

ARCHITECTRONICS, INC.
V.
CONTROL SYSTEMS, INC.

935 F. Supp. 425 (S.D.N.Y. 1996)

Judge MICHAEL B. MUKASEY

Architectronics, Inc., a software development firm, has sued two former joint venturers and two related corporations for trade secret misappropriation, breach of contract, tortious interference with contract rights, and copyright infringement. Defendants move for summary judgment on all claims pursuant to Fed. R. Civ. P. 56. For the reasons set forth below, the motion is granted in part and denied in part.

I.

Plaintiff Architectronics is a New York corporation that maintains its principal place of business in Poughkeepsie, New York. (Am. Compl. P 1) Defendants Control Systems, Inc. ("CSI") and Artist Graphics Corporation are commonly-owned Minnesota corporations operating principally in Roseville, Minnesota. (Id. PP 2-3) Defendants CADSource, Inc. and Access Graphics, Inc. are commonly-owned Delaware corporations operating principally in Boulder, Colorado. (Id. PP 4-5)

In 1986 and 1987, plaintiff developed prototypes for a new computer software product designed to enhance the capabilities of then-existing computer-aided design ("CAD") software. The product based on those prototypes would "retrofit" a standard CAD program to enable that program to reproduce on the main computer screen a "virtual" but fully-operational version of a hardware input device known as a "digitizer" or graphics tablet. (Lewis Aff. P 9)

Early versions of CAD software required a separate external digitizer to send commands to a personal computer ("PC") running the software. A digitizer was a small rectangular tablet with plastic or paper templates displaying available design elements. The CAD user would make "picks" by touching a special probe to the desired design element, and the digitizer would transmit to the computer the coordinates of the pick. From those coordinates, the computer could determine and generate on the screen the appropriate design element. Plaintiff's programmers sought to replace the external digitizer with a less expensive and less cumbersome software equivalent. Plaintiff's new software would perform the same functions as an external tablet, but would use only those physical components common to virtually all PCs running CAD software: a hard drive, a monitor, a video graphics board, a keyboard, and a "mouse" input device. (Id. PP 10-11) The ultimate goal was to generate a simulated tablet in a "window" on the main computer screen. CAD users would select locations on the simulated tablet with the mouse, and the software would communicate the appropriate data to the CAD program. Plaintiff's

software thus would "move the graphics tablet onto the screen" and eliminate the need for a separate external digitizer. (Id. P 12)

Plaintiff's prototypes were engineered to work with AutoCAD, the leading PC CAD software of the 1980's. AutoCAD demanded high resolution video display capabilities, which were achieved by the video graphics board, a separately installed item of hardware. To make the graphics board work with AutoCAD, an auxiliary piece of software known as a display driver was necessary. A graphics board designed for AutoCAD typically would be shipped from the manufacturer with a floppy disk containing the corresponding AutoCAD display driver. (Id. PP 13-15)

In March 1987, Architectronics developed a part-software, part-hardware prototype product. That prototype projected a simulated graphics tablet on a custom-built liquid crystal display ("LCD") screen. In June 1987, at a Washington, D.C. trade show, Architectronics President Stephen Lewis demonstrated the LCD prototype in a private hotel suite for Eric Korb, President of CADSource, and approximately 20 other people. (Id. P 18, 21) All in attendance signed confidentiality agreements prior to the demonstration. (Id. P 21; Abramson Aff. Ex. 1)

Later that summer, Architectronics developed a more sophisticated prototype implemented entirely in software. The second prototype generated a virtual graphics tablet on the screen of an ordinary, though separate, monitor. The final step in the project was to move the simulated graphics tablet into a window on the main computer screen along with the primary CAD image, and thereby eliminate the need for a second monitor. That technology, which plaintiff called "DynaMenu," was to be implemented in a new display driver. (Lewis Aff. PP 16-17, 21-22)

At the time Architectronics was developing DynaMenu, CSI was a leading manufacturer of graphics boards used in PCs to run AutoCAD, and CADSource was a distributor for CSI. Plaintiff believed that CSI's graphics boards would provide the best hardware platform from which to launch DynaMenu. Plaintiff hoped to secure CSI's cooperation in the development of a new DynaMenu display driver that would work with CSI graphics boards and could be sold to CSI's customers as an add-on product. (Id. P 23-24)

Lewis proposed such a joint venture to CSI Vice President Horace Beale at a meeting held at CSI's Minnesota headquarters on August 13, 1987. (Id. PP 24-25) Prior to a presentation of technical specifications and a demonstration of the LCD and dual monitor prototypes, Beale signed a memorandum stating that CSI would keep all disclosures confidential and would not "use or disclose to others any parts of these developments which are not already published, patented or recorded in [CSI's] files, except with [Lewis'] advance written permission." (Abramson Aff. Ex. 2) The meeting was attended by Lewis, Korb, Beale, and several other representatives of CSI, including two engineers, Shailendra Jain and Jim Hooker. (Lewis Aff. PP 25-28)

CSI's Beale and CADSource's Korb both expressed interest in the idea, and on September 1, 1987, representatives of Architectronics, CSI, and CADSource signed a Software

Development and License Agreement ("SDLA") that had been drafted by CSI. (Abramson Aff. Ex. 4) The SDLA provided that Architectronics would license the source code for its prototypes to CSI to permit CSI to develop a "Derivative Work," a new AutoCAD display driver configured for CSI graphics boards. (Id. P 2.1) The new display driver was to perform the following functions:

1. Display upon command from within an application program such as AutoCAD a rasterized¹ image from a binary file stored on disk or extended memory or expanded RAM.² [Architectronics] will provide the means for creating these rasterized image files and will provide the file structure and simple files.
2. Provide a cursor to indicate the location of pointing device within the logical pointing space corresponding to the menu displays. Mouse will be the primary input pointing device.
3. Provide for menu commands to be sent back to application program preferably using AutoCAD's own menu command interpreter. Menuing must be designed primarily for mouse input devices. [Architectronics] will provide a mouse driver which uses the ADI³ AutoCAD interface to define separate logical areas within the pointing space which can be used to refer to tablet and screen definitions for AutoCAD's menu interpreter. (Id. Ex. C)

Under the SDLA, CSI would own the copyright to the Derivative Work, but would grant Architectronics and CADSource jointly an exclusive worldwide license to "use, copy and distribute" the technology. (Id. P 3.1) Architectronics and CADSource agreed to pay CSI a \$ 20-per-copy royalty on sales of the display driver. (Id. P 5) In addition, Architectronics agreed to pay CSI a one-time "software development fee" of \$ 2,000. (Id. P 4 & Ex. B) Architectronics then sent CSI a check for \$ 2,000 along with the source code for its prototypes. (Lewis Aff. P 33)

