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Restricting Competition in the Software Industry: Impact of the Pending Revisions to the Uniform Commercial Code

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Contents:

Opening Disclosures

I'm a relatively new lawyer, with a long background in software development. My work combines software development consulting as well as law. I'm the senior author of the current bestselling book on software quality control (Kaner, Falk, & Nguyen, 1993) and I teach courses based on the book at several software publishing companies, including Microsoft.

I am not an antitrust lawyer and I have not fully read the documents in the Microsoft case. I have no opinion regarding the current matter. However, I have worked for, and/or consulted to several software publishers that have dealt with Microsoft as a competitor, a vendor, and a customer. My experience of Microsoft is that it is a determined competitor.

I've seen several products fail in competition with Microsoft offerings. My only knowledge in any of these cases involves the quality of the product or support services provided by the publisher. In each case of which I have knowledge, my view is that Microsoft provided the better product or the better service. I am therefore more inclined to view Microsoft as a national treasure than as a public enemy.

Despite my positive view of Microsoft, I am deeply concerned about the diminishing extent of competition in the industry.

This paper is not about Microsoft's current practices. Rather, it is about sweeping changes to the law of software licensing that Microsoft, along with many other software publishers, has been actively involved in drafting. I believe that these changes will have a far more damaging effect on software publishing competition and on the quality of software products than anything being done solely by Microsoft today.

The Uniform Commercial Code Article 2B

The Uniform Commercial Code (UCC) governs most contracts for the sale of goods in the United States. Courts treat sales of packaged software as a sale of goods and apply Article 2 of the UCC (the Law of Sales) to disputes involving packaged software. The courts treat the development and sale of custom software as a sale of services, that is not covered by the UCC. This has caused some confusion and unpredictability, which is no good for anyone.

The UCC is maintained and updated by the National Conference of Commissioners on Uniform State Laws (NCCUSL), a legal drafting organization funded by the 50 states that writes all "Uniform" laws. NCCUSL has significant influence with state legislatures. For example, in the year from August, 1996 to July, 1997, of 200 bills submitted to state legislatures based on NCCUSL drafts, approximately 100 passed. Unless there is serious public opposition, the odds are good that a NCCUSL-drafted amendment to the UCC will pass.

The UCC is co-maintained by the American Law Institute, another non-profit body of senior lawyers, and is influenced by several committees of the American Bar Association.

The UCC is being revised to include a new Article, 2B (Law of Licensing of Information). This draft statute, which runs 225-350 pages (depending on the draft), is to cover all contracts for the development, sale, maintenance and support of software along with many other information-related contracts. There is great benefit in creating a uniform legal system for software products *and* services, that works the same way across all states. Unfortunately, this particular proposal for unifying the law is seriously flawed (Kaner, 1996a, 1996b, 1997a, 1997b, 1997c, 1997d, 1997e, 1997f; Kaner & Lawrence, 1997; see `www.cptech.org` for the *Article 2B Protest Page* developed by Todd Paglia; see `www.webcom.com/software/issues/guide/docs` for several critical articles written by Gail Hillebrand. This site also includes many articles from publishers and others favorable to Article 2B).

This work started in the American Bar Association, 11 years ago. It became a NCCUSL project around 1992. It crystallized as the Article 2B project in 1995. As far as I can tell, up to this point there was almost no customer-side advocacy. I started attending the NCCUSL meetings at the second 2B meeting, in February, 1996 and I am still the only advocate for consumers and small businesses who regularly attends these meetings. Consumers Union (attorney Gail Hillebrand) and the Consumer Project on Technology (attorney Todd Paglia) also attend some of these meetings.

Publishers are very active in this work. For example, regular attendees include attorneys from the Business Software Alliance (Microsoft is a member), the Software Publishers Association (Microsoft is a member), Microsoft, Oracle, Adobe, Intel, the Software Industry Coalition, and many others.

Over the years, paragraph by paragraph, the language of 2B has been polished and optimized to benefit software publishers. The bias of the statute is pervasive. To the best of my knowledge, no advocate for mass-market customer who has studied Article 2B thinks that 2B is even marginally acceptable. It is a fundamentally unfair draft statute that will result in lower quality products,

lower customer confidence, and in an industry that is already starting to experience significant customer dissatisfaction (Kaner & Pels, 1997), a weaker domestic industry.

