FEDERALTRADE COMMISSION

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High-Tech Warranty Project : Comment, P994413

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Comments of Stephen Y. Chow, Boston, Massachusetts

1. I comments on my own behalf as an intellectual property law and e-commerce law practitioner, often representing technology-leading emerging enterprises. I have been one of the Uniform Law Commissioners for Massachusetts since 1994, and a member of the National Conference of Commissioners on Uniform State Laws ("NCCUSL") drafting committees of the Uniform Electronic Transactions Act ("UETA") and the Uniform Computer Electronic Transactions Act ("UCITA"). I strongly support UETA, but strongly oppose UCITA. I urge the Federal Trade Commission to do whatever it can to counteract the anti-competitive and anti-innovation framework that the proponents of UCITA seek to establish by its enactment and the concurrent attempt to remove computer programs from the pending revision of Uniform Commercial Code Article 2 -- Sale of Goods ("UCC Article 2") by removing functional computer programs from the reach of UCC 2. At a minimum, the FTC should treat computer programs as "goods" and treat non-negotiated "licenses" offered to a public beyond any meaningful claim of "confidentiality" as sales or leases under the Magnuson-Moss Act.[1]

2. I have programmed digital computers since 1966 and have been involved the legal aspects of computer software development and distribution since 1976. I hold a masters degree in Applied Physics from the Harvard Graduate School of Arts and Sciences, and have practiced law in the fields of antitrust, banking regulation, commercial law, copyrights, patents, telecommunications regulation, trademarks, trade secrets, and venture capital, both as a litigator and on the transactional side. My current practice includes the drafting of patent applications for telecommunications infrastructure as well as "New Economy" information systems (sometimes known as "business processes"). Despite popular misconception, the patenting process fulfills the constitutional basis for the Patent Act by providing public access to information previously kept secret in part by the "licenses" used by software "publishers" to prevent reverse engineering of their products.

3. In contrast, UCITA increases the ability of those who have market power to bind users to restraints traditionally surrendered upon sale of products. It does so under a new concept of "licensing" not based upon intellectual property, but upon the "contract" of "manifestation of assent after opportunity to review" a "click-wrap" agreement. As shown below, a UCITA regime encourages vendors not to make available terms prior to the user's installation of a covered product. UCITA thus establishes a reactionary

[1] Although the same might apply to the Robinson-Patman Act, at least there, there is economic benefit to pricing software differently as between classes of frequent and infrequent users. *See ProCD, Inc., v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (Easterbrook, J.).

framework that runs counter to many of the open-network advantages promised by the Internet. UCITA tends to entrench the practices that support the 1990's market-leading "bloatware" of unnecessarily large and complex computer programs with more bells and whistles fueling demand for faster hardware and more complex operating systems.[2] We should learn a lesson from the Detroit of the 1970's and encourage reliable component-based software and downloaded "applets" by keeping up the high manufacturing and design standards that companies such as General Electric and Motorola and foreign consumer electronics manufacturers have met.

4. UCITA proponents have provided no sound reason for enacting UCITA other than a professed need for different answers to the questions raised by UCC Article 2 from those provided by UCC Article 2 for sale of goods.[3] There simply has been no "market failure" calling for new answers; UCC Article 2, which has been applied to "off-the-shelf" computer programs for a generation,[4] has provided a framework under which all

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[2] Acceptance in UCITA of the alleged "inherent bugginess" of software and the habits of mass-market publishers lowers standards that may prove detrimental to our national primacy in technology. Mass-market general-purpose computers and software have added tremendously to our economy and therefore enjoy some well-deserved "slack" in our expectations. However, we would not tolerate frequent "crashes" in industrial equipment or in consumer electronics. It is in those industries that we have fallen behind. As the world moves to "component-based software engineering" – where software components are held to the same standards as hardware components – is American industry well-served by a law that relaxes allows publishers of end-user software to set their own standards by "contracts" with indirect anonymous purchasers, but expose "upstream" producers by the same elimination of privity requirements?

