449.
73. Boss & Woodward, supra note 1, at 1532.
74. Id.
Vendee’s Warranty Claims

The pace of warranty-related computer cases continued unabated during the current survey year. The cases are highly fact-specific and often turn on language in the relevant contractual memoranda. However, some general lessons can be drawn from the opinions. It is apparent that vendors continue to employ all means available under U.C.C. article 2 to tailor their warranty exposure. It is equally apparent that these efforts sometimes fail, because of poor drafting, failure to observe Code requirements, lack of agreement by the vendee, or other reasons. The cases suggest that vendors must give careful attention to each of the legal techniques employed to develop vendor warranty liability, because one technique may succeed even if others fail. Defenses such as the vendee’s misuse of the warranted product are frequently alleged, but may be unavailing if the contract fails to outline clearly the responsibilities of each party for installation, programming, maintenance, and so forth. Moreover, vendors should consider using documentation that reflects the expected quality of their products; use of extreme warranty limitations and exclusions, which may have been appropriate in an earlier age of unreliable software and hardware products, encourages vendees and courts to resort to tort law or other approaches to strike down the limitations.

Vendors also should be aware that their behavior during the bargaining process may give rise to warranties, either express or implied. In particular, courts have imposed warranty liability on vendors who were aware of their customers’ unique computer system needs and were aware that their customers possessed relatively sparse knowledge of computer systems, and therefore should have been aware that their customers were relying on their knowledge and skill in providing the appropriate product to meet customers’ needs.75

Turning to specific computer products liability cases, Kearney & Trecker Corp. v. Master Engraving Co.76 is representative. It involved a dispute between Kearney, a manufacturer of computer controlled machine tools, and Master, a producer of industrial components. The machine purchased by Master did not perform adequately, and Master asserted a variety of defects and claimed, inter alia, damages for lost profits on customer orders unfilled because of the defects. Kearney asserted that the problems were due to Master’s improper programming of the machine. The purchase agreement provided for a narrowly defined express warranty,77 disclaimed all other warranties,78 disclaimed consequential damages,79 and limited Master’s remedies to repair or replacement of defective parts or return of the product with a purchase price refund.80

77. Id. at 431, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 1687; U.C.C. § 2-316.
78. 527 A.2d at 431, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 1687; U.C.C. § 2-316.
79. 527 A.2d at 431, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 1687; U.C.C. § 2-719(3).
80. 527 A.2d at 431, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 1687; U.C.C. § 2-719(1).
The trial judge had charged the jury that if Kearney failed to make the machine operate as warranted, then the jury could award consequential damages irrespective of the consequential damages exclusion. The New Jersey Supreme Court reversed. It found that the "repair or replace" remedy and the exclusion of consequential damages were two independent contractual provisions, and it reasoned that even if the "repair or replace" remedy failed of its essential purpose, it would not automatically cause the consequential damages exclusion to fail. The court stated that a consequential damages exclusion is invalid only when it is inconsistent with the intent and reasonable commercial expectations of the parties, for example, upon the manufacturer's repudiation of its repair or replace obligations.

