Computer Software Contracts: A Review of the Case Law[1]

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The pervasiveness of computers in our society[3] has led to numerous legal controversies involving computers and computer transactions.[4] Conflicts between buyers and sellers of computer software[5] have resulted in, and will continue to result in, both tort and breach of contract actions to redress disputes.[6] This article focuses on those contract actions involving computer software.[7]

A fundamental issue in resolving a contract dispute involving a software transaction is whether article 2 of the Uniform Commercial Code (hereinafter UCC) or the common law governs.[8] It has been recognized that whether article 2 applies to computer software contracts is very significant especially in the areas of warranties, consequential damages, and limitations on liability.[9] However, commentators have disagreed on the answer to this question.[10] This article categorizes and examines the judicial decisions that have confronted this question. An analysis of these decisions demonstrates that although only a limited number of courts have faced this question the courts usually apply article 2[11] and the decisions are generally consistent and reconcilable when viewed in the context of commercial transactions generally.

TRANSACTIONS INVOLVING THE PURCHASE OR LICENSE OF SOFTWARE WITHOUT COMPUTER HARDWARE

Review of the Case Law

In *RRX Industries v. Lab-Con, Inc.,*[12] the court found the California version of the UCC applicable to a contract for the purchase of software. The court, noting that for the UCC to apply the software must be a good, had no difficulty concluding without analysis that the software was a good under section 2-105[13] of article 2.[14] The court then made a factual determination as to whether the services provided with the sale of the software were a predominant or incidental part of the transaction. This determination was necessary because, under California law, a contract for the sale of goods would be classified as a service contract outside the domain of article 2 if services provided with the sale of goods were the predominant aspect of the transaction. It follows from this decision that the court views software as a good; the investigation of the services provided in a particular transaction was merely to ascertain whether the predominant feature of the transaction was the sale of goods or the providing of services. The court concluded that the seller's contractual obligation to install the software, to repair any software errors, and to train the buyer's employees in the operation of the software were merely incidental services, and therefore the transaction fell within article 2.[15]

A contract for the purchase of software in *Compu-Med Systems, Inc. v. Cincom Systems, Inc.*,[16] resulted in an action for fraud and breach of contract against the seller when the software allegedly failed to perform as represented by the seller. In denying the seller's motion to dismiss the complaint or in the alternative to grant summary judgement the court relied upon two sections of article 2. The court found that the buyer had given the seller adequate notice of the alleged breach of contract, as required by section 2-607(3)(a),[17] and therefore the buyer was not barred from bringing the action. Additionally, the court found section 2-719(2)[18] applicable to the question of whether the contract provided an exclusive remedy that precluded the buyer's recovery of consequential, special, or indirect damages. The court applied article 2, under Ohio Law, to this transaction without addressing the threshold question of whether software was a good. Therefore, it must be assumed that the court viewed software as a good within the domain of article 2.

In *Harford Mutual Insurance Co. v. Seibels, Bruce & Co.*,[19] a buyer obtained software under a license agreement and brought suit under South Carolina law in tort and under the warranty provisions of article 2[20] when the software allegedly failed to operate properly. The court dismissed the tort claim on a motion for summary judgment but denied a motion for summary judgment with regard to the warranty claim.[21] The court recognized that the application of article 2 depended upon a finding that the license agreement was a contract for sale and that the software in question was a good as opposed to a service. However, the court declined to decide these issues since the court was deciding a motion for summary judgment and facts relevant to these questions were in dispute.[22]

Analysis of the Case Law

These three cases involved transactions to provide software without computer hardware. In both cases involving the sale of software article 2 was applied to the transaction. In *Compu-Med Systems* article 2 was applied without any discussion of whether software must be a good for article 2 to apply, the court applied article 2 without any discussion of whether it was a good. The cursory nature of these analyses indicates little judicial hesitancy with the conclusion that software is a good under article 2. In *RRX Industries* the main thrust of the court's analysis was its finding that the sale of software with accompanying services was within article 2. The court relied on the predominant feature test to reach its conclusion. Under this test a contract involving both sale and service aspects is classified according to which aspect predominates.[23] This approach is consistent with judicial treatment of commercial contracts in other contexts since the predominant feature test is the most frequently used test to evaluate whether a transaction involving both

goods and services falls within article 2.[24] *RRX Industries* indicates, therefore, that conventional legal doctrine applicable generally to commercial contracts is still relevant and will be applied to the sale of software.

Only in *Harford Mutual Insurance* was article 2 not applied to a software transaction. In this case the court left open the question of article 2's applicability because the court was only deciding a motion for summary judgment. However, this result is reconcilable with *Compu-Med Systems* and *RRX Industries*. Both of these cases involved sales which are covered by article 2. In *Harford Mutual Insurance*, however, the software was provided via a license, which is a non-sale transaction. As will be discussed *infra*, the treatment of non-sale transactions varies among jurisdictions.[25] Therefore, the court's uncertainty about whether article 2 applied in *Harford Mutual Insurance* is consistent with the judicial disagreement generally with regard to applying article 2 to non-sale transactions.[26]

Additionally, as will be discussed *infra*, the type of software involved in the transaction is relevant.[27] Providing custom designed software[28] may be predominantly a service contract outside the scope of article 2 while providing standardized software may be within article 2. Consequently, uncertainty about the type of software provided in *Harford Mutual Insurance* may explain the court's deferral of its determination of whether article 2 applied to the transaction.

TRANSACTIONS INVOLVING HARDWARE AND SOFTWARE SUPPLIED UNDER A SINGLE AGREEMENT

Review of the Case Law

In *Dreier Co., Inc. v. Unitronix Corp.*,[29] the plaintiff Dreier entered into a written contract for the purchase of a computer system consisting of both hardware and custom programmed software. The software allegedly never operated properly and Dreier brought an action for fraud and for breach of warranty under article 2 of the UCC. The trial court found the action time-barred by the statute of limitations and granted summary judgment for Unitronix. However, the appellate court reversed and remanded for a determination of when tender of delivery occurred because tender controls when the statute of limitations starts to run under section 2-725[30] of article 2. The court confronted the question of whether article 2 applied to the transaction and concluded that general agreement exists that the sale of a computer system comprising both hardware and software is a sale of goods under article 2. However, the court's discussion indicates that the court viewed the providing of custom software, as in this case, as simply being an incidental service aspect of the overall transaction.