[3] The proposed blanket exclusion of computer program transactions from UCC Article 2 along with other non-functional computer information is a drastic step contrary to the scholarship reflected in the American Law Institute's Restatement (Third) of Torts: Product Liability (1998), where, in *contrast* to *other* information products, it was observed,

> . . . Under the [Uniform Commercial]Code, software that is mass-marketed is considered a good. See, e.g., Systems Design v. Kansas City Post Office, 788 P.2d 878 (Kan.Ct.App.1990); Advent Sys. Ltd. v. Unisys Corp., 925 F.2d 670 (3d Cir.1991) (applying Pennsylvania law); RRX Indus., Inc. v. Lab-Con, Inc., 772 F.2d 543 (9th Cir.1985) (applying California law). However, software that was developed specifically for the customer is a service. See, e.g., Data Processing Servs., Inc. v. L.H. Smith Oil Corp., 492 N.E.2d 314 (Ind.Ct.App.1986); Micro-Managers, Inc. v. Gregory, 434 N.W.2d 97 (Wis.Ct.App.1988); see also Note, Computer Software as a Good Under the Uniform Commercial Code: Taking a Byte Out of the Intangibility Myth, 65 B.U.L. Rev. 129 (1985); Comment, The Warranty of Merchantability and Computer Software Contracts: A Square Peg Won't Fit in a Round Hole, 59 Wash. L. Rev. 511 (1984).

Section 19, Reporter's Note Comment d.

[4] A non-exhaustive list of cases applying UCC 2 to computer programs follows: California*: RRX Industries, Inc., v. Lab-Con, Inc*., 772 F.2d 543 (9th Cir. 1985) (applying California law); Colorado*: Rocky Mountain Microsystems, Inc. v. Public Safety Systems, Inc.*, 1999 WL 162597 (10th Cir. 1999) (applying Colorado Law) (unpublished opinion); Connecticut: *Latham & Assoc., Inc. v. William Raveis Real Estate, Inc.*, 589 A.2d 337 (Sup.Ct. Conn. 1991); Florida: *First Nationwide Bank v. Florida Software Services, Inc.*, 770 F.Supp. 1537 (M.D. Fla. 1991); *Hi Neighbor Enters., Inc. v. Burroughs Corp*., 492 F.Supp 823 (N.D. Fla. 1980); Kansas: *Systems Design and Management Information, Inc., v. Kansas City Post Office Employees Credit Union*, 788 P.2d 878 (App.Ct. Kans. 1990); Massachusetts*: Vmark Software, Inc., v. EMC Corp*., 642 N.E.2d 587 (Mass.Ct.App. 1994); *Novacore Technologies, Inc., v. GST Communications Corp*., 20 F.Supp.2d 169 (D.Mass. 1998); Michigan: *Richard Haney Ford, Inc., v. Ford Dealer Computer*

information industries have flourished. The extremely complex UCITA in fact regulates in favor of a single segment of these industries: publishers of computer programs and data to the public.

5. Many of the substantive problems in UCITA can be traced to two defects: (1) UCITA improperly lumps together functional computer programs, which are appropriately subject to UCC Article 2 questions of performance, with other non-functional computer information, for which UCC Article 2 questions are inappropriate and have not been previously asked, and uses policy and practices applicable to non-functional information to pull functional computer programs out of UCC Article 2;[5] and (2) UCITA unfairly provides an "enhanced Last Shot Rule" that amplifies the power of the computer program producer who is the most knowledgeable in any case about its product, the opacity of which is argued by UCITA proponents to distinguish it from other products subject to UCC Article 2. This exaggerated power, unimpeded by the unlikely-to-be-sustained state court defenses of "unconscionability" and "violates fundamental public policy of the state," renders irrelevant both the mediating counsel of reasonableness and the default rules argued by UCITA proponents to be "balanced".

6. The enhanced Last Shot Rule is subtly presented in UCITA section 204, which provides that a contract is not formed if a response to an offer includes presentment of a

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Services, 461 S.E.2d 282 (Ga.Ct.App. 1995) (applying Michigan law); Nebraska: *Design Data Corp., v. Maryland Casualty Company*, 503 N.W.2d 552 (Sup.Ct. Neb. 1993); New Hampshire: *Micro Data Base Systems, Inc., v. Dharma Systems, Inc.*, 148 F.3d 649 (7th Cir. 1998) (applying New Hampshire law*); Colonial Life Insurance Co., v. Electronic Data Systems Corp.*, 817 F.Supp 235 (D.N.H. 1993); New York*: Schroders, Inc., v. Hogan Systems, Inc.*, 522 N.Y.S.2d 404 (Sup.Ct. 1987); Oklahoma*: NPM Corp., v. Parametric Technology Corp.*, 958 F.Supp 1536 (N.D.Okla. 1997); Pennsylvania*: Advent Systems Ltd. v. Unisys Corp.*, 925 F.2d 670 (3d Cir. 1991) (applying Pennsylvania law); *Personal Data Systems, Inc., v. Grand Casinos, Inc.*, 1998 WL 437268 (E.D.Pa. 1998); Washington*: Morterson Company, Inc., v. Timberline Software Corp.*, 970 P.2d 803 (Wa.Ct.App. 1999), *aff'd*, 2000 Wash. LEXIS 287 (May 4, 2000); Wisconsin*: ProCD, Inc., v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (applying Wisconsin law).

