Computers and the Law

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CLASS 4

Trade Secrets;
Trespass to Chattels;
Copyright Law pt. 2
Trade Secrets

• Issue
  – What type of protection is afforded to a discovery or development that is kept secret?

Trade Secrets

• What is a Trade Secret?
  – Generally speaking, a trade secret is any information that has not been published and that could give a company a competitive advantage.

• Is Trade Secret Law Protected by State or Federal Law?
  – Trade secret law is protected by state law and varies from state to state.

• How about some good news?!
  – Trade secrets are cheap (sort of); no filing fee but…
  – Duration – perpetual unless it is no longer a trade secret…
What are the Primary Categories of Trade Secrets?

- The various categories of trade secrets include financial information, organization information, marketing information, and technical information.
- Financial information may include profit margins, overhead costs, material costs, and supplier discounts.
- Organizational information may include expansion plans, key employee acquisitions, record-keeping information, and methods of operation.
- Marketing information includes customer lists, terms of licenses, new product developments, and contract negotiations.
- Technical information includes formulas for producing products, computer software, chemical formulas, and processes and methods of manufacture.

Primary Sources

- What are the primary sources for the definitions of trade secrets that are adopted by states and used by courts?
  - The three main trade secret definitions are derived from the Restatement of Torts, the Restatement of the Law Third, Unfair Competition, and the Uniform Trade Secrets Act.

Definitions

- **Definition from Restatement of Torts (First)**
  - The Restatement of Torts §757 provides that "[a] trade secret may consist of any formula, device, pattern or compilation of information ... used in one's business and which gives [the holder] an advantage over competitors who do not know or use it."

- **Definition from Restatement of the Law, Third Edition**
  - "[A]ny information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.

- **Definition from the Uniform Trade Secrets Act**
  - The Uniform Trade Secrets Act (USTA) §1(4) defines a trade secret as any "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."
Factors/Elements

What Factors May Be Used to Determine Whether a Trade Secret Exists?
- The degree to which the information is known outside the claimant’s business;
- The degree to which the information is known by the claimant’s employees;
- The degree of measures taken by the claimant to guard the secrecy of the information;
- The value of the information to the claimant and its competitors;
- The amount of effort or money expended by the claimant in developing the information; and
- The ease with which others could acquire the information.

What are the Elements of a Trade Secret Cause of Action?
- The elements of a cause of action for violation of trade secret are (i) a trade secret, (ii) a confidential relationship between plaintiff and person revealing the information to a third party, and (iii) an intentional unauthorized disclosure to third party. There is no relief for accidental disclosure, reinvention, or reverse engineering.

When can the Use of Trade Secret Information by Former Employees be Restricted?
- The use of trade secret information by former employees can be restricted only if there is a legally protectable trade secret and the employee has either (i) covenanted not to disclose the information or (ii) acquired the information under a confidential relationship.

Protection of Trade Secrets

- Enter into non-disclosure agreements with third parties before disclosing confidential information
- Cover at least key employees with non-compete, confidentiality, and intellectual property agreements
- Secure access to physical files containing confidential information
- Implement network and other electronic security measures to limit internal and external access to files
- Monitor employee communications

Disclosure

- What happens if a trade secret is disclosed—does trade secret protection still exist?
Trade Secret Law in Missouri

Starting Point - http://www.moga.state.mo.us/

417.453. As used in sections 417.450 to 417.467, the following terms mean:

(1) "Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means;

(2) "Misappropriation";

(a) Acquisition of a trade secret of a person by another person who knows or has reason to know that the trade secret was acquired by improper means;

(b) Disclosure or use of a trade secret of a person without express or implied consent by another person who:
   a. Used improper means to acquire knowledge of the trade secret; or
   b. Before a material change of position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake; or
   c. At the time of disclosure or use, knew or had reason to know that knowledge of the trade secret was:
      i. Derived from or through a person who had utilized improper means to acquire it;
      ii. Acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use;
      iii. Derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use;

(3) "Person", a natural person, corporation, business trust, estate, trust, partnership, association, joint venture, governmental subdivision or agency, or any other legal or commercial entity, whether for profit or not for profit;

(4) "Trade secret", information, including but not limited to, technical or nontechnical data, a formula, pattern, compilation, program, device, method, technique, or process, that:
   a. 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
   b. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy;

417.461. An action for misappropriation shall be brought within five years after the misappropriation is discovered or by the exercise of reasonable diligence should have been discovered. For the purposes of this section, a continuing misappropriation constitutes a single claim.