Article 2B is scheduled for completion in July, 1998 and submission to state legislatures in the fall of 1998.

Basic Problems with Article 2B

My comments focus on transactions involving off-the-shelf software that comes with a shrink-wrap or clickwrap license. This is Microsoft's core market.

Article 2B adopts the publisher's view that it is merely granting a license to use intellectual property when it sells someone a software product. Software publishers have been claiming for years that mass-market software sales are licenses and that the pieces of paper inside software packages that call themselves "license agreements" are binding contracts. However, this view is controversial.

Off-the-shelf products are treated in most courts as "goods" today, but will be treated as "intangibles." There is no difference between selling the right to read a book from a computer disk and the right to read a book on paper. There is no reason in principle that we should declare one transaction a license and the other (for now) as a sale. *Customers* do not view their purchases of MS Word (or of books) as licensing transactions.

Once 2B characterizes the transaction as a licensing transaction, publishers gain several rights. For example, none of the consumer protection laws that apply specifically to sales of goods (such as the Magnuson-Moss Warranty Improvement Act) will apply to software, because software will no longer be "goods."

Article 2B denies the mass-market customer most remedies, even a refund of the fee charged by the publisher for calling to report problems. Customers are entitled to refunds only for "material" breaches of contract, and 2B redefines "material" to be narrower and less inclusive than the Restatement of Contracts. ***Article 2B denies the remedies even when the customer's damages are caused by a defect that was known to the publisher before the product was released for sale, that the publisher chose not to fix and chose not to warn the customer about.***

Article 2B settles the Battle of the Forms (the traditional problem of conflicting terms and expectations set between the publisher and the customer) by creating a new set of procedures that will ensure that the publisher wins the battle. The publisher gets the last shot, in the "mass-market license agreement," ***which the publisher need not even make available to the customer until after the customer has paid for the product, taken it away, and started installing it on his computer***. With extremely few exceptions, all of the terms in this "license" "agreement" will be fully enforceable against the customer as if he had reviewed, discussed, and signed a paper contract before the sale. This is not the traditional approach. For example, the Reporter's Notes to Section 2B-308 (Mass-Market Licenses) of the February, 1996 draft of Article 2B, states:

> This section reverses Wyse Technology v. Step-Saver, where the court used 2-207 to hold that a shrink wrap license in software packages delivered after a prior telephone contract did not become part of the sale contract. See also

> Arizona Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759, 22 UCC Rep. Serv2d 70 (D Ariz. 1993) (shrink wrap enforceable in transaction where no prior agreement, but not enforceable where there was a prior telephone agreement).

The traditional Uniform Commercial Code analysis is that the sales contract is formed when the customer agrees to buy the product and then pays for it. The shrink-wrapped "license" is a proposed modification to the sales contract, and if its terms are significantly different from the standard (default) terms laid out by the UCC, then they won't apply. See *Step-Saver v. Wyse Technology and The Software Link* (1991), *Arizona Retail v. The Software Link* (1993), and White & Summers (1995, volume 1). The contrary view, that publishers can enforce whatever terms they include in these shrink-wrapped "licenses" has been accepted in court only very recently (*ProCD, Inc. v. Zeidenberg,* 1996; *Hill v. Gateway 2000, Inc.*, 1997), and both of these decisions are from the same court. Much of the District Court's analysis of the ProCD case involved discussion of the then-current draft of Article 2B. Even though it is not law, Article 2B is already able to pollute the American legal system because it is being drafted by such a prestigious legislative drafting organization (NCCUSL).