The U.C.C. rule that a vendee is not bound by a limited remedy if that remedy fails of its essential purpose was also involved in Harper Tax Services v. Quick Tax Ltd. Two computer-based accounting services had ordered Quick Tax computer software to prepare 1982 state and federal tax returns. The accounting services now claimed fraud and breach of contract in that: the programs Quick Tax originally delivered were designed for the 1981 tax year, not 1982; the replacement software also contained defects; and corrected programs were not received until after the April 15, 1983, filing deadlines. The software license agreement warranted that the program would be free of program coding errors when delivered; the agreement disclaimed all other warranties. Further, the agreement purported to limit the licensee's remedies to corrections at licensor's expense and to disclaim all liability for consequential damages. The accounting services argued that Quick Tax's inability to provide suitable software for the 1982 tax season caused the exclusive remedy to fail of its essential purpose, making available all U.C.C. buyers' remedies. The court agreed that there was evidence that the limited remedy had failed. Yet, like the court in Kearney, it distinguished the limited remedy from the exclusion of consequential damages, explaining that the essential purpose test applied to the former, but not to the latter. The court noted that under the U.C.C., consequential damages may be limited or excluded unless the exclusion is unconscionable and—absent any suggestion of undue influence, force, or threats to sign the agreement—there was no evidence of unconscionability, even though the form agreement was an adhesion contract.
Word Management Corp. v. AT&T Information Systems also involved warranty issues. The buyer of computer communications equipment alleged that the seller breached an express warranty and the implied warranties of merchantability and fitness for a particular purpose. The court determined that the express warranty and disclaimer language were ambiguous and incomplete and, consequently, that it was inappropriate to dismiss the express warranty claim. The court did, however, dismiss the implied warranty claims because the written contract clearly and conspicuously disclaimed them pursuant to the U.C.C. requirements.

Sometimes it is argued that a warranty disclaimer that meets U.C.C. article 2 requirements is nonetheless unconscionable and, therefore, unenforceable. On the other hand, there is case authority that a disclaimer that complies with these requirements is per se conscionable and effective. In Meeting Makers, Inc. v. American Airlines, the court entertained a claim of disclaimer unconscionability but held that the disclaimer was enforceable because the computer lessee failed to establish that the parties had unequal bargaining power. The facts indicated that the lessee had a real voice in setting the contract terms. This case and the others discussed here suggest the need for careful definition of vendors' warranty responsibilities and their limits.

Finally, some businesses apparently need reminding that, in appropriate circumstances, a warrantor can cut off warranty defenses to payment by assigning its rights to a third party. This was the situation in Norstar Bank v. Corrigan, where the lessor was in bankruptcy and the assignee bank was suing the lessee to recover on a computer lease. The lease permitted the lessor to assign and specified that “assignee shall have all rights and remedies of Lessor . . . and shall hold this Lease free of any counterclaim, offset, defense or cross-complaint . . . Lessee reserving such remedies solely against the Lessor.” This “waiver of defenses” clause was upheld where the evidence showed that the assignee took the assignment in good faith and without notice of the claims or defenses. The court therefore disregarded the lessee’s claims that the lessor had

was not sufficient to establish unconscionability. Harper, 686 F. Supp. at 112, 6 U.C.C. Rep. Serv. 2d (Callaghan) at 413.


91. U.C.C. § 2-313.


94. U.C.C. § 2-316(2), (3).


98. Id. at 447–48.

99. U.C.C. § 9-206. The court also opined that constructive notice in such cases would place undue burdens on banks and financing agencies. 519 N.Y.S.2d at 448.
breached express and implied warranties and that the contract was void because of the lessor's fraudulent inducement.  

**FRAUD CLAIMS**

A vendor may also find itself subject to claims of fraud or misrepresentation. A disappointed vendee is most likely to include such allegations where its recollection of what was promised during the bargaining process differs markedly from what is actually provided in the computer contract warranty. The tort allegations also may be an attempt to avoid the effect of contract provisions limiting the vendor's warranty exposure. While it is arguable that business vendees generally should be limited to warranty relief, some courts may recognize a separate tort claim.

Election of remedies is sometimes a threshold remedial issue in a case involving allegations of fraud. In *Guernsey Petroleum Corp. v. Data General Corp.*, the court stated a familiar election rule:

"Where fraud in the inducement is alleged, the pleader has a choice between rescinding the contract or affirming it. If he rescinds he is not bound by any of its provisions, but in order to rescind successfully he must return or offer to return the subject matter of the sale in order to place the seller in the same situation in which he was prior to the transaction. If he affirms and suffers damages he is entitled to recover those damages which he can prove, but he is bound by the contract, having elected to stand upon it."  

