Uniform Commercial Code: Disclaiming the Express Warranty in Computer Contracts--Taking the Byte out of the UCC

Barbara Chretien-Dar
punitive damages. Furthermore, a plaintiff cannot bring an action by virtue of the amended statute, section 9 of title 23, because a plaintiff may not bring a cause of action for punitive damages in Oklahoma. A retrospective interpretation of the Oklahoma Tort Reform Amendment, therefore, seems to be supported both by common law rules of statutory interpretation and by the Oklahoma constitution.

Ray D. Weston, Jr.

Uniform Commercial Code: Disclaiming the Express Warranty in Computer Contracts—Taking the Byte Out of the UCC

The law’s struggle to absorb an emerging industry into existing and well-defined legal theories is nowhere so dramatic as in the computer industry. The industry’s explosive development, characterized by frequent and abrupt changes, presents an extraordinary challenge to computer scientists and companies competing to stay abreast of technological innovations and attendant market adaptations. Consequently, the judicial arena’s inherent sluggishness in adapting to economic developments stands out more than in the past when it slowly and deliberately responded to the emergence of autos, airplanes, or televisions.

Contract claims arising from transfers and sales of computer systems are not decided on a clean slate, but with reference to the general common law of contracts and specifically to the Uniform Commercial Code (UCC or Code). The UCC was drafted with a particular emphasis on adapting legal rules to commercial developments, and many of the provisions reflect its basic policy that commercial law should be “non-technical.”

The UCC places primary importance on (1) simplifying the law governing commercial transactions, (2) allowing the law to develop alongside changes in commerce and industry standards, and (3) achieving uniformity in the law among the states. The second objective is crucial to a rapidly developing industry if legal rulings are to provide meaningful guides to business behavior. The Code tries to ensure recognition of and respect for various commercial practices by emphasizing custom, usage of trade, course of dealing (precon-

1. A computer system typically has three components: “the hardware, the data and the software. The hardware is the machine, the actual computer. The data is the information to be processed. . . . The software is the computer program that tells the machine what to do with the data.” Note, Negligence Liability for Defective Software, 33 OKLA. L. REV. 848 (1980).
tract behavior), course of performance (postcontract behavior), and, in particular, individual agreement between the parties, throughout its provisions on contract formation.4 The Code also mandates that to further its underlying policies the specific provisions should be "liberally construed."5

Computer systems litigation surfaced at about the same time that many states were adopting the UCC. By the mid-1960s, computers were finding their way into the commercial market on a wide scale, primarily as a result of technological advances that made the computer a useful tool in the office. Before this stage, computers were generally used only by government agencies and large corporations because of their high cost and immense size.6 The adaptation of the transistor to computers, which reduced their size and increased their speed, was responsible for the production of so-called "second-generation" computers. The third generation followed the development of the integrated circuit,7 which allowed further significant reductions in cost and size while still increasing speed and memory capacities of the computer. Demand for computer equipment and services from businesses of all sizes as well as by individuals has since surged dramatically. Selling or leasing computer equipment and designing or programming systems has become a major growth industry in the country, causing a proportionate rise in litigation in the field.

This note first examines the extent to which courts have applied or declined to apply the UCC's article 2 to computer systems transactions. These cases usually involve a commercial purchase or lease from a computer supplier or a contract for computer services, such as accounting or other data-processing services. The second part of this note focuses on the creation of express warranties under article 2 and the tendency of courts to allow effective disclaimers of these warranties in computer-related cases. This note questions the wisdom of allowing disclaimers to eliminate express warranties—a phenomenon peculiar to recent computer litigation that contrasts sharply with a majority of other UCC cases, with many authorities on commercial law, and with Code policy.

Applying UCC Article 2 to Computer Contracts

The Early Computer as a "Good"

Article 2 of the UCC governs "transactions in goods" and declares that

5. U.C.C. § 1-102(1) (1982).
6. The earliest first-generation computers consisted of thousands of vacuum tubes, requiring huge amounts of power to operate and almost entire buildings or floors to house them. For example, one of the best-known early computers, the ENIAC, had 18,000 tubes, weighed 30 tons and required 15,000 square feet of space. Chandler, Computer Transactions: Potential Liability of Computer Users and Vendors, 1977 Wash. U.L.Q. 405, 409.
7. An integrated circuit incorporates the complete electronic circuit on a single encapsulated chip, whereas circuit boards have their components attached as separate parts. Chandler, supra note 6, at 409.
"'[g]oods' means all things . . . which are moveable at the time of identification to the contract for sale." The Code expressly excludes (1) money (if used in payment), (2) investment securities, and (3) things in action. While "things" is not a defined term in the Code, common law interpretations and the law merchant (from which article 2 was derived) add some flesh to the concept. Under pre-Code law, only those items that were capable of delivery or that could be the subject of larceny could be the subject of sales, thus distinguishing them from personal rights or other "intangibles." Although the Code's definition of goods as "moveable things" would by its terms preclude realty, services, and employment contracts from coming within its scope, courts have nevertheless invoked Code provisions in some of these cases, particularly its warranty provisions. The Code itself also invites reference to its principles and rules as guidelines for cases not within its scope.

The identity of the early computer as a single unit and as a "computing machine" precluded any debate on the applicability of article 2 to commercial transactions involving computers. Thus, where a specially manufactured computer promising to use "all the latest technological advances" was never delivered because of the manufacturer's inability to overcome "basic engineering difficulties," the Code's "practical impossibility" excuse provision governed the dispute. On the other hand, where a transaction has no tangible elements, such as a contract to perform data-processing services, courts have rejected article 2 and applied general contract law. The vast ma-

9. Id. § 2-105.
10. Id. 
11. The law merchant governed the sale of merchandise by merchants and was determined by merchants' own customs, not judges. Before the common law courts in England expanded into commercial cases, independent courts exercised jurisdiction over commercial cases in which a jury of merchants declared the law. When common law courts began invading the area, the customs of the law merchant were gradually accepted into testimony. Under Lord Mansfield, many customs were transformed into legal precedents because he used a body of merchants to advise him in controversies involving merchants. E. Farnsworth & J. Hofford, Commercial Law (4th ed. 1985).
13. Id.
15. U.C.C. § 2-313 comment 2 suggests: "[T]he warranty sections of this Article are not designed in any way to disturb those lines of case law growth which have recognized that warranties need not be confined either to sales contracts or to the direct parties to such a contract." Cf. id. § 2-105 comment 1 (inviting article 2 application by analogy to investment securities in appropriate cases).
16. Id. § 2-615 (excuse by failure of presupposed conditions).
17. See, e.g., United States v. Wegematic Corp., 360 F.2d 674 (2d Cir. 1966).
18. For example, the court in Computer Servicecenters, Inc. v. Beacon Mfg. Co., 328 F. Supp. 653, 655 (D.S.C. 1970), aff'd, 443 F.2d 906 (4th Cir. 1971), claimed it would "strain the imagination" to claim that a contract for the analysis, collection, storage, and reporting of data involves "goods."
jority of commercial transactions involving the acquisition of computer systems include both hardware and software or services.

**Computer Components: The Dual Nature of Software as a "Good" or "Service"

The hardware component of a computer system clearly falls within the literal scope of "goods" as defined by article 2, but computer software does not comfortably fit into legal classifications separating tangibles from intangibles. A computer program is physically embodied in a tangible medium, such as a disc, but the program itself is a set of instructions readable by the machine. Software's resemblance to services created some uncertainty as to the applicability of article 2 to software transactions, especially when it became apparent that software could exist and be transferred outside the "machine." Computer programs no longer had to be "hard-wired" into the machine's circuitry. Software businesses today compete alongside hardware suppliers in selling computer programs. Traditional rules of construction, however, exclude service contracts from article 2, raising the possibility that different laws could govern similar transactions depending on the nature of the seller.

In the initial stages of computerization, most computer contracts involved "hybrid" transactions where the same vendor supplied both the hardware and programming services. The courts have almost unanimously applied article 2 in these cases, reaching this determination through a variety of methods: by the "dominant" factor analysis, by applying Code principles by analogy, by applying article 2 without discussion, or by agreement of the parties.

19. La Rossa v. Scientific Design Co., 402 F.2d 937 (3d Cir. 1968) (sales law does not apply to a contract to build a factory); Perlmuter v. Beth David Hosp., 308 N.Y. 100, 123 N.E.2d 792 (1954) (provision of blood is a contract for services and not governed by the law of sales).


