Electronic Self-Help Software Repossession: A Proposal to Protect Small Software Development Companies

Timothy P. Heaton[±]

I.	Introduction
II.	Electronic Self-Help Repossession
	A. Means of Repossession
	B. Cases Involving Electronic Self-Help Repossession
	C. The Controversial Nature of the Electronic Self-Help Remedy
III.	UCITA/UCC 2B
	A. The Drafting Process
	B. Current Status of the Self-Help Provisions
IV.	Proposed Solution
	A. The Proposal and its Implementation
	B. Rationale for Waiver of the Remedy
	C. Rationale for a Notice Requirement
	D. Rationale for the Protection of Relatively Small Software Companies
V.	Comparisons to Other Areas of Law Protecting Parties With Relatively Less Bargaining
	Power
	A. Self-Help by Landlords and Tenants
	B. Little FTC Acts
	C. Small Retail Gasoline Station Assistance and the SBA
VI.	Comparisons to the UCC
	A. Articles 2A-525 and 9-503
	B. Unfair Bargaining Position
	C. No Breach of the Peace
	D. Flexibility
VII	Conclusion

I. INTRODUCTION

The computer age has changed our economy in a number of ways, and has ushered forth issues that legal scholars of previous generations never could have imagined.^[1] The National Conference of Commissioners on Uniform State Laws ("NCCUSL")^[2] recently adopted a new law, the Uniform Computer Information Transactions Act ("UCITA")^[3] that addresses many issues arising from the sale of software licenses.^[4] Until recently, the American Law Institute ("ALI")^[5] was also collaborating on this new law, and the law was to become Article 2B of the Uniform Commercial Code ("UCC 2B").^[6]

Electronic self-help software repossession is a controversial issue arising in the software licensing context.^[7] This remedy enables a software licensor to disable software upon a licensee's breach of a software licensing contract.^[8] Although the UCITA allows electronic self-help software repossession,^[9] some early UCC 2B drafts did not address the issue because of its controversial nature.^[10] This Note will advance several justifications for the use of

electronic self-help repossession by small software companies with a relative lack of bargaining power. Such a remedy would be consistent with other areas of law that protect parties with relatively less bargaining power, either by authorizing self-help remedies,^[11] or through legislation directly benefiting small businesses.^[12] Further, some UCC articles allow self-help repossession, ^[13] which indirectly benefits consumers who lack bargaining power. ^[14] Although the UCITA is no longer part of the UCC, protecting licensors without bargaining power promotes overall consistency within commercial law. Moreover, such protection conforms to the history of the UCITA as a proposed UCC article. Finally, this Note specifically advocates *electronic* repossession because there is a general prohibition against breaching the

peace when using self-help remedies.^[15]

Part II of this Note discusses the controversial nature of electronic software repossession and reviews courts' responses to this remedy. Part III discusses the UCITA/UCC 2B drafting process and the current status of the electronic self-help provisions. Part IV proposes a solution restricting electronic self-help to licensors that possess relatively inferior bargaining power compared to their respective licensees, and explores the justifications and consequences of such an approach. Part V provides comparisons to other areas of law protecting parties with inferior bargaining power, such as landlord-tenant law, Little FTC Acts, and Delaware's Small Retail Gasoline Station Assistance Act. Finally, Part VI provides comparisons to the UCC.

II. ELECTRONIC SELF-HELP REPOSSESSION

A. Means of Repossession

Self-help software repossession usually occurs when a software licensor includes a "logic bomb" in a program in order to disable a software program remotely via modem, or when a

licensor physically accesses the licensee's computer and disables the software.^[16] In the latter situation, the licensee may have initially granted the licensor electronic or physical access to its

facility for purposes of software repair or customer support.^[17] Sometimes the licensor programs the software to stop functioning on a specific date using a time-out mechanism; the licensor can then reactivate the software if the licensee pays an additional fee for continued access under the licensing agreement.^[18] There are four primary purposes^[19] behind the electronic self-help remedy: (i) to disable software after a demonstration license expires; (ii) to prevent reverse-engineering;^[20] (iii) to disable software upon failure to pay under a licensing contract; (iv) and to disable software upon failure to pay under a software development contract. ^[21]

B. Cases Involving Electronic Self-Help Repossession^[22]

In American Computer Trust Leasing v. Jack Farrell Implement, Farrell signed a software licensing agreement with Automatic Data Processing ("ADP") providing that ADP still owned the software, and that ADP would deactivate the software if Farrell failed to make payments pursuant to the agreement.^[23] ADP deactivated the software after Farrell failed to pay under the licensing agreement.^[24] In another matter, American Computer Trust Leasing ("ACTL") sued both Farrell and Boerboom International; Farrell and Boerboom added ADP to the case as one of three counterclaim defendants.^[25] Farrell claimed that ADP's software deactivation constituted extortion, thus violating the Racketeer Influenced and Corrupt

Organizations Act ("RICO").^[26] Under federal law, however, extortion requires "obtaining of property from another, with his consent, induced by wrongful use of actual or threatened force, violence, or fear, or under color of official right,"^[27] while under Minnesota law, extortion requires threatening to do something "unlawful."^[28] The court did not find extortion under either definition, because the licensing agreement gave ADP a legal right to repossess Farrell's software, and gave Farrell notice of this potential remedy.^[29]

In Art Stone Theatrical Corp. v. Technical Programming & Systems Support of Long Island, Inc., Technical Programming secretly removed software code from Art Stone's computer system after a dispute concerning the performance of Technical Programming's software system arose.^[30] Art Stone then signed a general release agreement, absolving Technical Programming of all liability, in order to regain access to the system.^[31] Art Stone later sued Technical Programming for breach of warranty and breach of contract.^[32] The lower court granted Technical Programming's motion to dismiss, but the New York State Appellate Division reversed the decision because there was a factual issue concerning whether to void the release on the grounds of economic duress.^[33] In *Clayton X-Ray Co. v. Professional Systems Corp.*, Clayton signed a contract to purchase a computer system and software from Professional Systems Corp. ("PSC").^[34] PSC then spent many hours unsuccessfully trying to repair ensuing software-related problems.^[35] Nonetheless, when Clayton did not fulfill its payment obligations entirely, PSC programmed the system to freeze and flash the message "Call [PSC] About Your Bill."^[36] Clayton claimed that PSC's action of freezing its computer system constituted conversion, and sought actual and

punitive damages for the conversion, as well as damages for breach of express warranty.^[37] The court affirmed a punitive damages award in Clayton's favor because "PSC had no legal

right, or any colorable legal right, to lock up Clayton's computer system."^[38] In *Revlon, Inc. v. Logisticon, Inc.*, Revlon withheld payment on a customized software inventory system because it did not meet required specifications. ^[39] After withholding payments, Revlon informed Logisticon that it would release them from their contractual obligation to repair the software. ^[40] Nonetheless, since Revlon had not fully paid its bill, Logisticon informed Revlon that it intended to repossess the software. ^[41] At 2 A.M. the night after providing this notice, Logisticon disabled Revlon's software through remote access. ^[42] Revlon claimed to have lost \$20 million because its product distribution system was disabled for the next three days. ^[43] Revlon filed action against Logisticon, but the parties reached settlement before trial. ^[44]

In *Werner, Zaroff, Slotnick, Stern & Askenazy v. Lewis*, Lewis adapted software for Werner's new computer system.^[45] Lewis secretly included a conditional statement that disabled the software after it had processed a certain number of insurance claims.^[46] Werner then sued Lewis for breach of contract, seeking punitive damages.^[47] The court determined that

Lewis "intentionally put the conditional statement into [Werner's] software, with the hope that, after the system stopped, [Werner] would retain him again to correct the problem."^[48] The court determined that punitive damages were appropriate for this behavior. [49]

Thus, while courts have upheld electronic self-help when there was notice in the contract that it could be used as a possible remedy, they have not endorsed its use through "surprise" or "coercion."^[50] Licensors, however, have not used the remedy extensively in recent years,

partly because of electronic self-help's uncertain legal status. [51]

C. The Controversial Nature of the Electronic Self-Help Remedy Electronic self-help software repossession is extremely controversial and presented a

major obstacle throughout the UCITA/UCC 2B drafting process.^[52] Licensees object to their lack of opportunity to present possibly legitimate reasons for breaching the licensing agreement:

The [software] vendor has set itself up as judge, jury and, most importantly, executioner, and has denied the customer of its right to protest, to present its arguments to a legitimate forum, to negotiate a settlement or to do any of the other

things we all have a right to expect in this country.^[53]

Indeed, licensees point out that this is the only area of law where repossession is allowed without [54]

either a "peaceful entry" upon the premises or through resort to the judicial process. [54] The electronic self-help remedy is also controversial because of its potentially severe

consequences.^[55] Computer systems hold an immense amount of data; lack of access to that data because of a software disablement could have effects far beyond the value of the breached

licensing agreement.^[56] For example, lost access to medical data could threaten patients' lives.

^[57] Additionally, software disablement could affect other businesses networked with the licensee but having no part in the breached licensing agreement, causing total losses well in excess of the licensor's damages.^[58] Indeed, so many businesses are interconnected through computer networks that in 1990, a single software failure affected most East Coast phone lines. ^[59]

Besides the effect on innocent networked businesses, the licensee itself could suffer

damages far in excess of the value of the disputed software.^[60] For example, the disablement in $Revlon^{[61]}$ arose from the failure to pay a \$180,000 installment on a licensing agreement totaling \$1.2 million, but the software disablement led to \$20 million in lost revenues.^[62] Similarly, one could envision the disablement of a large business such as an airline ticketing agency due to lack of access to vital data arising from a mere \$5,000 software licensing dispute.^[63] Such a loss of access to vital business information could decimate some businesses,^[64] and a licensor's wrongful decision to use electronic self-help could lead to much higher damages than the licensor could pay.^[65]

On the other hand, the main justification for an electronic self-help remedy is that small licensors with limited resources could go bankrupt without the availability of a self-help remedy

to enforce contractual terms regarding their intellectual property.^[66] For small developers and start-up software companies, self-help may be the only way to effectively regulate the use of

their software because they cannot afford litigation.^[67] In response to the fear about lost access to files, one developer points out that

[u]nless the files so created are encrypted in some manner, other programs can read those files and access the data in them. Certainly such access will not typically provide the full functional benefits of the program which was designed to use those files but after all, *that is the program which the user is no longer*

entitled to use.^[68]

Thus, software developers are adamant that they have a right to repossess software. At the same time, licensees fear the drastic consequences and lack of due process that the remedy can entail. ^[69] These opposing views proved difficult to reconcile throughout the UCITA/UCC 2B

drafting process.^[70]