My final example of general problems with Article 2B is that it lets publishers pick what law will govern their sales and where customers can sue them. There are no geographical restrictions and no requirement of any relationship between the law, the forum and any party or aspect of the transaction. Small claims court actions will be unavailable (when exclusive jurisdiction is given to a higher-level court) or prohibitively expensive (in a state or country far, far away). Article 2B is forum shopping gone wild, and available only to the publisher. There are slight restrictions on this if the customer is a “consumer” who uses the software for strictly non-business, non-professional purposes (the teacher who does research or writes assignments at home is not acting as a consumer, nor is the unemployed secretary who tries out some home-based network marketing scheme and uses a computer to manage her mailing lists and print fliers.) Few customers with meritorious cases will have the ability to bring a lawsuit against a publisher. We've talked about this at length in the Article 2B meetings. Everybody understands that small customers will be effectively barred from bringing many types of lawsuits by this rule. This is not an accident and not an oversight.

Anti-Competitive Issues with Article 2B

Article 2B will have several anti-competitive effects:

1. The post-sale revelation of terms makes it nearly impossible for buyers to compare terms of competing publishers.
2. Publishers can prohibit publishing detailed criticisms of the software. This is dressed up as a confidentiality restriction.
3. Publishers can prohibit reverse engineering.
4. Publishers can restrict interoperability through restrictions on reverse engineering.
5. Publishers can restrict competition in other ways.

1. The Difficulty of Comparing Terms

Article 2B leaves the regulation of the integrity of the industry to a supposedly free market that will kill bad companies through competition. But here, 2B lets the worst companies hide their practices until after customers have paid their money, when it is too late to look for competitive terms.

One of the core tenets of consumer protection is the notion of informed choice. Critical information about a product is made available to the consumer *at or before the sale* so the consumer is in a position to understand the relative benefits from competing products. Article 2 requires that some terms be conspicuous. This makes sure that the customer (not just a consumer in Article 2 -- any customer) becomes aware of particularly oppressive terms (such as a seller's refusal to guarantee that its product is fit for its normal purposes) before the sale.

Article 2B allows software publishers to disclaim warranties after the sale, in a contract that customers cannot see before the sale. In fact, all of the terms of the contract can be kept from the customer until after the sale has been complete. 2B requires publishers to draw the contract to the customer's attention early in the use of the product, and to allow the customer a refund if he rejects the terms of the contract. The effect of this is to make it impossible for customers to do comparison shopping on the terms of the contract. If no one publishes their warranty period, or the things that are covered by the warranty, then customers cannot make a buying decision that is based on comparisons of that information across products. I can speak from the experience of having tried to gather information about licensing practices across a broad group of mass-market products. I wanted to put together a statistical summary for an Article 2B drafting committee meeting and I finally gave up. There is no reasonably convenient way for shoppers to compare the warranty policies and support policies of competing products. Enforcement of the Magnuson-Moss Act will probably fix this problem under the law today. But if 2B passes, this inability to compare terms will be a result of law rather than a violation of it.

The same problem arises for any other terms that the publisher doesn't want the customer to see until after the sale is complete. Once the customer has taken the product home or to the office, and started loading it on her computer, he is no longer in a shopping frame of mind. He's much less likely to reject harsh legal terms in a license after he's committed himself to the product, and returning it would be an often-significant inconvenience.

To contrast this with existing law, Article 2 case law has consistently held that disclaimers of implied warranties must be conspicuous at the time of, or before the time of, the sale. In software, we see this principle adhered to in *Step-Saver Data Systems, Inc. v. Wyse Technology and The Software Link, Inc.*, 939 F.2d 91 (3rd Cir., 1991), *Arizona Retail Systems, Inc. v. The Software Link,* 831 F. Supp. 759, (D. Ariz., 1993) and *Tandy Corp. v. McCrimmon* 414 S.E.2d (Ga. Ct. App., 1991). There are also non-software cases. Here is Clark & Smith's summary from *The Law of Product Warranties* (1984; supplemented 1994) p. 8-18:

> The disclaimer may be found in an operator's manual, or in sales literature not sent to the buyer until sometime later, or it may be hidden away in the package that also contains the goods, with no warning on the outside of the package. In all of these cases, it is as though the seller

> were determined that the buyer should not see the disclaimer until after the fact. Given this seller perversity, it is not surprising that the courts generally nullify such post-contract disclaimers.

For those of us who lack X-Ray eyes, a disclaimer that is packaged inside of a box is non-visible and therefore inconspicuous at the time of sale. How could anyone but Orwell define something that is hidden as conspicuous? Article 2B-102(a) (7)'s definition of conspicuous does not require terms to be available before the sale. As long as they meet some formatting requirements, they are "conspicuous," whether the customer can see them or not.