[5] The UCITA construct of "computer information" is untested and imprecise. It is clearly over-inclusive in taking computer programs integral to the functioning of "hardware" out of UCC Article 2 *answers* and in subjecting empirical research data (which of necessity must be in computer form to have value) to the UCC Article 2 *questions* raised by UCITA. It is clearly under-inclusive as a test for UCC Article 2 application in that other information than "computer information", such as aesthetic elements of a product, should also be excluded from UCC Article 2, while other information, such as the shape of cams and the calibration of variable components, should be included for their effects on functionality. It is *functionality* – measured by the expectation of deterministic results – that distinguishes the subject matter of UCC Article 2 from "services" that are epitomized by "custom" or "personal" performance – including developmental computer programming – and from aesthetic or subjective information.

The lumping together under "computer information" of computer program deliverables valued for their functionality with information valued for their factual or human expression content (but usable in their digital format) opens intellectual property licensors – authors, artists, scientists, researchers, universities – to performance warranty risks. These are not entities that have the marketing or legal support or allocation to ask the same questions that UCITA proponents want answered. The traditional UCC Article 2 characterization of "service or product" relative to transactions of these entities almost always would be "service." By now raising the product warranty questions, these entities may be exposed to litigation upon each transaction, where there had been no litigation before. This chills innovation at the source.

material alteration of the offer. This is a fundamental change from the so-called "battle of forms" in UCC 2-207, under which a deal, evidenced, for example, by shipment of product, is recognized, with additional terms incorporated if consistent with the deal and "knocked out" if materially inconsistent. Under UCITA, attorneys should counsel producer clients to get the "last shot" at establishing contract terms by embedding within their products at least one term that is "materially different" from the terms of any agreement likely to be established prior to the presentment of those terms and to avoid early presentment of those terms. This is a strange result indeed, but it is supported by the resistance of UCITA proponents to posting terms on the Web: they say it is too expensive!

7. Other substantive objections to UCITA include provisions included to mollify opponents. Recent amendments include the exclusion from UCITA of motion picture transactions *except* in "downstream" mass-market transactions and at the "upstream" concept acquisition. UCITA balances the downstream favoring of the licensor with the upstream favoring of the licensee – all in favor of the publisher as licensee and licensor. Thus, UCITA section 216 was recently included, making unenforceable idea submission contracts – contrary to the "freedom of contract" for publishers – unless the idea is in fact confidential and concrete or there is express protection for these. (Traditional non-disclosure agreements may be called into question where ideas not yet reduced to practice are involved.)

8. The same principle is not made applicable by UCITA to publishers of mass-market data – for example, stock quotations. The stock exchanges support UCITA for contractual restrictions on retransmission of individual quotations, even when these are distributed to many thousands of "subscribers" and are not protected by copyright. UCITA stretches the traditional concept of licensing or granting of privileges in established intellectual property rights to a new concept of "licensing" as a contractual restriction without requirement of *any* property right or even consideration (in the case of post-sale presentment of restrictions on use). This extension is both an object of the loose UCITA usage of "licensing of information" and a central concern for those such as libraries and research institutions opposing appropriation of public domain information by those who have market share in distribution.

9. Another area of subtle bias is in the provision for "electronic self-help." Compared to the repossession of automobiles, disablement of computer programs typically affects many more innocent third parties because of the same opaque interaction of computer programs that UCITA proponents point to as a reason for rejecting "perfect tender" and other product rules. Professing balanced aid to "small developers", UCITA authorizes such "self-help" with procedural "safeguards", including consequential damages for improper use of self-help. In reality, this creates a legal-economic environment in which counsel to a licensee would advise avoidance of small developers, who by definition do not have the assets to answer in consequential damages. Thus, only large developers/publishers benefit from the "compromise".

10. UCITA adopts a concept of "remote anonymous contracting" that may ultimately backfire on its proponents. Traditional producers have insisted for generations on contractual privity for contractual enforcement; UCITA proponents wish to bind remote parties who "manifest assent" by "clicking on" an "I agree" button presented immediately prior to installation of computer programs. By creating such "remote privity", UCITA may open upstream suppliers of software components to contractual liability to users. Microsoft's *Illinois Brick* defense to end-user class actions may vanish.