20. In many hybrid transactions, the equipment "dominates," thus making article 2 applicable to the entire contract. See, e.g., Triangle Underwriters, Inc. v. Honeywell, Inc., 604 F.2d 737 (2d Cir. 1979) (contract for the purchase of a "turn-key" system will be governed by the statute of limitations for the sale of goods but not for service contracts because service is "incidental or collateral" to the sale of goods); Carl Beasley Ford v. Burroughs Corp., 361 F. Supp. 325 (E.D. Pa. 1973) (UCC governs entire transaction where contract price is fixed regardless of programming services). The frequent practice of " bundling"—charging one price for computer systems without regard to whether the purchaser wanted accompanying services or programming by the vendor—was later discontinued because of antitrust implications.


In most cases involving software components, the courts simply do not address the software portion of the transaction separately. So far, few reported cases involve "pure" software contracts. The determination of whether software is a "good" for purposes of the UCC depends on how it manifests itself. Where software can be delivered independently (in the form of floppy discs or magnetic tape), it is treated as a good; where programmers operate directly on the computer, the transaction is often considered a service contract. This is at best a rough approximation of the current state of case law involving software. At least one court determined that the Code's provision on damages governed what was ostensibly a service—failure to internally program a computer; but, in that case the service accompanied the sale of the system.

Some commentators advocate classifying software as a good by comparing it to phonograph records, books, or cassette tapes, or because it appears as an independent "product." Upon closer analysis, the purchase of software is essentially a contract for an intangible set of instructions constituting an idea in the same way that consumers buy records for the music recorded upon them. A purchaser may own the phonograph but certainly not the music. In the computer context, a purchaser can own the physical medium

---


30. See Note, supra note 19, 59 WASH. L. REV. 511.

---

1987] NOTES 475
upon which a computer program is grafted, but the intangible aspect of the program remains the intellectual property of the programmer or publisher. The user is merely "licensed" to use the program, but prohibited from copying or otherwise distributing it.

Despite its abstract nature, a computer program may nevertheless readily lend itself to the concept of a "good" under the UCC because it is extremely performance- or result-oriented. The essential difference between most commercial computer software and other types of intellectual property is that with software the result or performance is predictable and measurable in quantitative and qualitative terms, whereas other forms of intellectual property embodied in tangible media (music, art, literature) cannot be measured except by entirely subjective criteria. Perhaps the clearest description of the purchaser's goal in the acquisition of software is the "product [end-result] after applying or using an idea."31 Unlike a book, software must first interact with the hardware to render desired results.

The concept of software as a good for UCC purposes resembles analyzing it as a "product" for purposes of tort liability. The less it appears in the distribution chain and the closer it approaches "custom-tailoring," the more it is treated as a "service," in contrast to "canned" software which can be bought off the shelf by virtue of mass production and an extensive distribution system.32

Despite the ambivalent nature of computer software regarding its tangible/intangible status, it is unlikely that general acceptance of it as a good will be controversial. One reason is that vendors package and sell software on the assumption that the law will treat it as a good. Standard clauses in software licensing agreements on prepackaged programs are phrased in article 2 warranty, disclaimer, and limitation of liability terms.33

   Although the ideas or concepts involved in the custom designed software remained Honeywell's intellectual property, Triangle was purchasing the product of those concepts. That product required efforts to produce, but it was a product nevertheless and, though intangible, is more readily characterized as "goods" than "services." Intangibles may be "goods" within the meaning of U.C.C. § 2-106.
   (Emphasis added.)
32. Note, supra note 1, 33 Okla. L. Rev. at 854.
33. For example, IBM's 2.1 DOS (disk operating system) program License Agreement reads:
   LIMITED WARRANTY: THE PROGRAM IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU . . . ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. . . . IBM does not warrant that the functions contained in the program will meet your requirements or that the operation of the program will be uninterrupted or error-free. However, IBM warrants the diskette(s) or
The "Sale" Requirement—Exclusion of Leases and Other Nonsale Transactions from Article 2

Article 2 requires not only that there be a "good" but also a "transaction." Conceivably, this term is sufficiently broad to encompass situations beyond "sales," such as leases or bailments involving goods. However, the principal warranty provisions supplying causes of action are phrased in terms of "buyer" and "seller" and suggest that a "sale" is required for article 2 coverage. Because "sale" is defined as the "passing of title from seller to buyer for a price," many transactions are technically outside the ambit of article 2. Nevertheless, the Code may view a lease as a "contract for sale" in which the seller retains a security interest. Many equipment sales that are structured as leases would fall under this provision.

Furthermore, lease transactions may eventually be governed by the proposed lease article of the UCC because it can be expected that the states will adopt it as they have the other articles of the Code. The proposed lease article provides that the manufacturer's or supplier's warranties pass through to the ultimate lessee and thus creates a cause of action against the supplier in the case of a finance lease. The definition of a finance lease encompasses the situation where the lessor is essentially acting as the buyer's lender. In the case of true leases, where the lessor retains ownership at the end of the lease term, warranties are created between the lessor and lessee in basically the same manner as under the sales article.

Until the states adopt the proposed lease article, however, some courts may refuse to apply article 2 to a computer lease. Vendors who want to escape the Code's liberal creation of warranties, or whose disclaimers are technically insufficient under the Code, could use the lease as a shield to ward off applica-

---

cassettes on which the program is furnished, to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you. LIMITATIONS OF REMEDIES: IBM's entire liability and your exclusive remedy shall be: 1. the replacement of any diskette. 2. if IBM or the dealer is unable to deliver a replacement diskette or cassette which is free of defects you may terminate this Agreement.

35. Certain types of bailments, such as those to a carrier for transportation and those to warehousmen for storage, are specifically dealt with under U.C.C. article 7.
37. Id. § 1-201(37).
38. See Proposed Amendment to U.C.C., Article 2A—Leases (submitted for approval to the National Conference of Commissioners of Uniform State Laws, Aug. 1-8, 1986, Boston, Mass.).
40. Id. § 2A-103(g) (1986). This section describes a finance lease as "a lease in which (i) the lessor does not select . . . or supply the goods, (ii) the lessee received a copy of the contract evidencing the lessor's purchase of the goods . . . or (iii) the lessee's approval of the contract evidencing the lessor's purchase of the goods is a condition to effectiveness of the lease contract."
41. Id. §§ 2A-210 (express warranty), 2A-212 (implied warranty of merchantability), and 2A-213 (implied warranty of fitness).
tion of article 2. Surprisingly, computer vendors have not taken advantage of this argument, and most courts have not viewed computer leases as a bar to application of article 2.42 So far, only one court has refused to apply article 2 to a computer system acquisition because the transaction was structured as a lease.43 In another computer lease case, the court expressed surprise because the defendant supplier did not argue that the plaintiff had no cause of action under article 2.44 However, courts often treat leases as installment purchase contracts and apply article 2 if the lessor is in fact acting as a lender or finance company.45

Creation of Express Warranties Under the UCC

In General: The Three Warranties Relating to Quality

Whether general contract law or article 2 of the UCC will govern a particular dispute may alter the outcome of a case significantly. There are many differences between the UCC and the common law, especially with regard to disclaimers, limitation of remedies, consequential damages, statute of frauds, and the admissibility of parol evidence.46 In particular, with respect to warranties, the applicability of the Code will determine whether a cause of action even exists.

The Code supplies two implied warranties which arise automatically under certain conditions unless carefully disclaimed.47 For all practical purposes, implied warranties did not exist under the common law of contracts.48 The

42. Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291 (5th Cir. 1980) (the original understanding between the manufacturer and the plaintiff continues to govern dispute regardless of whether the arrangement with third party was a true lease or a financing arrangement); Basic/Four Corp., 538 F. Supp. 776 (E.D. Wis. 1982) (parties agreed that lease of software is governed by UCC); Garden State Food, 512 F. Supp. 975 (E.D. Wis. 1977) (UCC provisions on consequential damage limitation governs lease/purchase contract); Badger Bearing, 444 F. Supp. 919 (E.D. Wis. 1977) (original equipment contract was foundation for subsequent lease arrangement with third party and, therefore, UCC disclaimer provisions still apply).
43. W.R. Weaver, 580 S.W.2d 76 (Tex. Civ. App. 1979) (conspicuousness of disclaimer, required under the UCC, is not necessary in a computer equipment lease).
44. See Kalll Bottling, 619 P.2d at 1057. The court noted that the plaintiff was really a third party beneficiary of the contract between the manufacturer and the financing company (lessor), which "bought" the computer system and leased it to the plaintiff. The court expressed doubt whether any implied warranties extended to the plaintiff. Id.
47. U.C.C. § 2-314 (1982) supplies the warranty of "merchantability which arises when the seller is "a merchant as to goods of that kind" and requires that goods be "merchantable." See infra note 50.
U.C.C. § 2-315 states that an implied warranty of fitness for a particular purpose arises when the seller "has reason to know of any particular purpose for which the goods are required and that the buyer is relying on the seller's skill or judgment." It requires that the goods be fit for that particular purpose. Moreover, the seller need not be a merchant for this warranty to arise.
Code also transforms almost any statement or conduct concerning the goods into an express warranty without it being necessary to use words such as "warrant" or "guarantee," and there is no requirement of intent by the seller to create a warranty.\(^49\) As a result, an express warranty can arise from almost any communication, except that certain types of sales talk or mere opinion ("puffing") will not rise to the level of a warranty.