- Parties
- Defendants – involved with commodities market; Rollet Bros. Logistics, Inc., is a freight broker that arranges for the hauling of commodities for customers from one point to another.
- Plaintiff - dispatcher, responsible for finding loads for trucks to haul by contacting established and prospective customers on a daily basis. He was also responsible for finding trucks that were available to haul a customer’s load.

- P and D had a covenant not to compete that included a confidentiality clause
- Aug 05 – P submitted a resignation to
- Sept 05 – P began working as a dispatcher ECO Logistics
- Nov 05 – attorneys D sent a letter to ECO Logistics threatening legal action; Eco Logistics then terminated P


- Plaintiff filed suit and won at district court


- Covenants Not Compete
  - "Generally, because covenants not to compete are considered to be restraints on trade, they are presumptively void and are enforceable only to the extent that they are demonstratively reasonable."

- Non-Compete Agreement
  - “[A] noncompete agreement is reasonable if it is no more restrictive than is necessary to protect the legitimate interests of the employer.”
  - Reasonable in scope—place and time
  - “enforceable only to protect certain narrowly-defined and well-recognized interests, specifically, customer contacts and trade secrets.”


- “The goodwill that develops from customer contacts between the salesman or business partner and the company's customer is essential to the company's success and is the reason the employee or the business partner is remunerated. The goodwill that develops results in sales of the company's product or services. Therefore, an employer has a protectable right in both customers and goodwill.”


- “An employer must show that the employee had contacts of the kind enabling him to influence customers.”

• “In this case, there was substantial evidence to support implied findings that defendants' brokerage business did not become associated in a customer's mind with plaintiff and plaintiff did not possess the degree of influence over any customers that would justify enforcement of the Agreement under a "customer contacts" theory.”


• “Some factors to be considered in determining whether certain information is a trade secret are:
  • (1) the extent to which the information is known outside of his business;
  • (2) the extent to which it is known by employees and others involved in his business;
  • (3) the extent of measures taken by him to guard the secrecy of the information;
  • (4) the value of the information to him and to his competitors;
  • (5) the amount of effort or money expended by him in developing the information;
  • (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.”


• “Matters of public knowledge or information that is generally known within a given industry cannot be appropriated as a trade secret.”

- Was the customer list a trade secret?
- “Customer lists are protectable as trade secrets only when they represent ‘a selective accumulation of information based on past selling experience, or when considerable time and effort have gone into compiling it.’” However, “[t]o be protected, a customer list must be more than a listing of firms or individuals which could be compiled from directories or other generally available sources.”


- “Defendants argue that their customer list was a trade secret because there was evidence that it was produced over a twenty-year period with significant time and resources, was maintained as confidential, and, in a fast-paced industry, it reduced the time required for its employees to find a customer’s contact information. While there was evidence that the list met these criteria, there was substantial evidence to support an implied finding that the customer list was nothing more than a listing of firms or individuals that could be compiled from generally available sources.”


- “This evidence was sufficient to demonstrate that the information in defendants’ customer list could be compiled from other, generally available sources.”
AvidAir Helicopter Supply v. Rolls-Royce Corp.

• At Issue
  – information about the repair and overhaul of helicopter engines

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• AvidAir sought a declaration that the repair information was not protected by trade secret law.
• DC – most information protected by trade secret, 350K in actual damages, and permanent injunction

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• How did third party overhaul shops come about?
• How and why do you certify an engine for return to service?
• How was information exclusively provided to Authorized Maintenance Centers (AMCs)?
  – “Allison executed agreements with each AMC that specified the proprietary nature of this technical information, prohibited the AMCs from disseminating this information, and required the AMCs to return all proprietary documents at the end of their relationship. Allison also began including a proprietary rights legend on the front page of its DOILs”
AvidAir Helicopter Supply v. Rolls-Royce Corp.

• How and why did AvidAir obtain a copy of DOIL 24, Revision 13 without Rolls-Royce's permission?
  – RR C&D to stop using Doil 24
  – FAA inspection; AvidAir not following DOIL 24, R13
  – AvidAir obtained a copy of DOIL 24, Revision 13 with RR's permission and changed its overhaul procedure

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• Who filed suit?
  – AvidAir filed seeking a declaratory judgment in WD MO that DOILs were not trade secrets
  – Rolls-Royce filed its own suit in S.D. of Indiana for trade-secret violations

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• Existence of trade secret is question of law
• Trade Secret Definition
  – information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (1) 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 (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.
AvidAir Helicopter Supply v. Rolls-Royce Corp.