11. UCITA has immediate negative consequences for business. Because of the provision at UCITA section 503 that "a licensee's right under the license to possession or control of a copy is governed by the license and does not depend solely on title to the copy," purchasers cannot depend upon their payment of sales tax to determine that they own the copy, entitling them to "first sale" rights (or privileges) under 17 U.S.C. §§ 109 (general) and 117 (additional rights to use computer program by owner of copy). An unknown number of mass-marketed computer programs have been installed on an unknown number of desktop computers with unknown technicians "clicking through" terms that include restraints on transfer. Such transfer, even pledging, of a desktop computer, even to a succeeding entity, would result in a breach of those "license" agreements under UCITA. Due diligence for many asset transfers in a UCITA jurisdiction would require disclosure of this contingency.

12. These concerns, presented by this author, over the past five years, have never been addressed by any UCITA proponent. The basic argument that UCITA is good for business because it provides "definitive rules" for Internet transactions does not stand up to any scrutiny:

- "Definitive rules" for Internet transactions are premature if appropriate at all; in contrast, UETA was drafted to be "non-invasive" because technology was moving too quickly to be predicted, much less regulated by "definitive rules".

- UCITA in fact does not provide such rules tailored to the evolving Internet, but is based on the 1990s paradigm of post-sale presentation of terms ("shrink wrap" or "click-wrap" terms).

- UCITA weighs too much in favor of the party able to embed terms in an information deliverable, thereby negating any "rationality" of the choice of law rules, which do not adopt the Restatement of Judgments "rational relationship" rule in any case.

- The "manifestation of assent" after "opportunity to review" provision of UCITA section 112 does not in fact require that any party be made aware of such terms before payment, but only in limited cases requires the "right to return" if terms are presented after payment.

- The warranty of merchantability already exists under UCC Article 2, which has been applied extensively to "off-the-shelf" computer programs either directly or by analogy; UCITA simply provides for Last Shot disclaiming of such warranties, thereby avoiding any comparison shopping (competition).

- The so-called presumption of a perpetual license is also a presumption that the licensor has perpetual control over the copy under UCITA.

Ironically, UCITA proponents claim Justice Brandeis's "sunshine" for the UCITA drafting process. In fact, most provisions of UCITA were drafted by Reporter Nimmer and representatives of mass-market software and data publishers outside of any drafting committee meeting, and issues raised early by a "policy subcommittee" including this author and American Law Institute representatives Professors Amy Boss and David Rice (posted at www.2BGuide.com/docs/polmem.html) were rejected without discussion. Most telling is the structure of UCITA supporting a Last Shot presentation of terms and rejecting requirement of pre-payment presentment of terms on the Internet for mass-market transactions. These and the opacity of UCITA itself belies any "sunshine".

13. UCITA proponents argue that no uniform law governs the "licensing of intangibles" and "[a]ll information, including computer information, is fundamentally different from goods and rules written for goods do not create a legal infrastructure that facilitates a knowledge economy." In reality, licensing of intellectual property has proceeded for many years on fairly uniform principles. Computer programs, being functional – and for that reason much like other goods – differ from aesthetic works in computer-coded format, but are lumped together under UCITA's "computer information" category, which was invented only in May 1999 to support a "compromise" scope.

14. The mass-market publishing concept of "licensing" is a direct contractual restriction on use rather than the traditional grant of a privilege relative to a property right such as a patent or copyright, which is inherent or implied in any sale to the public of copies. Some publishers leveraged additional restrictions on grants of additional privileges (e.g., one copy allowed on each of office, home and mobile computers); UCITA, however, recognizes "licensing" independently of any proprietary right in the copy or any grant of privilege.

15. Stating that the UCC Article 2 "right of inspection" comes from the days of inspecting horses, Reporter Nimmer argues the right is inappropriate for computer programs, but offers only the example that inspection of a movie compromises its value. This is really an example of how computer program publishers use principles applicable to *other* information – "content" or "informational content" – to take functional computer programs out of UCC Article 2. In fact, it is precisely because the "bloatware" of the 1990's is successfully *opaque* that there should be extended, rather than restricted, periods of inspection of those computer programs.

16. While it is true that "pay now, terms later" contracts have been enforced for some time – UCC Article 2 supports them under certain circumstances – never has such

carte blanche been given to a producer to *restrict* use of a product after payment has been made and the product delivered. A stated purpose of UCITA is to assure "certainty" – and the rule of construction is that the publisher always wins.