III. UCITA/UCC 2B

A. The Drafting Process

The need for a new law relating to computer information transactions arose because the UCC was geared toward the 1950's economy, which was primarily driven by the sale of tangible goods.^[71] Today's economy relies much more on services and informational transactions.^[72] License agreements to access information are common, yet are fundamentally different from both leases and sales of goods.^[73] Currently, courts must determine whether to treat software licensing agreements as goods or services because the UCC does not apply to services contracts. ^[74] Some courts have treated licensing agreements as goods and have therefore applied the UCC to them.^[75] The UCITA aims to codify the issues that arise under licensing agreements so that courts can treat them in a more consistent, uniform manner.^[76] Representatives from both NCCUSL and the ALI formed the original UCC 2B drafting committee.^[77] Professor Ray Nimmer^[78] wrote the actual text.^[79] The approval of both organizations would have been required in order to submit the final draft to state legislatures as a UCC article.^[80] Since the UCITA will not be part of the UCC, however, only NCCUSL's approval was necessary.^[81] NCCUSL approval requires a two-step process. The NCCUSL must consider a proposed act at two annual conferences. [82] At its July 1998 meeting, an NCCUSL committee discussed the existing UCC 2B. [83] For final NCCUSL approval, a majority of the states present at an NCCUSL annual conference, and a minimum of twenty states, needed to approve the UCITA draft.^[84] At its July 1999 meeting, NCCUSL adopted the UCITA; it is now ready for debate within the states.^[85] B. Current Status of the Self-Help Provisions

An early version of UCC 2B allowed self-help repossession of software when the license had been cancelled, provided that a breach of peace is avoided and there is no "foreseeable risk of personal injury or significant damage to information or property other than the licensed

information."^[86] That draft did not comment on whether a licensor could repossess through electronic means.^[87] Earlier drafts had allowed a software licensor to repossess licensed information,^[88] and electronic means could be used subject to certain conditions.^[89] These provisions were deleted in the August 1998 Draft because they were so controversial.^[90] At the time, Professor Nimmer said that this "hotly contested issue" could be re-opened if a compromise position were proposed.^[91]

Indeed, at its November 1998 meeting, the Drafting Committee adopted provisions

allowing electronic self-help, although subject to severe restrictions.^[92] Section 2B-715 of the December 1998 draft remained essentially unchanged from the August 1998 draft, but a new

Section 2B-716 was added.^[93]

Following the addition of Section 2B-716, some industry representatives indicated that they would prefer to strike proposed Section 2B-716.^[94] These representatives recommended

revising Section 2B-715(g) to read "A licensor may not use electronic means to exercise its

rights under this Section unless the licensor has obtained judicial authorization to do so."^[95]

Under this recommendation, licensors must go to court to enforce their rights.^[96] Additionally, the representatives proposed that the following fee-shifting provision be added to Section 2B-715(c): "When the equities so require due to the relative financial circumstances of the parties, the court shall have discretion to award costs, including reasonable attorney fees, in favor of a

licensor who prevails in a proceeding for such injunctive relief."^[97]

In April 1999 NCCUSL and ALI announced that UCC 2B would not become part of the UCC.^[98] Ultimately, 2B evolved into a free-standing act now known as UCITA.^[99] In the final draft released after NCCUSL's July 1999 annual meeting, Section 816 provides for electronic self-help.^[100]

UCITA Section 815 provides that a software licensor may prevent the use of software without judicial process only "(1) without a breach of the peace; [and] (2) without a foreseeable risk of personal injury or significant physical damage to information or property other than the

licensed information \dots "^[101] Section 816 then specifies that licensors cannot implement this remedy *electronically* except when certain conditions are met:

A licensee shall separately manifest assent to a term authorizing use of electronic self-help. The term must: (1) provide for notice of exercise as provided in subsection (d); (2) state the name of the person designated by the licensee to which notice of exercise must be given and the manner in which notice must be given and place to which notice must be sent to that person; and (3) provide a

simple procedure for the licensee to change the designated person or place. [102]

The licensor must give notice before exercising electronic self-help by stating that the licensor intends to resort to electronic self-help as a remedy on or after 15 days following receipt by the licensee of the notice; (2) the nature of the claimed breach that entitles the licensor to resort to self-help; and (3) the name, title, and address including direct telephone number, facsimile number, or e-mail address to which the licensee may communicate concerning the claimed breach.^[103]

The licensee can recover damages for improper use of electronic self-help, and consequential damages,

whether or not such damages are excluded by the terms of the license if: (1) within the period specified in subsection (d)(1), the licensee gives notice to the licensor's designated person describing in good faith the general nature and magnitude of damages; [or] (2) the licensor has reason to know the damages of the type described in subsection (f) may result from the wrongful use of electronic self-help; or (3) the licensor fails to provide the notice required in subsection (d). [104]

Subsection (f) provides additional limitations on the use of electronic self-help: Even if the licensor complies with subsections (c) and (d), electronic self-help may not be used if the licensor has reason to know that its use will result in substantial injury or harm to the public health or safety or grave harm to the public interest substantially affecting third parties not involved in the dispute. [105]

A court can block the use of electronic self-help if the court finds:

(1) grave harm of the kinds stated in subsection (f), or the threat thereof, whether or not the licensor has reason to know of those circumstances; (2) irreparable harm or threat of irreparable harm to the licensee ... (3) [that] the party seeking the relief is more likely than not to succeed under its claim when it is finally adjudicated; (4) all the conditions to entitle a person to the relief under the laws of this State have been fulfilled; and (5) the party that may be adversely affected is adequately protected against loss [106]

Finally, "[b]efore breach of contract, rights or obligations under this section may not be waived or varied by an agreement, but the parties, in the term referred to in subsection (c), may specify

additional provisions more favorable to the licensee."[107]

Thus, the electronic self-help provisions varied in the last several drafts of UCC 2B and the UCITA. Even though NCCUSL has now enacted the UCITA, the debate within the states regarding the enactment of the UCITA is likely to be just as contentious as the debate within ALI and NCCUSL.^[108] A solution is therefore needed that will balance licensees' fears of abuse with licensors' insistence that they must have this remedy in order to enforce their licensing agreements.

PROPOSED SOLUTION IV.

A. The Proposal and its Implementation

This Note proposes electronic self-help repossession only when the licensor occupies a position of diminished bargaining power. $\frac{[109]}{100}$ The proposal supports the notice requirements, and the penalties for failure to follow them, that UCITA Section 816(d)-(e) provides. In contrast to UCITA Section 816(h), however, this proposal authorizes a licensor to waive the electronic self-help remedy.

This Note's proposed remedy incorporates the industry representatives' proposal to

consider "the relative financial circumstances of the parties,"^[110] but rejects the representatives' requirement of judicial intervention. By definition, self-help "can be obtained without recourse to courts or lawyers."^[111] Courts have not required parties in weaker bargaining positions to obtain court permission before exercising self-help.^[112] Thus, as in the

current UCITA Section 816, qualifying software licensors could exercise self-help after the required fifteen days' notice. They could do this using any of the means discussed above, such as accessing (either physically or via modem) the licensee's computer and disabling the software,

or by programming a time-out date into the software. $\begin{bmatrix} 113 \end{bmatrix}$ If the licensee later challenges the disablement in court, the court should uphold the use of the remedy, and apply the proposed feeshifting mechanism if it finds: (1) a lack of bargaining power, i.e. "when the equities so require

due to the relative financial circumstances of the parties,"^[114] and (2) that the notice requirements were followed. This would be a fact-sensitive inquiry determined at trial based on the relative positions of the parties.

Although this Note does not seek to establish a bright-line rule concerning when a court should uphold the use of electronic self-help, software licensors may not feel comfortable using the remedy without some additional guidance. Thus, courts may also wish to consider the following factors when upholding the use of the remedy: (1) whether the licensee is a relatively larger company than the licensor; (2) whether the licensor is classified as a small business

according to the Small Business Administration; [115] (3) whether the licensor was unable to afford an attorney; and (4) whether the licensing agreement was presented to the licensor as a

take-it or leave-it contract, so that the licensor was unable to negotiate its terms.^[116] None of these factors is meant to create a decisive bright-line test, since this Note's proposal ultimately requires a factual inquiry into the relative bargaining power between the licensee and licensor. The presence of the above factors, however, will likely indicate that the licensor lacked bargaining power.

B. Rationale for Waiver of the Remedy

The fee a prospective licensee will pay depends in part on the remedies the licensee is

subject to in the event of default.^[117] Presumably, licensees will expect to pay a lower licensing fee if licensors may use electronic self-help repossession. This Note proposes that small software developers with the right to electronically repossess software should be able to bargain away that right in order to charge a higher licensing fee. This proposal contrasts with the

UCITA, which prohibits waiver of the self-help remedy.^[118]

There are three different kinds of rules protecting legal entitlements. A "property rule" protects an entitlement "to the extent that someone who wishes to remove the entitlement from its holder must buy it from him in a voluntary transaction in which the value of the entitlement is agreed upon by the seller."^[119] A "liability rule" exists "[w]henever someone may destroy the initial entitlement if he is willing to pay an objectively determined value for it"^[120] An "inalienable rule" exists where an entitlement's "transfer is not permitted between a willing buyer and a willing seller."^[121]

The remedies available under intellectual property law are predominantly property rules. [122] Those available under the UCC are predominantly liability rules, where both buyer and seller can breach if they are willing to pay damages.^[123] Property rules are favored in situations where there are "few parties, difficult valuation problems, and otherwise low transaction costs."^[124] Liability rules are more appropriate when there are many parties, strategic bargaining is likely, and transaction costs are high.^[125] One justification for inalienable rules is that certain parties do not know the best course of action for their own well-being.^[126] For example, law imposes a wide range of prohibitions on minors' activities.^[127] Such parties should not be able to bargain away their rights because they are not informed enough to safeguard their best interests.^[128]

Under the Coase Theorem, in the absence of transaction costs, parties will bargain so that the party who values a right the most will end up with that right, regardless of which party

originally possessed the right and the prevailing legal rule.^[129] This efficient result may not

occur when transaction costs exist.^[130] The party with higher transaction costs will be at a relative disadvantage. To level the playing field, the right should be given to the disadvantaged party, thus inducing the party with lower transaction costs to bargain for the right if they value it more ^[131] This Note's proposal similarly grants a right to relatively small software developers

more.^[131] This Note's proposal similarly grants a right to relatively small software developers in order to induce relatively larger licensees to bargain with them in a more efficient and fair manner.

This Note does not advocate a paternalistic, inalienable application of the electronic selfhelp remedy, under which small software developers could not negotiate the right away. Small software companies do not lack knowledge of their own best interests, the traditional

justification for inalienable rules.^[132] Rather, small software developers need protection

because they lack bargaining power when dealing with larger companies.^[133]

Some commentators worry that the self-help remedy will leave software developers with an unfair advantage. [134] Although it does give them an advantage, this advantage will merely

level the uneven playing field that already exists between them and large licensees. ^[135] This Note simply creates a default rule making self-help available to certain small parties. Such a rule would shift the burden to the better-positioned party to negotiate an immunity from the remedy, if that party fears its consequences.

C. Rationale for a Notice Requirement

The caselaw at the beginning of this Note reveals that courts have generally upheld the use of electronic self-help repossession when the licensing agreement gave notice of the remedy. [136] Thus, a notice requirement would be consistent with precedent. [137] Nonetheless, the

proposal in this Note would not uphold the result in *American Computer Trust Leasing v. Jack Farrell Implant* unless ADP could show that, in addition to giving Farrell notice within the

licensing agreement, ADP occupied a weak bargaining position relative to Farrell.^[138] This would be unlikely since ADP is such a large company.^[139]

An additional rationale for a notice requirement is to be consistent with analogous criminal laws. New York, for example, imposes liability for tampering with a computer system when "having no right to do so [someone] intentionally alters in any manner or destroys

computer data or a computer program of another person." [140] A notice requirement would

overcome this standard because the person would be authorized to repossess the software and thus would, in fact, have a "right to do so."