What benefit is there to the public of a law that cuts off their right to know before the sale what guarantees the product comes with? And what do you think this will do for software quality?

2. Prohibiting Bad Publicity

> "Contractual use restrictions" include obligations of nondisclosure and confidentiality and limitations on scope, manner, method, or location of use to the extent that those obligations or duties are created by the contract. Article 2B § 102(a)(10)

Section 102(a) (10) lets publishers use confidentiality clauses in their license agreements. Almost any clause that can appear in a negotiated license can appear in a mass-market license under Article 2B. A very few clauses are not allowed in mass-market licenses, but these don't include nondisclosure and confidentiality.

When you buy mail order or in a store, who can the publisher keep the behavior of the product secret from? Any person willing to pay the price can examine the product, including competitors. Yet we see shrinkwrapped clauses like “You agree to hold the Package within your Organization and shall not, without our specific written consent . . . publish or communicate or disclose to third parties any part of the Package” (Symantec). Some publishers are direct about their intent. For example, “The customer will not publish reviews of the product without prior written consent from McAfee.”

I’m aware of one dispute between a software publisher and a magazine publisher over exactly this issue--the publisher cited one of these clauses in an effort to block a review. Ultimately, the magazine publisher printed its review. But with the explicit authorization of nondisclosure use restrictions in 2B, magazines--and, especially, the more-easily-intimidated private persons who maintain websites or post messages on newsgroups--will be more easily chilled.

What benefit is there to the public of a law that lets publishers cut off their customers' right to read detailed, critical reviews of a product they are considering buying? How can we assure competition in the marketplace if publishers can block negative reviews of their products?

3. Prohibiting Reverse Engineering

When products are sold, they can be reverse engineered. This is well-established under both patent and copyright law. See for example, *Bonita Boats, Inc. v. Thunder Craft Boats, Inc.* (1989) and *Sega Enters. Ltd. v. Accolade, Inc.* (1992). However, restrictions on reverse

engineering can definitely be included in some licenses and might be includable in all of them. As Ray Nimmer (1996 § 2.12), the Reporter of Article 2B, explains:

> The Court has never expressly ruled on whether a similar principle extends to contract limits that may not create true confidentiality, but more likely than not a contractual arrangement forbidding a disclosure of information or forbidding reverse engineering would present a proper cause of action not in direct conflict with *patent* policies of public domain disclosure. Enforcing contract obligations represents an independent state law interest that does not conflict with patent policy; it sets out rights only against contracting parties (not the entire world) and enforces claims grounded in contract, rather than specific rights in technology.

Article 2B repeats this theme in several places, such as this:

> As stated in the Copyright Act, federal property law precludes state law that creates rights equivalent to property rights created under copyright.(17 U.S.C. § 301.) But as both a practical and a conceptual matter, copyright (or patent) do not generally preclude or preempt contract law. (See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 7th Cir. 1996). Indeed, contracts are essential to use one's own property, even when the property is tangible, let alone when it is intangible. A contract defines rights between parties to the agreement, while a property right creates rights against all the world. They are not equivalent. (from UCC 2B September 25 draft, PART 2: BASIC THEMES, Licensing Law and Practice)

Article 2B generally validates use restrictions, which would include restrictions on reverse engineering.

The Drafting Committee has been repeatedly urged to limit the breadth of use restrictions in mass-market licenses by barring restrictions on reverse engineering in those clauses. The response is that:

> Some disputed issues deal with reverse engineering of copyrighted, but unpatented technology and the scope of educational or scientific fair use of digital works. These are questions of federal policy. They must be resolved by courts and Congress, rather than through state legislation. Article 2B takes no position on these or similar questions, whether a preclusion potentially stems from antitrust law or from intellectual property law or other source of federal preemption. Article 2B merely provides a contract law framework. (Reporter's Note 8 to Section 2B-105, September 25, 1997 draft.)