All three types of warranties are relevant in the acquisition of a computer system, but the ones most likely to lead to controversy are express warranties and the implied warranty of fitness for a particular purpose.\(^50\) Any negotiation-type setting will, over time, raise factual questions as to what was explicitly claimed. Such a setting will also produce allegations that the seller knew or was informed as to the vendee's particular wishes and needs and that the vendee was relying on the seller's superior skill and knowledge. These are the circumstances that create the implied warranty of fitness for a particular purpose. Therefore, the seller's statements can raise two different types of warranties—express warranties and implied warranty of fitness for a particular purpose.

*Modified Reliance in Creating an Express Warranty*

Under the Code, express warranties can be created by: (1) any affirmation of fact or promise relating to the goods, (2) any description of the goods, or (3) any sample or model.\(^51\) The pre-Code requirement of "reliance" by the buyer under the Uniform Sales Act and common law\(^52\) has been replaced with the less stringent requirement that the statement or promise become

\(^49\) U.C.C. § 2-313 (1982).

\(^50\) Disputes involving the implied warranty of merchantability, U.C.C. § 2-314, will usually be limited to factual questions about the condition of the good. This warranty is fairly straightforward and assures that goods should: "(a) pass without objection in the trade, and (b) in the case of fungible goods, be of fair average quality; . . . (c) be fit for the ordinary purpose for which such goods are used."

This warranty certainly covers defects in hardware and defects in the medium upon which computer programs are stored, such as the defective disc or tape. Conceptually, it is difficult to extend this particular warranty to the intellectual contents of a program or to its correct logical sequence in order to assure a particular result. Proof of breach of this implied warranty necessarily involves comparisons with other "goods." In an industry characterized by rapid changes and developments, comparisons among different programs to establish what "passes without objection in the trade" may invite speculation in a courtroom. It may also be a disservice to buyers by setting minimum standards that become outdated in a matter of a few months or by demanding perfection when such is not feasible. In either case such an approach is not only inconsistent with the UCC emphasis on conforming the law to the current realities of an industry, but also could stifle the industry's natural development. Note, *supra* note 19, 59 WASH. L. Rev. at 525.

\(^51\) U.C.C. § 2-316(1)(a)-(c) (1982).

\(^52\) The express warranty under common law had almost identical features as the implied warranty of fitness under the Code. In White v. Miller, 71 N.Y. 118, 129-30 (1877), the well-known case overruling the extremism of caveat emptor principles, the court said:

*A dealer who sells an article, describing it by the name of an article of commerce, the *identity of which is not known to the purchaser, must understand that the*
"part of the basis of the bargain." Official comments under the express warranty provision suggest that the seller must demonstrate that the statement or promise did not become part of the understanding between the parties, rather than requiring the buyer to prove his reliance. Exactly how this burden may be met remains unclear, but presumably a showing that a buyer's belief or reliance was unreasonable or a showing that the buyer "knew better" would satisfy this burden. This reasoning reintroduces the pre-Code reliance element.

The same idea of unreasonable reliance is also inherent in the Code's exclusion of the seller's "opinion" or "commendation of the goods" as an express warranty. Although some courts claim that reliance is irrelevant to the existence of an express warranty, it is conceptually difficult to entirely disregard reliance in determining which statements are part of the basis of the bargain or in identifying a seller's "opinion."

Computer-related cases decided under the UCC have also used a reliance factor in determining the creation of express warranties. In Westfield Chemical Corp. v. Burroughs Corp., the court used a reliance-type test to determine whether an express warranty was created by the seller when a salesman assured the buyer during negotiations for a computer system that it would realize "substantial man-hour savings." In concluding that no express warranty was created by the affirmation, the court said:

[M]an-hour savings are dependent upon such variables as the program actually decided upon, the cooperation and efficiency of the operators, the caliber of electric current supplied to the computer, the volume of business being processed, etc., none of which were susceptible of knowledge when the proposal was written. . . . Fur-

latter relies upon the description as a representation by the seller that it is the thing described; and this constitutes a warranty.

As reported in R. NORDSTROM, J. MURRAY & A. CLOVIS, supra note 4, at 110 (emphasis added).


54. Comment 3 to U.C.C. § 2-313 states:

In actual practice affirmations of fact made by the seller about the goods during a bargain are regarded as part of the description of those goods; hence no particular reliance on such statements need be shown in order to weave them into the fabric of the agreement. Rather, any fact which is to take such affirmations, once made, out of the agreement requires clear affirmative proof.

See also J. WHITE & R. SUMMERS, supra note 2, § 9-5.

55. See id.

56. In Ewers v. Eisenkopf, 88 Wis. 2d 482, 489, 276 N.W.2d 802, 805 (1979), the court suggested that reliance is irrelevant under the Code and that the "true test" of the existence of an express warranty is "whether [the seller] made an affirmation of fact the natural tendency of which was to induce the sale and which did in fact induce it." (Citing Pritchard v. Liggett & Meyers Tobacco Co., 350 F.2d 479, 487 (3d Cir. 1965), cert. denied, 382 U.S. 987 (1966)). Arguably, the difference between an affirmation upon which a buyer relies and one which induces a purchase is slight, if a difference exists at all.


58. Id. at 1297.
thermore, as a matter of law, the plaintiff could not have reasonably relied upon such representations.59

Curiously, the court supported its conclusion by commenting that statements made during the early planning stages are less conducive to reasonable reliance.60 However, traditional reliance concepts necessarily assume that this is precisely when those warranties are created because of the "inducement" factor. In fact, the Code intended to enlarge the scope of express warranties by allowing statements made after the contract to operate as warranties, even though, logically, the buyer could not rely on postcontractual statements in making a purchase decision.61

A reliance test was also used in Investors Premium Corp. v. Burroughs Corp.62 to deny recovery on a seller's statement that the computer "had sufficient capacity and capability to handle [buyer's] then present business needs and to double that capacity without adding additional personnel."63 The buyer, however, had leased the system before signing a purchase agreement and apparently knew that the system was incapable of performing in conformity with those affirmations. After examining the circumstances and communications prior to the signing of the purchase contract, the court determined that in fact no reliance occurred because of the buyer's actual knowledge of the system's performance capacity.64 The court then declared that the prior assurances were excluded from being considered in evidence because of the Code's parol evidence rule.65 The court's decision is somewhat confusing because it considered extrinsic evidence to rule out reliance as a basis for an express warranty, but it then proceeded to exclude the same extrinsic evidence for purposes of proving the content of the assurances.

General and Specific Statements—The Express Warranty as the Sum of its Parts

Express warranties can also be created by advertisements or brochures,66 prior proposals, or letters, although these more easily approach puffing than

59. Id. at 1297-98 (emphasis added).
60. Id. at 1298.
61. Comment 7 to U.C.C § 2-313 states: "The precise time when words of description or affirmation are made . . . is not material. . . . If language is used after the closing of the deal . . ., the warranty becomes a modification, and need not be supported by consideration if it is otherwise reasonable and in order."
63. Id. at 44.
64. Id.
66. Computerized Radiological Servs., Inc., v. Syntex Corp., 595 F. Supp. 1495 (E.D.N.Y. 1984) (express warranty can be found in sales literature, brochures, and ads); Jaskey Fin. & Leasing v. Display Data Corp., 564 F. Supp. 160 (E.D. Pa. 1983) (advertising and promotional materials claiming system to be: (1) a "turn-key" system particularly suitable for use by an automobile dealership, and (2) a system in which all errors and malfunctions would be eliminated in specified time, were express warranties susceptible to exclusion by parol evidence
specific oral statements.\textsuperscript{67} Generally, the more specific the assertion or statement, the closer it comes to being considered a warranty rather than puffing or opinion. The degree of specificity needed to create an express warranty, however, does not necessarily require an inordinate amount of detail; phrases such as "an effective tool" or "suitable for business expansion" have been considered sufficient to embody an express warranty.\textsuperscript{68}