Under federal law, "knowingly caus[ing] the transmission of a program, information, code, or command, and as a result of such conduct, intentionally caus[ing] damage *without*

authorization, to a protected computer" is illegal.^[141] Using a modem to disable software in another state would seem to violate this statute. However, a notice requirement would ensure compliance since the transmission would be authorized.

D. Rationale for the Protection of Relatively Small Software Companies

This Note proposes the use of electronic self-help repossession only by parties occupying an unfair bargaining position when licensing to larger companies. Because the remedy is so controversial, ^[142] courts may be hesitant to allow its widespread use. It may be an appropriate compromise to allow its use only when a licensor would not have access to more conventional judicial remedies.

Most software companies are very small. Statistics show that in California in 1995, there

were 6,633 software companies, with an average of only sixteen employees. ^[143] In the United States in 1992, there were 23,265 software companies, with an average of 10.43 employees.

^[144] These smaller companies often contract with larger software companies. ^[145] Indeed, "[t] he software industry is peculiarly suited to fostering a vibrant economic community of small developers that work for, alongside, and sometimes in competition with, large software companies. It is important in crafting [UCITA] that this community not be disadvantaged in

relation to its larger partners and competitors."^[146] Advocates for small licensors stress that there needs to be some leverage to restore the balance between these small businesses and

"software industry giants, for whom they often supply software." [147] One such giant, Microsoft, has the second largest market value of public American companies, after General

Electric.^[148] Electronic self-help is one means of balancing the bargaining power between smaller companies and large companies such as Microsoft:

"[Self-help electronic repossession] goes on a lot more than you think--and I'm absolutely sympathetic with the software companies that do it," says Phil Dorn, a Manhattan-based computer consultant for more than 20 years. "The fact is that small software houses are being pushed to the wall by companies that essentially are making demands with a gun to their heads, and this is the way they've found to defend themselves."[149]

Small software companies in a position of diminished bargaining power need an electronic self-help remedy because they may not be able to afford the cost of obtaining relief through the court system. ^[150] The larger companies with whom they contract can more easily afford the costs of litigation. ^[151] While a self-help remedy would be unfair if a licensee were unable to sue when the remedy was used incorrectly, ^[152] this Note's proposal avoids such an eventuality because the licensee will, by nature of its superior bargaining position, be better able to afford litigation. The proposed remedy would not uphold self-help repossession when both licensor and licensee are small companies unless it can be proven that the licensor had relatively less bargaining power than the licensee.

Thus, this Note proposes a limited right to electronic self-help that protects only licensors

that occupy a weaker bargaining position when negotiating the licensing agreement. It differs from the UCITA by not protecting all licensors, and by not requiring an expedited hearing for those licensors that are protected. This proposal does not seek to change the notice requirements in the UCITA; licensors must still comply with those provisions. Finally, those licensors that are eligible for the proposed electronic-self help remedy may use it as a bargaining tool during license negotiations; in contrast, the UCITA would not permit such bargaining.

V. COMPARISONS TO OTHER AREAS OF LAW

PROTECTING PARTIES WITH RELATIVELY LESS BARGAINING POWER

Limiting which parties can use a remedy may seem radical. However, the next several sections of this Note will show that other well-established areas of law only protect certain parties, including landlord-tenant self-help, Little FTC Acts, and Delaware's Small Retail Gasoline Station Assistance Program.

A. Self-Help by Landlords and Tenants

Under early English common law, landlords could repossess their property using any means avoiding death or bodily harm.^[153] The Forcible Entry Act of 1381 restricted entry such that landlords could repossess only in a peaceable manner, with "no more than necessary force."^[154] Today, landlords in England can only use self-help with reasonably necessary force.^[155]

Similarly, early American landlords could use forcible entry to evict tenants.^[156] Now, most states have passed both "forcible entry" and "detainer" statutes, which make it a criminal offense to forcibly enter premises, and have implemented summary judicial procedures for landlords to evict tenants.^[157] Most states have banned self-help evictions^[158] in favor of mandatory judicial proceedings; landlords can only use self-help when tenants voluntarily surrender or abandon the premises.^[159] A minority of states still allow landlords to use all necessary and reasonable means to evict tenants; other states allow peaceful means only.^[160] One concern that arises from self-help evictions is the potential for violence and public disturbances, or breaches of the peace.^[161] Most tenants will protect their homes and not leave peacefully.^[162] Landlord self-help has been abrogated in part because of "potentially violent confrontations between landlords and tenants."^[163] A ban against landlord self-help also prevents potential lawsuits against landlords for wrongful evictions.^[164] Both the constant danger of violence and the desire to reduce wrongful evictions militates towards a required judicial proceeding.^[165]

Although landlord self-help has been abrogated in most jurisdictions, tenant self-help has survived. The "rent application remedy" allows tenants to repair defects in the premises and deduct the cost from their rent.^[166] Alternately, through rent withholding, tenants may pay their rent into an escrow account until the landlord makes needed repairs.^[167] These one-sided remedies reflect the influence of consumer protection law on landlord-tenant law and do not have the same potential for violence as landlord self-help.^[168] Tenant self-help is justified on the grounds that tenants, like consumers, occupy weaker bargaining positions than their landlords. ^[169] Indeed, "the overwhelming *bargaining power* many residential landlords

traditionally have enjoyed over their tenants has weighed strongly in favor of expanding tenant self-help remedies." [170]

The final draft of UCC 2B, before it became the UCITA, provided for an expedited judicial hearing to authorize or block the use of electronic self-help.^[171] The final draft of the UCITA does not provide for such a hearing.^[172] Landlord-tenant self-help suggests that prior judicial authorization should not be required and shows the flaw in the fee-shifting measure proposed by industry representatives.^[173] Tenants, like the licensors that this Note seeks to protect, lack bargaining power. Landlords, like the large licensees against whom this Note grants a remedy, enjoy considerable bargaining power. Tenants can simply repair and deduct without resort to a summary judicial hearing.^[174] In most states, only landlords are required to follow summary judicial procedures.^[175] Similarly, small software developers that lack bargaining power should be able to exercise electronic self-help without prior endorsement by the judicial system. The labels (landlord, tenant, licensor, licensee) are irrelevant; the party in the weaker bargaining position should be protected in the software context, just as in the landlord-tenant context.

B. Little FTC Acts

Aside from the self-help remedy, there are other examples of remedies aimed at parties in inferior bargaining positions. One such remedy is the extension of state "Little FTC Acts" to small businesses. The Federal Trade Commission ("FTC") Act prohibits "[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce"^[176] Although the FTC is empowered to enforce this act on the government's behalf, ^[177] in the early 1970's courts held that no private right of action existed under the FTC Act. ^[178] Because the FTC was unable to persuade Congress to enact a private cause of action, the FTC encouraged states to adopt their own prohibitions against unfair methods of competition, including a private cause of action. ^[179]

Now, most states have enacted "Little FTC Acts," modeled on the federal act, which

include a private cause of action for consumers.^[180] Many of these enactments provide consumers the incentive to bring private actions by awarding attorneys' fees and either minimum or multiple damages.^[181] There were three main justifications for extending these protections to consumers: (1) to compensate for unequal bargaining power; (2) to make litigation of small

claims economical; and (3) to "deter other potential unfair or deceptive practices."^[182] A number of states have now extended their Little FTC Acts to businesses as well. Some

states, such as Massachusetts and Texas, initially allowed businesses of any size to bring an action. [183] Massachusetts, the first state to add businesses as plaintiffs, [184] currently allows action by

[a]ny person who engages in the conduct of any trade or commerce and who suffers any loss of money or property, real or personal, as a result of the use or employment by another person who engages in any trade or commerce of an

unfair method of competition or an unfair or deceptive act \dots [185]

One impetus behind this change in Massachusetts was to protect franchisees and dealers

from franchisers and manufacturers.^[186]

Similarly, Texas redefined the term "consumer" under its Little FTC Act, the Texas Deceptive Trade Practices Act.^[187] "Consumer" was initially redefined to mean an "individual, partnership, corporation . . . who seeks or acquires by purchase or lease, any goods or services" Texas has now chosen to protect only small businesses, by adding a size limit on businesses that can bring suit under its Little FTC Act.^[189] The Texas Act "contributed significantly toward providing a means whereby fraud and deception in the marketplace could be confronted effectively. This important, initial contribution of the Consumer Protection Act has been re-enforced and made even more meaningful now that all of us--even businesses--are consumers."^[190]

In Texas, the trial court determines whether a party falls within the definition of "consumer."^[191] Indeed, "a plaintiff can be a consumer to one defendant but not a consumer to another defendant \dots "^[192] Similarly, this Note proposes a flexible remedy under which the trial court will determine whether to uphold electronic self-help repossession based on the

relative equities of the parties and the other considerations mentioned above.^[193] Under this proposal, it is conceivable that a software licensor will have experienced a lack of bargaining power when negotiating with one licensee, but not when negotiating with a different, smaller, licensee.

Although Little FTC actions are available to all businesses in some states, such as Massachusetts, other states, such as Texas under its current statute, have limited the application of their Little FTC Acts to small businesses, including "franchisees, dealers, sole proprietorships. and farmers."^[194] One commentator has advocated the use of such actions for small businesses in particular.^[195] Kansas redefined the meaning of "consumer" in its Little FTC Act to include only certain kinds of businesses.^[196] It allows farmers and sole proprietorships to bring action under Kansas' Little FTC Act^[197] by defining "consumer" as "an individual or sole proprietor who seeks or acquires property or services for personal, family, household, business or *agricultural* purposes."^[198] Thus, the Kansas act covers "individuals' business transactions of any nature."^[199] One stated purpose of the Kansas act is "to protect consumers [as defined in the Act] from suppliers who commit deceptive and unconscionable practices , [200]

Maryland and West Virginia protect farmers when they engage in commercial

transactions, by defining "consumer transaction" to include agricultural transactions. $\begin{bmatrix} 201 \end{bmatrix}$ In Maryland, "'[c]onsumer credit', 'consumer debts', 'consumer goods', 'consumer realty', and 'consumer services' mean, respectively, credit, debt or obligations, goods, real property, and services which are primarily for personal, household, family or *agricultural* purposes."^[202]

West Virginia has defined a "consumer transaction" as a "sale or lease to a natural person or persons for a personal, family, household, or *agricultural* purpose."^[203]

Thus, these states have adopted statutes that only protect certain parties; this Note similarly advocates the protection of only those software developers with a lack of bargaining power. There are a number of important reasons why small businesses require more protection than large businesses.^[204] Often, inexperienced entrepreneurs, who are unequal participants in the marketplace, start small businesses.^[205] Larger businesses have an incentive to act unfairly because the "one time gain from an unfair transaction may outweigh the value of maintaining a long-term relationship with a small customer."^[206] Since small businesses fail more often than large ones, small businesses lack experience and suffer from informational disadvantages.^[207] A Little FTC cause of action for small businesses promotes "honest and ethical" principles in trade, thus discouraging any advantage-taking.^[208]