The court in *Guernsey Petroleum* also distinguished fraud from puffing, finding that statements made by a second defendant to Guernsey did not amount to fraud in view of the business sophistication of the plaintiff and the court's judgment that reliance on the misstatements would not have been "reasonable" under the circumstances.

Typical fraud claims were involved in *Word Management Corp. v. AT&T Information Systems*. The court determined that the allegations stated a fraud cause of action because the plaintiff claimed a representation of fact which (i) was either untrue and known to be untrue or recklessly made, and (ii) was offered to deceive and induce the other party, causing injury.

100. 519 N.Y.S.2d at 448.
102. Id. at 1535–36.
105. Id. at 923–24.
107. 525 N.Y.S.2d at 435.
The plaintiff did not fare so well in *Olivetti Corp. v. Ames Business Systems.* The case involved Olivetti's continued supply of a particular machine to Ames, a vendor. Ames alleged that Olivetti made material misrepresentations about its continued support for the machine and that these statements entitled it to damages for fraud. The court proceeded through a traditional fraud analysis, affirming the trial court's findings on misrepresentation, materiality, and the reasonableness of reliance. But it found that Ames had not proven damages with sufficient certainty to support a judgment for over $1.2 million. Ames emerged from its appeal with no damages for fraud and owing money on the system it had purchased. In the course of its opinion, the court rejected the "new business rule" for North Carolina.

In *Harper Tax Services v. Quick Tax Ltd.*, certain fraud-related issues were resolved in a manner favorable to the vendor, Quick Tax. The vendee, a provider of accounting services, claimed negligent as well as intentional misrepresentation. The court accepted the vendor's argument that damages for fraud did not include lost profits under the New York approach and indicated that the negligent misrepresentation claim would be subject to the liability and remedy limitations contained in the license agreement.

The effect of contractual liability limitations on a vendor's fraud liability was also an issue in *Ostalkiewicz v. Guardian Alarm.* There the vendee claimed that the vendor failed properly to program a computerized alarm system. The vendee-jeweler alleged that the vendor's personnel knowingly misrepresented that the system was fully functional. Afterwards, the jeweler was robbed and the alarm failed, and the jeweler sued for breach of contract, negligence, and fraud. The contract limited the vendor's liability to a fraction of the jeweler's loss and the question was what effect the contract should have on the various claims. The court upheld the damages limitation with respect to the breach of contract and negligence counts because the parties had dealt at arm's length and the limitation was not unconscionable. Nonetheless, the court permitted the jeweler to pursue the fraud claim free of the limitation, suggesting that a limitation of damages clause may not protect a vendor against a claim of deliberate misrepresentation. The case is consistent with others in this factually sensitive area.

109. 320 N.C. 541-43, 356 S.E.2d at 583-84.
110. 320 N.C. 549, 356 S.E.2d at 587.
111. 320 N.C. 546, 356 S.E.2d at 585. This is a rule of law that precludes a "new business" from proving damages for profits lost as a result of breach on the grounds that the damages are as a matter of law too speculative. The *Olivetti* court ruled, instead, that such damages must simply be proved with reasonable certainty.
112. 686 F. Supp. 109, 6 U.C.C. Rep. Serv. 2d (Callaghan) 408 (D. Md. 1988). This case is initially discussed supra at note 84 and accompanying text.
115. 520 A.2d at 565.
116. 520 A.2d at 567.
Finally, *Citicorp Industrial Credit, Inc. v. Rountree*\(^{118}\) will remind the contractor that a written contract can destroy a fraudulent inducement claim and that reading a contract is essential in the contracting process. In *Citicorp*, the defendant originally contracted to purchase computer equipment. After the vendee had made several payments, the plaintiff represented that it could arrange to lower the vendee’s payments for equipment. A sales representative then presented the vendee with a sixty-month lease and an indemnification agreement, and stated that “nothing would change” if the vendee signed these agreements.\(^{119}\) The vendee complied without reading the documents. The vendee (who was now the lessee) stopped making payments when the equipment proved unsatisfactory and was sued by the lessor for breach of the lease.\(^{120}\)