Shortly after the signing of the SDLA, Autodesk, Inc., the manufacturer of AutoCAD, introduced Release 9 of the AutoCAD program, which offered, inter alia, an improved graphical user interface. CSI and CADSource believed that Release 9 rendered plaintiff's DynaMenu technology less extraordinary, and sought to abandon the joint venture. (Id. P 36) In November 1987, CSI drafted and circulated to CADSource and Architectronics an agreement purporting to terminate the SDLA. (Abramson Aff. Ex. 9) Architectronics refused to sign that document. CSI subsequently drafted an agreement dated April 28, 1988 terminating the SDLA as between CSI and CADSource. That agreement was signed by Beale and Korb. (Id. Ex. 10) CSI retained but never cashed the \$ 2,000 development fee check from Architectronics. (Lewis Aff. P 37)

In June 1990, CSI released a product called "GT FLEXICON" that plaintiff describes as "a full-blown tablet replacement [program] that implemented a number of advanced features drawn directly from Architectronics' original 1987 prototypes and specifications." (Id. P 49) Plaintiff alleges that GT FLEXICON is a "Derivative Work" based on the Architectronics prototypes, and that CSI has breached the exclusive

licensing provision of the SDLA by selling the product. CADSource and Access Graphics, it is alleged, have participated in the distribution and marketing of GT FLEXICON.

Plaintiff filed this lawsuit on December 18, 1992. Plaintiff has since amended its complaint and now alleges that "GT ICON," a display driver for AutoCAD that CSI released on January 15, 1989, also incorporates Architectronics trade secrets. (Id. P 39) Plaintiff charges all defendants with misappropriation of trade secrets and copyright infringement. A breach of contract claim based on the August 13, 1987 confidentiality agreement is asserted against CSI, and a second contract claim based on the SDLA is asserted against both CSI and CADSource. Artist Graphics and Access Graphics are alleged to be liable on the contract claims as alter egos of CSI and CADSource, respectively. Separately, plaintiff charges that Artist Graphics and Access Graphics tortiously interfered with Architectronics' contractual relationships. Defendants move jointly for summary judgment on all claims.

II.

Subject matter jurisdiction for the copyright claims is premised on 28 U.S.C. § 1338(a) (1994). Subject matter jurisdiction for the trade secret misappropriation, breach of contract, and tortious interference claims is premised on diversity of citizenship, 28 U.S.C. § 1332(a)(1) (1994), and principles of supplemental jurisdiction. 28 U.S.C. § 1367(a) (1994). On this motion, the court construes the facts in the light most favorable to the nonmovant. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986). Summary judgment may be granted only "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c).

III.

A. Statute of Limitations -- Choice of Law

Defendants argue that plaintiff's claims all are barred by the relevant statutes of limitations. All parties have relied on Minnesota statutes of limitations in framing their arguments, presumably because the SDLA specifies that its terms shall be construed according to the law of Minnesota. (*Abramson Aff.* Ex. 4 P 14)

In fact, New York statutes of limitations apply to all the claims in the complaint. Federal courts sitting in diversity apply the choice of law rules of the forum state. *Klaxon Co. v. Stentor Elec. Mfg. Co.*, 313 U.S. 487, 496, 85 L. Ed. 1477, 61 S. Ct. 1020 (1941). On matters of substantive law, New York courts apply the law of "the jurisdiction which, because of its relationship or contact with the occurrence or the parties, has the greatest concern with the specific issue raised in the litigation." *Schultz v. Boy Scouts of America, Inc.*, 65 N.Y.2d 189, 196, 491 N.Y.S.2d 90, 94, 480 N.E.2d 679 (1985) (quoting *Babcock v. Jackson*, 12 N.Y.2d 473, 481, 240 N.Y.S.2d 743, 749, 191 N.E.2d

279 (1963)). When the parties have selected the law of a particular jurisdiction by contract, New York courts give "great deference" to that choice and will apply the chosen substantive law unless "the jurisdiction whose law is to be applied has no reasonable relation to the agreement or where enforcement of the provision would violate a fundamental public policy." *American Special Risk Ins. Co. v. Delta America Re Ins. Co.*, 836 F. Supp. 183, 188 (S.D.N.Y. 1993) (citations and quotation marks omitted). However, New York courts treat statutes of limitations as part of the forum's procedure, and therefore apply New York statutes of limitations even if the underlying claim ultimately will be governed by the substantive law of another jurisdiction. See generally *Sun Oil Co. v. Wortman*, 486 U.S. 717, 722-729, 100 L. Ed. 2d 743, 108 S. Ct. 2117 (1988) (application of forum state's statute of limitations to a claim governed by the substantive law of a different state does not violate the Full Faith and Credit Clause). New York courts apply New York statutes of limitations to claims filed in New York even when, as here, the claims arise out of a contract providing that its terms shall be construed in accordance with the law of another state. *Woodling v. Garrett Corp.*, 813 F.2d 543, 551 (2d Cir. 1987); *Insurance Co. of North America v. ABB Power Generation, Inc.*, 925 F. Supp. 1053, 1059 (S.D.N.Y. 1996); *Sears, Roebuck & Co. v. Enco Associates, Inc.*, 43 N.Y.2d 389, 397-98, 401 N.Y.S.2d 767, 772, 372 N.E.2d 555 (1977).

B. Statute of Limitations -- Breach of Contract

The general statute of limitations for contract claims in New York is six years. N.Y. Civ. Prac. L. & R. § 213(2) (McKinney 1990). However, if the contract giving rise to the claim involves a "transaction in goods," the four-year limitations period of Article Two of the Uniform Commercial Code ("UCC") applies instead. N.Y. U.C.C. Law § 2-725(1) (McKinney 1993).⁴ The difference could be material because defendants allege that the contracts were breached, if at all, approximately five years before the filing of the complaint in this action.

The first contract claim, alleged in paragraphs 18-21 of the amended complaint, arises from the August 13, 1987 confidentiality agreement signed by CSI. That agreement provided that Architectronics would disclose its prototypes to CSI for demonstration purposes, and that CSI would keep the disclosures confidential. The agreement involved no transfer of software or software rights; CSI bargained only for a demonstration, and Architectronics received only a promise of confidentiality. Because the agreement involved no transaction in goods, the six-year statute of limitations applies.