However, an overall general idea or concept (as opposed to mere vagueness) created by the cumulative effect of individual specific statements, or by a series of conduct may constitute an overall express warranty, which exists apart from the "mini-warranties" of individual parts of a good. For example, a promise to provide a "turn-key" system\textsuperscript{69} can be created by assurances that the buyer's employees would be trained to operate the computers in conjunction with the sale of computer equipment.\textsuperscript{70} Similarly, an Illinois court concluded that a seller's oral statements that a computer system would be "free of defects" upon delivery or be repaired during a 90-day warranty period and would "work for a reasonable period of time" could not be classified as puffing.\textsuperscript{71} Instead, the cumulative effect of these representations constituted a warranty that the equipment "would operate properly; and, in the event it did not, [seller] promised to render it operational for a reasonable period of time."\textsuperscript{72}

A "cumulative-type" warranty approach was also taken by a federal district court in Pennsylvania.\textsuperscript{73} It viewed an oral promise to provide programs along with the sale of computer equipment as the equivalent of a war-

\begin{itemize}
\item \textsuperscript{67} Garden State Food Distrib., Inc. v. Sperry Rand Corp., 512 F. Supp. 975 (D.N.J. 1981) (seller admitted that series of letters to the plaintiff created express warranties).
\item \textsuperscript{68} See generally J. WHITE & R. SUMMERS, supra note 2, \S\ 9-3. See also Clements Auto Co. v. Service Bureau Corp., 444 F.2d 169 (8th Cir. 1971). The court found the statement that a data-processing system would, "when, fully implemented, be capable of providing [the buyer] sufficient information in a form such . . . that it would constitute an effective and efficient tool to be used in inventory control" actionable in a cause for misrepresentation. \textit{Id.} 178-84. The dispute arose prior to Minnesota's adoption of the UCC. The court found that under state law, no scienter or intent was necessary in an action for misrepresentation. \textit{Id.} at 176. The court indicated that the statement would have created a warranty under the UCC as well. \textit{Id.}
\item \textsuperscript{69} See also Dunn Appraisal Co. v. Honeywell Information Sys., Inc., 687 F.2d 877 (6th Cir. 1982) (representation that computer would be suitable for intended use in business expansion was not an "opinion" but a statement of present fact).
\item \textsuperscript{70} A system which is complete and fully operational by the delivery or contract date.
\item \textsuperscript{71} See Triangle Underwriters, Inc. v. Honeywell, Inc., 457 F. Supp. 765 (E.D.N.Y. 1978) (the concept of a system that is capable of performance as soon as installed is itself a warranty that is breached on delivery, not a warranty that extends to future performance for purposes of determining when the statute of limitations begins to run).
\item \textsuperscript{72} Redmac, Inc. v. Computerland, 140 Ill. App. 3d 741, 489 N.E.2d 380 (1986).
\end{itemize}
ranty to provide functioning equipment, rather than merely equipment as provided in the written sales contract. Although technically only the oral contract was breached when the programming proved deficient, the court viewed both agreements as inseparable because the hardware was "virtually worthless" without proper programming. Therefore, the court allowed the plaintiff to recover under the terms of the written equipment sales contract because only it provided a price for measuring damages.

Liberal construction of warranties raises the possibility that generic-type expressions alone may create express warranties upon which a vendee can sue—much like the term "automobile" denotes a warranty that the car will perform to some degree, such as providing transportation for at least some distance. Presumably, as computer terms become more deeply rooted in our daily language, phrases such as "accounting program," "word-processing program," or "turn-key system" will carry with them specific expected standards of performance. The Code contemplates that such "warranties of description" are express warranties rather than implied, a designation that becomes significant because of the difference in their respective disclaimability.

Proving a Breach of Express Warranty

Although the Code provides for the relatively uncomplicated creation of express warranties through conduct, description, or samples, the computer vendee will often encounter serious impediments in attempting to prove that a particular malfunction or error constitutes a breach of warranty. Consumer demand for compatibility between printers, terminals, software, and other computer products will complicate pinpointing the source of a problem. Because the buyer must show that a deficiency comes within the seller's realm of responsibility, the buyer may have to show a connection between a certain deficiency and a breach of warranty, rather than simply showing the faulty performance.

This problem arose in Bruffey Contracting Co. v. Burroughs Corp., where the buyer failed to convince the trial court that a recurring printer

74. Id. at 334.
76. Comment 1 to U.C.C. § 2-313 (1982) states: "This section reverts to the older case law insofar as the warranties of description and sample are designated 'express' rather than 'implied.'"
77. Under common law analysis, for example, describing an item as a "car" would imply that it had a motor, thus creating an implied warranty. Under the Code, however, implied warranties are easily disclaimed by standard clauses and the buyer would have no recourse unless the existence of the motor became incorporated into the express warranty. The test as to what comes within such a "generic" or "description" warranty would vary with each fact pattern and be determined by the understanding of the reasonable buyer. See R. Nordstrom, supra note 75, at 64.
malfunction was connected to specific parts warranted by the seller. The
court concluded that the "nature of the system is that no one could say with
certainty in every case what caused a malfunction," and, therefore, placed
the burden of showing general causation (linking the defect to the scope of
the warranty) on the buyer.

On the other hand, in Carl Beasley Ford, Inc. v. Burroughs Corp., the
court held that the plaintiff had satisfied its burden of proof by showing that
it had contracted for a certain result that failed to materialize. The transac-
tion involved the purchase of computer equipment. Although programming
services were part of a separate oral agreement, they were included in the
total purchase price of the equipment. A jury determined that the seller had
promised to provide thirteen computer programs along with the equipment,
that it had failed to deliver most of the programs, and that there were con-
tinuing problems with the programs that were delivered. Specifically, the jury
found that the seller had failed to provide programming adequate to perform
the "functions which had been performed by the [plaintiff's] accountants
and produce the information necessary to preparation and submission of
Ford Financial Reports." The defendant argued that although the plaintiff
had shown faulty performance, it failed to demonstrate that any deficiency
was caused by faulty programming rather than by operator error or machine
malfunction. The court responded that the seller had to establish the reason
for the faulty performance if it wished to absolve itself. Thus, at a
minimum, the buyer must show nonconforming performance. Whether he
will also be required to show causation at that point and whether the burden
then shifts to the seller to show his nonresponsibility for the faulty perfor-
man ce, is not settled.

This precarious balance in the shifting burden of proof is reflected in Red-
mac, Inc. v. Computerland, where an Illinois appellate court upheld a trial
court's ruling that the seller had the burden of proving causation of defective
performance once the buyer had shown nonconforming performance. Although the seller claimed that the buyer had failed to treat the computer
area with antistatic spray and mats as advised and that certain programming
symptoms could only result from operator-tampering, this was not sufficient
to counter plaintiff's showing. However, the court indicated that the defendant
could have prevailed by using outside or expert testimony instead of relying only on his own.

As users become more sophisticated and are able to modify prepackaged
software or alter computer systems to suit specific needs, the evidentiary pro-
b lem of proving causation may become hopelessly confusing. The buyer also

79. Id. at 1276.
81. Id. at 327.
82. Id. at 331.
84. Id., 489 N.E.2d at 383.
increases his risk if he hires an outside specialist to find or fix any trouble. This will invariably entail modifications to a system, such as reprogramming, and possibly create insurmountable barriers to proof in a later suit against a vendor, unless detailed records are kept. In addition, a seller could justifiably condition the effectiveness of any warranty on nonmodification.\textsuperscript{85} Because authorities differ on when the burden of proof is satisfied, the buyer should be prepared to show causation of the faulty performance.

\textit{Conditional Effectiveness of the Express Warranty—Requirements of Privity}

One unanswered question is whether a manufacturer can validly condition the effectiveness of its express warranties on the purchaser buying only from an “authorized dealer.”\textsuperscript{86} At common law, only the parties to the immediate contract of sale could sue for warranty relief.\textsuperscript{87} This privity of contract requirement has been eroding for a number of years and sometimes has even been eliminated entirely.\textsuperscript{88} The Code has contributed to this erosion by extending warranties to third parties outside the distribution chain in the case of personal injury and by providing state legislatures with three alternatives by which to expand warranty protection to the end user.\textsuperscript{89} As with the question of unconscionability, this area is open to court interpretation and development.