A computer system comprising both hardware and software was sold in *Redmac, Inc. v. Computerland*.[31] The system failed to work properly and an action was brought under Illinois law for breach of express warranty under section 2-313[32] of article 2. The court applied article 2 to the transaction without discussion and found that the seller had breached the section 2-313 express warranty and that the buyer had a right tor evoke acceptance of the system under section 2-608.[33]

In *Triangle Underwriters, Inc. v. Honeywell, Inc.*,[34] the sale of a computer system consisting of hardware, standard software, and custom software resulted in breach of contract claims when the system failed to function properly because the software did not operate as promised. The court concluded that the transaction involved the sale of goods under article 2.[35] Therefore, the contract action was barred by the four year statute of limitations under section 2-725[36] of article 2 which applied in lieu of the six year statute of limitations which applied to contracts outside the domain of article 2 in New York state.[37]

The plaintiff in *Rochester Welding Supply Corp. v. Burroughs Corp.*[38] Contracted to buy two different computers from Burroughs. Under both contracts Burroughs was obligated to program the computers, but after several unsuccessful efforts Burroughs conceded that it was unable to properly program the computers. Rochester sued Burroughs for breach of contract, but the trial court dismissed after concluding the statute of limitations under section 2-725[39] of article 2 had expired. On appeal the court found that the statute of imitations had not run and trial court was reversed.[40] Both the majority and dissent applied article 2 to the transaction without discussion of its application. Their disagreement centered on how to apply section 2-725, not on whether the transaction was within the scope of article 2.[41]

In *Samuel Black Co. v. Burroughs Corp.*,[42] a buyer contracted to purchase a computer as well as software for the computer. The software was never completed, and the buyer returned the computer and sued the seller for, among other things, breach of contract. The court found that Michigan law controlled the transaction and stated that "there is reason to doubt whether the courts of Michigan would treat the computer system transaction . . . as falling within the scope . . . of the Uniform Commercial Code's ("UCC") article on sales."[43] The court then declined to resolve the question of the applicability of article 2 because it felt the outcome of the case would be the same whether article 2 did or did not apply. Based on this reasoning the court simply applied article 2 to the transaction by analogy.[44]

In *United States Welding v. Burroughs Corp.*,[45] dissatisfaction with the operation of a leased computer and operating software resulted in an action for negligent misrepresentation and breach of an implied warranty of fitness.[46] In denying the motion to dismiss the negligent misrepresentation claim the court held, under Colorado law, that the contemporaneous contract claim (the breach of warranty claim) did not preclude the negligent misrepresentation claim.[47] Additionally, the court simply presumed without any analysis that article 2 applied to the overall lease transaction under Colorado law.

In *Jaskey Finance and Leasing v. Display Data Corp.*,[48] the plaintiff, Jaskey, purchased a computer system, consisting of both hardware and software from Display Data. The transaction involved a contract covering the computer system and any accompanying programming and installation, and a separate maintenance contract for the computer system. Dissatisfaction with the operation of the system resulted in an action by Jaskey against Display Data for breach of express[49] and implied warranties.[50] In deciding a motion to dismiss, the court applied Maryland law and found any express warranties in the advertising or promotional material to be excluded under section 2-202[51] of article 2.[52] Additionally, the contract effectively disclaimed any express or implied warranties of

fitness under section 2-316,[53] although any implied warranty of merchantability was not disclaimed under section 2-316.[54] The court applied article 2 to both contracts without discussion of the scope of article 2 or its application to the transactions involved.

In *Aplications, Inc. v. Hewlett Packard Co.*,[55] Aplications purchased a Hewlett Packard computer programmed with a Hewlett Packard computer language for resale to a third party. After Aplications installed the computer, it alleged the computer language did not perform as warranted and Aplications sued Hewlett Packard for breach of express[56] and implied warranty.[57] The court granted summary judgment for Hewlett Packard with regard to the breach of warranty claims because the court found, under California law, that any warranties had been effectively disclaimed under section 2-316.[58] The court applied article 2 in this case without any discussion of its applicability to the transaction involved.

In *Kalil Bottling co. v. Burroughs Corp.*,[59] Kalil signed a contract to purchase a computer and software on credit. Subsequent to the installation of the computer, Burroughs rejected Kalil's application for credit and a third party purchased the computer and software from Burroughs and leased it to Kalil. The computer did not operate properly and Burroughs failed to install all the software required in the original contract. Kalil sued Burroughs for breach of contract and breach of warranty.[60] The parties proceeded at trial and on appeal on the theory that a contract existed between Kalil and Burroughs and therefore the court decided the case under Arizona law based on this theory.[61] In reversing a jury award for Kalil and remanding for a new trial, the appellate court found an implied warranty exclusion valid under section 2-3165 (renumbered A.R.S. 44-2333 in Arizona).[62] Additionally, the court found any alleged representation made prior to executing the contract inadmissible due to section 2-202 (A.R.S. 44-2309 in Arizona).[63] Finally, a contract clause limiting damages and only requiring repair and replacement of any defective parts was found to be a nonexclusive remedy under section 2-719 (A-R.S. 44-2398 in Arizona).[64] Article 2 was applied in this case without any discussion of its scope or application to the transaction at issue.

In *Chatlos Systems v. National Cash Register Corp.*,[65] National Cash Register (NCR) sold Chatlos a computer via a sale/leaseback arrangement which involved sale of the computer by NCR to a bank which then leased it back to Chatlos. Under the terms of the arrangement NCR also provided programming services to Chatlos which entailed installation of software in the computer by NCR personnel. The software never worked properly and in an action by Chatlos against NCR the court held, under New Jersey law, that NCR had breached both an express warranty[66] and an implied warranty of fitness.[67] Damages were consequently awarded under section 2-714.[68] The court addressed the question of the applicability of article 2 and stated that the transaction involved the sale of goods despite the lease arrangement and the programming services which it viewed as only incidental service aspects of the overall transaction.[69]

In *Carl Beasley Ford, Inc. v. Burroughs Corp.*,[70] Burroughs sold Ford a computer and accompanying software via a "bundled" transaction.[71] The agreement obligated Burroughs to furnish, install, and test thirteen computer programs. Twelve of the programs were installed late and three crucial programs failed to work properly rendering the computer useless to Ford. Ford then rejected the computer and software and brought a successful breach of contract action against Burroughs to recover the purchase price and consequential damages. The court applied article 2, under Pennsylvania law, to the transaction without discussion.[72] The court found that Ford had made a valid rejection of goods under sections 2-602[73] and 2-606.[74] It then awarded damages based on sections 2-711,[75] 2-712,[76] and 2-715.[77]

In *O J & C Co. v. General Hospital Leasing*,[78] O J & C obtained a computer ad accompanying software via a sale/leaseback arrangement under which the computer manufacturer sold the computer to General Hospital Leasing who then leased it to O J & C. The lease was for five years with an option to renew the lease on an annual basis at the end of the five year period. The lease did not include an obligation or option to purchase on the part of O J & C. In a successful action to recover unpaid rent due on the computer from O J & C, the court determined under Texas law that section 2-302[79] of article 2 was not relevant with regard to whether the warranty provision of the lease was unconscionable.[80] The court rejected application of section 2-302 because the court said article 2 was limited to sales.[81]