It is not clear when the alleged breach of the August 13, 1987 agreement occurred. Nevertheless, it is clear that the first contract claim in the complaint is timely because plaintiff filed this lawsuit within six years of contract formation.

Plaintiff's second breach of contract claim, alleged in paragraphs 22-30 of the complaint, is based on the SDLA. If the SDLA memorialized a "transaction in goods," the four-year limitations period applies; if not, the six-year period applies as above.

Under the UCC as adopted in New York, a "transaction" need not involve a sale; "the use

of the term 'transaction' rather than sale in UCC § 2-102 makes it clear that Article 2 is not to be confined merely to those transactions in which there is . . . a transfer of title." 1 Ronald A. Anderson, Uniform Commercial Code § 2-102:4 (3d ed. 1981) (citing *Hertz Commercial Leasing Corp. v. Transportation Credit Clearing House, Inc.*, 59 Misc. 2d 226, 298 N.Y.S.2d 392, 395 (N.Y. City Civ. Ct. 1969), rev'd on other grounds, 64 Misc. 2d 910, 316 N.Y.S.2d 585 (1st Dep't 1970)). The applicability of Article Two to a transaction is not defeated by the use of a license in lieu of a sale if the license provides for transfer of some of the incidents of goods ownership. *Colonial Life Ins. Co. of America v. Electronic Data Sys. Corp.*, 817 F. Supp. 235, 239 (D.N.H. 1993); *Communications Groups, Inc. v. Warner Communications, Inc.*, 138 Misc. 2d 80, 527 N.Y.S.2d 341, 344-45 (N.Y. City Civ. Ct. 1988).

Under the UCC, "'goods' means all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities . . . and things in action." *Id.* § 2-105. Generally, software is considered a "good," even though a finished software product may reflect a substantial investment of programming services. *Communications Groups*, 527 N.Y.S.2d at 344; *Schroders, Inc. v. Hogan Sys., Inc.*, 137 Misc. 2d 738, 522 N.Y.S.2d 404, 406 (Sup. Ct. New York County 1987); see generally Bonna Lynn Horovitz, 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). However, copyrights, patents, and trademarks are classified as "general intangibles" under the UCC and are distinguished from goods. N.Y. U.C.C. Law § 9-106 & New York Annotations (McKinney 1990); see *Grappo v. Alitalia Linee Aeree Italiane, S.p.A.*, 56 F.3d 427, 431 (2d Cir. 1995).

The SDLA provided for two licenses. Under the first license, Architectronics granted CSI the right to use its DynaMenu software prototypes for joint venture-related purposes only. That license gave CSI a tool necessary for the development of the "Derivative Work," a new display driver. Under the second license, CSI granted Architectronics and CADSource the right to use, copy, and distribute the "Derivative Work." That license was the centerpiece of the transaction, because it provided Architectronics and CADSource with the valuable right to manufacture the new display driver and sell it to the public. Architectronics and CADSource bargained primarily for the right to mass-market the product, not for the right to install single copies of the display driver onto their own PCs. See generally **Andrew Rodau, Computer Software: Does Article 2 of the Uniform Commercial Code Apply?**, 35 *Emory L.J.* 853, 874-883 (1986) (distinguishing tangible software use rights from intangible intellectual property rights). CSI's upside in the deal also was linked to the rights to reproduce and distribute: the parties anticipated thousands of sales of the new product (Lewis Aff. P 32), and Architectronics and CADSource promised to pay CSI a \$ 20-per-copy royalty on those sales. CSI stood to gain in royalties a sum that would dwarf the \$ 2,000 development fee. Because the predominant feature of the SDLA was a transfer of intellectual property rights, the agreement is not subject to Article Two of the UCC.⁵ Plaintiff's second contract claim therefore is timely because plaintiff filed suit within six years of CSI's first attempt to repudiate the SDLA.

C. Statute of Limitations -- Trade Secret Misappropriation

New York trade secret misappropriation claims are governed by the three-year statute of limitations for suits based on injury to property. N.Y. Civ. Prac. L. & R. § 214(4) (McKinney 1990); see *Galet v. Carolace Embroidery Prods. Co.*, 1994 U.S. Dist. LEXIS 14060, No. 91 Civ. 7991, 1994 WL 542275, *4 (S.D.N.Y. Oct. 5, 1994); *Construction Technology, Inc. v. Lockformer Co.*, 704 F. Supp. 1212, 1224 (S.D.N.Y. 1989); *Lemelson v. Carolina Enterprises, Inc.*, 541 F. Supp. 645, 658 (S.D.N.Y. 1982). Accrual of a claim for trade secret misappropriation occurs as follows:

If a defendant misappropriates and discloses a trade secret, he becomes liable to plaintiff upon disclosure. On the other hand, if the defendant keeps the secret confidential yet makes use of it to his own commercial advantage, each successive use constitutes a new actionable tort for purposes of the Statute of Limitations. *Id.* at 659. This rule reflects the principle that "once the information is no longer secret or confidential, there is no property to protect." *Construction Technology*, 704 F. Supp. at 1225.

Plaintiff's trade secret claims thus are timely if and only if (1) the alleged unlawful use of plaintiff's trade secrets occurred no earlier than December 18, 1989, and (2) the trade secrets were not extinguished by disclosure before that date. Defendants argue that the trade secrets were publicly disclosed on January 15, 1989 when CSI released GT ICON, a product allegedly incorporating misappropriated trade secrets. Plaintiff claims that misappropriated secrets were not disclosed to the public until the release of GT FLEXICON in June 1990.

It is not clear whether the release of GT ICON amounted to a public disclosure of trade secrets that may have been used by the programmers who created the software. There is no evidence that a user of GT ICON could have discovered such trade secrets by inspecting the product. See *id.* The technology may have been concealed within impenetrable programming codes, making reverse engineering difficult or impossible. Alternatively, it is possible that CSI used the misappropriated technology to create GT ICON without actually disclosing the secret know-how in the released product. Because neither party has raised or addressed this issue, it would be inappropriate to grant summary judgment on the trade secret claims on limitations grounds.