The nature of the small business's claim may make litigation prohibitive.^[209] Although litigation of a small claim may also not be cost-effective for large businesses, "recovering even a small claim may be vital to the survival of a small business, whereas a larger business would consider the same sum insignificant."^[210]

Further, protecting small business consumers ultimately protects individual consumers. Small businesses and consumers often have the same suppliers; suits by small businesses thus deter fraud against both.^[211] Consumers also gain because the small business merchants do not need to raise their prices to compensate for the fraud levied against them.^[212] An example of the successful application of a Little FTC Act by a small business is

Homsi v. C.H. Babb Co., Inc.^[213] In Homsi, the owner of a small family business purchased a gas stove relying on the seller's assurances that the buyer would be able to obtain gas from the local gas supplier.^[214] The seller, however, was fully aware that the local gas company was no longer accepting new customers.^[215] After trial, a jury awarded the seller damages over the buyer's \$10,600 deposit, and the judge awarded over \$12,000 for legal fees.^[216] This case is a perfect example of a suit that would not have been litigated but for the Massachusetts Little FTC Act because the legal fees exceeded the value of the claim; nonetheless, loss of the deposit would have been devastating to the family business.^[217] Even though *Homsi* was brought under the Massachusetts Little FTC Act, which protects all businesses,^[218] it illustrates the Act's value to a small business in particular need of protection. Further, although *Homsi* involved a small business' purchase of goods,^[219] rather than a small software developer's licensing transaction, it is analogous to this Note's proposal because it shows protection of parties in weaker bargaining positions. Protection of small businesses under the Little FTC Acts is therefore another example of government policy that favors small business, where the only parties who can possibly be damaged are larger, "[u]nscrupulous suppliers ,"[220] Even though the FTC Act combats fraud and deception, ^[221] whereas software license disputes involve breach of contract, ^[222] this Note advocates protection of small software licensors because they similarly lack bargaining power. Once again, the labels (purchaser, seller, licensor, licensee) are irrelevant; parties in weaker bargaining positions should be protected in the software context, just as they are under the Little FTC Acts.

C. Small Retail Gasoline Station Assistance and the SBA Another example of a law that protects only small businesses is Delaware's Small Retail Gasoline Station Assistance Program.^[223] Delaware enacted its Underground Storage Tank Act in order to protect groundwater through better monitoring of underground gasoline tanks.^[224] The Delaware legislature found, however, that small gasoline station owners were "often unable to obtain financing for needed [as required by the Act] remedial and preventive measures in the private financing market"^[225] The legislature also found it to be "in the best interests of the people of Delaware that small retail gasoline station owners and operators continue to maintain their economic viability, while taking the remedial and preventive measures necessary to protect Delaware's environment and to comply with this subchapter"^[226] The

legislature thus established a loan assistance program that enabled the small gasoline station

owners to meet the requirements of the Underground Storage Tank Act.^[227]

Delaware only made these loans available to "small gasoline stations," defined as those owner/operators who

qualify as a "Small Business" under rules established by the Small Business Administration, provided, however, that no loan may be provided to a small station which has a total throughput of 75,001 gallons or more of gasoline and/or special fuel (diesel) products as a monthly average for the 12 months preceding

the date of application for the loan \dots [228]

The Delaware Small Retail Gasoline Station Assistance Program provides another example of a right that is limited in application to small businesses, as well as a specific attempt to define small businesses. In the United States, "[t]he trend ... has been for the most innovative software application development to occur in small software companies."^[229] Thus, just as it was "in the best interests of the people of Delaware" to protect small gasoline stations,^[230] the protection of small software development companies is important in order to promote software development in the United States.^[231] Congress established the Small Business Administration ("SBA"), a federal agency, in 1953.^[232] Its purpose is to ensure that small businesses obtain an appropriate share of

government contracts.^[233] A small business must not be "dominant in its field of operation . . .

."^[234] The SBA measures firm size using either the number of employees or the revenue amounts.^[235] Size standards and classification of individual firms are exclusively the function

of the SBA and have the effect of law.^[236]

The SBA classifies businesses according to their annual revenue, and defines a "small" software firm as one with a maximum of \$18 million dollars of annual revenue. ^[237] As noted above, this represents another yardstick that courts could use to evaluate whether a software company is a "small" business. ^[238] The SBA classification, however, will not always be relevant to this Note's proposal because this proposal focuses on the relative lack of bargaining power between licensor and licensee. A licensor with more than the maximum amount of revenue under SBA standards could still experience diminished bargaining power when contracting with larger companies. Nonetheless, Microsoft, the largest independent software company worldwide, had revenues of \$11.358 billion in 1997, well in excess of the SBA

maximum for small businesses.^[239]

Thus, the Little FTC Acts, Delaware's Small Retail Gasoline Assistance Program, and the SBA all provide for protection of small businesses. The labels (gasoline station, software licensor) are again unimportant; small software licensors should be protected because of their lack of bargaining power and their importance to software development.

VI. COMPARISONS TO THE UCC

A. Articles 2A-525 and 9-503

Article 9 of the UCC provides creditors with a security interest in collateral the right of

self-help repossession.^[240] Article 2A affords similar rights to lessors.^[241] To promote consistency within commercial law, software developers should similarly be given the right to repossess software upon default on a licensing agreement; indeed, the UCITA/UCC 2B drafters

intended to parallel Articles 2A and 9 when they included a self-help remedy.^[242] Under Articles 2A and 9, self-help repossession is not restricted to parties of certain sizes.

^[243] Some UCC 2B drafts, however, did not address electronic repossession, ^[244] and although the UCITA does provide electronic self-help repossession, ^[245] this remedy generated substantial controversy and hindered the drafters' ability to reach consensus. ^[246] The imminent debate on the UCITA within the states is likely to be equally controversial. ^[247] This section shows that an electronic self-help remedy would generally be consistent with the UCC. Given the remedy's highly controversial nature, ^[248] however, this Note would restrict its use to parties who likely could not otherwise recover.

B. Unfair Bargaining Position

Although Article 9 appears size-neutral, since it does not restrict the self-help remedy to certain parties, it indirectly protects smaller parties. Self-help repossession usually involves large creditors and automobiles.^[249] One justification for Article 9 repossession, however, is its beneficial effect on consumer loan rates.^[250] A 1971 study estimated that denying self-help repossession of automobiles to creditors in California for one year would have prevented 66,000 repossessions and cost creditors \$13.5 million.^[251] The study hypothesized that creditors would be likely to pass this cost on to high-risk consumers by extending less credit.^[252] When Wisconsin prohibited self-help repossession in 1973, it became possible to test this hypothesis.^[253] The Wisconsin act requires a court determination, through a replevin action, that the creditor has a right to the collateral before the creditor can reposses it.^[254] A study showed that the number of automobile loans did not significantly decrease after this statute was passed, but that the costs of repossession did increase significantly.^[255] These costs may have been passed on to consumers by used car-dealers, who apparently required consumers to pay higher down-payments.^[256] The traditional justification for self-help repossession in the UCC centers on the

protection of consumers, who occupy weaker bargaining positions: "[t]he modern policy underlying the right [to self-help repossession] is that if a creditor can effect repossession of collateral without resort to often expensive and time-consuming judicial procedures, debtors in general may more freely receive loans at a lower rate."^[257] Thus, even though Article 9 repossession is usually practiced by large companies, it indirectly helps consumers, who occupy a weaker bargaining position. The same rationale applies to small software companies protected by this Note's proposed remedy. These companies should be afforded the electronic self-help remedy because they lack bargaining power. Many software companies are very small; [258] their advocates stress that such companies should not be denied the self-help that is

available in other areas of commercial law.^[259]

Other provisions of the UCC also have the effect of protecting parties that occupy weaker bargaining positions.^[260] Courts often use the UCC to protect merchants in a weaker bargaining position when dealing with other merchants; these weaker merchants form a class of "merchant/consumers."^[261] Where a merchant lacks the ability to fully understand the terms of a contract, lacks education, or lacks sophistication (the same characteristics that many consumers exhibit), a court may find that a contract to which the merchant was subject is unconscionable

and thus unenforceable.^[262]

In *Moscatiello v. Pittsburgh Contractors Equipment Co.*, a contractor, who was familiar with neither heavy equipment nor the seller's forms, ^[263] purchased a paving machine. ^[264] The court held that the seller's damages limitation provision was unconscionable partly because

of the seller's "superior bargaining position with respect to Moscatiello."^[265] Thus, courts use the UCC to protect merchants who lack bargaining power when *buying* from larger companies; the UCITA should similarly protect small software companies when *selling* to larger companies.

Protection of small software companies and relatively unsophisticated merchant/consumers is similar to tenant remedies in landlord-tenant law. As stated above, landlords generally may not use self-help repossession, because of their superior bargaining position.^[266] Tenants, on the other hand, may use self-help means of repairing their premises, and can withhold their rent or pay into an escrow account in order to do this.^[267] The law affords tenants these remedies because of their inferior bargaining position.^[268] Similarly, courts should uphold the use of electronic self-help repossession by small software companies that occupy an unfair bargaining position. Again, the labels (tenant, licensor, buyer, seller) are unimportant; the unifying principle behind protection of unsophisticated buyers, tenants, and the proposed protection of small software licensors is that all of these parties occupy a relatively weak bargaining position.

C. No Breach of the Peace

Security interests in goods have an ancient heritage that did not always include a prohibition against breaching the peace.^[269] Today, the UCC allows security interests in collateral, including goods, but collateral cannot be repossessed in a manner that breaches the peace.^[270] When repossessing automobiles, a breach of the peace occurs when repossession is "accompanied by the threat of violence or when the secured creditor breaks into unoccupied buildings or garages."^[271] One reason why courts abrogated landlord self-help was the potential for a breach of the peace.^[272]

American law today reflects a desire to avoid a breach of the peace. Software is not kept outdoors, unlike automobiles, which are often parked outdoors and can easily be repossessed without a potential for a breach of the peace.^[273] Some courts have said that entering a

structure to repossess is a breach of the peace, ^[274] suggesting that physical repossession of software by entering a structure would breach the peace. For this reason, this Note advocates *electronic* repossession of software as a means of avoiding potentially violent physical confrontations. One commentator has argued that electronic "[e]ntry to a 'locked' computer

system without consent is similar to a creditor breaking through a locked door."^[275] Another commentator has dramatically likened the use of electronic repossession to a construction

company placing dynamite in a structure to enforce its contract.^[276] These comparisons lack validity, since the purpose of prohibitions against breaches of the peace is to prevent *physical*

confrontations and *physical* injury;^[277] an *electronic* repossession cannot lead to *physical* injury.

Accordingly, the use of electronic repossession will be consistent with the goal of the UCC, as well as other areas of self-help law, of avoiding a breach of the peace. Because previous drafts of UCITA did not comment on electronic repossession due to its controversial nature, [278] this Note advocates a compromise: the use of the remedy only by small software companies that cannot otherwise recover.