The Court of Appeals for the Third Circuit reviewed the allowance of a claim in a bankruptcy proceeding in the *Matter of Community Medical Center*.[82] The transaction involved a three year contract which provided that the claimant would provide data processing services to the debtor. The claimant leased computers from a computer manufacturer which were installed on the debtor's premises. These leased computers were then linked to claimant's central computer, located on claimant's premises, which served the needs of all claimant's customers including the debtor. The claimant also provided programming services, maintained the computers, and trained the debtor's personnel in the operation of the system. In determining the proper amount of the claim under New Jersey law the court noted in dicta that the transaction was not within the domain of article 2.[83] The court stated that the transaction involved a lease that was not the practical equivalent of a sale because the computers involved were leased by the claimant and therefore they could not be sold to the debtor. Additionally, the debtor did not have an option to purchase them at the end of the lease for a nominal sum.[84] Consequently, the court determined that a contract for the sale of services, outside the scope of article 2, existed.[85]

In *Aubrey's R.V. Center v. Tandy, Corp.*,[86] Aubrey's obtained a computer system comprised of hardware and software from Tandy. Inventory software was purchased directly from the software producer with a Tandy employee acting as an agent for the sale. The hardware and the remainder of the software were obtained via a sale/leaseback arrangement in which a third party purchased the system from Tandy and leased it back to Aubrey's. The sale/leaseback arrangement was used as a financing scheme and it allowed Aubrey's to purchase the system at the end of the lease. The inventory software and some of the other software filed to function properly and Aubrey's sought contract rescission and damages for violation of the state consumer protection act.[87] In affirming the trial court's rescission of the contract the appellate court noted that such a remedy was codified in section 2-608[88] of article 2 although in code language it was called "revocation of acceptance."[89] The court, noting that both parties agreed that article 2 applied, applied article 2 under Washington law without any discussion of its application to computer software.[90]

In *Neilson Business Equipment v. Monteleone*,[(91)] a physician in private practice obtained a computer system consisting of hardware, software, and accompanying services via a sale/leaseback arrangement. The software filed to generate proper patient bills or maintain adequate records, and the physician thereafter terminated the computer system lease and sued for damages. The trial court awarded damages to the physician, under Delaware law, for breach of the warranties of merchantability[(92)] and fitness[(93)] under article 2 of the UCC. In affirming the trial court decision, the Delaware Supreme Court recognized that the central issue was whether the transaction involved goods[(94)] because article 2 is limited in its application to transactions in goods.[(95)] The court dismissed the argument that software is an intangible and therefore not a good by concluding that the computer hardware, software, and services were purchased as a package.[(96)] The court recognized that the transaction involved service aspects, but it upheld the trial court's application of the predominant feature test[(97)] because substantial evidence supported the conclusion that the transaction involved goods. The court was also not deterred from applying article 2 because the computer system was obtained via a lease. The court concluded that the sale/leaseback arrangement was the equivalent of a sale and that it was used merely to obtain favorable cash flow and tax treatment.

Analysis of the Case Law

A total of nine decisions involved the sale of hardware and software under a single agreement. In seven of these decisions article 2 was applied to the transaction. *Triangle Underwriters* addressed the threshold question of whether software was a good under article 2. The court, sitting in diversity concluded that a New York court would treat both the computer hardware and software as goods under article 2.[(98)] *Dreier* also confronted this question and stated:

It is clear that the sale of a computer system consists not only of physical goods, but of substantial services essential in producing the final product. Nevertheless, most authorities agree that the sale of a computer system involving both hardware and software is a "sale of goods" notwithstanding the incidental service aspects of the sale; therefore Article 2 of the Uniform Commercial Code . . . applies.[(99)]

In *Samuel Black* the court was unsure whether the computer transaction was within the scope of article 2 of the UCC. Nevertheless, the court applied article 2 without resolving this scope question because it concluded that the outcome in this case was the same under both the common law and under article 2. In the remaining five cases that involved the sale of hardware and software under a single agreement, article 2 was applied to the transaction without discussion.

Although judicial decisions have found article 2 applicable to most sales of hardware and software under a single agreement, less consistent results exist when the computer hardware and software is leased rather than sold. In *United States Welding* a lease of computer hardware and software was subject to article 2 under Colorado law. However, in the *Matter of Community Medical Center* the court noted that a lease of computer hardware which included programming services was not covered by article 2 under New Jersey law.

Judicial decisions exhibit similar conflicting results when hardware and software are obtained via sale/leaseback arrangements. In *Neilson Business Equipment Center* article 2 was applied to a sale/leaseback arrangement under Delaware law. In *Kalil Bottling* article 2 was applied to a sale/leaseback transaction under Arizona law. An analogous transaction was covered by article 2 under New Jersey law in *Chatlos Systems*. In *Aubrey's R.V. Center*, article 2 was applied under Washington law in a transaction involving both the direct sale of software and sale/leaseback of hardware and software. However, in *O J & C* application to a sale/leaseback transaction was unequivocally rejected under Texas law.

This inconsistent application of article 2 to transactions involving leases and sale/leaseback arrangements does not represent confusion over whether article 2 applies to software. Instead it merely exemplifies the judicial disagreement over the extension of article 2 generally to non-sale transactions such as leases.[(100)] A few courts have extended article 2 to true leases[(101)] while other courts have only extended article 2 to leases that are analogous or equivalent to a sale.[(102)] Additionally, some courts have limited the scope of article 2 to sales thereby excluding leases from the scope of article 2.[(103)]

The Texas courts have consistently held that article 2 is limited in scope to sale transactions.[(104)] Therefore, the failure of the Texas court in *O J & C* to apply article 2 to a sale/leaseback transaction involving computer hardware and software is consistent with the Texas court's interpretation of the scope of article 2. In contrast to Texas, the Arizona courts have extended article 2 to lease transactions.[(105)] Therefore the application of article 2 to the sale/leaseback arrangement in *Kalil Bottling* is consistent with the Arizona court's interpretation of article 2. Likewise, Washington courts have concluded that article 2 covers leases and bailments.[(106)] Consequently, the application of article 2 to the transaction in *Aubrey's R.V. Center* is consistent with state law in Washington.

In an early decision extending the implied warranty of fitness to a leased truck, the New Jersey Supreme Court noted, in dicta, that article 2 could extend beyond sales.[(107)] Based on this and decisions in other states extending article 2 to lease transactions, the application of article 2 in *Chatlos Systems* seems logical. Despite *Chatlos Systems*, a federal court noted in *Community Medical Center* that under New Jersey law a lease arrangement was not within the scope of article 2. These decisions are reconcilable, however, in light of the trend of only extending article 2 to lease transactions that are analogous or equivalent to sales.[(108)]

In *Chatlos Systems* a sales/lease back arrangement was used merely for financing purposes. In this case a computer manufacturer was unable to sell a computer system directly to a customer because the customer failed to meet the credit standards of the manufacturer. To prevent loss of the sale, the manufacturer sold the computer system to a bank which then leased it to the customer. Despite the use of a lease, the underlying purpose of the transaction was to accomplish a sale, and therefore the technical lease arrangement was really equivalent to a sale by the manufacturer to the customer.

In *Community Medical Center*, the court noted that some leasing arrangements are within the scope of article 2 when they are equivalent to sales. However, the court did not believe the lease arrangement in this case was equivalent or analogous to a sale and therefore article 2 was found inapplicable.