The extension of warranty issue is closely related to the requirement of a “sale”\textsuperscript{90} for article 2 coverage,\textsuperscript{90} except that here it is not a question of whether article 2 governs a “non-sale” transaction, but whether an ultimate purchaser can benefit from the original supplier’s warranties after a series of sales. If not, his only cause of action is against his immediate seller, who

\textsuperscript{85} See, e.g., Office Supply Co. v. Basic/Four Corp., 538 F. Supp. 776, 780 (E.D. Wis. 1982) (agreement provided: “If the purchaser, without the written consent of the Seller, makes any modification to the programming or any deviations from the operating instructions . . ., all warranties set forth herein cease immediately.”).

\textsuperscript{86} Some computer manufacturers have announced a war against so-called “gray marketers” of their equipment. Gray-marketing is when a manufacturer’s goods are sold outside the designated distribution chain at a reduced price. The gray marketer obtains the goods from the authorized dealer who may have gotten a substantial discount from the manufacturer because of a large-volume purchase. The authorized dealer is obligated to sell only to end users but will move more volume and still make a profit by selling to another dealer. The authorized dealers, however, are under an obligation to provide minimum services on the manufacturer’s warranty to the end users; the gray marketers are not. 195 N.Y.L.J. 46, Mar. 11, 1986, at I, col. 1.


\textsuperscript{88} Id.

\textsuperscript{89} U.C.C. § 2-318 (1982). At a minimum, Alternative A extends a warranty to those persons suffering personal injury on account of a breach if they are a family or household members of the buyer or a guest of the household. Alternative C allows the court to determine the recovery of any economic damages of any persons who may reasonably be expected to use the goods.

\textsuperscript{90} See supra notes 34-45 and accompanying text.
most probably did not make any independent warranties. Indeed, a purchaser may find it difficult to recover on an express warranty or to get promised repairs if the manufacturer has clearly imposed an "authorized dealer only" condition on the product and the purchaser realized he was obtaining computer equipment at a price substantially lower than retail. Dealers who promise servicing and are obliged to honor manufacturers' warranties would be at a disadvantage if they had to perform warranty repairs on a product not sold by them but by a competitor who has no contractual obligation to the supplier to perform repairs.

The Vulnerability of the Express Warranty in UCC Computer-Related Cases

The General View of Cases, Commentators, and the Code:
Disclaimers are not Effective Against Express Warranties

The Code clearly disfavors attempts to exclude or disclaim express warranties once made. The 1952 Code draft prohibited a seller from doing just that by providing: "If the agreement creates an express warranty, words disclaiming it are inoperative."91 Permitting disclaimers of express warranties would allow sellers to promise the moon to make a sale, while keeping their fingers crossed to ward off any liability. However, the draft provision was criticized because it created a problem of construction in that it required the peculiar interpretation that an express warranty was isolated and existed apart from the rest of the agreement. This interpretation directly conflicted with the traditional approach of reading the agreement as a whole.92 Thus, a blanket disclaimer could virtually eliminate the creation of an express warranty and undermine the basic purpose of section 2-316(1).

Section 2-316(1) now reads:

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 with each other; but subject to the provisions of this Article on parol or extrinsic evidence (section 2-202) negation or limitation is inoperative to the extent that such construction is unreasonable.

92. Professor John Honnold, writing for the New York Law Revision Commission, stated: This language ... presents a problem of construction which must be faced at the outset. . . . If the agreement is read as a whole and includes a complete disclaimer, how can it be supposed that the agreement ever created an express warranty? However, this view that a disclaimer clause could operate to forestall the creation of an express warranty under the Code would virtually deny effect to subsection (1). This provision is patently designed to allow express warranties to override disclaimer clauses; subsection (1) may not be construed in a fashion to render it inoperative.

1 N.Y.L. REV. COMM. REP. U.C.C. 1955, at 405, 406, as reported in Hawkland, supra note 87, § 2-316:02.
The new language does not change the substantive notion of the 1952 draft, but it recognizes that there is a difference between the simultaneous giving and withdrawing of an express warranty and not giving a warranty in the first place. Thus, language in an agreement can be used to show that an express warranty was never in fact created, but that language may not act as a disclaimer of a warranty.

One commentator has even suggested that the only way for a seller to be certain that there are no express warranties is to completely refrain from any words or conduct relevant to the creation of an express warranty. As discussed earlier, express warranties are easily created and this advice is consequently difficult to apply. Accordingly, the seller’s option is to show that any grounds upon which an express warranty rests were withdrawn by him—an analysis that requires the same proof as showing that no warranty ever came into being under section 2-313. Such proof would probably consist of demonstrating that the affirmation did not relate to the goods, that it was merely an opinion, or that it never became the basis of the bargain. Other commentators have reached essentially the same conclusion.

Comments to section 2-313 on the creation of express warranties echo the position that disclaiming an express warranty is basically a contradiction in terms. They provide: “A clause generally disclaiming ‘all warranties, express or implied,’ cannot reduce the seller’s obligation with respect to such description and therefore cannot be given literal effect under section 2-316 (disclaimer provision).”

Any consideration of express warranties, however, is inextricably linked to the Code’s parol evidence provision, which can operate to prevent promises from becoming part of the agreement. The Code language prohibiting express warranty disclaimers is subject to the Code’s parol evidence rule and reflects the competing objectives at stake: protection of the buyer from “unexpected and unbargained language” and protection of the seller from false allegation of earlier oral warranties. Nevertheless, the Code’s protection of express warranties as the “essence of the bargain,” supplemented by its flexible parol provision, clearly mandate that disclaimers of express

93. R. Nordstrom, supra note 75, at 87.
94. See supra notes 46-77 and accompanying text.
95. R. Nordstrom, supra note 75, at 87.
96. J. White & R. Summers, supra note 2, § 12-3. See also Hawkland, supra note 87, 2-316:02.
98. Id. § 2-202.
99. Id. § 2-316 comment 1.
100. Id. comment 2.
101. Comment 1 to U.C.C. § 2-313 states: “‘Express’ warranties rest on ‘dickered’ aspects of the individual bargain, and go so clearly to the essence of that bargain that words of disclaimer in a form are repugnant to the basic dickered terms.”
102. U.C.C. § 2-202 allows a writing intended to be final to be “explained or supplemented” with evidence of (1) course of dealing, (2) usage of trade, (3) course of performance, and (4) con-
warranties should not be given effect, particularly if disclaimers are boilerplate provisions.

In keeping with Code policy, courts interpreting the UCC have generally not allowed disclaimers to operate against written or oral warranties. In contrast, courts interpreting the UCC in computer-related cases since the mid-1970s have taken the opposite position and allowed disclaimers to negate such warranties. As yet, this interpretation has not spilled over into noncomputer cases and remains a characteristic peculiar to the computer group. The following subsections examine the evolution of the disclaimability of express warranties in computer-related cases and attempt to explain its development.

The Originating Cases—Still in Line With the General Rule

Three cases seem to be responsible for the phenomenon of express warranty disclaimability in computer-related cases, based on the frequency with which they have been cited in later cases for this proposition. Two of these cases are computer-related, but only one of these could fairly be read as holding that an express warranty may be negated by the seller. However, even this case rests on two alternative grounds.

In Investors Premium Corp. v. Burroughs Corp.,106 the Federal District

103. Northern States Power Co. v. ITT Meyer Indus., 777 F.2d 405 (8th Cir. 1985) (a disclaimer of al. warranties that conflicts with a specifications warranty is inapplicable); Walcott & Steele, Inc. v. Carpenter, 246 Ark. 95, 436 S.W.2d 820 (1969) (clause on seller's invoice for cottenseed was unenforced attempt to modify an express warranty on a certificate attached to the bags); Killion v. Buran Equip. Co., 27 U.C.C. Rep. Serv. (Callaghan) 970 (Cal. Ct. App. 1979) ("As is" disclaimer on used truck could be construed that truck is sold "as is" and without warranties except those to which parties expressly agreed); Century Dodge, Inc. v. Mobley, 155 Ga. App. 712, 272 S.E.2d 502 (1980) (it is unreasonable to allow an express warranty describing car as "new" to be negated by a disclaimer of warranties); Young & Cooper, Inc. v. Vestring, 214 Kan. 311, 521 P.2d 281 (1974) (UCC allows disclaimer only of implied warranties; express warranties not subject to exclusion or modification); Gladden v. Cadillac Motor Car Div., 83 N.J. 320, 416 A.2d 394 (1980) (exclusion or limitation engrafted on express warranty is inoperative to extent the terms are unreasonably inconsistent with express warranty); Miller v. Hubbard-Wray Co., 52 Or. App. 897, 630 P.2d 880 (1981) (once an oral warranty is admissible, there is no poli-zy or law that the oral warranty should be treated differently than any written warranty; therefore, an inconsistent disclaimer is ineffective against it).