• Can compilations be protected as trade secrets?
  – Compilations are specifically contemplated in the UTSA definition of a trade secret, and the fact that some or even most of the information was publicly available is not dispositive of the first factor in the UTSA definition. Compilations of non-secret and secret information can be valuable so long as the combination affords a competitive advantage and is not readily ascertainable.

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• “[E]xistence of a trade secret is determined by the value of a secret, not the merit of its technical improvements. Unlike patent law, which predicates protection on novelty and nonobviousness, trade secret laws are meant to govern commercial ethics.”

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• “Trade secret protection does not shield an idea from “infringing” other uses of the idea; instead it protects valuable information from being misappropriated despite reasonable efforts to keep it secret.”
AvidAir Helicopter Supply v. Rolls-Royce Corp.

• What does readily ascertainable mean?
  – “The fact that information can be ultimately discerned by others—whether through independent investigation, accidental discovery, or reverse engineering—does not make it unprotectable.”
  – “[T]he court must look at whether the duplication of the information would require a substantial investment of time, effort, and energy.”

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• How did AvidAir go wrong?
  – “Instead of obtaining FAA approval based on an independent investigation of changes to the approved procedure, AvidAir simply appropriated the documents it knew were claimed to be trade secrets and then certified that its procedure was in compliance with the updated documents.”

AvidAir Helicopter Supply v. Rolls-Royce Corp.

• “Reasonable efforts to maintain secrecy need not be overly extravagant, and absolute secrecy is not required.”
• “The use of proprietary legends on documents or the existence of confidentiality agreements are frequently-considered factors in establishing or denying a trade secret claim.”
AvidAir Helicopter Supply v. Rolls-Royce Corp.

- “Though AvidAir claims the documents were ‘freely available’ in the industry, it failed to present any evidence that Rolls-Royce actually distributed them to a party not bound by confidentiality agreements. We agree with the district court that these were reasonable efforts to maintain secrecy. ... The fact that a trade secret was successfully misappropriated does not defeat the fact that there were reasonable efforts to maintain its secrecy.”

Theft of Trade Secrets

- Theft of trade secrets for commercial or economic purposes is a federal crime

Discussion

- Can a defendant be liable for misappropriation of a trade secret which is admittedly embodied in source code, based upon the act of executing, on his own computer, executable code allegedly tainted by the incorporation of design features wrongfully derived from the plaintiff's source code?
Trespass to Chattels

• When will access that may be otherwise be considered legally permissible be an actionable violation?

Introduction to Deep Linking

• The term "linking" means the transfer from one website to another by means of a simple click of the mouse on a hypertext link contained on the referring website.
• A hyperlink is a point in a web document through which users may branch outwards from a central text to other bodies of information.
• A "deep link" is a link to an interior page of a target site, as opposed to the home page.
Unauthorized Linking

• Unauthorized linking to other sites has been challenged because it may imply an affiliation with, or approval of, the linked site when such is not the case.
• Deep linking raises issues related to the control of website advertising and the right to revenues therefrom.
• It may also undermine the expectations of a website’s author.
• It deprives the target site’s sponsors of expected exposure and inhibits the ability of the site’s author to identify itself properly or otherwise take credit for the content.
• Website owners should consider seeking permission before linking to another’s site and may want to enter into linking agreements.

Restricting Access

• Website owners may wish to restrict parties from linking to their sites.
• For example, in cases where websites are hosted on slow servers or where the site owners pay for service based on volume of “hits,” owners may wish to limit their site’s exposure to unwanted traffic.
• Also, site owners may not wish to have their sites linked to the sites of unaffiliated organizations or to sites that contain objectionable material.

Technological Controls

• Given the Internet’s lack of centralized control, technology may be the most practical and effective way to control hyperlinking into a website.
• Examples of technological controls include use of passwords to control access, use of dynamic web pages whose URLs change periodically, and use of “robots” to control the listing of websites in search engine databases.
• Deep pages of a website can be programmed to accept traffic only from the site’s home page.
Trespass to Personal Property

• When an individual, without consent, takes or harms the personal property of another or otherwise interferes with the lawful owner's possession and enjoyment of personal property

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eBay v. Bidder's Edge

Factual Background

• Parties
  – eBay – online auctioneer
  – Bidder's Edge – “BE is an auction aggregation site designed to offer online auction buyers the ability to search for items across numerous online auctions without having to search each host site individually.”