17. Each of the "five basic principles" stated by the chair of the UCITA drafting committee in fact point to the infirmities of UCITA in addressing the issues raised:

1. *"Computer information transactions involve primarily licenses, not sales."*

This statement begs the question, particularly in the mass-market context. The expectation of purchasers of "computer information" who pay sales tax in retail transactions is no different from their expectation in purchase of DVDs that invariably include at least a warning of "licensed for home use only" and even purported additional restrictions on use: the copy is *sold* to the end user, who enjoys at least a license to transfer under the "first sale" provision of the Copyright Act for copyrighted works. The publisher has the option to structure the transaction differently as a true license transaction with attendant tax consequences.

2. *"Small companies play a large role in computer information transactions."*

As reviewed above, UCITA favors large software developers and mass-market publishers of software and data, also generally larger entities. By resolving issues of ownership and warranty of upstream information in favor of the publishers, such as in UCITA section 207 ("Releases"), section 216 (Idea Submissions), and section 401 (warranty of non-infringement in use, not previously applied to non-product "information"), UCITA in fact hurts the smaller companies that drive much of the advance of technology.

3. *"Computer information transactions implicate fundamental free speech issues."*

Information of the non-functional kind tends to implicate free speech more than computer programs. UCITA proponents are not likely to support the free speech arguments made in support of dissemination of DeCSS, the algorithm "cracking" the DVD encryption. This statement is another example of UCITA proponents' blurring of the line between functionality and expression, central to intellectual property law, to support both the mass-market software publishers' desire to remove themselves from UCC Article 2 and the mass-market data publishers' desire to "license" on the coat-tails of those who have intellectual property to license.

4. *"Parties to computer information transactions should be free to contract as they wish."*

UCITA supplies the mechanism for a producer to reduce the freedom to contract to a binary one of click "yes" or "no"; where the producer has market power, there is little choice at all. UCITA further provides incentive not to disclose terms for comparison or competition or examination by an observant "whistleblower". Where the publisher is put

at risk, UCITA further limits the enforceability of agreements on idea submissions. This is hardly a statute that supports "freedom of contract".

5. "The law must be technology-neutral."

UCITA is *not* technology-neutral; it favors the mass-marketed "bloatware" of the 1990's distributed by large publishers using "shrink-wrap licenses" by failing to require the simple provision of mass-market terms on the Internet (or otherwise), but providing an unlikely-to-be-used refund mechanism under specific circumstances. Favoring wire transfer rules developed in the 1980's for UCC Article 4A, UCITA, unlike UETA, is a statute justifying old practices rather than looking at a future that likely will include software components held to the same standards as hardware components. A law that favors publishers of "bloatware" and exposes innovative component developers to remote liability is one that this author will oppose for his State, which provides such innovation.

18. In summary, for at least the following reasons, UCITA is anti-competitive and anti-innovation in effect:

- By enhancing the ability of producers with market power to restrict use of their products, UCITA entrenches incumbents to the detriment of innovators.

- By providing a framework in which a rational producer will seek to get the "Last Shot", UCITA inhibits comparison of mass-market terms and the attendant competition, policing, and development of new forms of marketing.

- By extending the intellectual property-based concept of licensing to information that Congress has not protected under copyright and which is too widely distributed to be protected as confidential, UCITA removes valuable public domain data from innovators who would otherwise build on such data.

- By extending UCC Article 2 warranties to "computer information" other than functional computer programs, including individual stock quotations that have value even in non-computer form, UCITA exposes to such warranty risk empirical research in fields such as biotechnology and seismology, data for which must be in computer form to be of value.

- By establishing privity with remote purchasers to restrict their use of products, UCITA exposes upstream component developers to contractual liability to end users.

- By facilitating limitations on transferability of mass-marketed information embedded in other assets, UCITA makes it more difficult, if not impossible, to transfer or pledge assets or reorganize, chilling financing of innovators.

- By authorizing "electronic self-help" under complex rules and consequential damages for improper use, UCITA creates a framework in which the prudent user

would not deal with smaller developers who do not have assets to answer in such consequential damages.

- By setting a lower performance standard for computer programs than for other functional products, UCITA favors a 1990's "bloatware" model over component-based models; as a result, American software products may fall behind foreign software products for Internet, mobile wireless and television set-top appliances.

These injuries to the innovation community have not been afforded much attention despite the opposition to UCITA of such organizations as the Association for Computing Machinery, the Institute for Electrical and Electronics Engineering and the American Intellectual Property Law Association. They are concerns in communities such as Massachusetts where innovation is valued.

19. The author does not speak for consumer interests, but notes that the social cost of applying different rules – including what constitutes a contract or waiver as to privacy – to transactions in functional products that include from those that do not include "computer information" components is wholly unwarranted in light of a future in which computer program components clearly will be held to higher standards than in the 1990's.

September 11, 2000

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