105. Of the cases listed in note 104, only S.M. Wilson & Co. was not a computer case. The warranty there concerned the operating speed of a tunnel-boring machine. 587 F.2d at 1366.

Court for South Carolina found that an express warranty existed in a contract for computer hardware, although the contents of the warranty were unclear from the opinion. The court recited the contract’s disclaimer and integration clause and concluded: “Such an exclusion is authorized under [2-316].” Since 2-316(1) cross-references the parol evidence provision, it is difficult to tell whether the court allowed the disclaimer of the express warranty or whether it excluded the statement from evidence under the parol restriction.

The other computer case, Bakal v. Burroughs Corp., allowed a disclaimer of the implied warranties of merchantability and fitness for a particular purpose. The court found no breach of a written warranty in the contract covering defects in material or workmanship of the equipment, but it used the parol evidence bar to exclude sales literature and prior oral representations from being incorporated into the contract after a determination that the written contract was the final expression of the parties’ intent. All of the court’s conclusions are consistent with Code policy and with the general approach of warranty cases thereunder.

The noncomputer case, S. M. Wilson & Co. v. Smith International, Inc., was decided on grounds similar to Bakal. The court in S. M. Wilson concluded that the Code’s parol provision prevented an earlier letter from becoming part of the contract because of an effective merger clause that specifically excluded any statements by “unauthorized” representatives. The only reason the buyer could not recover on the remaining warranty was because of his own misassembly of the machine.

Neither Bakal nor S. M. Wilson actually held that express warranties could be legally disclaimed, but later computer cases would certainly create that impression by repeated citation to these cases. There are several possible reasons explaining this development, not the least of which is a general confusion about the nature of express and implied warranties and the difference in their respective disclaimability.

However, coincidence also plays a part in the phenomenon of express warranty disclaimability in computer cases. A later case, Westfield Chemical Corp. v. Burroughs Corp., cited both Bakal and Investors Premium to hold that an express warranty regarding the efficiency and time savings of a computerized accounting system was effectively disclaimed. Although it is arguable that the issue in Westfield Chemical was limited to whether an express warranty ever existed, the language of the opinion indicates other-
wise. Consequently, the case became a true precedent for court opinions allowing successful disclaimers of express warranties in computer litigation.

The tendency of UCC opinions to rely on cases involving the same type of good explains both the relative profusion of express warranty disclaimability within the computer group and the simultaneous isolation of this phenomenon to the computer field. A case-by-case analysis of UCC computer litigation reveals that many factors combined to create what is almost an aberration of previous established law: that no disclaimer is effective once an express warranty is found to exist. As of now, a majority within the small cluster of UCC computer cases hold the opposite.

The Express/Implied Warranty Confusion

A major reason for the disclaimability of the express warranty is the lack of any bright-line distinction between express and implied warranties. This type of reasoning is reflected in APlcations, Inc. v. Hewlett-Packard Co., where a federal court found that a disclaimer which complied with the requirements for effectively disclaiming the implied warranties of merchantability and fitness for a particular purpose (conspicuous, written, and properly worded) also negated any express warranty given by the vendor. The buyer, who was in the business of adapting and reselling computers and software, claimed that the manufacturer gave an express warranty regarding a newly developed computer language that was supposed to diminish response time in small-scale computers. The manufacturer was undoubtedly aware that the plaintiff relied on these statements in its own resale to a customer because the manufacturer's representatives attended a number of meetings between the plaintiff and the ultimate customer (presumably to explain or promote the new computer language). The response time of the new system proved unacceptably long. Nevertheless, satisfied that the disclaimer complied with the Code requirement for disclaiming implied warranties, the court determined that the "[a]greement excludes this [express] warranty as well as any implied warranty. While there are no particular requirements

However, the court first found that the language in the disclaimer was effective against "all warranties express and implied." Id. at 1295. See supra notes 57-60 and accompanying text.

116. Although not an explanation of why computer cases specifically allow disclaimers of express warranties, one general reason for such a position might be that the implied warranties of merchantability and fitness are relatively easy to disclaim so long as the disclaimers meet the Code's conspicuousness standards and wording requirements set forth in section 2-316(2) and (3). The Code's position is that disclaiming these warranties is perfectly proper. Because implied warranties arise as an operation of law and depend on certain fact patterns (eg., the implied warranty of fitness arises only when the seller has reason to know of a particular purpose; the implied warranty of merchantability arises only if the seller is a merchant as to goods of that kind), the seller is not attempting to avoid liability for his own conduct or representation during a transaction, as is the case with express warranties.

117. 501 F. Supp. 129 (E.D.N.Y. 1980), aff'd, 672 F.2d 1076 (2d Cir. 1982).

118. The disclaimer read: "NO OTHER WARRANTY IS EXPRESSED OR IMPLIED. HP SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE." Id. at 132.
under the Code to limit express warranties or liability, the Code contemplates that such limitations may be undertaken by the parties."119 The court justified its position by citing the previously discussed seminal cases: Investors Premium, S. M. Wilson, Westfield Chemical, and Bakal.

The same logic was also followed in Jaskey Financing & Leasing v. Display Data Corp.120 There the court held that a conspicuous and properly worded disclaimer (effective against implied warranties) was sufficient to preclude oral express warranties.121 The court concluded that "cases in other states applying the Uniform Commercial Code are almost unanimous in holding that provisions disclaiming express warranties by the use of language similar to that in this case are effective disclaimers of express warranties.122 In contrast to Investors Premium,123 however, the court explicitly decided that it was the combined effect of a properly worded disclaimer and integration clause that prevented the express warranty from being effective, thus basing its holding on both grounds.

Another curious reading of warranty disclaimers appears in Elmer v. Delaware Mini-Computer Systems.124 In that case, the court interpreted a statement that the computer was "a first-rate computer and would perform all the functions necessary to be performed by a commercial computer,"125 as the equivalent of a warranty of merchantability or of fitness. Because the contract contained a disclaimer that would have been effective against both of these warranties had they been implied, the court concluded that the disclaimer operated against the express warranty as well.126

The court's conclusion is unsupported by the UCC. The Code does not indicate that a disclaimer should work to eliminate an express warranty simply because it articulates the contents of an implied warranty. Instead, the UCC focuses on how warranties are created to distinguish express from implied

119. Id. at 133. The court also cited section 2-719, the Code's provision on limitation of remedies. However, it specifically relied on section 2-316(1) and on the wording of the disclaimer to hold that the disclaimer was effective. It seems as though the court equated a limitation of remedy under section 2-719 with a disclaimer under section 2-316(1). See infra note 157 and accompanying text for a discussion of section 2-719.
120. 564 F. Supp. 160 (E.D. Pa. 1983) (discussed earlier for the court's conclusion that an express warranty existed for a turn-key system particularly suitable for an automobile dealership). See supra note 69.
121. Id. at 163. The buyer claimed that the seller expressly warranted that the computer and the software constituted a turn-key system, that it was a system particularly suitable for use by an automobile dealership, that it was adaptable to other types of businesses, and that all errors and malfunctions would be eliminated within a specific period of time. Id.
122. Id. Among cases cited by the court for this conclusion are: Investors Premium, discussed supra at notes 106-107 and accompanying text; APLications, Inc., discussed supra at notes 117-119 and accompanying text; and Bruffey Contracting, discussed infra at notes 129-132 and accompanying text.
123. Investors Premium was one of the "originating cases." See supra notes 106-107 and accompanying text.
125. Id. at 160.
126. Id.
warranties as well as to explain the resulting differences in their disclaimability. 127 The comments suggest that because implied warranties arise by operation of law and not by the seller's consent, the seller should fairly have the opportunity to avoid them so long as the buyer is aware of and assents to the elimination. The requirements of clarity and conspicuousness under section 2-316 help to establish whether the buyer had notice of, understood, and assented to the disclaimers. On the other hand, once the seller verbalizes the contents of an implied warranty it becomes an express warranty. Therefore, the justification for allowing disclaimers no longer exists because these warranties are no longer imposed upon the seller by law. 128

Interpretative Problems Under the Narrow Express Warranty

Another type of analysis that has contributed to the conclusion that express warranties should be subject to disclaimers is viewing the warranty as a two-step process rather than as an entity in itself. The position that the scope of a warranty is determined by language resembling disclaimer language can easily lead to the conclusion that a warranty can be disclaimed after its creation. However, viewing a limited warranty as an entity is in line with the Code's analysis under section 2-316(1), which pits the entire warranty against the disclaimer and makes the disclaimer yield.