Finally, in *United States Welding* a federal court sitting in diversity, concluded, without analysis, that under Colorado law article 2 applied to a lease transaction despite a lack of Colorado precedents on this question.[109] Such a result is consistent with other jurisdictions which have extended articl3 2 to lease transactions.

A review of the caselaw indicates that the sale of computer hardware and software under a single agreement is treated as being within the scope of article 2 by most courts. However, when a lease transaction is involved, the courts are divided on whether article 2 applies. An examination of the treatment of leases generally under article 2 reveals that the courts are divided on the treatment of leases.[110] Therefore, the different state-to-state treatment of computer lease transactions is consistent with the varied treatment of leases in general.

TRANSACTIONS TO OBTAIN BOTH COMPUTER HARDWARE AND SOFTWARE INVOLVING SEPARATE HARDWARE AND SOFTWARE AGREEMENTS

Review of the Case Law

In *W.R. Weaver Co. v. Burroughs Corp.*[111] A computer user leased a Burroughs computer from the defendant and purchased application software to run on the computer from the defendant. When the computer and software failed to operate as warranted the computer user sought consequential damages based on theories of express[112] and implied warranty[113] and strict liability. The appellate *court* specifically found article 2 inapplicable to the computer hardware portion of the transaction because the hardware was leased and article 2, at least in Texas, is limited to sales.[114] Article 2 was held applicable to the software sale, however, and therefore the statute of limitations embodied in section 2-725[115] and the warranty exclusion contained in section 2-316[116] were applicable to the software sale.[117] Although the court did not directly address whether the software was a good, such a conclusion is implicit in the court's application of article 2 to the software transaction.[118]

A buyer entered into two contracts for the purchase of computer hardware and accompanying training, support services and other material in *Hi Neighbor Enterprises v. Burroughs Corp.*[119] The buyer also executed two contracts for the purchase of software and computer education courses. Dissatisfaction with the seller's performance under the contracts led the buyer to sue for breach of contract and fraud. In analyzing the enforceability of the damage and warranty limitation clauses of the contracts, the court applied Florida law and determined that sections 2-719[120] and 2-316[121] of article 2 rendered the clauses valid.[122] The court failed to expressly address whether software was a good and simply implied this conclusion by finding article 2 applicable to the contracts for the sale of software.[123] In *Office Supplies, Inc. v. Basic/Four Corp.*,[124] the plaintiff purchased computer hardware and leased software to be used with the hardware. The plaintiff brought an action for beach of contract alleging defects in both the hardware and software, but the action was dismissed pursuant to defendant's motion for summary judgment.[125] In the court's analysis, the statute of limitations under the Wisconsin version of section 2-725[126] was relied on.[127] In addition, relying on California law, a warranty disclaimer was found not to be conspicuous as required by section 2-316,[128] and a damage limitation was found to be void and to have failed of its essential purpose under section 2-719.[129] In reaching its decision, the court treated the lease of software as a sale of software noting in a footnote that the software was leased for copyright purposes and that neither party to the action contended that this had any significance with regard to the application of article 2.[130]

A beer distributor contracted with Burroughs to buy a computer and for the right to use certain programs provided by Burroughs in *Quad Cty. Distributing co. v. Burroughs, Corp.*[131] The distributor also paid Burroughs $14,000 to have Burroughs develop software for the distributor. The programs to be developed never worked properly and the buyer covered by purchasing the programs elsewhere for $18,718.28 and sued for breach of contract under Illinois law. The court stated that the measure of damages for breach of a contract for the sale of personal property was the difference between the contract price and the market price at the time of the breach.[132] The court then found damages to be the difference between the contract price and the cost of cover.[133] The court failed to identify whether the common law or article 2 applied since the court noted the common law measure of damages in this case was the same as under the applicable article 2 provision (section 2-712).[134] It follows, however, from the court's analysis that it at least viewed software as personal property even though the court failed to explicitly determine whether the common law or article 2 controlled the transaction.

In *Westfield Chemicals Corp. v. Burroughs Corp.*,[135] Burroughs sold a computer with a one year service contract to Westfield. Westfield alleged that the computer did not work property and sued for damages based on breach of contract and breach of express[136] and implied warranties.[137] The court applied article 2 under Massachusetts law without discussion. The court dismissed the action because it determined the contract was not unconscionable based on Comment one to section 2-302.[138] The court found the contract defectively disclaimed all warranties under 2-316,[139] and that the contract defectively limited Westfield's remedy to repair or replacement of defective computer parts under section 2-719.[140] The court also noted in dicta that the parties signed a second software contract under which Burroughs was to program the computer for Westfield. The court stated that the provisions of this contract also disclaimed all warranties and limited liability as in the sales contract, although the court failed to state explicitly that article 2 applied to the software contract.[141]

In *H.M.O. Systems v. Choicecare Health Services*,[142] H.M.O. purchased computer hardware from Hewlett Packard on credit. H.M.O. then leased this hardware to Choicecare and Choicecare made monthly lease payments equal to H.M.O.'s monthly payments directly to the bank that financed the transaction between Hewlett Packard and H.M.O. Choicecare was responsible for all maintenance of the hardware and had an option to purchase the hardware at the end of the lease. Choicecare also entered into an agreement with H.M.O. under which H.M.O. granted Choicecare a non-expiring license for $15,000 to use software developed by H.M.O. especially for Choicecare. The software agreement also provided that Choicecare would make space available to H.M.O. to demonstrate the software to other potential customers in return for Choicecare receiving a royalty for each system sold. Choice care subsequently became insolvent and was placed in receivership. H.M.O. then sued, under Colorado law, for breach of the hardware lease and breach of contract with regard to the software agreement. The court held that the lease agreement was governed by article 9 of the UCC[143] since the intent of the parties was to create a security interest in the computer hardware.[144] The breach of

the software agreement, however, was treated as a breach of contract claim and damages were determined based on the common law without any discussion as to whether article 2 should apply to the software agreement.(145)

Analysis of the Caselaw

A total of six decisions involved transactions to provide computer systems in which a separate agreement was executed for the hardware and software segments of the system. Article 2 was consistently applied to contracts for the sale of software in *W.R. Weaver and Hi Neighbor*. However, the decisions are less consistent when custom software(146) is involved or the software is provided via a non-sale transaction such as a lease or license.

In *Westfield Chemicals* the court implied that a contract to provide custom software was governed by article 2. However in *Quad Cty. Distributing*, the application of article 2 to a similar custom software contract was left undecided because the outcome of the case was the same under the common law or article 2. Additionally, article 2 was found applicable to leased software in *Office Supplies* while *H.M.O. Systems* applied the common law to an agreement to license custom software.