This claim of neutrality depends on your perspective. Article 2B's mass-market contracts aren't contracts between a few individuals. Instead, the mass-market provisions cover the type of

transactions that are normally made as "sales" to the general public. As 2B-102(a)(29) defines it, "'Mass-market transaction' means a transaction in a retail market for information involving information directed to the general public as a whole. . . " Furthermore, if one person buys (licenses) a software product and then resells it, the subsequent purchaser is bound by the same terms because parties can only transfer their rights under the Article 2B licenses (see 2B-502). Because 2B doesn't recognize the sale of a copy of a product like MS Word as a sale, the buyer becomes a licensee and not an owner of a copy, and thus the First Sale Doctrine of Copyright is never triggered.

The rights transferred under an Article 2B mass-market transactions are thus "rights against all the world." They are state law equivalents of copyright and patent, without any of the federal policy restrictions that apply to copyright and patent. This point is more eloquently and more expertly made by Lemley (1997), McManis (1997), Oakley (1997), and Rice (1996).

Robert Gomulkiewicz (an attorney at Microsoft) & Mary Williamson (an attorney at at Preston Gates & Ellis's Seattle office, which sometimes represents Microsoft) argue emphatically that shrinkwrap license agreements should be able to bar reverse engineering because

> Most purchasers of off-the-shelf software, however, care little, if at all, about the right to reverse engineer, and they certainly are not interested in paying more money to acquire this right.[91] The entities that are most interested in acquiring this right are competitors of the software developer.[92] A competitor should not be permitted to acquire the right to examine a company's trade secrets for the low price that the typical end user pays for the software.
>
> Gomulkiewicz & Williamson (1996).

In every other industry in the United States, mass-market distribution of a product carries with it a grant to the customer of the right to reverse engineer the product. Every industry that involves invention can make exactly the same point that Gomulkiewicz & Williamson make (read *Bonita Boats*, for example) but federal public policy (derived from the constitutional roots of patents and copyrights) has flatly rejected this point. Why should the software industry enjoy rights not available to other industries?

If Article 2B is passed, federal courts probably would eventually disallow bans on reverse engineering in mass-market software transactions. But how many years will this take and how vast a set of resources will have to be amassed before this decision becomes clear and final?

What benefit is there to the public of a law that lets software publishers limit the research opportunities of their competitors in ways not allowed for other industries?

4. Restricting Interoperability Through Restrictions on Reverse Engineering

Several years ago, I managed the development of a major upgrade to desktop publishing program. The product was still relatively young in its market and it had established competitors. To succeed in a new market, it's important to be able to read files created from other products. For example, it was essential to us to be able to read documents written in several word processors.

I called several software publishers to obtain file format specifications for their document files. Some publishers (such as Word Perfect) were quite helpful. Others claimed that they didn't have a written specification (this is believable, in this industry), but they (non-sarcastically) wished us good luck in figuring it out for ourselves. Still others said that we were competitors and told us not to reverse engineer their file formats. Knowing that we had every right to reverse engineer these files, we did so. Eventually, this product became the best selling product in its niche.

I've talked through this example with some publishers' lawyers (not Microsoft's) who have expressed the position that they should be allowed to restrict reverse engineering of their file formats. They felt that they should be able to decide who to license this information to.

Understand what this means, in terms of competition.

A new company that has little existing technology will find it difficult or expensive to license competitive technology and, unlike the situation in every other industry, they will be barred from reverse engineering it. It is often essential to be able to read competitors' file formats in order to succeed in a new market. For example, suppose that you have lots of documents that you've written using your current word processor. I offer to sell you a new word processor that you really like. Unfortunately, my program can't read your old files. Would you buy my program? Probably not. By making interoperability very hard to achieve, Article 2B makes it hard for a new competitor to enter the market. It is a kiss of death for low-budget startups.

What benefit is there to the public of a law that lets a software publisher limit the extent to which its competitors can make their products compatible with this publisher's, in ways not allowed for other industries?