D. Statute of Limitations -- Copyright Infringement

Claims for copyright infringement are governed by a three-year statute of limitations. 17 U.S.C. § 507(b) (1994). The first allegedly infringing product sold by defendants, GT ICON, was released in January 1989, over three years before the filing of this action. (CSI Local Rule 3(g) Statement P 64) However, "every act of infringement is a distinct harm giving rise to an independent claim for relief," *Stone v. Williams*, 970 F.2d 1043, 1049-50 (2d Cir. 1992), cert. denied, 508 U.S. 906, 124 L. Ed. 2d 243, 113 S. Ct. 2331 (1993), and much of the damages plaintiff claims arise from sales of copies of GT FLEXICON beginning in June 1990. Because at least some portion of plaintiff's copyright claim clearly is not time-barred, summary judgment on that claim on statute of

limitations grounds is not warranted.

III.

Defendants argue that plaintiff's copyright claims must be dismissed because plaintiff failed to record the instrument that transferred copyright rights in the "Derivative Work," the SDLA, with the United States Copyright Office.

In 1988, pursuant to the Berne Convention for the Protection of Literary and Artistic Works, Congress adopted amendments to the Copyright Act relaxing various formal requirements. See generally Orrin G. Hatch, *Better Late Than Never: Implementation of the 1886 Berne Convention*, 22 *Cornell Int'l L.J.* 171, 191-95 (1989). Those amendments took effect on March 15, 1989. *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522, 1541 n.19 (S.D.N.Y. 1991). As to claims accruing after that date, recordation of the instrument of transfer is not a jurisdictional prerequisite to the filing of a suit for copyright infringement by an assignee of copyright rights. *R&R Recreation Prods., Inc. v. Joan Cook, Inc.*, 1992 U.S. Dist. LEXIS 5176, No. 91 Civ. 2589, 1992 WL 88171, *4 (S.D.N.Y. Apr. 14, 1992). To the extent plaintiff's copyright claim is based on CSI's release of GT FLEXICON in June 1990, recordation is not necessary.

To the extent plaintiff's copyright claim is based on the release of GT ICON in January 1989, recordation of the instrument of transfer is a prerequisite to suit under former § 205(d) of the Copyright Act, because the 1988 amendments to that provision do not apply retroactively. 17 U.S.C. § 205(d) (1988). However, courts repeatedly held under former § 205(d) that recordation after the filing of the suit cured the defect. See, e.g., *Kenbrooke Fabrics, Inc. v. Soho Fashions, Inc.*, 690 F. Supp. 298, 302 (S.D.N.Y. 1988); *Wales Indus., Inc. v. Hasbro Bradley, Inc.*, 612 F. Supp. 510, 514 (S.D.N.Y. 1985); *Northern Songs, Ltd. v. Distinguished Productions, Inc.*, 581 F. Supp. 638, 641 (S.D.N.Y. 1984). Because plaintiff submitted the SDLA to the Copyright Office for recordation in March 1996 (*Abramson Aff. Ex. 32*), plaintiff's copyright claims accruing before March 1989 are not subject to dismissal for failure to record. Of course, recovery on those claims will be barred on limitations grounds absent some reason for tolling.

Defendants also challenge plaintiff's standing to sue for copyright infringement, pointing out that the allegedly infringed copyright in the "Artist XJ10 GT protected mode driver with GT Flexicon," which was registered on December 31, 1990, belongs to CSI. But CSI's ownership of the copyright does not bar suit by Architectronics here. Plaintiff alleges that the copyright in question is for the "Derivative Work" described in the SDLA, the rights to which were exclusively licensed to Architectronics and CADSource. As an exclusive licensee of copyright rights, plaintiff enjoys "all of the protection and remedies accorded to the owner" under federal copyright law. 17 U.S.C. § 201(d)(2) (1994). CSI, as owner and licensor of the copyright, "may be liable to the exclusive licensee for copyright infringement, if the licensor exercises rights that have theretofore been exclusively licensed." 3 *Melville B. Nimmer & David Nimmer, Nimmer on Copyright* § 12.02[b] (1996); see *United States Naval Institute v. Charter Communications, Inc.*, 936 F.2d 692, 695 (2d Cir. 1991).

IV.

The merits of plaintiff's trade secret claims are governed by Minnesota law for at least three reasons. First, the duty of confidentiality upon which the claim is premised was imposed by a contract executed in Minnesota and specifying that its terms shall be construed according to Minnesota law. Second, the allegedly infringing products were created in Minnesota by a Minnesota defendant. Third, all parties have relied on Minnesota law in their memoranda.

A. Minnesota Trade Secret Law

Under the Uniform Trade Secrets Act ("UTSA") as enacted in Minnesota, a trade secret is defined as information, including a formula, pattern, compilation, program, device, method, technique or process that

(i) derives independent economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use, and

(ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Minn Stat. § 325C.01(5) (1994).

There appears to be little dispute, at least for purposes of this motion, as to whether plaintiff made reasonable efforts to prevent public disclosure of its technology. Plaintiff revealed its prototypes only to a limited audience of potential co-venturers, and insisted that all in attendance at demonstrations of the prototypes sign specific confidentiality agreements. See *Electro-Craft Corp. v. Controlled Motion, Inc.*, 332 N.W.2d 890, 901 (Minn. 1983) ("This element of trade secret law does not require maintenance of absolute secrecy; only partial or qualified secrecy has been required"); *Aries Information Sys., Inc. v. Pacific Management Sys. Corp.*, 366 N.W.2d 366, 369 (Minn. Ct. App. 1985) (employer took reasonable precautions to preserve trade secret by forcing employees to sign confidentiality agreements). Similarly, there is little doubt that unauthorized use of protected Architectronics technology by CSI or CADSource would amount to misappropriation. Misappropriation is defined under Minnesota law as "the acquisition, disclosure, or use of a trade secret through improper means." 332 N.W.2d at 903. One improper means is through "breach of a duty to maintain secrecy." *Id.* CSI promised not to disclose trade secrets in both the SDLA and the August 13, 1987 confidentiality agreement, and CADSource made similar promises in an agreement signed May 25, 1987. (Abramson Aff. Ex. 1)

The dispute here is whether the allegedly misappropriated technology was "generally known" or "readily ascertainable." Minnesota trade secret protection requires less novelty than federal patent protection. *Jostens, Inc. v. National Computer Sys., Inc.*, 318 N.W.2d

691, 698 (Minn. 1982). Although "mere variations on widely used processes cannot be trade secrets," *Electro-Craft*, 332 N.W.2d at 899, "generally known computer elements may gain trade secret protection from the nature of their combination." *Jostens*, 318 N.W.2d at 698; cf. *Integrated Cash Management Servs., Inc. v. Digital Transactions, Inc.*, 920 F.2d 171, 174 (2d Cir. 1990) (under New York law, "a trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique combination, affords a competitive advantage") (quoting *Imperial Chem. Indus. Ltd. v. National Distillers & Chem. Corp.*, 342 F.2d 737, 742 (2d Cir. 1965)); 1 Roger M. Milgrim, *Milgrim on Trade Secrets* P 1.08[5] (1993) ("Recognition is accorded to a new singular or particularly useful combination of familiar substances or principles, which combination constitutes a new result").