The court reversed a jury verdict for the defendant for lack of triable facts, pointing out that the defendant was experienced in business and able to read, and that given the writing, defendant's fraud claim had to fail.\(^{121}\) Moreover, the court held that the lease, being a true lease, was not a sale subject to the provisions of U.C.C. article 2.\(^{122}\)

**Other Bases for Vendor Liability**

Purchasers of computer equipment who believe they have been “taken” may be able to enhance their damage recovery through the jurisdiction's deceptive trade practice or consumer protection statutes. For example, in *Sun Power, Inc. v. Adams*,\(^{123}\) the plaintiff, a convenience store operator, purchased a computerized cash register that the defendant office equipment dealer represented as IBM compatible. It was not, and a replacement register constantly broke down and was irreparable. The defendant refused to attempt further repairs or to refund the purchase price, prompting the plaintiff to allege that defendant's actions were “unconscionable” under the Texas trade practices act.\(^{124}\) The


\(^{119}\) *Id.* at 66-67.

\(^{120}\) *Id.* at 67.

\(^{121}\) *Id.* at 68.

\(^{122}\) On the issue of lease or sale, the court stated:

> [I]t is clear that the lease is not equivalent to a sale by appellant and a purchase by appellees of computer equipment. The lease provided for 60 monthly payments of $711.22. Title to the equipment was at all times to remain in appellant. The lease contained no provision which required or even permitted appellees to purchase the equipment at the end of the lease. Instead, the agreement provided that the equipment was to be returned to appellant at the end of the lease.

*Id.* at 68. In view of the speed at which computer equipment loses value, one wonders what value the parties contemplated the equipment would have at the end of the lease and whether it would have been more trouble than it was worth for the lessor to retrieve the equipment. See generally Cooper, *Identifying a Personal Property Lease Under the UCC*, 49 Ohio St. L.J. 195 (1988).

\(^{123}\) 751 S.W.2d 689 (Tex. Ct. App. 1988). For earlier cases dealing with application of the Texas Deceptive Trade Practices Act to computer-related contracts, see Boss & Woodward, *supra* note 1, at 1539.

\(^{124}\) 751 S.W.2d at 695 (applying Tex. Bus. & Com. Code Ann. § 17.50(a)(3) (Vernon 1987)).
appeals court found that the jury could have concluded that the defendant’s conduct was unconscionable by taking unfair advantage of plaintiff, or that the gross disparity in the value paid for the worthless cash register amounted to unconscionability. However, the plaintiff was not entitled to statutory damages equal to twice its actual damages because the defendant’s violation was not committed “knowingly.”

**REMEDIES FOR BREACH**

**Equitable Remedies**

*Aubrey’s R.V. Center v. Tandy Corp.* involved a suit for rescission of a contract to purchase a computer system from Tandy. Tandy had attempted to resolve the problems with the system for more than a year. The basic question before the court was whether a buyer could sue for “rescission” under the Code and, if so, how. Resolving the question in Aubrey’s (the buyer’s) favor, the court noted that the rescission concept is encompassed by the term “revocation of acceptance” under the Code. The court concluded that, under the facts, Aubrey’s had met the Code requirements for this remedy. The court decided that Aubrey’s had made out a case for “substantial impairment of value” even though only parts of the system failed, that buyer’s notice was seasonable, and that its continued use of the system did not bar revocation of acceptance under the facts. The court also held that the buyer’s finance charges were a proper element of damages since the objective of the remedy was to restore the status quo ante.