• “The current version of the User Agreement prohibits the use of “any robot, spider, other automatic device, or manual process to monitor or copy our web pages or the content contained herein without our prior expressed written permission.” (Id.) It is not clear that the version of the User Agreement in effect at the time BE began searching the eBay site prohibited such activity, or that BE ever agreed to comply with the User Agreement.”

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eBay v. Bidder's Edge

Factual Background

• “A software robot is a computer program which operates across the Internet to perform searching, copying and retrieving functions on the web sites of others. A software robot is capable of executing thousands of instructions per minute, far in excess of what a human can accomplish. Robots consume the processing and storage resources of a system, making that portion of the system's capacity unavailable to the system owner or other users. Consumption of sufficient system resources will slow the processing of the overall system and can overload the system such that it will malfunction or ‘crash.’ A severe malfunction can cause a loss of data and an interruption in services.”
eBay v. Bidder's Edge

Factual Background

• "The eBay site employs 'robot exclusion headers.' A robot exclusion header is a message, sent to computers programmed to detect and respond to such headers, that eBay does not permit unauthorized robotic activity. Programmers who wish to comply with the Robot Exclusion Standard design their robots to read a particular data file, 'robots.txt,' and to comply with the control directives it contains."

• "eBay identifies robotic activity on its site by monitoring the number of incoming requests from each particular IP address. Once eBay identifies an IP address believed to be involved in robotic activity, an investigation into the identity, origin and owner of the IP address may be made in order to determine if the activity is legitimate or authorized. If an investigation reveals unauthorized robotic activity, eBay may attempt to ignore ("block") any further requests from that IP address. Attempts to block requests from particular IP addresses are not always successful."

Factual Background

• "The information available on the BE site is contained in a database of information that BE compiles through access to various auction sites such as eBay. When a user enters a search for a particular item at BE, BE searches its database and generates a list of every item in the database responsive to the search, organized by auction closing date and time. (Id. P 5.) Rather than going to each host auction site one at a time, a user who goes to BE may conduct a single search to obtain information about that item on every auction site tracked by BE. (Id. P 6.) It is important to include information regarding eBay auctions on the BE site because eBay is by far the biggest consumer to consumer on-line auction site. (Id.)"

Factual Background

• In early 1998, eBay gave BE permission to include information regarding eBay-hosted auctions for Beanie Babies and Furbies in the BE database. In early 1999, BE added to the number of person-to-person auction sites it covered and started covering a broader range of items hosted by those sites, including eBay. On April 24, 1999, eBay verbally approved BE crawling the eBay web site for a period of 90 days. The parties contemplated that during this period they would reach a formal licensing agreement. They were unable to do so."
eBay v. Bidder's Edge

Factual Background

• In late August or early September 1999, eBay requested by telephone that BE cease posting eBay auction listings on its site. BE agreed to do so. In October 1999, BE learned that other auction aggregations sites were including information regarding eBay auctions. On November 2, 1999, BE issued a press release indicating that it had resumed including eBay auction listings on its site. On November 9, 1999, eBay sent BE a letter reasserting that BE's activities were unauthorized, insisting that BE cease accessing the eBay site, alleging that BE's activities constituted a civil trespass and offering to license BE's activities. eBay and BE were again unable to agree on licensing terms. As a result, eBay attempted to block BE from accessing the eBay site; by the end of November, 1999, eBay had blocked a total of 169 IP addresses it believed BE was using to query eBay's system. BE elected to continue crawling eBay's site by using proxy servers to evade eBay's IP blocks.

Analysis

• eBay asserts that it will suffer four types of irreparable harm if preliminary injunctive relief is not granted:
  (1) lost capacity of its computer systems resulting from BE's use of automated agents;
  (2) damage to eBay's reputation and goodwill caused by BE's misleading postings;
  (3) dilution of the eBay mark; and
  (4) BE's unjust enrichment. n7 (Mot. at 23:18-25.)