These decisions indicate that software was viewed as a good covered by article 2 in the majority of cases. The decisions in which article 2 was not applied or in which its application was left undecided do not necessarily represent confusion with regard to whether article 2 applies to software. Both of these decisions involved custom software which under existing law may not be subject to the application of article 2. As will be discussed in the next section, such contracts may be service contracts outside the domain of article 2.(147)

Additionally, the failure of *H.M.O. Systems* to apply article 2 may be due to the nature of the transaction. *H.M.O. Systems* involved a license to use software which is a non-sale transaction. As previously discussed, the treatment of non-sale transactions generally varies among different jurisdictions.(148) In Colorado no state court precedents exist with regard to the extension of article 2 to non-sale transactions.(149) Therefore, the failure to apply article 2 may indicate reluctance of the intermediate appellate court in *H.M.O. Systems* to apply article 2 to a non-sale transaction absent Colorado precedents.

AGREEMENT TO DEVELOP CUSTOM SOFTWARE

Review of the Case Law

In *Data Processing Services Inc. v. L.H. Smith Oil Corp.*,(150) the court squarely addressed the issue, under Indiana law, of whether a contract to develop custom software(151) designed to meet the specific needs of the user was a contract for the sale of goods subject to article 2, or a contract to perform services subject to the common law.(152) The trial court found article 2 applicable and awarded $33,000 damages for breach of contract based on a finding that the software failed to perform as promised. On appeal, the court affirmed the award of damages but its decision was based on the common law since the appellate court determined that the contract to develop software was a contract to provide services and not a contract to sell goods.(153) It should be noted that the court distinguished the custom software involved in this case from the sale of "generally-available standardized software" which other courts have held to be within article 2.(154)

In *Data Processing Services* the court confronted the question of whether a contract to develop custom software was a contract for the sale of goods or a service contract.(155) The court concluded that the development contract was a service contract and therefore article 2 did not apply since the scope of article 2 does not extend to service contracts.(156) However, the court recognized that it was dealing with custom made software and that its decision might not apply to standardized software which is sold as a mass-marketed commodity.(157)

The distinction between standardized software and custom made software with regard to the application of article 2 is analogous to the application of article 2, by some courts, in other commercial transactions. For example, in *Art Metal Products Co. v. Royal Equipment Co.*,(158) a contract to supply and install custom built athletic lockers was held to be outside the scope of article 2. The court reasoned that the main purpose or predominant feature of the contract was to install the custom lockers. The providing of the lockers, which are goods under article 2, was viewed as only an incidental aspect of the contract.(159) In reaching its conclusion, the court distinguished *Anderson Construction Co. Inc. v. Lyon Metal Products, Inc.*,(160) in which a contract to provide and install school lockers was held subject to article 2. In *Anderson Construction*, the lockers were standard lockers and therefore the court concluded the sale of the lockers was the predominant feature of the contract. Therefore, a determination that standard software is a good and that custom software is not a good under article 2 is reconcilable with at least some existing caselaw dealing with non-computer transactions.

AGREEMENT TO PROVIDE DATA PROCESSING SERVICES

Review of the Case Law

In *Liberty Financial Mgmt. v. Beneficial Data*,(161) Beneficial Data entered a contract to provide on-line data processing services to Liberty, a consumer loan company. Dissatisfaction with the services resulted in Liberty bringing a breach of contract action under Missouri law which yielded a jury award of over one million dollars. On appeal, the trial court decision was reversed and the case was remanded, in part, because a clause in the contract limiting consequential damages for negligence was withdrawn from the consideration of the jury by the trial court. In analyzing the validity of the clause limiting consequential damages, the appellate court found the clause valid, but rejected application of section 2-719(162) of article 2 because it concluded the scope of article 2 was limited to transactions in goods.(163) The court determined that the contract in this case was primarily for data processing services with reels of tape and other tangible items provided to Liberty being only incidental to the contract, and therefore the contract was not within the scope of article 2.(164)

In *Computer Servicenter, Inc. v. Beacon Manufacturing Co.*,[(165)] an oral contract was entered into which provided that Computer Servicenter would provide data processing services to Beacon in the form of analysis, collection, storage, and reporting of certain data supplied by Beacon. The services had been provided for three months when Beacon notified Computer Servicenter that these services were no longer required. Computer Servicenter brought an action for breach of contract but Beacon's motion for summary judgment was granted based on the oral contract being unenforceable under the statute of frauds. In reaching its decision, the court determined under South Carolina law that the transaction was a contract to provide services as opposed to a contract for the sale of goods and therefore the common law statute of frauds applied rather than section 2-201[(166)] of article 2.[(167)]

Analysis of the Case Law

In both *Liberty Financial Mgmt.* and *Computer Servicenter*, computer hardware and software were used to provide services to customers. In *Liberty Financial Mgmt.*, reels of tape and other tangible things which are goods under article 2 were supplied to customers. In *Computer Servicenter*, data supplied by the customer was collected and analyzed. Presumably this data was reported to the customer in some tangible form which would also be a good under article 2. However, in both cases, article 2 was found inapplicable because the predominant feature or purpose of the transaction was found to be the providing of services with the goods only being incidental to the transaction. This result is consistent with the predominant feature test which has already been discussed.

The conclusion that article 2 was inapplicable in both *Liberty Financial Mgmt.* and *Computer Servicenter*, is also consistent with judicial decisions outside the computer area. A contract to supply blood[(168)] as well as contracts for the installation of glass,[(169)] flooring,[(170)] carpet,[(171)] and a sewer system[(172)] were all held to be service contracts outside the domain of article 2. In each of these cases the goods involved in the transaction were found to be incidental to the predominant service aspect of the transaction. The decisions in *Liberty Financial Mgmt.* and *Computer Servicenter* are therefore consistent with an existing body of judicial decisions.

CONCLUSION

An overview of these decisions and the accompanying analyses indicates that the majority of courts faced with transactions involving software have relied on the same analysis applied generally to commercial transactions. The predominant feature test was used to determine if a software transaction which includes services is a service contract outside article 2 or a contract for the sale of goods within article 2. Such an analysis is generally consistent with commercial decisions not involving computer hardware or software. Additionally, the judicial disagreement over whether article 2 applies to software transactions involving a lease or sale/leaseback arrangement is consistent with judicial decisions outside the computer area. Disagreement exists generally over whether article 2 is applicable only to pure sales or to non-sale transactions such as leases.

The different treatment of custom and standardized software is also consistent with decisions outside the area of computers. The conclusion that a contract to develop custom software is a service contract outside article 2 while the sale of standardized software is within article 2 is analogous to the same distinction made by many courts between custom and standard goods in general.

The judicial treatment of software is therefore consistent with judicial treatment of commercial transactions generally. Any inconsistencies or conflicting results with regard to the application of article 2 to different types of software transactions are a product of varying judicial treatment of commercial transactions generally rather than confusion over how to deal with software.

FOOTNOTES

1. Article reprinted in 2 Software L.J. 77 (1987)(Software Law Journal subsequently merged into The John Marshal Journal of Computer & Information Law).

2. Visiting Assistant Professor of Law, The Claude W. Pettit College of Law, Ohio Northern University; B.S., Hofstra University, 1976; J.D., Western New England College School of Law, 1981; LL.M., Temple University School of Law, 1986.