B. Alleged Trade Secrets

Plaintiff claims CSI wrongfully used the following protected technology in its GT FLEXICON and GT ICON products:

- [1]. Video overlay implementation of the dynamic window concept
- [2]. Retrofit of a dynamic graphical user interface onto an existing application program which is "unaware" of the existence of the graphical user interface
- [3]. Ability for user of an application program to use that application program to create and modify menu images . . . employed by its graphical user interface
- [4]. Storing of displayable images on disk and RAM for fast display
- [5]. Giving the user the power to program the circumstances in which display windows appear, and to control their positions and contents
- [6]. Flexibility of underlying placement and sizes of individual menu elements or icons
- [7]. Providing an alternate cursor that the application is not "aware" of, for the user to communicate with the graphical interface overlay
- [8]. Providing a mechanism for the graphical user interface to pass a recognized command string⁶ back to the parent application
- [9]. The ability to create multiple simultaneous and/or nested display windows for purposes such as nested submenus, dialog boxes, etc.
- [10]. Dual screen system where second screen is used for menu icons, display windows and the like

[11]. Combinations of the foregoing elements in a unified graphical interface integrated with an existing application program[.]

(Abramson Aff. Ex. 27)

C. Prior Art

Defendants argue that the alleged trade secrets were nothing more than "generally known basic computer graphics principles" that had been understood and implemented in various computer products prior to the signing of the SDLA. (CSI Mem. at 7) Defendants have identified several examples of successful implementation of most of the above-described technology in the years preceding the joint venture giving rise to this lawsuit.

Feature [1]. "Video overlay implementation" simply means the superimposition of a window with the simulated graphics tablet over a window with the primary CAD image. The "dynamic window concept" refers to permitting users to alter the appearance, location, and contents of the windows. According to defendants, those two elements of technology were implemented together in a microprocessor produced in 1986 by Hitachi America, Ltd. that CSI used in the manufacture of graphics boards for CAD programs. (CSI Rule 3(g) Statement P 69)⁷ Defendants also contend that those two elements were implemented that same year through alternative technology⁸ by Apple Computer, Inc. in its Macintosh computer system. (Id. P 72)

Feature [2]. In more simple terms, feature [2] refers to the development of a new software product implementing a user-friendly interface for an existing software product with an inferior interface, without disruption of the normal operation of the old software product. Defendants trace the roots of the graphical user interface back to research at Xerox Corporation's Palo Alto Research Center in the 1970's. In the early 1980's, Apple Computer implemented a sophisticated and enormously successful graphical user interface in its Macintosh system. Microsoft followed suit by 1987 with the release of early versions of its now-ubiquitous Windows software. (Id. P 74)

Defendants contend that the British firm Cambridge Computer Graphics, Ltd. also beat Architectronics to the punch in the perfection of feature [2]. That company's Excellerator 1024 "graphics adapter," released in July 1987, is described as incorporating "a retrofit of a [graphical user interface] using a window and icons to interact with AutoCAD." (Id. P 78) The Excellerator product was "transparent" to the underlying program in that it did not disrupt normal CAD drawing. (Id. P 79)

In October 1987, one widely-circulated CAD industry periodical actually published source code for a custom graphical user interface. (Id. P 81)

Features [3] and [6]. Defendants claim that features [3] and [6] were offered in a product called Personal Designer which was released by Computervision, Inc. in 1986. Personal Designer, according to defendants, permitted users to design and modify menu icons for a CAD graphical user interface. (Id. PP 77, 83) Defendants also cite the 1985 version of the

Amiga computer system, which was manufactured by Commodore International, Ltd., as offering similar technology. (Id. P 84)

Feature [4]. Defendants portray feature [4], the storage of displayable images on a floppy disk or in the computer's random access memory, as unremarkable even in 1987. Many PCs of that vintage apparently could store images in those two places. (Id. PP 87-88)

Feature [5]. Feature [5], defendants argue, was also offered by the Personal Designer product described in connection with features [3] and [6] above. Personal Designer enabled users to control the position and contents of display windows, and determine when those windows would appear on the screen. (Id. P 91)

Features [7] and [8]. Defendants suggest that the alternate cursor of feature [7] was superfluous, because the manufacturer of AutoCAD previously had released products implementing the Autodesk Device Interface,⁹ which permitted the use of a single cursor for technology such as plaintiff's. (Id. P 94) The Autodesk Device Interface also could to some extent perform feature [8], passing command strings to the parent application. (Id. PP 95-96)

Feature [9]. Defendants identify the Apple Macintosh computer systems of the early 1980's as incorporating the nested menus and submenus of feature [9]. Some of the technology for developing such an interface was revealed in computer industry publications as early as 1982. (Id. PP 98, 100) Defendants also note that a 1986 version of Autodesk's "Autosketch" design software featured pull-down menus and dialog boxes. (Id. P 53) These features ultimately were incorporated in AutoCAD by 1987 with the introduction of Release 9 and its "Advanced User Interface." (Id. P 13)

Feature [10]. Defendants point out that in 1986, Intergraph, Inc., a manufacturer of hardware for CAD systems, released a product called the Bentley MicroStation which offered a dual monitor display. (Id. P 102)

D. Reports of the Court-Appointed Expert

Court-appointed expert Hank L. Kee, a computer systems consultant from Queens, New York, examined the SDLA and various submissions from the parties and issued the following opinion in a letter to the court dated August 15, 1994:

The technology specified had been used in one form or another with other programs predating the agreement between the parties. The graphical user interface was first pioneered by Xerox PARC (Palo Alto Research Center) and implemented first by the Commodore Amiga in a mouse pointing menu system as the first widely commercial available multitasking graphical user product. Apple Computers with the LISA and Macintosh computer operating systems included all of the specified functions prior to the agreement date between the Plaintiff and the Defendants.

Microsoft initially announced Windows in 1983 for IBM based computers. Versions 1.X and 2.X which were released prior to 1990 were graphical user interface shell that interfaced with each program product. Their specifications were readily available to all developers. The proposed standards were well publicized in the trade journals. Programs written for the early version of Windows would be able to take advantage of a graphical user interface. However each program ran independent of any other programs using the early version of Microsoft's Windows shell. Windows 3.0 released by Microsoft in 1990 was an instant sensation in that all programs written for the Windows environment shared a common graphical user interface. All devices including mouse pointing devices were commonly accessed by all programs.