In *Synscort, Inc. v. Indata Services*, the court refused to accelerate the payments on a three-year lease of computer software or award lessor judgment for the total payments under the lease. The contract permitted the defendant lessee to terminate the agreement within sixty days of installation without further obligation; the defendant terminated about one and one half months after the contractual grace period by returning all materials to the lessor. To support its denial of the full lease payments, the court stated that the plaintiff was seeking specific performance of the agreement and brought “all principles of equity into consideration, not merely those raised by the parties.”

125. *Id.* at 696. The vendor under a lease/purchase agreement for a computer system was not so fortunate in *Equitable Life Leasing Corp. v. Abbick*, 243 Kan. 513, 757 P.2d 304 (1988). Its liability under the Kansas Consumer Protection Act included $15,000 worth of punitive damages and the vendee’s attorney’s fees.


127. U.C.C. § 2-608.

128. 46 Wash. App. at 600–01, 731 P.2d at 1127–28, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 106.

129. *Id.* at 602–05, 731 P.2d at 1128–30, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 106–07.

130. *Id.* at 607–08, 731 P.2d at 1131, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 109.


132. *Id.* at 484, 541 A.2d at 545.
sizing that the plaintiff, by stipulation, had used the program only once, and analogizing a recovery of full lease payments to a prohibited penalty provision, the court denied what it termed "an unconscionable windfall for the plaintiff." It should be noted that the result in the Synscort case could well be different under the new U.C.C. article 2A on leases, which both validates accelerated rental provisions and allows a lessor to recover for future rentals reduced to present value (whether or not an acceleration clause appears in the lease)—however, minus an offset based on the "market rent" for the remaining term of the lease.

**Vendees' Damages**

Vendees often purchase computer hardware and software with great expectations of enhanced operating efficiency and all the business benefits that may flow from it. They are disappointed if the installation of the computer products takes longer than expected, or if they ultimately do not realize all the anticipated capabilities. Serious and expensive business disruptions can occur during the installation period and thereafter if the system fails to perform. If the vendee's disappointment is compensable under a warranty or some other theory, then its burden becomes one of proving damages. Challenging the vendee's proof of the alleged damages may be the vendor's final line of defense against a substantial judgment because it can be difficult to place a monetary value on the vendee's alleged disappointment and increased costs and to demonstrate that they are causally linked to the vendor's breach. Photo Copy, Inc. v. Software, Inc. illustrates some of these proof problems. Although it was decided under Louisiana's Civil Code, the U.C.C. could generate results comparable to those found by the Louisiana court.

Software contracted to furnish a customized software system that would perform accounting functions including specially designed applications based on the needs of the vendee, Photo Copy. Most important was the ability to pull up a customer's name from only an invoice number. Photo Copy contended that it relied on Software's promises and that the software was defective. Software conceded that its product did not provide invoice-to-customer cross-referencing and certain other features. However, it argued that it had not been given the opportunity to perform before Photo Copy declared a default.

133. Id. at 485, 541 A.2d at 545.
136. Id. at 1339. Photo Copy claimed that the software was redhibitorily defective (meaning that it is either absolutely useless, or its use is so inconvenient that it must be supposed that the buyer would not have purchased it if the buyer knew of the defect). It sought recovery under Louisiana law holding sellers liable for damages and attorney's fees if they fail to declare known vices in things sold, and presuming that manufacturers know of defects in their products. Id.; see La. Civ. Code Ann. arts. 2520, 2545 (West 1972). The court determined that the presumption applied because Software was the "effective manufacturer" of the program. 510 So. 2d at 1340.
This defense failed because the evidence showed that cross-referencing was not available and could never be installed. Software's liability included return of the down payment on the program, the cost of customized statements purchased by Photo Copy that were not usable without the software, and reasonable attorney's fees.\(^\text{137}\) The court also reasoned that there should be no recovery for hours spent entering data because "this is to be expected in any new system."\(^\text{138}\) While this latter conclusion may make sense with respect to time spent simply entering raw data, where substantial effort is expended adjusting the data base to conform to the requirements of the new software, this arguably might be determined to be incidental or consequential damages. Photo Copy also was denied recovery for the costs of mass market software purchased after the custom program failed, allegedly to mitigate damages.\(^\text{139}\)