3. The computer industry has been one of the fastest growth industries in the United States with companies in this field having average annual growth rates of 11.1% for the twenty-five year period ending in 1980. Note, *U.C.C. Section 2-719 as Applied to Computer Contracts-Unconscionable Exclusions of Remedy?: Chatlos Systems, Inc. v. National Cash Register Corp.*, 14 Conn. L. Rev. 71, 93 n.100 (1981). *See also* Samuelson, *Our Computerized Society*, Newsweek, Sept. 9, 1985 at 73 (estimated that 10 million small home computers will be in use by 1990); Reed, *Decades Top Jobs-Where to Write for Details on 20 Fastest-Growing Careers*, N.Y. Times, Oct. 13, 1985 at 17J (during next decade the number of computers in use is expected to increase by a factor of ten).

4. One computer vendor had approximately 165 suits brought against it relating to their line of small business computers. Another major computer seller had a $2.7 million judgment awarded against them. Zammit, *Computers, Software, and the Law*, 68 A.B.A.J. 970 (1982). *See also,* Holmes, *Application of Article Two of the Uniform Commercial Code to Computer System Acquisitions*, 9 Rutgers Computer & Tech. L.J. 1, 4, n.10 (1982) (one major computer manufacturer had more than two hundred and fifty lawsuits brought against them by dissatisfied purchasers of their computers).

Additionally, controversy has existed over whether computer software is taxable, admissible as evidence, or eligible for patent or copyright protection. Note, *Computer Programs as Goods Under the UCC*, 77 Mich. L. Rev. 1149 (1979). *See also* Rodau, *Protecting Computer Software: After Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983), *Does Copyright Provide the Best Protection?*, 57 Temple L.Q. 527 (1984) (discusses the application of patent and copyright law to computer software).

5. Computer software, also called a program, is defined as "a set of instructions arranged in proper sequence for directing the computer in performing a desired operation, such as the solution of a mathematical problem or the sorting of data." The Illustrated dictionary of Microcomputers 236 (2nd ed. 1986) (see "program" definition). For a description of how software is produced see Rodau, *computer Software: Does Article 2 of the Uniform Commercial Code Apply?*, 35 Emory L.J. 853, 868 n.57 (1986).

Computer software should be distinguished from computer hardware which is the actual physical machinery that comprises a computer system. *See* Rodau, *supra* note 3, at 871-72, n.66, for a description of the various types of computer hardware elements that comprise a computer system.

6. *See* Zammit, *supra* note 2 (discusses potential contract and tort causes of action that are available when a computer system fails to operate properly). *See also* Conley, *Tort Theories of Recovery Against Venders of Defective Software*, 13 Rutgers Computer & Tech. L.J. 1 (1987); Brenneman, *Computer Malfunctions: What Damages May Be Recovered in a Tort Product Liability Action*, 2 Santa Clara Computer & High-Tech L.J. 271 (1986).

7. One commentator predicts that the bulk of future computer litigation will involve software. Zammit, *supra* note 2, at 970.

8. Conley, *supra* note 4, at 2.

9. McGonigal, *Application of Uniform Commercial Code to Software Contracts*, 2 Computer L. Serv. Rep. (Callaghan) 117 (1978). *See also* Conley, *supra* note 4, at 2-3 (article 2 more liberal than common law with regard to admissibility of parol evidence, formalities required to form a contract, and the power of a court to supply missing contract terms).

10. *See* Rodau, *supra* note 3, at 855-56 n.9. *See also* Conley, *supra* note 4, at 3 (argues article 2 should not apply to software).

11. Conley, *supra* note 4, at 4 (courts will apply UCC to software transactions).

12. 772 F.2d 543 (9th Cir. 1985).

13. UCC section 2-105(1) states that "'[g]oods' means all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities (Article 8) and things in action."

14. 772 F.2d at 546.

15. *Id.*

16. Unpublished decision, No. 83 Civ. 8729 (S.D.N.Y. Aug. 30, 1984) (available on Lexis, Genfed Library, Dist. file).

17. UCC section 2-607(3)(a) states that where the tender of goods has been accepted the buyer is barred from any remedy for breach if the buyer fails to notify the seller of the breach within a reasonable time after buyer discovers or should have discovered the breach.

18. UCC section 2-719(2) states "[w]here circumstances cause an exclusive or limited remedy to fail of its essential purpose, remedy may be had a provided in this Act."

19. 579 F. Supp. 135 (D. Md. 1984).

20. UCC section 2-313 (express warranty), section 2-314 (implied warranty of merchantability), and section 2-315 (implied warranty of fitness for particular purpose).

21. *Id.* at 138.

22. *Id.*

23. Note, *The Goods/Services Dichotomy and the U.C.C.: Unweaving the Tangled Web*, 59 Notre Dame L. Rev. 717, 719 (1984).

24. G. Wallach, The Law of Sales Under the Uniform Commercial Code 11.05[3] at 11-28 (1981). *See also* Freeman v. Shannon Constr., Inc., 560 S.W.2d 732 (Tex. Civ. App. 1977).

25. *See infra* notes 98-101 and accompanying text.

26. *Harford Mutual Insurance* involved a federal court sitting in diversity and applying South Carolina law. Under South Carolina law leases for automobiles and refrigeration equipment have been held to be within article 2 when the lessee has an option to purchase the goods at the end of the lease term. *See* White v. State, 263 S.C. 110, 208 S.E.2d 31 (1974); Hones Leasing Inc. v. Gene Phillips & Assoc., 282 S.C. 327, 318 S.E.2d 31 (1984). However, it is unclear if South Carolina courts will extend article 2 to other non-sale transactions such as licenses.

27. *See infra* notes 155-158 and accompanying text.

28. *See infra* note 149 and accompanying text.

29. Unpublished decision, No. A-1593, 85T5, Slip Op. (N.J. Super. Nov. 10, 1986).

30. UCC section 2-725(1) states that unless the parties have agreed otherwise, an action for breach of contact must be commenced within four years of the tender of delivery.

31. 140 Ill. App. 3d 741, 489 N.E.2d 380 (1986).

32. UCC section 2-313(1) states that express warranties result from the seller's affirmations of fact or promises, descriptions of the goods, or by providing a sample or model which becomes a basis of the bargain.

33. UCC section 2-608(1) states:

(1) The buyer may revoke his acceptance of a lot or commercial unit whose non-conformity substantially impairs its value to him if he has accepted it on the reasonable assumption that its nonconformity would be cured and it has not been seasonably cured; or without discovery of such non-conformity if his acceptance was reasonably induced either by the difficulty of discovery before acceptance of by the seller's assurances.

34. 457 F. Supp. 765 (E.D.N.Y. 1978), *modified*, 604 F.2d 737 (2d Cir. 1979) (reversed in part because district court improperly applied statute of limitations).

35. *Id.* at 769.

36. *See supra* note 28.

37. 457 F. Supp. at 769.

38. 78 A.D.2d 983, 433 N.Y.S.2d 888 (1980).