At least one case, Bruffey Contracting Co. v. Burroughs Corp., 129 involving such extremely narrow warranties, has been noted by subsequent cases as a precedent for the disclaimability of express warranties. It is questionable, however, whether the court actually concluded that a disclaimer operated against any express warranty. Rather, the court found that any express warranty contained in the contract was extremely limited in scope because of a contract clause stating: "No representation or other affirmation of fact, including but not limited to, statements regarding capacity, suitability for use, or performance of the equipment, shall be or be deemed to be a warranty." 130

The net result was that the only express "warranty" in fact existing in the agreement was one covering "defects in nonexpendable parts." 131 The plaintiff lost the case because it was unable to prove that the defect occurred in one of the few nonexpendable parts. The conclusion that an express warranty is so narrow that it will not extend to the entire computer is quite different

127. Comment 1 to U.C.C. § 2-316 states: "'Implied' warranties rest so clearly on a common factual situation or set of conditions that no particular language or action is necessary to evidence them and they will arise in such a situation unless unmistakably negated."

128. The importance of the express warranty can also be inferred from the UCC provision dealing with conflicting warranties, section 2-317. Under this section, except for the warranty of fitness, the express warranty displaces the implied warranty if the two are inconsistent. The fitness warranty arises from the conduct and communications of the parties (knowledge of special needs plus reliance) and more closely resembles the express warranty; therefore, it is not displaced.

130. Id. at 772.
131. Id. at 774.
from allowing a disclaimer to cancel an express warranty, even though the result may be the same. Unfortunately, Bruffey Contracting has been cited for the latter premise even though there is no indication that this is what the court held. 132

A straightforward finding of narrow warranties can circumvent the problem of determining whether a disclaimer purporting to eliminate express warranties should be allowed to do so. The problem is more likely one of proof by the buyer that his damage resulted from a breach of warranty.

In a case involving disclaimers in four separate contracts, otherwise effective against all implied warranties, a federal court simply did not consider the question of whether they also eliminated express warranties contained in the contracts. 133 The transaction involved two hardware and two software contracts. The software (computer education courses and control and management systems) was warranted to conform to "design specifications" apparently outlined in the seller's manual. 134 This warranty was further limited in scope by defining as nonconformance only those deviations from design specifications that were "significant." The warranty in the equipment contracts was limited to defects in materials and workmanship. The court declined to view these warranties together to create an overall warranty to provide a functioning system, as urged by the plaintiff. Instead, the court interpreted the elaborate disclaimers, the narrow individual warranties, and the limited remedies as extinguishing any claims as a matter of law, except for whatever specific violation the plaintiff could show of the narrow express warranties. 135 As in Bruffey Contracting, the extremely narrow warranty created a basic problem of proof because of the difficulty of showing that the warranted parts were responsible for the malfunction.

In the area of narrow and specific warranties, the confusion is often a problem of terminology. In two noncomputer cases, the courts said that express warranties could be excluded, 136 but the statements remained mere dicta because both courts let the express warranties stand. In both cases, however, the courts used the terms "exclusion" or "disclaimer" for what was in reality the creation of very narrow, specific, and time-limited warranties.

The Parol Evidence Restriction on the Express Warranty

Any discussion of express warranties cannot ignore the significant role of the Code's parol or extrinsic evidence rule, which is specifically referred to in

132. Jaskey Financing, discussed supra at notes 120-123, cited Bruffey Contracting for this conclusion.
134. Id. at 825.
135. Id. at 826.
136. In McCarthy v. E.J. Korvette, Inc., 28 Md. App. 421, 347 A.2d 253, 259 (1975), the court said there is a "right on the part of the warrantor to negate, modify or limit an express or implied warranty." In McCulloch v. General Motors Corp., 577 F. Supp. 41, 44 (W.D. Tenn. 1982), the court said: "Express warranties may be excluded by words or conduct evidencing a disclaimer of warranties."
the warranty disclaimer provision of section 2-316(1). A carefully worded integration or merger clause can have the same effect as a successful disclaimer of an express warranty.137 That is, any statements qualifying as oral warranties under section 2-313 can be excluded from evidence by a typical clause making the contract "the entire agreement of the parties" and asserting that "there are no antecedent or extrinsic representations, warranties, or collateral provisions that are not intended to be discharged."138

The problem is one of timing in that only prior statements are subject to exclusion. One computer-related opinion employed a parol evidence-type analysis to reach a determination that a disclaimer worked against prior express warranties, but not against ones given later.139 The transaction, involving the acquisition of a computer system, progressed from a written proposal by the seller140 to a written purchase agreement,141 ultimately culminating in a lease. The buyer tried to exclude from evidence any reference to the purchase contract (the second document) on the assumption that the disclaimer contained in it would operate against the explicit promises contained in the proposals (the first document). Even though the court incorporated the purchase contract into the final lease agreement, it then followed the buyer's reasoning by allowing the disclaimer to render any promises contained in the proposal ineffective. However, it did not allow the disclaimer to operate against a three-months' warranty contained in the purchase contract which also con-

137. See supra note 102 for a discussion of the Code's flexible parol evidence provision concerning the admissibility of additional consistent terms.


140. The proposal summarized the performance to be rendered by the computer:

We recommend that you install a Burroughs E6000 Computer. This machine will be used on the applications we discussed. . . . These are:
   . . .
2. Inventory Up-Dating. Inventory Ledgers are updated automatically through the use of punch cards . . . Sales, cost and Gross Profit by salesman [sic] by major product category are accumulated as a by-product of updating inventory.

PERIODIC MANAGEMENT REPORTS.

3. Inventory Stock Status Report.
4. Inventory Non-Activity List.
5. Inventory Listing by product.
6. Inventory Listing by Mfg. by product.
7. Customer analysis by Salesman by Dollars by Product bought.

After reviewing your present system and requirements for a proposed system, we are confident that the installation of a Burroughs E6000 Computer will afford you:

MORE WORK IN LESS TIME AND MORE MEANINGFUL MANAGEMENT INFORMATION THAN EVER BEFORE POSSIBLE.

Id. at 920-21.

141. The purchase contract contained only a three-months warranty apparently limited to defects and workmanship and a disclaimer of implied warranties.
tained the disclaimer. The court's reasoning was based on the *timing* of the express warranty; that is, the disclaimer may eliminate earlier warranties but not the ones contained in the later document. However, this reasoning is inconsistent with Code policy, which views the time at which warranties arise as irrelevant, so long as they are found to exist.

Because the disclaimer provision of section 2-313(1) works in tandem with the parol provision of section 2-202, it is often difficult to determine whether courts exclude evidence of prior affirmations or whether they allow disclaimers of express warranties that are part of the agreement. All of the originating cases involved parol evidence issues. The express warranty disclaimability phenomenon, in large measure, arises from an approach that essentially equates an *exclusion* with a *disclaimer*. Contributing to this effect are standard contract clauses that combine merger clauses and disclaimers into one section.

Most cases involving warranty disputes in computer systems acquisitions also allege fraud or misrepresentation as alternative or additional grounds for recovery. Under these tort theories, the bar of the parol evidence restriction becomes irrelevant. Fraud will usually render any merger clause ineffective. However, this is generally not a reliable cause of action because many courts will dismiss the fraud claims as being mere restatements of breach of warranty claims. One court even allowed a preprinted merger clause to pre-
vent a plaintiff from bringing claims in negligent misrepresentation and fraud. 148

While the parol evidence rule and an effective merger clause may provide a shield for the unscrupulous seller who has "stretched the truth" during negotiations, it is an entirely different matter for courts to sanction outright disclaimers of express warranties. Because the parol evidence rule is designed to protect the seller from an unscrupulous buyer who tries to get more than he contracted for, it should not protect the seller from his own misconduct. This reasoning explains why the parol evidence rule does not apply in cases of fraud or misrepresentation.149 This rationale is also basic to section 2-316(1), which rejects disclaimers that would diminish an existing express warranty. The disfavored behavior is that of a seller attempting to qualify his own affirmation; the point at which this constitutes fraud is simply one of degree and/or intent.

Of course, in practice, the rule will often protect the dishonest seller by excluding any extrinsic evidence of oral statements, but not because the courts sanction the seller's action. The seller wins because of a determination that the contract was complete and exclusive ("integrated").150 Such a determination usually involves a factual finding that that both parties understood and consented to the meaning of the provisions in the contract (unless misrepresented)—an analysis that can be used under section 2-316(1) to find that no warranties ever existed.151 Without such a safeguard against false allegations, surely the written contract would rapidly lose its significance and binding power. Where parol evidence problems are absent, however, there is no rational justification for protecting the seller from his own assertions or express warranties, regardless of whether such a transaction falls under the UCC or general contract law.