D. Flexibility

The open-ended drafting style of the UCC allows courts flexibility in the application of UCC doctrines.^[279] For example, disclaimers of implied warranties, if written, must be conspicuous,^[280] and courts are left to determine whether a particular term satisfies the statutory definition of "conspicuous."^[281] Courts usually apply a lesser standard of "conspicuousness" to consumers and merchants who are in a position of weaker bargaining power^[282] than they apply to sophisticated merchants with equal bargaining power.^[283] The flexibility of UCC Article 2 allows courts to differentiate among different classes of parties.^[284] Neutral language in the UCITA, allowing a court to decide whether to uphold a licensor's use of electronic self-help repossession "[w]hen the equities so require due to the

relative financial circumstances of the parties," $^{[285]}$ along with the additional factors mentioned above, $^{[286]}$ would foster overall consistency in commercial law.

Some commentators have suggested that replevin may be an appropriate means for software developers to reclaim their software.^[287] This would be appropriate for large software companies that can afford the replevin process. A flexible UCITA would allow courts to reject large companies' use of electronic self-help repossession, thus restricting these more powerful

parties to the replevin remedy. Further, the UCC Article 9 committee discussed the use of electronic chips to repossess equipment through electronic disablement.^[288] The committee decided not to comment on the issue in Article 9, instead leaving the issue to other law.^[289] The current UCITA allows all parties to use electronic self-help repossession.^[290] A more open-ended UCITA would be more consistent with the Article 9 committee's decision.

VI. CONCLUSION

Self-help software repossession is a controversial remedy because of its potentially severe consequences.^[291] Nonetheless, many software licensors are small companies

occupying a weak bargaining position when licensing their software to larger companies. ^[292] This Note has therefore proposed a limited electronic self-help remedy that would protect only certain small software companies. Indeed, there are other areas of law protecting only small parties, such as tenant self-help, ^[293] the Little FTC Acts in certain states, ^[294] and Delaware's Small Retail Gasoline Station Assistance Act. ^[295] Further, even though self-help repossession is available to all parties in some UCC articles, one effect of Article 9 repossession is to help smaller parties, such as consumers. ^[296] This Note has also advocated the use of *electronic* means of software repossession because it will avoid a breach of the peace, a concern that surfaces in other areas of law involving self-help. ^[297] Finally, the flexible remedy advocated in this Note would be consistent with other UCC articles that allow courts to differentiate among different classes of parties. ^[298]

^[2] See The National Conference of Commissioners on Uniform State Laws (last modified Apr. 3, 2000) <http://www.nccusl.org>. "The National Conference of Commissioners on Uniform State Laws . . . is comprised of more than 300 lawyers, judges, and law professors, appointed by the states as well as the District of Columbia, Puerto Rico, and the U.S. Virgin Islands, to draft proposals for uniform and model laws and work toward their enactment in legislatures." *Id*.

^[3] The UCITA would apply to computer information transactions involving contracts for software licenses, computer games and programs, online database access, and Internet-distributed information. *See* U.C.I.T.A. § 103 (Proposed Draft Oct. 15, 1999), *available in The National Conference of Commissioners on Uniform State Laws Drafts of Uniform and Model Acts Official Site* (last modified Nov. 9, 1999) http://www.law.upenn.edu/library/ulc/ulc.htm#ucc2B [hereinafter *NCCUSL Model Acts Official Site*]. The *NCCUSL Model Acts Official Site* contains the proposed and final drafts of UCC 2B and UCITA. *See id*.

^[4] See Gary J. Edwards, Comment, Self-Help Repossession of Software: Should Repossession Be Available in Article 2B of the UCC?, 58 U. PITT. L. REV. 763, 784 (1997); New Uniform Act Meets Immediate Needs of the Information Age (last modified July 30, 1999) http://www.2bguide.com/docs/pru72999.html; Carol A. Kunze, 2BGuide: Background (last modified Sept. 30, 1998) http://www.2bguide.com/bkgd.html [hereinafter Background]. For the status of UCITA in the state legislatures, see infra note 85.

^[5] The American Law Institute ("ALI"), which is comprised of up to 3,000 lawyers, judges and law teachers, drafts model laws and codes "to promote the clarification and simplification of the law and its better adaptation to social needs, to secure the better administration of justice, and to encourage and carry on scholarly and scientific legal

[†] B.A. (Physics), 1997, Cornell University School of Arts and Sciences; J.D. (anticipated), 2000, Boston University School of Law.

^[1] See Raymond T. Nimmer, Article 2B: An Introduction, 16 J. MARSHALL J. COMPUTER & INFO. L. 211, 211 (1997) (suggesting that our modern economy is dominated by information and services, and introducing a proposed law, Article 2B, intended to govern such transactions). Article 2B contemplates software, content, news, entertainment, and other information and service transactions that "by and large have never been covered by a Uniform Commercial Code." *Id*.

work." About the American Law Institute (visited Apr. 4, 2000) < http://www.ali.org/ali/Thisali.htm>.

[6] See NCCUSL to Promulgate Freestanding Uniform Computer Information Transactions Act: ALI and NCCUSL Announce that Legal Rules for Computer Information Will Not Be Part of UCC (last modified Apr. 8, 1999) <http://www.2bguide.com/docs/040799pr.html> [hereinafter NCCUSL Press Release]: see also David Bicknell. Alarm Bells Ring Over License Act, 99 COMPUTER WKLY., May 6, 1999, available in 1999 WL 17440331 (stating that the ALI withdrew because of concerns about proposed self-help clauses, causing the NCCUSL to pursue the initiative on its own).

^[7] See Esther C. Roditti, Is Self-Help a Lawful Contractual Remedy?, 21 RUTGERS COMPUTER & TECH. L.J. 431. 432-33 (1995).

^[8] See id.

[9] See U.C.I.T.A. § 816 (Proposed Draft Aug. 4, 1999), available in NCCUSL Model Acts Official Site, supra note 3; U.C.C. § 2B-716 (Proposed Drafts Dec. 1998 and Feb. 1999), available in NCCUSL Model Acts Official Site, supra note 3.

[10] See Carol A. Kunze, The 2BGuide: Report on the NCCUSL Annual Meeting July 24-31, 1998 (last modified Sept. 29, 1998) < http://www.2bguide.com/nmtgrpt8.html> [hereinafter Report on the 1998 NCCUSL Annual *Meeting*]; see also infra notes 52-70 and accompanying text.

[11] See, e.g., Douglas I. Brandon et al., Special Project, Self-Help: Extrajudicial Rights, Privileges and Remedies in Contemporary American Society, 37 VAND. L. REV. 845, 963 (1984) ("[T]he overwhelming bargaining power many residential landlords traditionally have enjoyed over their tenants has weighed strongly in favor of expanding tenant self-help remedies.").

^[12] See Note, Toward Greater Equality in Business Transactions: A Proposal to Extend the Little FTC Acts to Small Businesses, 96 HARV. L. REV. 1621, 1630 (1983) (discussing the protection of small businesses under the Little FTC Acts).

[13] See U.C.C. § 2A-525 (1995); *id.* § 9-503; *see also infra* notes 240-41 (providing the full text of these provisions).

[14] See, e.g., Riley State Bank of Riley v. Spillman, 750 P.2d 1024, 1029 (Kan. 1988) (stating that creditors offer more loans when a self-help repossession remedy is available).

[15] See, e.g., U.C.C. § 9-503 (1995) (allowing self-help repossession to secured parties provided the repossession is carried out without breach of the peace).

[16] See Roditti, supra note 7, at 432; Edwards, supra note 4, at 764. Logic bombs are portions of computer programs that are triggered by "some preordained event, on a certain date, or after a definite number of times a program is run." Roditti, supra note 7, at 432. Logic bombs are capable of disabling software, electronically repossessing software, or damaging software or data on a system. See id.

[17] See Stephen L. Poe & Teresa L. Conover, Pulling The Plug: The Use and Legality of Technology-Based Remedies by Vendors in Software Contracts, 56 ALB. L. REV. 609, 610 (1993); see also Clayton X-Ray Co. v. Prof'l Sys. Corp., 812 S.W.2d 565, 566 (Mo. App. 1991) (awarding punitive damages where licensor having physical access to licensee's facility implanted lockup program with pre-set activation date).

[18] See Poe & Conover, supra note 17, at 609-10; Edwards, supra note 4, at 764.

^[19] This Note does not discuss undisclosed disabling devices such as viruses that serve mischievous purposes. *See* Roditti, *supra* note 7, at 432 n.2 (distinguishing "trojan horses," "worms," and "stealth viruses").

^[20] Reverse engineering is determining how a program was made by working backward from the finished program. *See* Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 524 (1998).

[21] See Roditti, supra note 7, at 433; see also Edwards, supra note 4, at 764 (listing similar purposes).

^[22] Some of these cases are also discussed in Henry Gitter, *Self-Help Remedies for Software Vendors*, 9 COMPUTER & HIGH TECH. L.J. 413, 414, 420-21 (1993); Poe & Conover, *supra* note 17, at 628-33; Roditti, *supra* note 7, at 435-45; Edwards, *supra* note 4, at 774-79.

^[23] 763 F. Supp. 1473, 1482, 1493 (D. Minn. 1991), *aff'd on other grounds sub nom*. American Computer Trust Leasing v. Boerboom Int'l, Inc., 967 F.2d 1208 (8th Cir. 1992), *discussed in* Gitter, *supra* note 22, at 420 n.53; Poe & Conover, *supra* note 17, at 632-33; Roditti, *supra* note 7, at 437-39; Edwards, *supra* note 4, at 776-77. ACTL sought to collect payments due for hardware that had been leased to the defendants, Farrell and Boerboom International. *See Jack Farrell Implement*, 763 F. Supp. at 1480.

^[24] See Jack Farrell Implement, 763 F. Supp. at 1492. Presumably, the deactivation was carried out using a modem. See id. After the deactivation, Farrell paid the balance owed to ADP. See id. After ADP reactivated the software, Farrell allegedly disconnected its modem so that ADP could no longer access Farrell's system. See id.

^[25] See *id.* at 1480. ACTL sought to collect payments due for hardware that had been leased to the defendants. See *id.* The other counterclaim defendants were Navistar International Transportation Corporation, and J.I. Case Company. See *id.* All of defendant Boerboom's counterclaims against ADP were dismissed because it was uncontested that ADP never deactivated Boerboom's software. See *id.* at 1492.

^[26] See id. at 1491-92. A claim for treble damages under a Minnesota statute was dismissed because the relevant statute did not include a provision for civil damages at the time of the alleged deactivation. See id. at 1493. Allegations of trespass and nuisance under Minnesota law were also dismissed because software was not protected under either statute. See id. at 1493-94.

^[27] 18 U.S.C. § 1951(b)(2) (1994), cited in Jack Farrell Implement, 763 F. Supp. at 1493.

[28] MINN. STAT. § 609.27 (1987), cited in Jack Farrell Implement, 763 F. Supp. at 1493.

[29] See Jack Farrell Implement, 763 F. Supp at 1492-93.

^[30] 549 N.Y.S.2d 789, 790 (N.Y. App. Div. 1990), *discussed in* Poe & Conover, *supra* note 17, at 629-30; Roditti, *supra* note 7, at 440; Edwards, *supra* note 4, at 775.