Commercially available products on the IBM PC predating the agreement between Architectronics and Control Systems, Inc. had been implemented by Aldus with PageMaker which is a page layout desktop publishing system for the IBM PC, Microsoft with their Excel spreadsheet, and Micrografx with Designer which is a graphical drawing program. AutoDesk at that time had not released a mouse pointer oriented menuing function for AutoCAD. . . .

(Caretta Aff. Ex. 16) Later in 1994, Kee met with both parties to discuss the matter further. In a somewhat cryptic memorandum summarizing the meeting dated December 7, 1994, Kee asserted the following opinion:
The applications of technologies in the form of a retrofit to a specific product that had not been previously available is a very narrow definition. The . . . add on of a mouse pointer is an example of widespread implementation of a technology.
(Id.)

E. Analysis and Conclusion

Defendants' exhaustive survey of prior art and the expert's reports all suggest that many of the features cited by plaintiff as trade secrets in 1987 were at that time generally known and already implemented in various computer products. However, these submissions do not permit summary judgment here because (1) the technology defendants cite as prior art may have been inferior to what plaintiff claims as trade secrets (see Pl. Rule 3(g) Statement PP 14, 38, 40, 43, 48, 52, 54), and (2) the submissions do not adequately address plaintiff's claim to trade secret protection in the combination of all the cited features in the DynaMenu prototypes, which is labeled as feature [11] above.

The expert's first report comes closest to addressing the "combination of elements" theory of protection. Kee there asserts that "Apple Computers with the LISA and Macintosh computer operating systems included all of the specified functions prior to the agreement date between the Plaintiff and the Defendants." However, this statement is conclusory, and Kee here is referring to the highly abstract list of specifications for the "Derivative Work" provided in the SDLA, rather than the more specific list of allegedly misappropriated trade secrets provided by plaintiff's President in his affidavit.

Kee's second letter simply does not address what plaintiff claims as trade secrets. Kee

states only that the use of a mouse, and the idea of a "retrofit" -- designing a new product to work with and enhance the performance of an existing product -- were not novel. Plaintiff's claims are much more elaborate and sophisticated.

As discussed above, trade secret protection requires only a minimal level of novelty. The whole may be greater than the sum of its parts here, because there may be sufficient novelty solely in Architectronics' combination of known elements. *Jostens*, 318 N.W.2d at 698. Summary judgment on the merits of the trade secret claims therefore is not warranted. However, a few observations about those claims are in order.

First, plaintiff still has the burden of proof on the trade secret claims. *Id.* at 701. It bears noting that plaintiff's LCD and dual monitor prototypes, as described by Lewis in his affidavit, did not achieve Architectronics' stated ultimate goal of moving the graphics tablet to the same screen as the CAD image. Plaintiff must show that it actually implemented the technology for which trade secret protection is sought. If there is trade secret protection here, it will be in the implementation of ideas for a new computer product, not the ideas themselves. Further, plaintiff must show that there actually is some novelty in the way the DynaMenu prototypes combined known elements, and that CSI used that protected novel technology in the infringing products. Finally, plaintiff must prove damages. If the evidence suggests that DynaMenu represented only a minor technological advance, or that the state of the art in the rapidly changing computer industry quickly rendered DynaMenu unremarkable or obsolete, damages may be insubstantial. Summary judgment is denied here because it is not clear that plaintiff cannot show any damages, but this does not mean that plaintiff necessarily will be able to prove damages.

V.

Defendants argue that plaintiff's breach of contract claims are preempted under the Copyright Act because they are duplicative of the claims for copyright infringement. See 17 U.S.C. § 301 (1994).

Under § 301 of the Copyright Act, state law is preempted when it grants copyrightable subject matter protection that is equivalent to the protection afforded by § 106 of the Act. 17 U.S.C. §§ 106, 301(a). Computer programming codes generally qualify as copyrightable subject matter. *Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 702 (2d Cir. 1992). Protection from breach of contract, however, is not equivalent to copyright protection because a contract claim requires an "extra element," *id.* at 716, that renders the claim qualitatively different from a claim for copyright infringement: a promise by the defendant. See 1 Nimmer on Copyright § 1.01[B][1][a]. Tort-like copyright infringement claims, unlike breach of contract claims, do not require a promise by the defendant to refrain from using protected subject matter. See, e.g., *Maureen A. O'Rourke, Drawing the Boundary Between Copyright and Contract*, 45 *Duke L.J.* 479, 523 (1995) (requirement of a contractual promise is an "extra element" that immunizes breach of contract actions from preemption).

A Wisconsin District Court recently rejected this analysis and held in a considered opinion that a claim for breach of a "shrink wrap" licensing agreement for computer software was preempted because it was "an attempt to make an end run around copyright law." *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 658-59 (W.D. Wis. 1996). However, the Seventh Circuit reversed that decision, agreeing instead with the only three other courts of appeals that have decided the question that § 301 does not preempt breach of contract claims. 86 F.3d 1447, 1453-55 (7th Cir. 1996) (citing *National Car Rental Sys., Inc. v. Computer Associates Int'l, Inc.*, 991 F.2d 426, 433 (8th Cir.), cert. denied, 510 U.S. 861, 126 L. Ed. 2d 136, 114 S. Ct. 176 (1993), *Taquino v. Teledyne Monarch Rubber*, 893 F.2d 1488, 1501 (5th Cir. 1990), and *Acorn Structures, Inc. v. Swantz*, 846 F.2d 923, 926 (4th Cir. 1988)). As Judge Easterbrook explained:

Rights "equivalent to any of the exclusive rights within the general scope of copyright" are rights established by law -- rights that restrict the options of persons who are strangers to the author. Copyright law forbids duplication, public performance, and so on, unless the person wishing to copy or perform the work gets permission; silence means a ban on copying. A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create "exclusive rights." 86 F.3d at 1454; cf. *American Airlines, Inc. v. Wolens*, 513 U.S. 219, 130 L. Ed. 2d 715, 115 S. Ct. 817, 824 (1995) (contract rights are based on self-imposed undertakings and do not arise merely by operation of state law).