Minority View of UCC Computer Warranty Cases: Consistent With Prior Law

The first UCC opinion in the computer context explicitly to reject the contention by sellers that disclaimers should be effective against express warranties was Consolidated Data Terminals v. Applied Digital Data Systems.152 In that case, a seller of computer terminals argued that the disclaimer of "express or implied warranties" should override an express warranty concerning

---

151. See *supra* notes 92-96 and accompanying text.
152. 708 F.2d 385 (9th Cir. 1983).
the operating speed of a line of terminals bought by the plaintiff, itself a distributor. Under the Code's disclaimer provision, the court found that specific warranty language would prevail over a general disclaimer if the two cannot be reasonably reconciled.\textsuperscript{153}

\textit{Consolidated Data} could spawn a counter-force within the computer group of UCC warranty cases. It was cited by \textit{Computerized Radiological Services v. Syntex Corp.} for the determination that a clause attempting to disclaim "implied" warranties did not block consideration of any express warranties created by sales literature and oral promises made during negotiations.\textsuperscript{154} The court avoided any parol evidence problems by finding that proof of express warranties was not inconsistent with a disclaimer limited to implied warranties and therefore admissible into evidence.\textsuperscript{155} Had the disclaimer also been directed at "express" warranties (as most standard clauses are), it is likely that the court would have reached the same conclusion. The opinion found extensive buyer reliance in the purchase of computerized CAT-Scan equipment and interpreted section 2-316(1) as intending to protect such reliance.

Another UCC computer-related case, though theoretically accepting the idea of express warranty disclaimability, sensed that there was a difference in disclaiming implied and express warranties.\textsuperscript{156} The court concluded that any doubt regarding the disclaimer of an express warranty should be resolved in favor of the affirmative warranty.

\textit{Relation of Express Warranty to Other UCC Provisions}

As can be seen from the preceding discussion, express warranties and their relative disclaimability are closely intertwined with concepts expressed in other Code provisions, as well as with some areas not specifically embodied in the Code, such as common law fraud actions.

On a practical level, express warranty litigation not only raises the core issue of the existence of an express warranty as defined by the Code, but a host of other relevant Code provisions that can cause the same outcome as an effective warranty disclaimer. The buyer will have to contend with additional seller defenses or his own failure to perform. In the end the express warranty may become irrelevant to a successful recovery. These other obstacles facing computer vendees in a suit for defective systems which prevent recovery include:

\begin{itemize}
  \item \textsuperscript{153} Id. at 392.
  \item \textsuperscript{154} 595 F. Supp. 1495 (E.D.N.Y. 1984).
  \item \textsuperscript{155} Id. at 1507.
  \item \textsuperscript{156} In W.R. Weaver Co. v. Burroughs Corp., 580 S.W.2d 76, 81 (Tex. Ct. App. 1979), the court stated:
    At this stage, at least, the inconsistent language of the instruments, creating an express warranty [that the systems analysis would completely define vendee's accounting needs and design a working system to meet plaintiff's requirements] while at the same time disclaiming the warranty, creates a question of fact as to the intention of the parties.
\end{itemize}
1. seller's valid limitation of remedies,\(^{157}\)
2. limitation of consequential damages,\(^{158}\)
3. buyer's failure to effectively reject defective goods,\(^{159}\)
4. buyer's failure to particularize the specific defects as the basis for rejection,\(^{150}\)
5. buyer's acceptance of the goods,\(^{161}\)
6. wrongful or ineffective revocation of acceptance,\(^{162}\) and
7. the shortening of the statute of limitations.\(^{163}\)

The seller's limitation of remedy and the limitation on consequential damages are conceptually distinct from disclaiming warranties. Nevertheless, one UCC computer-related case relied on section 2-719 for its ruling that an express warranty could be effectively disclaimed under section 2-316(1).\(^{164}\) The confusion arises because both provisions can reduce the seller's liability exposure.

Allowing disclaimers of implied warranties or creating a narrow express warranty limit the seller's exposure by decreasing the number of circumstances in which he is in breach of contract. Consequently, the potential number of causes of action are reduced. Limiting the available remedy or placing a ceiling on the amount of damages merely decreases the seller's remedial obligation once he has breached the contract.\(^{165}\) Thus, even if the buyer can prove that a breach has occurred, a limited remedy or a limitation on consequential damages may provide the same result as if no warranty existed.

As is typical under the UCC, most of the above-listed provisions can be changed by agreement. This, however, is little consolation to an individual consumer or a small business acquiring computers from dealers who neither give their own warranty nor add to the manufacturer's warranty. In those cases there is little room for bargaining. The evolving nature of the computer has rapidly changed the background of the transaction. So far, most of the

---

157. U.C.C. § 2-719 (1982) allows the seller to provide for an exclusive remedy unless such remedy fails of its essential purpose.
158. Id. § 2-719(3) allows the seller to limit or exclude liability for consequential damages unless such limitation is unconscionable.
159. Id. § 2-602 requires the buyer to reject goods within a reasonable time and to notify the seller.
160. Id. § 2-605.
161. Id. § 2-606 provides that the buyer is deemed to have "accepted" the goods under certain circumstances or by certain conduct.
162. Id. § 2-608 provides that the buyer may revoke his acceptance if there is a "substantial" impairment to the value of the contract. However, revocation must take place within a reasonable time of discovery of the defect; the seller must be notified; and revocation must take place before the value of the goods deteriorates.
163. Id. § 2-725 provides for a four-year statute of limitations, which can be shortened by agreement to not less than a year.
164. See supra note 118.
reported UCC cases involve large businesses individually contracting with the original manufacturer, a situation well within the contemplation of the UCC.

Conclusion

It is entirely possible that courts in the early computer cases were biased in favor of the seller because the industry was in its infancy. This situation can produce a conscious or unconscious desire to ease some litigation burdens. If so, this reason for helping the seller by allowing disclaimers of express warranties is no longer valid, particularly in view of the many other Code defenses available to the seller and his ability to limit his remedial obligations or his liability for consequential damages.166

From a policy standpoint, permitting disclaimers of express warranties is likewise questionable because such a rule allows sellers to escape the consequences of their own business conduct and condones misrepresentation. To some extent, a seller already can avoid liability for his own statements that do not rise to the level of fraud by using an effectively worded merger clause to keep prior representations from being incorporated into the agreement. This is an unfortunate, albeit unavoidable, by-product of the parol evidence bar whose purpose is to protect the “real bargain” by excluding false allegations of additional promises. Where express warranties are part of the bargain and otherwise enforceable, it hardly makes sense to render them inoperative by disclaimer.

Computer transactions generally present no difficulties as far as application of article 2 is concerned. Particularly in the realm of express warranties, the issue of where on the services/goods or tangible/intangible spectrum the transaction lies becomes irrelevant because the seller himself has provided the measure for contract performance. In the computer context, performance is measureable; moreover, results are predictable and can be duplicated reliably. It is ironic that the Code which, in contrast to common law, liberalized the creation and scope of warranties in favor of the buyer should now be read by courts to allow the giving and simultaneous withdrawing of an affirmative promise.167

The close interrelation between Code concepts has proven to be conducive to confusion in terminology, and related concepts then tend to lose their subtle distinctions. The disclaimability of express warranties in great measure resulted from a disregard of the distinction between creating express and implied warranties and the consequent different disclaimer rules.168 Cases excluding evidence of express warranties under the parol evidence bar have been used as a basis for concluding that express warranties may be disclaimed.169 Even the limitation of remedies provision has been equated with a disclaimer of express warranties.170

166. See supra notes 157-165 and accompanying text.
168. See supra note 46 and accompanying text.
169. See notes 116-126 and accompanying text.
170. See note 119 and accompanying text.
On the other hand, the same interrelation of concepts which can lead to confusion also gives the Code its sense of unity and internal consistency. Supplemented by the overall emphasis on commercial reasonableness, trade practices, and good faith, the specific provision rendering inconsistent disclaimers of express warranties inoperative should be liberally construed in favor of the warranty. A seller seeking to disclaim his own affirmations rather than standing behind them is hardly acting in good faith.

Viewed in this light, attempted disclaimers of express warranties should be critically examined. Because computer warranty litigation is bound to continue and increase, the likelihood that the disclaimability of the express warranty will spill over into noncomputer cases becomes correspondingly greater. Courts should seriously question the precedential value of computer-related cases that leave specific and affirmative promises at the mercy of general disclaimer provisions found in standardized contracts.

Barbara Chretien-Dar