5. Restrict Competition in Other Ways.

Through careful drafting of the license, a publisher can block a customer from getting third party support for the product (*MAI Systems Corp. v. Peak Computer, Inc*., 1993). In this case, MAI sold computers. Peak was a third party service organization. Customers would call Peak to maintain their computers. If you had an MAI computer, the Peak staff member would come to your site, turn on your machine, boot its operating system, run the diagnostics that came with the machine, and then do what was necessary. In this situation, MAI and Peak are competitors for your service business. MAI was able to stop Peak from servicing MAI computers because MAI's license restricted use of the software to not more than three of the customer's "bone fide employees." Even though Peak was working at the customer's site, at the request of the customer, running software licensed to the customer, and MAI supplied this software to the customer specifically to be run on this computer, Peak was a contractor, not an employee of the customer. Therefore, Peak's use of the software was a violation of the terms of MAI's license, and was therefore a copyright infringement.

This was, and continues to be, a controversial decision. But its rules have been adopted in Article 2B and it is talked about in the 2B meetings as good law. In other meetings, it is often called an abuse of copyright.

Article 2B allows other restrictions on competition. For example, some mass-market licenses bar use that would result in creation of a competing product. This might seem to you to be harmless

when it involves not using one compiler to create another compiler. But what about not using research material from an on-line service to write a book that would be published with a competing publisher?

What possible benefit is there to the public of a law that increases the power of a publisher to stop a dissatisfied customer from using an independent service company for technical support? And what benefit is there from a law that gives a publisher broad new rights to block the development of competitive services or products?

Recommendations

I would like to see a successful result in Article 2B. The current state of software contracting law makes it difficult to counsel clients and difficult to determine when a cause of action exists. A clear, instructive, uniform statute would be extremely valuable. However, the statute has to be reasonable or no customer advocate can support it.

Article 2B rests on a legitimate need for standard-form contracting. It makes no sense to negotiate the terms of $100 products. If the terms are frequently negotiated, the products will become much more expensive to reflect the transaction costs. The law should grant publishers the ability to deliver enforceable contracts to customers under circumstances that don't make it convenient to apprise customers of the terms before the sale.

However, giving publishers the right to create enforceable contracts doesn't mean that they should be allowed to toss in whatever terms they want, no matter how outrageous.

This isn't the place to discuss the range of restrictions on shrink-wrap licenses that are appropriate, but from an anti-competition point of view, publishers should not be allowed to include the following terms in mass-market licenses:

- Restrictions on reverse engineering.
- Nondisclosure clauses.
- Restrictions on the use of the product that stop the customer from creating a competing product, except to the extent that this use would involve copying some of the product to an extent that would exceed normal fair use limits.
- Warranty disclaimers and remedy limitations, unless they are published on the product packaging or are otherwise easily available, at no charge to the requesting party, before the sale.
- Blanket disclaimer of liability for known defects, unless the known defects are disclosed to the customer and are easily available, at no charge to the requesting party, before the sale.
- Charges for technical support, when the customer calls about an actual defect in the product, unless this policy is published on the product packaging or is otherwise easily available, at no charge to the requesting party, before the sale. (It’s inappropriate to ban such charges altogether because it might be fair and reasonable to charge a customer for such support after the expiration of a reasonable warranty period.)

Several other restrictions are appropriate for mass-market products, which I will be glad to discuss with you privately.

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Note: This article will be distributed to non-lawyers, so I cite court cases using an expanded bibliographic style that non-lawyers have a chance of understanding.

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Cem Kaner attends Article 2B meetings and Uniform Electronic Transactions Act meetings as an observer. He practices law, usually representing individual developers, small development services companies, and customers. He also consults on technical and management issues and teaches within the software development community.

His book, *Testing Computer Software*, received the *Award of Excellence* in the Society for Technical Communication's 1993 Northern California Technical Publications Competition. It is currently the best selling book in its area.

Kaner has managed every aspect of software development, including software development projects, software testing groups and user documentation groups. He has also worked as a programmer, a human factors analyst / UI designer, a salesperson, a technical writer, and an associate in an organization development consulting firm. He teaches courses on software testing and on the law of software quality at UC Berkeley Extension, at UC Santa Cruz Extension, and by private arrangement.

He has also *served pro bono* as a Deputy District Attorney, as an investigator/mediator for Santa Clara County's Consumer Affairs Department, and as an Examiner for the California Quality Awards.

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