In *American Movie Classics Co. v. Turner Entertainment Co.*, 922 F. Supp. 926, 931 (S.D.N.Y. 1996), a Court in this District held that a breach of contract claim will escape preemption only if there is a contractual promise and the promise involves a right not existing under copyright law. *Id.* at 931. There, the parties had signed an agreement granting the plaintiff an exclusive license to exhibit certain motion pictures owned by the defendant. The plaintiff alleged that the defendant violated the exclusive license by exhibiting some of the licensed films on its own television networks. The Court acknowledged that the claim was based on an express promise rather than copyright protection, but found the claim preempted because the contract governed "rights equivalent to the Copyright Act's exclusive right of public performance." *Id.* at 932.

I respectfully decline to follow the formulation applied in *American Movie*. As was explained in *Brignoli v. Balch Hardy & Scheinman, Inc.*, 645 F. Supp. 1201 (S.D.N.Y. 1986) -- one of the cases cited in *American Movie* as authority for the test there applied -- the "extra element" that saves a contract claim from preemption is the promise itself. 645 F. Supp. at 1205. In *Brignoli*, the plaintiff sued for unauthorized reproduction and use of a copyrighted computer program. The Court stated that a state tort law claim for mere unauthorized use of the program would be preempted. The plaintiff's claims, however, involved "an element beyond unauthorized reproduction and use -- a promise to pay plaintiff for use of his product." *Id.* *Brignoli* stands for the proposition that a breach of contract claim is not preempted even if the contract involves the rights granted to copyright owners under the Copyright Act. Thus, *Brignoli* is at odds with *American Movie*.

The American Movie Court relied also on *Smith v. Weinstein*, 578 F. Supp. 1297 (S.D.N.Y.), *aff'd* without reported opinion, 738 F.2d 419 (2d Cir. 1984). The plaintiff in *Smith* sued for unauthorized reproduction of a copyrighted movie script. One of the claims in the complaint was styled breach of contract, and purportedly was based on an agreement between the parties providing for the plaintiff to write motion picture "treatments" for the defendant. The Court found the claim preempted because the contract did not govern reproduction of the relevant script. In other words, *Smith* involved a claim that was not really a contract claim -- the plaintiff had used the label "breach of contract" for a claim that rested "not on breach of the terms of the contract," but merely on the defendant's "having copied his property." 578 F. Supp. at 1307. In *Smith*, there was in fact no relevant promise to supply the "extra element."

The decision in *Wolff v. Institute of Electrical & Electronics Engineers, Inc.*, 768 F. Supp. 66 (S.D.N.Y. 1991), lends some support to the American Movie formulation. In *Wolff*, the plaintiff granted the defendant permission to reproduce a copyrighted photograph in one issue of a magazine. The plaintiff sued for breach of contract when the defendant exceeded the scope of the license by using the photograph in advertisements in other media. The Court found the claim preempted.

For the reasons explained below, I respectfully decline also to follow *Wolff*. The Court in *Wolff* went further than the Court in *American Movie* and held that all contract claims are preempted under § 301. The Court did not consider whether a promise ever could supply the "extra element" necessary to defeat preemption. Moreover, *Wolff* rests almost entirely on what I believe are mistaken inferences from the legislative history of § 301.

An early draft of § 301 included a non-exclusive list of examples of claims that were based on non-equivalent rights, and that accordingly would not be preempted. The examples supplied were claims for "breaches of contract, breach of trust, invasion of privacy, defamation, and deceptive trade practices such as passing off and false representation." H.R. 3055, 89th Cong., 2d Sess. § 301(b)(3) (1966). In the course of the legislative process, this specific list of examples was deleted, and no list appears in the version of § 301 that was enacted as part of the Copyright Act in 1976. The House Report on the Copyright Act states that "nothing in the bill derogates from the rights of parties to contract with each other and to sue for breaches of contract." H.R. Rep. No. 1476, 94th Cong., 2d Sess. 129, 132 (1976), reprinted in 1976 U.S.C.C.A.N. 5659. However, this language, along with all of the other commentary in the House Report on § 301, was based on the preliminary version of the provision that contained the list of examples.

The Court in *Wolff* relied heavily on this legislative history, notwithstanding the widely-shared belief that this history is puzzling and unreliable. See, e.g., *Orth-O-Vision, Inc. v. Home Box Office*, 474 F. Supp. 672, 684 n.12 (S.D.N.Y. 1979) (describing legislative history of § 301 as "confusing"); Howard B. Abrams, *Copyright, Misappropriation, and Preemption: Constitutional and Statutory Limits of State Law Protection*, 1983 Sup. Ct. Rev. 509, 545 (1983) ("Neither Congress nor the Copyright Office seems to have had any conception of what they were doing"); Jane C. Ginsburg, *No "Sweat"? Copyright and Other Protections of Works of Information after Feist v. Rural Telephone*, 92 Colum. L.

Rev. 338, 356 (1992) ("The legislative history . . . is muddled"); Jessica D. Litman, Copyright, Compromise, and Legislative History, 72 Cornell L. Rev. 857, 860 (1987) ("Courts consult the statute's legislative history for guidance, but find that it compounds their confusion"); Henry David Fetter, Copyright Revision and the Preemption of State "Misappropriation" Law: A Study in Judicial and Congressional Interaction, 27 ASCAP Copyright L. Symp. 1, 54 (1982) ("The legislative history appears thoroughly confusing"); Shelley Ross Saxer, Note, Baltimore Orioles, Inc. v. Major League Baseball Players Association: The Right of Publicity in Game Performances and Federal Copyright Preemption, 36 UCLA L. Rev. 861, 879 (1989) ("Section 301(b)'s legislative history is a source of controversy and ambiguity, rather than a helpful guide to determining which rights Congress intended as not equivalent").¹⁰ The Wolff Court reasoned that the elimination of the "safe harbor" created by the preliminary version of the statute compels the conclusion that Congress intended to preempt the listed causes of action. 768 F. Supp. at 69. However, there is nothing in the legislative history or elsewhere to suggest that this was the motive behind the deletion. In fact, the deletion did nothing to change the general rule that non-preempted claims include any claims based on "rights that are not equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106." 17 U.S.C. § 301 (1994). The only material difference between the preliminary version of the statute and the enacted version is that the preliminary version supplied examples of non-preempted causes of action while the enacted version did not. That a clause has been deleted from a draft of a statute, without more, does not mean that the polar opposite of the clause was enacted, particularly when the clause in question did no more than provide a list of examples that did not purport to be exhaustive. For essentially these reasons, the leading treatise on federal copyright law criticizes the logic in Wolff as "faulty," and the conclusion that breach of contract claims are preempted as "erroneous." 1 Nimmer on Copyright § 1.01[B][1][a] n.69.5.