With the exception of the award of attorney's fees\(^\text{140}\) and assuming that U.C.C. article 2 applies to the software transaction, the opinion in Photo Copy fits comfortably within the framework of article 2. In article 2 terms, it would seem that Software tendered nonconforming goods that Photo Copy rejected,\(^\text{141}\) and Software was unable to cure its tender.\(^\text{142}\) Photo Copy was then entitled to recover its down payment and incidental and consequential damages.\(^\text{143}\)

Consequential damages were at issue in Cricket Alley Corp. v. Data Terminal Systems.\(^\text{144}\) In that case, defendant agreed to install cash registers that would communicate with any Wang computer. When installed, the registers never communicated and ultimately had to be replaced. The damages at issue were increased labor costs plaintiff sustained because the cash registers failed to communicate as promised; seller challenged these because it (seller) did not know of the general or particular needs of the plaintiff's business at the time of contracting. Sensibly observing that, given the product and the defect, increased labor costs for any buyer were foreseeable, the court held them recoverable under U.C.C. section 2-715(2)(a).\(^\text{145}\)

\(^{137}.\) 510 So. 2d at 1340–41. Photo Copy was not, however, allowed to recover overtime wages for a bookkeeper who allegedly was required to do more work because of defects in the program: Photo Copy's proof failed to negate the possibility that the extra work was the fault of the employee who was not a "computer person." \(\text{Id.}\) at 1340.

\(^{138}.\) \(\text{Id.}\) at 1340.

\(^{139}.\) \(\text{Id.}\) at 1341.


\(^{141}.\) 510 So. 2d at 1339–40; see U.C.C. § 2-508.

\(^{142}.\) 510 So. 2d at 1340; see U.C.C. § 2-508.

\(^{143}.\) 510 So. 2d at 1340–41; see U.C.C. §§ 2-711, 2-712, 2-715; cf. § 2-718. There was apparently no evidence that the cost of the substitute program was greater than the defective program, thereby perhaps entitling the plaintiff to the difference between the "cover" price and the contract price. See U.C.C. § 2-712.


\(^{145}.\) \(\text{Id.}\) at 725, 3 U.C.C. Rep. Serv. 2d (Callaghan) at 952 ("The submission of data from the cash registers to the mainline computer on sales, payrolls, inventory, etc. is a common feature of such equipment and the failure of the cash registers to do so would foreseeably create additional labor costs for the afflicted retail merchants.").
Vendors' Remedies and Damages

The customer isn't always right, in which case the vendor may be entitled to a remedy and damages. In the case of a software contract, questions can arise concerning whether the proper measure of vendor's damages is the license fee, reimbursement for development expenses, lost profits, or some other standard.\textsuperscript{146} For example, in Third Party Software, Inc. v. Tesar Meats, Inc.,\textsuperscript{147} the vendor had designed a special program for Tesar Meats, but when the system was ready for installation, Tesar was unable to use it. Following breach the vendor disposed of as much of the equipment as it could and brought suit. The main issue was the proper measure of damages for the failure of the customer to accept the system. The Nebraska Supreme Court held that, given the theory on which the case was tried, the proper measure of damages was reimbursement for out-of-pocket costs and other expenses attributable to the contract, and not the full amount of the contract payments still due from the vendee.\textsuperscript{148} In effect, the court deprived the vendor of the benefit of its bargain, because custom software, once developed, has little residual value to the vendor. Hence, the Nebraska decision may be a bit harsh.

Defining the Computer Enterprise

The development of functional software, hardware, or a computer system requires skill and expertise often not possessed by a single individual or business organization. Consequently, such projects are typically undertaken by multiple actors who may neglect to formalize their relationship inter se (e.g., independent contractors, employer/employee, contractor/subcontractor, joint ventures, etc.). Color Connection, Inc. v. Juneau\textsuperscript{149} shows that this ambiguity can lead to uncertainty concerning the actors' contractual liability to third parties or the ownership of assets employed in the project.