39. *See supra* note 28.

40. 433 N.Y.S.2d at 889.

41. *Id.*

42. 33 U.C.C. Rep. 964 (D. Mass. 1981).

43. *Id.* at 962.

44. *Id.* at 964.

45. 587 F. Supp. 49 (D. Colo. 1984).

46. *See* UCC section 2-315.

47. 587 F. Supp. at 51.

48. 564 F. Supp. 160 (E.D. Pa. 1983).

49. *See supra* note 30.

50. *See* UCC section 2-315 (implied warranty of fitness for particular purpose).

51. UCC section 2-202 governs the admission of parol evidence with regard to transactions covered by article 2.

52. 564 F. Supp. at 164.

53. UCC section 2-316 allows the parties, by agreement, to exclude or modify warranties created by sections 2-313, 2-314 and 2-315.

54. 564 F. Supp. at 164.

55. 501 F. Supp. 129 (S.D.N.Y. 1980), *aff'd*. 672 F.2d 1076 (2d Cir. 1982).

56. *See supra* note 30.

57. UCC section 2-314 (implied warranty of merchantability) and section 2-315 (implied warranty of fitness for a particular purpose).

58. 501 F. Supp. at 133.

59. 127 Ariz. 278, 619 P.2d 1055 (1980).

60. *See supra* note 18.

61. 619 P.2d at 1058.

62. *See supra* note 51.

63. *See supra* note 49.

64. UCC section 2-719 states:

(1) Subject to the provisions of subsections (2) and (3) of this section and of the preceding section on limitation of damages,

(a) the agreement may provide for remedies in addition to or in substitution for those provided in this Article and may limit or alter the measure of damages recoverable under this Article, as by limiting the buyer's remedies to return of the goods and repayment of the price or to repair and replacement of non-conforming goods or parts; and

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

(2) Where circumstances cause an exclusive or limited remedy to fail of its essential purpose, remedy may be had a provided in this act.

(3) Consequential damages may be limited or excluded unless the limitation or exclusion is unconscionable. Limitation of consequential damages for injury to the person in the case consumer goods is prima facie unconscionable but limitation of damages where the loss is commercial is not.

65. 479 F. Supp. 738 (D. N.J. 1979), *aff'd.* 635 F.2d 1081 (3d Cir. 1980) (remanded for recomputation of damages), 670 F.2d 1304 (3d Cir. 1982) (liability upheld after remand).

66. *See* UCC section 2-313.

67. *See* UCC section 2-315.

68. UCC section 2-714(2) states:

The measure of damages for breach of warranty is the difference at the time and place of acceptance between the value of the goods accepted and the value they would have had if they had been as warranted, unless special circumstances show proximate damages of a different amount.

69. 479 F. Supp. at 742.

70. 361 F. Supp. 325 (E.D. Pa. 1973), *aff'd without opinion*, 493 F.2d 1400 (3d Cir. 1974).

71. *See* Rodau, *supra* note 3, at 873 (explanation of bundled transaction).

72. 361 F. Supp. at 330.

73. UCC section 2-602(1) states:

Rejection of goods must be within a reasonable time after their delivery or tender. It is ineffective unless the buyer seasonable notifies the seller.

74. UCC section 2-606 states:

Acceptance of goods occurs when the buyer

(a) after a reasonable opportunity to inspect the goods signifies to the seller that the goods are conforming or that he will take or retain them in spite of their non-conformity; or

(b) fails to make an effective rejection (subsection (1) of Section 2-602), but such acceptance does not occur until the buyer has had a reasonable opportunity to inspect them; or

(c) does any act inconsistent with the seller's ownership; but if such act is wrongful as against the seller it is an acceptance only if ratified by him.

(2) Acceptance of a part of any commercial unit is acceptance of that entire unit.

75. UCC section 2-711(1) states:

(1) Where the seller fails to make delivery or repudiates or the buyer rightfully rejects or justifiably revokes acceptance then with respect to any goods involved, and with respect to the whole if the breach goes to the whole contract (Section 2-612), the buyer may cancel and whether or not he had done so may in addition to recovering so much of the price as has been paid

(a) "cover" and have damages under the next section as to all the goods affected whether or not they have been identified to the contract; or

(b) recover damages for non-delivery as provided in this Article (Section 2-713).

76. UCC section 2-712 provides that if the buyer covers, the buyer can recover damages equal to the difference between the cost of cover and the contract price plus any incidental or consequential damages.

77. UCC section 2-715 allows the buyer to recover incidental damages and to recovery consequential damages in certain situations.

78. 578 S.W.2d 877 (Tex. Civ. App. 1979).

79. UCC section 2-302 allows a court to refuse to enforce all or part of a contract if the court finds the contract to be unconscionable as a matter of law.

80. 578 S.W.2d at 878.

81. *Id.*

82. 623 F.2d 864 (3d Cir. 1980).

83. *Id.* at 868 n.4.

84. *Id.*

85. *Id.*

86. 46 Wash. App. 595, 731 P.2d 1124 (1987).

87. Wash. Rev. Code Ann. § 19.86 et. seq. (1978).

88. *See supra* note 31.

89. 731 P.2d at 1127.

90. *Id.*

91. 524 A.2d 1172 (Del. 1987).

92. UCC section 2-314.

93. UCC section 2-315.

94. 524 A.2d at 1174.

95. UCC section 2-102 states that "[u]nless the context otherwise requires, this Article applies to transactions in goods. . . ."

96. 524 A.2d at 1174.

97. *See supra* notes 21, 22 and accompanying text.

98. 457 F. Supp. at 769.

99. *Dreier*, No. A-1593, 85T5, Slip Op. at 8-9. *Accord* Neilson Business Equipment Center v. Monteleone, 524 A.2d 1172, 1174 (Del. 1987) (court relied on predominant feature test to apply Article 2 to transaction involving computer hardware, software and services).

100. *Compare* Hertz Commercial Leasing Corp. v. Joseph, 641 S.W.2d 752 (Ky. Ct. App. 1982) (article 2 applied to lease of a muffler pipe-bending machine) *with* Bona v. Graefe, 264 Md. 69, 285 A.2d 607 (1972) (article 2 limited to sales so lease of golf cart not covered).

101. *See, e.g.*, Owens v. Patent Scaffolding Co., 77 Misc. 2d 992, 354 N.Y.S.2d 778 (N.Y. Sup. Ct. 1974), *rev'd on other grounds*, 50 A.D.2d 866, 376 N.Y.S. 2d 948 (1975); Capitol Assoc., Inc. v. Hudgens, 455 So. 2d 651 (Fla. Dist. Ct. App. 1984) (article 2 applies to lease that gave lessee no right to purchase or acquire title to the equipment).