Notwithstanding the holdings in American Movie and Wolff, the consensus among courts and commentators appears to be that breach of contract claims are qualitatively different from claims for copyright infringement and therefore are not preempted. See, e.g., ProCD, 86 F.3d at 1454; National Car Rental, 991 F.2d at 433; Taquino, 893 F.2d at 1501; Acorn Structures, 846 F.2d at 926; Trenton v. Infinity Broadcasting Corp., 865 F. Supp. 1416, 1429 (C.D. Cal. 1994); Ronald Litoff, Ltd. v. American Express Co., 621 F. Supp. 981, 986 (S.D.N.Y. 1985); 1 Nimmer on Copyright § 1.01[B][1][a]. In accordance with that view, I find that defendants are not entitled to summary judgment on the breach of contract claims on preemption grounds.

Defendants argue also that § 301 preempts trade secret claims. The Second Circuit, however, has ruled that trade secret misappropriation claims generally are not preempted, because they require the "extra element" of a breach of some duty of trust or confidentiality. Computer Associates, 982 F.2d at 717. This is consistent with the majority view of courts and commentators. See, e.g., 1 Nimmer on Copyright § 1.01[B][1][g] ("Actions for disclosure and exploitation of trade secrets require a status of secrecy, not required for copyright, and hence, are not preempted"). Here, plaintiff's trade secret claims are premised on the breach of duties undertaken by agreement. Accordingly, those claims are not preempted, and summary judgment is not warranted.

VI.

Although the breach of contract claims are not preempted, I find that CADSource and Access Graphics cannot be liable on those claims as a matter of contract law. The first contract claim in the complaint is based on an agreement that only CSI signed, and is expressly asserted only against CSI. (Am. Compl. PP 18-21) The second contract claim is based on the SDLA. Plaintiff alleges that CADSource was a party to the SDLA, but cannot identify a breach of any contractual obligation by CADSource. CADSource's only affirmative obligation under the SDLA was to pay CSI a royalty on sales of a "Derivative Work." (Abramson Aff. Ex. 4 P 5) The SDLA was terminated as between CSI and CADSource in April 1988. (Id. Ex. 10) As one of the joint licensees under the SDLA, CADSource also is subject to the SDLA's confidentiality provisions. However, that does not give Architectronics standing to sue here because the SDLA provided for disclosure of source code for the prototypes to CSI, not to CADSource. (Id. Ex. 4 P 2.1) CADSource was not entrusted with protected technology; CADSource only agreed to help distribute the finished product. Moreover, as one of the licensees of the "Derivative Work," CADSource's obligation to keep disclosures confidential pursuant to paragraph 7 of the SDLA is owed to CSI, which as licensor of the "Derivative Work" is "the other party" referred to in the provision. Accordingly, summary judgment is granted in favor of CADSource and its alleged alter ego Access Graphics on the contract claims.

VII.

Finally, defendants argue that plaintiff's claims should be dismissed under the equitable doctrine of laches. Laches will bar an action when the defendant establishes "both plaintiff's unreasonable lack of diligence in initiating an action, as well as prejudice from such a delay." King v. Innovation Books, A Div. of Innovative Corp., 976 F.2d 824, 833 (2d Cir. 1992). Here, the evidence suggests that plaintiff did not learn that its trade secrets had been used by CSI until the release of GT FLEXICON in June 1990. Plaintiff filed suit in December 1992 after attempts to settle the dispute failed, and Lewis succeeded in securing legal counsel. (Lewis Aff. P 81) Under the circumstances, plaintiff's delay was not unreasonable. Accordingly, laches does not bar this action.

* * *

For the above reasons, summary judgment is granted in favor of CADSource and Access Graphics on the breach of contract claims only. Defendants' motion otherwise is denied.

SO ORDERED.

FOOTNOTES

1. A "raster" is simply "the area upon which the image is reproduced in the cathode ray tube" of a computer monitor. Webster's Third New Int'l Dictionary at 1884 (1986).

2. "RAM" is an acronym for "random access memory," which is the computer's short-term memory system.
3. "ADI" is an acronym for "Autodesk Device Interface," which refers to menus on the main computer screen that are generated by the AutoCAD program itself.
4. Minnesota courts apply the same limitations periods to contract claims. See Minn. Stat. § 336.2-725 (1994) (four-year statute of limitations under Article Two of the UCC as adopted in Minnesota) and id. § 541.05 (1994) (residual six-year contract statute of limitations).
5. This conclusion may follow more obviously from the following hypothetical analogous set of facts: Suppose that the parties here are book publishers, that Architectronics gives CSI a written outline for a new novel, and that CSI agrees to write the novel. An agreement provides that CSI will own the copyright to the novel, but will grant Architectronics the exclusive right to reproduce and distribute the novel. When Architectronics sells copies of the book to consumers, the sale will be a "transaction in goods" under the UCC. But in the agreement between Architectronics and CSI, Architectronics is contracting for intangible intellectual property rights, even though it will receive a "hard" copy of the novel when CSI finishes the project. The agreement to write the novel would not be a "transaction in goods" under the UCC.
6. A "command string" is a line of programming code containing instructions for the performance of a particular computer operation.
7. Hitachi used a technique called "frame buffering for multiple bit planes." Each bit plane could store a different image. One bit plane would store the user interface with features such as the cursor or a pop-up menu. Another bit plane would store the main design image. The pixels, or points of light, in the respective bit planes would be assigned different color values by a color table. This made it possible to "overlay" one image on top of another. (CSI Rule 3(g) Statement PP 69-70)
8. Under the Apple technique, a portion of the main image displayed on the screen would be marked by "window" boundaries. The data in the marked-off window would be erased from the screen but saved in memory, and then new data could be written into the windowed space. (CSI Rule 3(g) Statement PP 71-72)
9. See note 3 supra.
10. The Supreme Court's admonition about the limitations of legislative history in *West Virginia Univ. Hosps., Inc. v. Casey*, 499 U.S. 83, 98-99, 113 L. Ed. 2d 68, 111 S. Ct. 1138 (1991), applies with particular force to § 301. The Copyright Act's preemption provision brings to mind "the canon of construction of the wag who said, when the legislative history is doubtful, go to the statute." *Greenwood v. United States*, 350 U.S. 366, 374, 100 L. Ed. 412, 76 S. Ct. 410 (1956) (Frankfurter, J.).