Color Connection was in the photographic processing business. Juneau operated a computer services business that did business as Southern Microtech. An individual named Womack did business as Q.E.D. Microengineering. Color Connection and Juneau discussed the installation of a computer system in Color Connection's lab. Juneau indicated that it could obtain hardware and assist with programming but lacked certain other expertise. Womack subsequently applied for a job with Juneau, displaying a resume claiming expertise of the sort needed to install the system. Color Connection testified that Juneau “had someone who was able to help put [Color Connection's] ... desired computer system together.”\textsuperscript{150} Juneau arranged a meeting between

\textsuperscript{146} Assuming the Code applies, the relevant U.C.C. remedies and damages provisions include §§ 2-703, 2-706, 2-708, 2-709, and 2-710. A vendee may fail to meet its payment responsibilities for the purchase or lease of computer hardware, in which case it may be held liable for the price or unpaid lease payments. See All Star Video, Inc. v. Baeder, 730 P.2d 796 (Wyo. 1986).

\textsuperscript{147} 226 Neb. 628, 414 N.W.2d 244 (1987).

\textsuperscript{148} Id. at 630–33, 414 N.W.2d at 245–46.

\textsuperscript{149} 505 So. 2d 914 (La. Ct. App. 1987)

\textsuperscript{150} Id. at 915.
Womack and Color Connection to discuss the project, which was followed by a proposal, prepared by Juneau and Womack, employing Juneau’s hardware price list and describing the equipment, its price, the cost of labor, and payment and completion terms. The proposal was on Southern Microtech (Juneau’s) stationery, and contained the name “Clarence A. Womack, d/b/a Q.E.D. Microengineering.” The proposal did not allocate duties between Juneau and Womack or provide for separate payments to them. However, Color Connection issued separate checks after entering into an oral contract based upon the proposal.151

After the project failed, Juneau contended that its obligation was limited to delivery and installation of hardware, and that Womack independently contracted to program the system and tie it together. Juneau claimed that the proposal was Womack’s and that Womack lacked authority to use Southern Microtech (Juneau’s) stationery. Juneau cited the separate checks in support of its theory of distinct contractual obligations. However, Juneau admitted that its performance went beyond supplying and installing hardware, at least after the project fell behind schedule. There was also evidence that some equipment was supplied by Womack. Of course, Color Connection contended that Juneau and Womack were each liable for the installation of a functional system as demonstrated by the proposal, their performance, and the fact that Color Connection was not informed of separate contracts during negotiations.152 The Louisiana principle of solidary liability153 rendered both Juneau and Womack liable to Color Connection for the contract price and they were held to be co-owners of equipment acquired for the project.154

Failure to describe clearly the relationship inter se of actors in a business relationship, apparently a fairly common problem in the computer industry, can have other serious consequences. For example, it can lead to uncertainty concerning the capital contribution or other obligations of the actors with respect to the new venture.155 Computer cases during the current survey year suggest that failure to observe legal formalities during the course of the computer enterprise could also result in the personal liability of shareholders or directors.156

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151. Id.
152. See id. at 915–16.
153. A solidary obligation is one in which each obligor is liable for the whole performance and performance by one obligor relieves the other of liability toward the obligee. La. Civ. Code Ann. art. 1794 (West 1987).
154. 505 So. 2d at 918.
156. See, e.g., Flip Mortgage Corp. v. McElhone, 841 F.2d 531 (4th Cir. 1988) (director is personally liable for debts when he carries on business of a dissolved corporation in violation of Virginia law); Wang Laboratories v. Dataword Corp., 680 F. Supp. 110 (S.D.N.Y. 1988) (claim that corporate veil should be pierced on account of undercapitalization).
**DECISION MAKERS**