[31] See Art Stone Theatrical Corp., 549 N.Y.S.2d at 790.

[32] See id.

^[33] See id. at 791.

^[34] 812 S.W.2d 565, 566 (Mo. App. 1991), *discussed in* Gitter, *supra* note 22, at 421 n.58; Poe & Conover, *supra* note 17, at 631-32; Roditti, *supra* note 7, at 443-44; Edwards, *supra* note 4, at 775-76.

[35] See Clavton X-Ray Co., 812 S.W.2d at 566.

[36] *Id.*

[<u>37</u>] See id.

[38] *Id.* at 567. The \$10,000 punitive damage award in Clayton's favor offset PSC's award for the unpaid bill of \$10,000; the court also awarded Clayton \$60,000 for breach of warranty and \$1,050 in actual damages. See id.

[39] See Roditti, supra note 7, at 440-43 (citing No. 70533 (Super. Ct., Santa Clara County, filed Oct. 22, 1990)); Gitter, supra note 22, at 414; Poe & Conover, supra note 17, at 630-33; Edwards. supra note 4. at 778-79.

[40] See Roditti, supra note 7, at 441.

^[41] See id.

^[42] See id. at 441-42.

^[43] See id. at 442.

[44] See id. at 442-43 (citing Revlon's allegations of "intentional interference with contractual relations and with prospective economic advantage; trespass; conversion; misappropriation of trade secrets; breach of contract; breach of express warranty and implied covenant of good faith and fair dealing.").

[45] 588 N.Y.S.2d. 960, 960 (N.Y. City Civ. Ct. 1992), discussed in Gitter, supra note 22, at 421 n.58; Roditti, supra note 7, at 444-45; Edwards, supra note 4, at 777-78.

[46] See Werner, Zaroff, Slotnick, Stern & Askenazy, 588 N.Y.S.2d. at 961.

[47] See id.

[48] *Id.*

^[49] See id. at 962. Although punitive damages are not generally awarded for breaches of contract, the court justified

the sanction because of defendant's "morally culpable and seemingly criminal" acts. Id. at 962-63. The court hoped to "send a message to others who would consider committing similar acts in the future, and even to some who may eradicate their already planted, as yet silent viruses which are presently waiting to awaken and wreak their havoc." Id. at 963.

[50] See Roditti, supra note 7, at 456; see also Edwards, supra note 4, at 779 (citing American Computer Trust Leasing v. Jack Farrell Implement Corp., 763 F. Supp. 1473 (D. Minn. 1991), aff'd on other grounds sub nom., American Computer Trust Leasing v. Boerboom Int'l, Inc., 967 F.2d 1208 (8th Cir. 1992)).

^[51] See Pamela Samuelson, Embedding Technical Self-Help in Licensed Software, COMM, OF THE ACM, Oct.

1997, at 13.

[52] See Report on the 1998 NCCUSL Annual Meeting, supra note 10 (noting that the remedy is a "hotly contested issue"). The controversy was reported as follows:

A strong statement, but no motion, was made by a member of the drafting committee for Article 9 (Secured Interests) in support of a ban on electronic self-help. Currently, 2B takes a neutral position, authorizing the use of self-help repossession in § 715(b), but clarifying in the notes that 2B takes no position on whether this repossession can occur electronically. The section that would have specifically authorized the use of self-help subject to stringent restrictions has been deleted due to a failure to reach consensus on the provisions. The Chair of the 2B committee indicated that it would be out of character to ban a practice in the UCC, and further noted that the Article 9 committee had discussed the issue [electronic chips present the possibility for equipment to be repossessed by electronic disablement] and also decided to leave it to other law. He also remarked that this was a hotly contested issue. In the absence of consensus, attempting to deal with it rather than leave it up to other law would mean losing support for 2B. However, he noted that if a compromise position were forthcoming the issue would be re-opened.

Id.

^[53] Roditti, supra note 7, at 432 n.4 (quoting Lee Gruenfeld, Pay Up, or Bombs Away, COMPUTERWORLD, June 18, 1990, at 23) (alterations in original).

^[54] See Edwards, supra note 4, at 785 (quoting RAYMOND T. NIMMER, THE LAW OF COMPUTER TECHNOLOGY ¶ 7.33, at 7-110 (2d ed. 1992)).

^[55] *See id.* at 786.

^[56] See id. For two examples of such situations, see *infra* notes 61-63 and accompanying text.

^[57] See Edwards, supra note 4, at 786; see generally Grace-Marie Mowery, Comment, A Patient's Right of Privacy in Computerized Pharmacy Records, 66 U. CIN. L. REV. 697, 723-24 (1998) (discussing the growing importance of computer use by pharmacists to prevent allergic drug interactions and the harmful simultaneous use of contraindicated drugs).

[58] *See* Gitter, *supra* note 22, at 421.

[59] See id. (referring to the January 1990 AT&T telephone outage).

[60] See id.

[61] See supra notes 39-44 and accompanying text.

[62] See Poe & Conover, supra note 17, at 625 n.84; see also Roditti, supra note 7, at 432 n.4 (quoting RAYMOND T. NIMMER, THE LAW OF COMPUTER TECHNOLOGY ¶ 7.33, at 7-111 (2d ed. 1992)) ("Remote or pretimed disabling of software may cause damage that goes beyond merely enforcing a contract. Data loss, system failure, and other consequences may ensue. Even though these may be compensated for, it is not clear that contract law should permit this risk."").

[63] See Gruenfeld, supra note 53.

[64] See Poe & Conover, supra note 17, at 625; see also Joseph P. Verdon, Article 2B: Transactions in Software and 'Information,' N.Y. L.J., Aug. 13, 1997, at 1, 4; 2BGuide: Issues & Comments: Hot Button Issue: Licensor's Self Help (last modified Jan. 12, 1997) < http://www.2bguide.com/hbilsh.html> [hereinafter Hot Button Issue: Licensor's

Self-Help].

[65] See Edwards, supra note 4, at 786; see also Hot Button Issue: Licensor's Self Help, supra note 64.

[66] See Hot Button Issue: Licensor's Self Help, supra note 64.

[67] See Verdon, supra note 64, at 4.

^[68] Kaye Caldwell, The Software Forum, *Letter to Article 2B Drafting Committee* (Jan. 10, 1997) (last modified Jan. 15, 1997) http://www.webcom.com/software/coalition/sfsvsic.html (emphasis added) [hereinafter *Caldwell Letter*].

[69] See supra notes 61-63 and accompanying text.

[70] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

[71] See Nimmer, supra note 1, at 213.

^[72] See id.

^[73] See id. at 216.

[74] See Edwards, supra note 4, at 779.

^[75] See Colonial Life Ins. Co. v. Electronic Data Sys. Corp., 817 F. Supp. 235, 239 (D.N.H. 1993), *discussed in* Gitter, *supra* note 22, at 416; Edwards, *supra* note 4, at 780.

[76] See Nimmer, supra note 1, at 216.

[77] *See Background, supra* note 4.

^[78] Raymond T. Nimmer was the Reporter for Article 2B and is the Leonard Childs Professor of Law at the University of Houston Law Center and of Counsel to Weil, Gotshal & Manges. *See* Nimmer, *supra* note 1, at 211 n.[†].

[79] *See Background, supra* note 4.

^[80] See id.

[81] See NCCUSL Press Release, supra note 6.

^[82] See id.

[83] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

[84] *See Background*, *supra* note 4.

[85] New Uniform Act Meets Immediate Needs of the Information Age (last modified July 30, 1999) <http://www.2bguide.com/docs/pru72999.html>. UCITA has been introduced in Delaware, the District of Columbia, Hawaii, Illinois, and Oklahoma. See UCITA Online: Status of UCITA in the States (last modified Apr. 12, 2000) <http://www.ucitaonline.com/slhpsus.html>. Further, the governor of Virginia signed UCITA into law on March 14, 2000. See id. The governor of Maryland signed UCITA into law on April 25, 2000. See Bill Info-2000 Regular Session-HB 19 (last modified Apr. 27, 2000) http://www.mlis.state.md.us/2000rs/billfile.hb0019.htm>.

[86] U.C.C. § 2B-715(a)-(b) (Proposed Draft Aug. 1998), available in NCCUSL Model Acts Official Site, supra note 3. The early draft provided:

- Upon cancellation of a license, the licensor has the right: (a)
 - to possession of all copies of the licensed information in the possession or control of the licensee (1)and any other materials pertaining to that information which by contract were to be returned or delivered by the licensee to the licensor; and
 - to prevent the continued exercise of contractual and informational rights in the licensed information (2)under the license.

Id.

[87] See id. § 2B-715, reporter's notes para. 3 ("3. Self-help. . . . As in both of those articles [2A and 9], this Section takes no position on whether self help can be pursued through electronic means.").

[88] See id. § 2B-715 (Proposed Draft Mar. 1998) ("(a) On cancellation of a license because of breach by the licensee, the licensor has the right: ... (2) to prevent the continued exercise of rights in licensed information and informational property rights provided to the licensee pursuant to the agreement.").

[89] See id. § 2B-716. This section provides:

(b) If the licensed information is not informational content, but is rightfully used in, and is material to, process other information held by the licensee or to operate the business of the party in breach, the aggrieved party may use *electronic means* to exercise its rights under subsection (a) only if: (1) the aggrieved party obtains physical possession of a copy without a breach of the peace and the electronic means are used with respect to that copy; or (2) the following conditions are met: (A) a term in the license [that is conspicuous] [to which the party in breach manifests assent] authorizes use of electronic means; and (B) the aggrieved party gives *notice* of an intent to exercise the remedy in a record

Id. (brackets in original) (emphasis added).

[90] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

[91] See id.

[92] See 2BGuide: NCCUSL Press Release: Committee Drafting New Article 2B of the Uniform Commercial Code Makes Major Changes to Protect Consumers and Small Businesses and to Safeguard Public Interests in Free Speech and Fair Criticism in the Electronic Age (Nov. 17, 1998) (last modified Nov. 18, 1998) <http://www.2bguide.com/docs/prsr1198.html>.

(2)

^[93] Compare U.C.C. § 2B-715 (Proposed Draft Aug. 1998) and U.C.C. § 2B-715 (Proposed Draft Feb. 1999), available in NCCUSL Model Acts Official Site, supra note 3. The November changes were originally promulgated in the Dec. 1998 draft and remained unchanged in the final UCC 2B draft dated Feb. 1999. That draft would not have allowed electronic self-help unless

- the licensee manifested assent to a term in the license that authorizes the use of electronic self-help; (1)
 - before the exercise of electronic self-help the licensor gives notice to the licensee that states:
 - that the licensor intends to exercise electronic self-help as a remedy 15 or more days after receipt (A) by the licensee of the notice;
 - the nature of the breach of contract that entitles the licensor to exercise self-help: and **(B)**

the name, title, and address of a person with whom the licensee may communicate concerning the (C) alleged breach.

U.C.C. § 2B-716(a) (Proposed Draft Feb. 1999), available in NCCUSL Model Acts Official Site, supra note 3.

[94] See James R. Helms et. al., Letter to Chairman, NCCUSL Article 2B Drafting Committee (Nov. 25, 1998) (last modified Dec. 12, 1998) <http://www.2bguide.com/docs/1198sh.html>.