• The harm eBay alleges it will suffer can be divided into two categories.
  – The first type of harm is harm that eBay alleges it will suffer as a result of BE's automated query programs burdening eBay's computer system ("system harm").
  – The second type of harm is harm that eBay alleges it will suffer as a result of BE's misrepresentations regarding the information that BE obtains through the use of these automated query programs ("reputational harm").

eBay v. Bidder's Edge

Analysis

• "If BE's activity is allowed to continue unchecked, it would encourage other auction aggregators to engage in similar recursive searching of the eBay system such that eBay would suffer irreparable harm from reduced system performance, system unavailability, or data losses. ... BE does not appear to seriously contest that reduced system performance, system unavailability or data loss would inflict irreparable harm on eBay consisting of lost profits and lost customer goodwill. Harm resulting from lost profits and lost customer goodwill is irreparable because it is neither easily calculable, nor easily compensable and is therefore an appropriate basis for injunctive relief. ... Where, as here, the denial of preliminary injunctive relief would encourage an increase in the complained of activity, and such an increase would present a strong likelihood of irreparable harm, the plaintiff has at least established a possibility of irreparable harm."
eBay v. Bidder's Edge

- Trespass to chattels "lies where an intentional interference with the possession of personal property has proximately cause injury." In order to prevail on a claim for trespass based on accessing a computer system, the plaintiff must establish:
  1. defendant intentionally and without authorization interfered with plaintiff's possessory interest in the computer system; and
  2. defendant's unauthorized use proximately resulted in damage to plaintiff.

- Here, eBay has presented evidence sufficient to establish a strong likelihood of proving both prongs and ultimately prevailing on the merits of its trespass claim.

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eBay v. Bidder's Edge

- "BE argues that it cannot trespass eBay's web site because the site is publicly accessible. BE's argument is unconvincing. eBay's servers are private property, conditional access to which eBay grants the public. eBay does not generally permit the type of automated access made by BE. In fact, eBay explicitly notifies automated visitors that their access is not permitted. "In general, California does recognize a trespass claim where the defendant exceeds the scope of the consent." Baugh v. CBS, Inc., 828 F. Supp. 745, 756 (N.D. Cal. 1993)."

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eBay v. Bidder's Edge

- "eBay is likely to be able to demonstrate that BE's activities have diminished the quality or value of eBay's computer systems. BE's activities consume at least a portion of plaintiff's bandwidth and server capacity. ... eBay's claim is that BE's use is appropriating eBay's personal property by using valuable bandwidth and capacity, and necessarily compromising eBay's ability to use that capacity for its own purposes. See CompuServe, 962 F. Supp. at 1022 ("any value [plaintiff] realizes from its computer equipment is wholly derived from the extent to which that equipment can serve its subscriber base.")."
eBay v. Bidder's Edge

• Ruling
  – “[T]he court preliminarily enjoins defendant Bidder's Edge, Inc. from accessing eBay's computer systems by use of any automated querying program without eBay's written authorization.”

• Holding
  – The court concludes that under the circumstances present here, BE's ongoing violation of eBay's fundamental property right to exclude others from its computer system potentially causes sufficient irreparable harm to support a preliminary injunction.

Copyright pt. 2

Protection of Literal Elements of Code

• Are literal elements of the code subject to copyright protection?
  – Code itself is eligible subject matter and subject to copyright protection

• Source code or object code?
  – Both
Protection of Nonliteral Elements of Code

- Are nonliteral elements of the code subject to copyright protection?
  - Internal structural details of software design
  - User interface elements
  - Interactive behavior of programs

Nonliteral Elements Protectable

- “Most courts confronted with [computer program copyrightability] have determined that copyright protection extends not only to the literal elements of a program, i.e., its source code and object code, [] but also to its ‘nonliteral’ elements, such as the program architecture, ‘structure, sequence and organization’, operational modules, and computer-user interface.”
- Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335 (5th Cir. 1994)

Applicable Test

- The abstraction-filtration-comparison test is used in determining whether one program is substantially similar to another program for purposes of copyright infringement.
Abstraction-Filtration-Comparison Test

• **Step 1** - Separate protectable expression from unprotected ideas
• **Step 2** - Filter out elements of the program which are unprotectable
• **Step 3** - Compare the remaining protectable elements of the infringed program to the corresponding elements of the allegedly infringing program to determine whether there was sufficient copying of protected material to constitute infringement.