Some computer contract cases are decided in administrative tribunals or in binding arbitration. This may give rise to specialized jurisdictional issues. An example is *Pacificorp Capital, Inc. v. United States*. In 1987, the Air Force awarded a contract to IBM to upgrade a central processing unit used on board various weapons systems. Pacificorp, the disappointed bidder, protested the award and IBM intervened and moved to dismiss for lack of jurisdiction of the General Services Board of Contract Appeals ("GSBCA"). The Circuit Court of Appeals for the Federal Circuit held that the GSBCA had no jurisdiction to resolve the bid protest. The General Services Administration ("GSA") lacked authority to procure automated data processing equipment or services on behalf of the Department of Defense if it involved equipment integral to a weapons system or critical to the direct fulfillment of military or intelligence missions. Logically, the court concluded, the GSA's authority to hear bid protests coincides with its procurement authority, so it had no jurisdiction over the bid protest. The case has broad implications, since similar classification issues could arise in the context of contract formation and the procurement authority of a government contractor.

Arbitrability came up in *Geldermann, Inc. v. Mullins*, another case in which ownership of a custom program was at issue. In *Geldermann*, defendant Mullins developed a program as an employee of the plaintiff, a company that conducted ninety percent of its business with the Chicago Board of Trade ("CBOT"). He later hired a consultant to modify the program, quit, and took the new program with him. When plaintiff sued, Mullins claimed that the dispute was arbitrable under the CBOT rule requiring arbitration of "any controversy . . . which arises out of the Exchange business" of the parties. Relying on the public policy favoring arbitration as an easier, faster way of resolving disputes, the court concluded that Geldermann's business was sufficiently exchange-related to bring it within the CBOT’s arbitration requirement.

*Grobet File Co. v. RTC Systems* was an action to confirm an arbitrator's award. Grobet had agreed to purchase IBM hardware from RTC, along with "vanilla" programs devised and marketed by RTC. RTC was to furnish twelve programs under a software license and to modify the software to serve Grobet's purposes. The software portion of the agreement was embodied in

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157. 852 F.2d 549 (Fed. Cir. 1988)
158. *Id.* at 551.
159. *Id.*
161. *See also* Shaurers v. Board of County Comm’rs, 746 P.2d 444 (Wyo. 1987), discussed *supra* notes 69–71 and accompanying text.
164. "Vanilla" programs apparently referred to standard programs developed for general purposes.
RTC's standard form licensing contract for the vanilla programs, plus eleven specially drafted pages dealing primarily with the modifications. The agreement provided that RTC would complete the project by a set date. The dispute arose because the modifications were not completed on time. Pursuant to a provision for arbitration in the agreement, the dispute was submitted to a single arbitrator, whose award included consequential damages. RTC claimed consequential damages were excluded by the contract and that the arbitrator thus exceeded his authority.165

The court pointed out that an arbitrator's award was to be reversed only on the ground of fraud, arbitrary conduct, or significant procedural irregularity. An arbitrator may not award damages going beyond clearly marked limits of the contract. The provision relied on by RTC to exclude consequential damages was contained in the standard license form's canned warranty of title provisions. The court believed the limitation could reasonably be construed as limited to damages for this warranty. Even if construed more broadly, it could be interpreted to extend only to the licensing and not to the modifications. Since either construction was reasonable and since the standard language was to be construed against its author, the court sustained the arbitrator's damage award.166

BANKRUPTCY

Last year's survey167 commented on Lubrizol Enterprises v. Richmond Metal Finishers,168 which involved the right of a bankruptcy trustee to reject a technology licensing agreement. Congress has amended the Bankruptcy Code to override this decision. The legislation provides that licensees of bankrupt licensors may elect to retain their rights under executory contracts to intellectual property.169

165. 524 N.E.2d at 406.
166. Id. at 407.
167. Boss & Woodward, supra note 1, at 1551.