[95] *Id.*

^[96] See id.

[97] *Id*

[98] See NCCUSL Press Release, supra note 6.

^[99] See id.

[100] See U.C.I.T.A. § 816 (Proposed Draft Oct. 15, 1999), available in NCCUSL Model Acts Official Site, supra note 3.

^[101] *Id.* § 815(b).

[102] *Id.* § 816(c)

[103] *Id.* § 816(d).

[104] *Id.* § 816(e).

[105] *Id.* § 816(f).

[106] *Id.* § 816(g).

[107] *Id.* § 816(h).

[108] See Hiawatha Bray, KO This Statute, BOSTON GLOBE, Aug. 19, 1999, at D1 (noting that "attorneys general from 26 of the 50 states ... have denounced the [UCITA]."). For the current status of UCITA within the state legislatures, see supra, note 85.

^[109] One commentator has mentioned that the existence of an unfair advantage might be relevant in determining whether to uphold the use of electronic self-help, but did not explore the option in detail. See Gitter, supra note 22, at 428.

[110] Helms, *supra* note 94.

[111] Samuelson, *supra* note 51, at 13.

[112] See infra notes 173-75 and accompanying text (discussing tenant self-help).

[113] See supra notes 16-21 and accompanying text.

[114] Helms, *supra* note 94.

[115] See infra notes 237-39 and accompanying text (discussing the Small Business Administration and its definition of small software companies).

^[116] Indeed, unequal bargaining power and an inability to negotiate the terms of adhesion contracts are justifications for consumer protection. *See* John J.A. Burke & John M. Cannel, *Leases of Personal Property: A Project for Consumer Protection*, 28 HARV. J. ON LEGIS. 115, 152-53 (1991).

^[117] See Maureen A. O'Rourke, *Rethinking Remedies at the Intersection of Intellectual Property and Contract: Toward a Unified Body of Law*, 82 IOWA L. REV. 1137, 1188 (1997) (proposing a solution to the clash between property rules under Intellectual Property law and liability rules under the Uniform Commercial Code).

[118] See U.C.I.T.A. § 816(h) (Proposed Draft Oct. 15, 1999), available in NCCUSL Model Acts Official Site, supra note 3.

^[119] O'Rourke, *supra* note 117, at 1147 (quoting Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092 (1972)).

[120] Calabresi & Melamed, *supra* note 119, at 1092.

[121] *Id.*

[122] *See* O'Rourke, *supra* note 117, at 1148.

[123] *See id.* at 1159.

^[124] Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 COLUM. L. REV. 2655, 2664 (1994).

[125] See id.

[126] See Calabresi & Melamed, supra note 119, at 1113.

^[127] See id.

[128] *See id.* at 1114.

^[129] See O'Rourke, supra note 117, at 1185; see generally Calabresi & Melamed, supra note 119, at 1094 (describing Pareto optimality and economic efficiency); Merges, supra note 124, at 2656 n.5 (noting that the theorem later named the Coase Theorem first appeared in R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960)).

[130] See Merges, supra note 124, at 2656.

[131] See Calabresi & Melamed, supra note 119, at 1096-97.

^[132] See id. at 1113.

[133] See Hot Button Issue: Licensor's Self Help, supra note 64.

[134] See Edwards, supra note 4, at 786 ("This leaves, in many cases, a large disparity of bargaining power in the hands of the software developer."); see also Poe & Conover, supra note 17, at 622 ("[T]he customer's knowledge that the vendor has the capability to exercise such a remedy likely affords the vendor substantial leverage, especially if the software plays a key role in the customer's business operations.").

[135] See Samuelson, supra note 51, at 14.

[136] See supra notes 22-51 and accompanying text.

[137] See Poe & Conover, supra note 17, at 633; Roditti, supra note 7, at 456; Edwards, supra note 4, at 779.

[138] See 763 F. Supp. 1473 (D. Minn. 1991), aff'd on other grounds sub nom. American Computer Trust Leasing v. Boerboom Int'l, Inc., 967 F.2d 1208 (8th Cir. 1992); see also supra notes 23-29 and accompanying text (discussing the American Computer Trust Leasing case).

[139] ADP is the world's largest payroll processing company, filing payroll taxes for over 285,000 clients. See HOOVER'S HANDBOOK OF AMERICAN BUSINESS 198-99 (1998). Their 1997 sales totaled \$4,112,000,000. See id.

[140] N.Y. PENAL LAW § 156.20 (McKinney 1998 & Supp. 1998).

[141] See 18 U.S.C. § 1030(a)(5)(A) (Supp. IV 1998) (emphasis added).

[142] See supra notes 52-70 and accompanying text.

[143] See Caldwell Letter, supra note 68.

^[144] See 1992 Census of Industries (taxable firms) - U.S. Summary, Business Services (visited Apr. 4, 2000) <http://www.census.gov/epcd/www/sc92h73.html> (showing 23,265 computer programming services establishments with total employment of 242,702); see also Raymond T. Nimmer, Article 2B: UCC in the Information Age, in PLI'S THIRD ANN. INST. FOR INTELL. PROP. L. at 309, 316 (490 PLI Patents, Copyrights. Trademarks, and Literary Prop. Course Handbook Series No. G4-4008, Sept. 1997), available in WESTLAW, PLI/Pat File (stating that most information companies have less than 20 employees).

^[145] See Caldwell Letter, supra note 68 ("Contract development work is extremely common in the software industry. Many contract companies specialize in particular technology areas which are essential to certain portions of the products of larger software companies.").

[146] Hot Button Issue: Licensor's Self Help, supra note 64.

[147] Id.; see also Samuelson, supra note 51, at 14. ("[Self-help repossession could] help level the playing field when dealing with licensees of substantial size and market clout.").

[148] See HOOVER'S HANDBOOK, supra note 139, at 978.

^[149] Joe Dysart, *Is Your Software About to Drop Dead?* RESTAURANT HOSPITALITY, Feb. 1, 1992, at 65, *available in* 1992 WL 3227606; *see also* Roditti, *supra* note 7, at 441 n.67 (1995).

[150] See Verdon, supra note 64, at 4.

^[151] See Caldwell Letter, *supra* note 68 ("We point out once again that it is extremely common for the licensee, by nature of their size, to be in a much better position to obtain legal expertise than the small software developer licensor.").

^[152] See Gail Hillebrand, *The Uniform Commercial Code Drafting Process: Will Articles 2, 2B & 9 Be Fair to Consumers?*, 75 WASH. U. L.Q. 69, 113 (1997) (suggesting changes to the Uniform Commercial Code's drafting process that take into account the new laws' impact on consumers, small businesses, and other underrepresented groups).

[153] See Brandon et al., supra note 11, at 946.

[154] *Id.* at 948 (quoting Harvey v. Brydges, 153 Eng. Rep. 546, 548 (Ex. 1845)).

^[155] See id. at 949; see also Randy G. Gerchick, No Easy Way Out: Making the Summary Eviction Process A Fairer and More Efficient Alternative to Landlord Self-Help, 41 UCLA L. REV. 759, 775 (1994).

[156] See Gerchick, supra note 155, at 776.

[157] *See id.*

[158] See id. at 777; see also Mendes v. Johnson, 389 A.2d 781, 787 (D.C. Cir. 1978) (holding that the landlord's "right of self-help has been abrogated.").

[159] See Gerchick, supra note 155, at 777-78.

[160] See id. at 779.

[161] See id. at 782; see also Mendes, 389 A.2d at 786 ("To sanction the use of self-help in our densely populated city, chronically plagued with serious housing shortages, would be to invite and sanction violence.").

[162] See Gerchick, supra note 155, at 783.

[163] See Brandon et al., supra note 11, at 963; see also Gerchick, supra note 155, at 782.

[164] See Gerchick, supra note 155, at 784.

[165] *See id.* at 785-86.

[166] See Brandon et al., supra note 11, at 956.

[167] *See id.* at 957.

[168] See id. at 955.

[169] See id.

[170] *Id.* at 963 (emphasis added).

[171] See U.C.C. § 2B-716(d) (Proposed Draft Feb. 1999).

^[172] See U.C.I.T.A. § 816(g) (Proposed Draft Oct. 15, 1999), *available in NCCUSL Model Acts Official Site, supra* note 3. The final draft does allow a court to block the use of electronic self-help with an injunction. *See id.*

[173] *Cf.* Helms, *supra* note 94 (discussing non-judicially authorized electronic self-help and advocating a general fee-shifting provision).

[174] See Brandon et al., supra note 11, at 956.

[175] See Gerchick, supra note 155, at 777.

^[176] 15 U.S.C. § 45(a)(1) (1994).

[177] See id. § 45(a)(2).

^[178] See G. Richard Shell, Substituting Ethical Standards for Common Law Rules in Commercial Cases: An Emerging Statutory Trend, 82 NW. U. L. REV. 1198, 1213 (1988) (citing Holloway v. Bristol-Myers Corp., 485 F.2d 986, 989 (D.C. Cir. 1973)).

[179] *See id.* at 1213-14.

[180] See Note, supra note 12, at 1622.

[181] See id.

[182] *Id.* at 1625-26.

^[183] See id. at 1636.

[184] *See* Shell, *supra* note 178, at 1214.

^[185] MASS. GEN. LAWS ch. 93A, § 11 (1997 & Supp. 1998).

^[186] See Shell, supra note 178, at 1221.

^[187] See Daniel F. Bragg, Now We're All Consumers! The 1975 Amendments to the Consumer Protection Act, 28 BAYLOR L. REV. 1, 5 (1976); Note, supra note 12, at 1637.

[188] Note, *supra* note 12, at 1637 n.96 (quoting TEX. BUS. & COM. CODE ANN. § 17.45(4) (Vernon Supp. 1982)).

^[189] See TEX. BUS. & COM. CODE ANN. § 17.45(4) (West 1987) ("[T]he term [consumer] does not include a business consumer that has assets of \$25 million or more, or that is owned or controlled by a corporation or entity with assets of \$25 million or more.").

[190] Bragg, *supra* note 187, at 23 (commenting on the initial definition of "consumer" under the DTPA).

[191] See Luker v. Arnold, 843 S.W.2d 108, 111 (Tex. App. 1992).

[192] *Id.* at 112.

[193] See Helms, supra note 94; see also supra notes 114-116 and accompanying text.

[194] Shell, *supra* note 178, at 1216.

^[195] See Note, supra note 12, at 1623.

[196] *See id.* at 1639.

^[197] See Shell, supra note 178, at 1216 n.97.

[198] KAN. STAT. ANN. § 50-624(b) (1994) (emphasis added).

[199] Note, *supra* note 12, at 1636.

[200] KAN. STAT. ANN. § 50-623(b).

^[201] See MD. CODE ANN., COM. LAW II § 13-101(d) (1994); W. VA. CODE § 46A-6-102(b) (1998); see also Shell, supra note 178, at 1216 n.97.

[202] MD. CODE ANN., COM. LAW II § 13-101(d) (emphasis added).

^[203] W. VA. CODE § 46A-6-102(b) (emphasis added).