A look at some cases…

Computer Associates International v. Altai

• **Computer Associates (P)**
  – CA-Scheduler program is a job scheduling program. A subprogram is Adaptor that operates as a translator.
• **Altai (D)**
  – Made a job scheduling program called ZEKE. ZEKE used a program called OSCAR that acted as a translator and included portions of code literally copied from Adaptor. OSCAR was rewritten upon initiation of suit and now excludes all copied portions of code.
Computer Associates International v. Altai

- Idea v. Expression Dichotomy
  - Ideas are not subject to copyright protection, but expression of ideas are.
  - “Elements of a computer program that are necessarily incidental to its function are similarly unprotectable.”
  - Use a substantial similarity test for computer program structure an abstraction-filtration-comparison test.

Computer Associates International v. Altai

Abstraction-Filtration-Comparison test

- Step one – abstraction
  - “A court should dissect the allegedly copied program’s structure and isolate each level of abstraction contained within it. The process begins with the code and ends with an articulation of the program’s ultimate function. …”

Computer Associates International v. Altai

- Step two – filtration
- Successive filtering method
  - “[E]xamine the structural components at each level of abstraction to determine whether their particular inclusion at that level was ‘idea’ or was dictated by [other considerations]”
Computer Associates International v. Altai

Successive filtering method

• Elements Dictated by Efficiency
  – “[I]n order to determine whether the merger doctrine precludes copyright protection to an aspect of a program’s structure that is [selected because of efficiency], a court must inquire ‘whether the user of this particular set of modules is necessary efficient to implement that part of the program’s process’ being implemented.”
  – Expression merges with the idea if that was the basis behind the programmer’s choice.

Computer Associates International v. Altai

Successive filtering method

• Elements Dictated by External Factors
  – Certain selections for a computer program are based on extrinsic factors such as:
    1) the mechanical specifications of the computer on which a particular program is intended to run;
    2) Compatibility requirements of other programs with which a program is designed to operate in conjunction;
    3) Computer manufacturers’ design standards;
    4) Demands of the industry being serviced; and
    5) Widely accepted programming practices within the computer industry.

Computer Associates International v. Altai

Successive filtering method

• Elements Taken from the Public Domain
  – Not subject to copyright protection in context of a computer program
Computer Associates International v. Altai

- Step three – comparison
- Remove the ideas and expression dictated by efficiency and/or external factors and identify what is left in the computer program
- The remaining portion is protectible expression
- Court should determine what portions of the protectible expression have been copied and what is the importance to the overall program

Case Resolution
- “[T]he district court could reasonably conclude that they did not warrant a finding of infringement given their relative contribution to the overall program.”

Lotus Development Corp. v. Borland International

- Lotus (P)
  - Creator of Lotus 1-2-3 spreadsheet program
- Borland (D)
  - Creator of Quattro Pro competing spreadsheet program
- Basis of Proceeding
  - Borland used Lotus’s menu hierarchy in a competing program. Is the menu hierarchy subject to copyright protection? D.C. said yes.
Lotus Development Corp. v. Borland International

• Why can't this case be considered on the Altai framework?
• "The initial inquiry should not be whether individual components of a menu command hierarchy are expressive, but rather whether the menu command hierarchy as a whole can be copyrighted."

Lotus Development Corp. v. Borland International

• 17 U.S.C. §102(b)
• "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."

Lotus Development Corp. v. Borland International

• The court holds that the Lotus menu command hierarchy is an uncopyrightable method of operation.
  – The hierarchy is a method by which the program is operated and controlled
  – The expression is not copyrightable because it is part of the "method of operation"
Lotus Development Corp. v. Borland International

• "[O]ur initial inquiry is whether the Lotus menu command hierarchy is a 'method of operation'."

Lotus Development Corp. v. Borland International

• "We think that 'method of operation,' as that term is used in §102(b), refers to the means by which a person operates something, whether it be a car, a food processor, or a computer. Thus a text describing how to operate something would not extend copyright protection to the method of operation itself; other people would be free to employ that method and to describe it in their own words."

Lotus Development Corp. v. Borland International

• "We hold that the Lotus menu command hierarchy is an uncopyrightable "method of operation." The Lotus menu command hierarchy provides the means by which users control and operate Lotus 1-2-3."
Lotus Development Corp. v. Borland International

- Does that mean you can copy the source code?
  - "The Lotus menu command hierarchy is also different from the underlying computer code, because while code is necessary for the program to work, its precise formulation is not. In other words, to offer the same capabilities as Lotus 1-2-3, Borland did not have to copy Lotus's underlying code (and indeed it did not); to allow users to operate its programs in substantially the same way, however, Borland had to copy the Lotus menu command hierarchy. Thus the Lotus 1-2-3 code is not a uncopyrightable "method of operation.""