102. *See, e.g.*, Westmont Tractor Co. v. Viking Inc., 534 F. Supp. 1314, 1317 n.3 (D. Mont. 1982) (lease of equipment that gave lessee option to purchase equipment at end of lease was covered by article 2); Sawyer v. Pioneer Leasing Corp., 244 Ark. 943, 428 S.W.2d 46 (1968) (article 2 applicable to lease where lease analogous to sale); Hertz Commercial Leasing Corp. v. Transportation Credit Clearinghouse, Inc., 59 Misc. 2d 226, 298 (N.Y. Civ. Ct. 1969), *rev'd on other grounds*, 64 Misc. 2d 910, 316 N.Y.S.2d 585 (N.Y. App. Div. 1970) (article 2 applied to lease that was analogous to sale).

103. Dekalb A.G. Research, Inc. v. Abbott, 391 F. Supp. 152, 153-54 (D. Ala. 1974), *aff'd per curiam*, 511 F.2d 1162 (5th Cir. 1975) (lease of hens not covered by article 2 since article 2 applies to sales not leases).

104. *See, e.g.*, U.S. Armament Corp. v. Charlie Thomas Leasing Co., 661 S.W.2d 197 (Tex. Ct. App. 1983).

105. Pacific American Leasing v. S.P.E. Bldg. Sys., Inc., 152 Ariz. 96, 730 P.2d 273 (1986) (article applied to lease of computer); Preston Motor Co., Inc. v. Palomares, 133 Ariz. 245, 650 P.2d 1227 (1982) (article 2 applied to automobile lease); Broadmont Corp. v. Fashion Floors, Inc. 124 Ariz. 282, 603 P.2d 553 (1979) (UCC applied to automobile lease).

106. Mieske v. Bartell Drugs Co., 92 Wash. 2d 40, 593 P.2d 1308 (1979) (en banc); Banker v. City of Seattle, 79 Wash. 2d 198, 484 P.2d 405 (1971) (en banc).

107. Cintrone v. Hertz Truck Leasing, 212 A.2d 769, 775-76 (N.J. 1965).

108. *See supra* note 100 and accompanying text.

109. *See* Neilson Business Equipment Center v. Monteleone, 524 A.2d 1172, 1175 (Del. 1987) (despite lack of state precedents Delaware Supreme Court applied article 2 to a sale/leaseback transaction based on persuasive authority from another jurisdiction).

110. The judicial disagreement over whether article 2 of the UCC applies to leases has resulted in the drafting of a new article for the UCC. Article 2A entitled "Leases" applies to all transactions that create a lease. 1A U.L.A. (West) 405-39 (1987 Supp.).

111. 580 S.W.2d 76 (Tex. Ct. App. 1979).

112. *See* UCC section 2-313.

113. *See* UCC section 2-314 and 2-315.

114. 580 S.W.2d at 80.

115. *See supra* note 28.

116. *See supra* note 51.

117. 580 S.W.2d at 80-81.

118. *Id.*

119. 492 F. Supp. 823 (D. Fla. 1980).

120. UCC section 2-719 allows contracting parties, by agreement, to limit damages and remedies for breach of contract.

121. *See supra* note 51.

122. 492 F. Supp. at 826.

123. *Id.*

124. 538 F. Supp. 776 (D. Wis. 1982).

125. *Id.* at 793.

126. Wisconsin modified UCC section 2-725 so it provides a six year statute of limitations instead of a four year statue of limitations. Wis. Stat. Ann. § 402.725 (West Supp. 1986).

127. 538 F. Supp. at 781.

128. UCC section 2-316 provides that a written exclusion or modification of implied warranties under UCC sections 2-314 and 2-315 must be conspicuous.

129. 538 F. Supp. at 784, 789. *See supra* note 62.

130. *Id.* at 778 n.1.

131. 68 Ill. App. 3d 163, 385 N.E.2d 1108 (1979).

132. *Id.* at 1110.

133. *Id.*

134. *Id. See supra* note 74.

135. 21 U.C.C. Rep. 1293 (Mass. Super. Ct. 1977).

136. UCC section 2-313.

137. UCC section 2-315 (implied warranty of fitness for particular purpose).

138. "The principle [of unconscionability] is one of the prevention of oppression and unfair surprise . . . and not of disturbance of allocation of risks because of superior bargaining power." 21 U.C.C. Rep. at 1296, *quoting* UCC section 2-302 official comment one.

139. *See supra* note 51.

140. 21 U.C.C. Rep. at 1295-96.

141. *Id.* at 1299.

142. 665 P.2d 635 (Colo. Ct. App. 1983).

143. Article 9 of the UCC is applicable "to any transaction (regardless of its form) which is intended to create a security interest in personal property or fixtures including goods. . . ." U.C.C. 9-102(1)(A).

144. 665 P.2d at 635.

145. *Id.* at 639.

146. *See infra* note 149.

147. *See infra* notes 153-155 and accompanying text.

148. *See supra* notes 98-108 and accompanying text.

149. *But see* United States Welding v. Burroughs Corp., 587 F. Supp. 49 (D. Colo. 1984) (federal court sitting in diversity found article 2 applicable to lease transaction under Colorado law).

150. 492 N.E.2d 314 (Ind. Ct. App. 1986), *reg. denied*, 493 N.E.2d 1272 (Ind. Ct. App. 1986).

151. Computer software can be classified as "canned" or "off the shelf" software or as "custom" software. Canned software is software that is suitable for many users without modification. Custom software is specially designed for the specific needs of the user and is not readily usable by other users. Measurex Systems, Inc. v. State Tax Assessor, 490 A.2d 1192, 1195 (Me. 1985). *See also* Rodau, *supra* note 3, at 861 n.31.

152. 492 N.E.2d at 318.

153. *Id.*

154. *Id.* at 319.

155. *Id.*

156. *Id.*

157. *Id.*

158. 670 S.W.2d 152 (Mo. Ct. App. 1984).

159. *See id.* at 155. *But see* Lake Wales Publishing Co., Inc. v. Florida Visitor, Inc., 335 So. 2d 335 (Fla. Dist. Ct. App. 1976) (contract to print specially manufactured pamphlets covered by article 2).

160. 370 So. 2d 935 (Miss. 1979).

161. 670 S.W.2d 40 (Mo. Ct. App. 1984).

162. *See supra* note 62.

163. 670 S.W.2d at 48.

164. *Id.*

165. 328 F. Supp. 653 (D.S.C. 1970), *aff'd*. 443 F.2d 906 (4th Cir. 1971).

166. UCC section 2-201 requires contracts for the sale of goods for $500 or more to be in writing to be enforceable.

167. 328 F. Supp. at 655.

168. Lovett v. Emory University, Inc., 116 Ga. App. 277, 156 S.E.2d 923 (1967).

169. Coakley and Williams, Inc. v. Shatterproof Glass Corp., 778 F.2d 196 (4th Cir. 1985), *cert. denied*, 106 S. Ct. 1640 (1986).

170. Ranger Construction Co. v. Dixie Floor Co., Inc., 433 F. Supp. 442 (D.S.C. 1977).

171. Dionne v. Columbus Mills, Inc., 311 So. 2d 681 (Fla. Dist. Ct. App. 1975).

172. Semier v. Knowing, 325 N.W.2d 395 (Iowa 1982).