^[204] See Note, supra note 12, at 1629-34 (arguing that it is more efficient and more ethical to "tax" unscrupulous suppliers than to further burden taxpayers or consumers with additional business subsidies).

^[205] See id. at 1629.

[206] *Id.*

^[207] See Shell, supra note 178, at 1237; Note, supra note 12, at 1629.

^[208] See Shell, supra note 178, at 1240.

^[209] See Note, supra note 12, at 1629-30 n.56.

[210] Id.

^[211] See id. at 1631.

^[212] See id.

^[213] 409 N.E.2d 219 (Mass. App. Ct. 1980); see also Note, supra note 12, at 1630.

^[214] See Homsi, 409 N.E.2d at 223; see also Note, supra note 12, at 1630.

^[215] See Note, supra note 12, at 1630.

^[216] See Homsi, 409 N.E.2d at 222, 225; Note, supra note 12, at 1630.

^[217] See Note, supra note 12, at 1630.

^[218] See id. at 1636.

^[219] See id. at 1630.

[220] *Id.* at 1634.

[221] See 15 U.S.C. § 45(a)(1) (1994).

[222] See Roditti, supra note 7, at 453.

[223] See DEL. CODE ANN. tit. 7, §§ 7420-7424 (1996).

[224] See id. § 7401.

^[225] *Id.* § 7421.

[226] *Id.*

[227] See id.

^[228] *Id.* § 7423.

[229] Rieko Mashima, *The Turning Point for Japanese Software Companies: Can They Compete in the Prepackaged Software Market?*, 11 BERKELY TECH. L.J. 429, 450 (1996).

[230] See DEL. CODE ANN. tit. 7, § 7421.

[231] Cf. U.S. CONST. art. 1, § 8 cl. 8 ("[Congress shall have the power] to promote the Progress of Science and

useful Arts, . . .").

[232] See Danielle Conway-Jones, Federal Procurement of Environmental Remediation: Feast or Famine for Small Business, 41 HOW. L.J. 1, 15 (1997).

[233] *See id.* at 21.

[234] 15 U.S.C. § 632(a)(1) (1994).

[235] See Conway-Jones, supra note 232, at 15.

[236] See id.; see also American Elec. Co. v. United States, 270 F. Supp. 689, 691 (D. Haw. 1967).

[237] See 13 C.F.R. § 121.201 (1998).

[238] See supra note 115 and accompanying text.

[239] See HOOVER'S HANDBOOK, supra note 139, at 978-79.

^[240] See U.C.C. § 9-503 (1995). Section 9-503 states:

Unless otherwise agreed a secured party has on default the right to take possession of the collateral. In taking possession a secured party may proceed without judicial process if this can be done without breach of the peace or may proceed by action. If the security agreement so provides the secured party may require the debtor to assemble the collateral and make it available to the secured party at a place to be designated by the secured party which is reasonably convenient to both parties. Without removal a secured party may render equipment unusable, and may dispose of the collateral on the debtor's premises under section 9-504.

Id.

^[241] See U.C.C. § 2A-525. Section 2A-525 provides:

(2) After a default by the lessee under the lease contract of the type described in section 2A-523(1) or 2A-523(3)(a) or, if agreed, after other default by the lessee, the lessor has the right to take possession of the goods. If the lease contract so provides, the lessor may require the lessee to assemble the goods and make them available to the lessor at a place to be designated by the lessor which is reasonably convenient to both parties. Without removal, the lesser may render unusable any goods employed in trade or business, and may dispose of the goods on the lessee's premises (section 2A-527). (3) The lessor may proceed under subsection (2) without judicial process if it can be done without breach of the peace or the lessor may proceed by action.

Id.

^[242] See U.C.C. § 2B-715, reporter's notes para. 3 (Proposed Draft Aug. 1998), *available in NCCUSL Model Acts Official Site, supra* note 3; *see also* Roditti, *supra* note 7, at 454. The UCC is also relevant because of the UCITA's history as a proposed UCC article.

[243] See U.C.C. § 2A-525; id. § 9-503.

^[244] See U.C.C. § 2B-715, reporter's notes para. 3 (Proposed Draft Aug. 1998).

^[245] See U.C.I.T.A. § 816 (Proposed Draft Oct. 15, 1999), available in NCCUSL Model Acts Official Site, supra note 3.

[246] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

[247] See Bray, supra note 108. For the current status of UCITA in the state legislatures, see supra note 85.

[248] See supra notes 52-70 and accompanying text (discussing the controversial nature of the electronic self-help remedy).

[249] See Robert W. Johnson, Denial of Self-Help Repossession: An Economic Analysis, 47 S. CAL. L. REV. 82, 87 (1973); James J. White. The Abolition of Self-Help Repossession: The Poor Pay Even More, 1973 WIS. L. REV. 503, 513.

[250] See Wanda M. Temm, Creditor Beware: From Default Through Deficiency Judgment, 60 J. KAN. B.A., Oct. 1991, at 17, 19; see also Riley State Bank of Riley v. Spillman, 750 P.2d 1024, 1029 (Kan. 1988); Edwards, supra note 4, at 772.

[251] See Johnson, supra note 249, at 107.

^[252] See id. at 110 ("There is little reason to expect that the marginal costs of a posthearing replevin system would be borne to any significant extent by the defaulting consumers. Hence, efforts will probably concentrate on denying them credit."); *see also* White, *supra* note 249, at 524 ("Surely the creditors will leave no stone unturned in their attempt to pass on the costs to their debtors. It seems likely that by hook or by crook they will be successful in passing on these costs.").

[253] See William C. Whitford & Harold Laufer, The Impact of Denying Self-Help Repossession of Automobiles: A Case Study of the Wisconsin Consumer Act, 1975 WIS. L. REV. 607, 611.

[254] See id. at 612 (citing WIS. STAT. § 425.206 (1973)). A replevin action is one in which "the owner or person entitled to repossession of goods or chattels" seeks to "recover those goods or chattels," BLACK'S LAW DICTIONARY 1299 (6th ed. 1990).

[255] See Whitford & Laufer, supra note 253, at 654.

^[256] See id. ("Our informal interviews with low value used car dealers, who presumably sell disproportionately to the poor, suggested there may have been substantial restriction of credit to their clientele-primarily in the form of higher required down payments.").

^[257] Riley State Bank of Riley v. Spillman, 750 P.2d 1024, 1029 (Kan. 1988) (citing Benschoter v. First Nat'l Bank of Lawrence, 542 P.2d 1042, 1049 (Kan. 1975) and White, *supra* note 249).

[258] See Caldwell Letter, supra note 68.

[259] See id.

[260] See generally U.C.C. § 2-302 (1995) (enabling a court to refuse to enforce a contract that was "unconscionable at the time it was made"). The primary aim of this provision, however, is "the prevention of oppression and unfair surprise," and not to alleviate the harm from superior bargaining power. Id. cmt. 1.

[261] See Edith Resnick Warkentine, Article 2 Revisions: An Opportunity to Protect Consumers and "Merchant/Consumers" Through Default Provisions, 30 J. MARSHALL L. REV. 39, 49 (1996).

^[262] See id.

^[263] 595 A.2d 1190, 1196 (Pa. Super. Ct. 1991), *discussed in* Resnick Warkentine, *supra* note 261, at 53.

^[264] See id. at 1191.

^[265] *Id.* at 1197.

[266] See Brandon et al., supra note 11, at 963.

^[267] See id. at 956-57.

^[268] See id. at 963.

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<sup>[269]</sup> See James R. McCall, *The Past as Prologue: A History of the Right to Repossess*, 47 S. CAL. L. REV. 58, 64-66 (1973) (discussing self-help repossession by the ancient Greeks and Romans).

<sup>[270]</sup> See U.C.C. § 9-503 (1995); *id.* § 2A-525(3); *see also* Headspeth v. Mercedes-Benz Credit Corp., 709 A.2d 717, 720 (D.C. 1998) ("The only limitation to the creditor's statutory remedy to repossess the collateral, other than any provided by the contract, is that the secured party proceed only 'if [repossession] can be done without breach of the peace . . . . '') (alteration in original) (quoting D.C. CODE § 28:9-503 (1996)).

<sup>[271]</sup> *Headspeth*, 709 A.2d at 721.

[272] See Gerchick, supra note 155, at 782.

[273] See Headspeth, 709 A.2d at 721.

<sup>[274]</sup> See id.

<sup>[275]</sup> Gitter, *supra* note 22, at 419.

[276] See Edwards, supra note 4, at 763.

[277] See Gerchick, supra note 155, at 782.

[278] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

<sup>[279]</sup> See Resnick Warkentine, *supra* note 261, at 44 ("[T]he [Article 2] Drafting Committee has preserved the 'open-ended drafting' approach of current Article 2 which permits courts to extend protection not only to consumers, but also to 'merchant/consumers.'").

[280] See U.C.C. § 2-316(2) (1995), discussed in Resnick Warkentine, supra note 261, at 61.

<sup>[281]</sup> See U.C.C. § 1-201(10) (1995), discussed in Resnick Warkentine, supra note 261, at 61. "A term or clause is conspicuous when it is so written that a reasonable person against whom it is to operate ought to have noticed it . . . . Whether a term is 'conspicuous' or not is for decision by the court." Id.

<sup>[282]</sup> See Resnick Warkentine, *supra* note 261, at 62-64 (citing Hartman v. Jensen's, Inc., 289 S.E.2d 648 (S.C. 1982) and Sierra Diesel Injection Servs., Inc. v. Burroughs Corp., 890 F.2d 108 (9th Cir. 1989)).

<sup>[283]</sup> See id. at 63 (quoting Myrtle Beach Pipeline Corp. v. Emerson Elec. Co., 843 F. Supp. 1027, 1038, 1040 (D.S.C. 1993)) ("[T]he court asserted that '[h]ere, no consumer was involved; rather, the context of this transaction is a commercial negotiation between two sophisticated corporate entities.' Furthermore, the court ... must ... 'consider the status of the parties to the transaction in its calculus for determining what constitutes conspicuous language."").

<sup>[284]</sup> See id. at 93.

[285] Helms, *supra* note 94.

[286] See supra notes 114-116 and accompanying text (providing additional factors for determining when to uphold the use of electronic self-help).

[287] See Edwards, supra note 4, at 781 (quoting Gitter, supra note 22, at 424).

[288] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

<sup>[289]</sup> See id.

[290] See U.C.I.T.A. § 816 (Proposed Draft Oct. 15, 1999), available in NCCUSL Model Acts Official Site, supra note 3.

[291] See Report on the 1998 NCCUSL Annual Meeting, supra note 10.

<sup>[292]</sup> See Hot Button Issue: Licensor's Self Help, supra note 64.

[293] See Brandon et al., supra note 11, at 963.

<sup>[294]</sup> See Shell, supra note 178, at 1216.

<sup>[295]</sup> See DEL. CODE ANN. tit. 7, § 7423 (1997).

<sup>[296]</sup> See U.C.C. § 9-503 (1995); *id.* § 2A-525; Riley State Bank of Riley v. Spillman, 750 P.2d 1024, 1029 (Kan. 1988).

[297] See Gerchick, supra note 155, at 782 (discussing self-help in the landlord/tenant context).

[298] See Resnick Warkentine, supra note 261, at 93.