Other Possible 102(b) Issues?

- Numbering system of a catalog?
- Software program for automation of legal forms?
- APIs?

Protection for Program Outputs

- Protection of screen displays are available as an audio-visual work (e.g., as a compilation)
Video Games

• What portions of a video game could be subject to copyright protection?
  – Game as a whole?
  – Elements of the game?
  – Game characters?
  – Incidents, characters, and/or settings relating to the game theme?

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Incredible Technologies – Plaintiff
  – Golden Tee
• Global VR – Defendant
  – PGA Tour Golf
• How did play of the games compare?
• How did the games differ?

District Court

– “Global VR had access to and copied IT’s original instruction guide and the video display expressions from Golden Tee.”
– No likelihood of success because “expressions on its control panel are not dictated by creativity, but rather are simple explanations of the trackball system; at best, they are entitled to protection only from virtually identical copying; [and] (2) the video displays contain many common aspects of the game of golf”
Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Ordinary Observer Test
  - "Because it is pretty clear here that Global VR set out to copy the Golden Tee game, the second question ([i.e., whether the ‘copying, if proven, went so far as to constitute an improper appropriation.’]) comes closer to the issue we must face, and it leads us to the ‘ordinary observer’ test: ‘whether the accused work is so similar to the plaintiff's work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff's protectible expression by taking material of substance and value.’

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Protection of Expression
  - “In these games, an ordinary observer, seeing a golf game on the video display and a trackball to operate the game, might easily conclude that the games are so similar that the Global VR game must infringe the Golden Tee game. But because ideas—as opposed to their expression—are not eligible for copyright protection … protection does not extend to the game itself.

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Scenes a faire doctrine
  - "The doctrine refers to ‘incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic.’ These devices are not protectible by copyright. … For instance, the mazes, tunnels, and scoring tables in Atari's PAC-MAN were scenes a faire."
**Incredible Technologies, Inc. v. Virtual Technologies, Inc.**

- **Trackball System**
  - “The trackball system of operating the game is not subject to copyright protection. Functional features, such as the trackball system, might, at least potentially might, be eligible for patent protection.”
  - Why?

- **Copying of Instructions**
  - “[W]hile there arguably are more ways than one to explain how the trackball system works, the expressions on the control panel of Golden Tee are utilitarian explanations of that system and are not sufficiently original or creative to merit copyright protection. Furthermore, the judge said, to the extent they might be subject to a copyright, they would merit protection only against virtually identical copying.”

- **Scenes a faire**
  - What elements are common to a game of golf when implemented as a video game?
  - “[S]cenes a faire refers to incidents, characters, or settings which are as a practical matter indispensable, or at least standard in the treatment of a given topic.”
Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Virtual Identical Copying Only
  – “In presenting a realistic video golf game, one would, by definition, need golf courses, clubs, a selection menu, a golfer, a wind meter, etc. Sand traps and water hazards are a fact of life for golfers, real and virtual. The menu screens are standard to the video arcade game format, as are prompts showing the distance remaining to the hole. As such, the video display is afforded protection only from virtually identical copying.”

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• End result?
  – No infringement

Tetris Holdings v. XIO Interactive

• What portions of a video game are subject to copyright protection?
Tetris Holdings v. XIO Interactive

• Case Background
• D.C. NJ - Finding in favor of Tetris

Tetris Holdings v. XIO Interactive

• Game
  – Tetris – puzzle game developed by Alexy Pajitnov
• Parties
  – Tetris Holdings – Alexy Pajitnov + Henk Rogers
  – Xio Interactive - Desiree Golden

Tetris Holdings v. XIO Interactive

• Who owns the Tetris copyrights?
• Has Tetris ever licensed its intellectual property?
• How did Xio come to develop its program?
  – “Xio says, it copied Tetris in such a way so as to not copy any protected elements after diligently researching intellectual property law, and that it also tried to obtain a license from Tetris Holding, but was refused.”
Tetris Holdings v. XIO Interactive

• Timeline
  – 5/09 – Mino 1.0
  – 7/09 – Mino 1.1 and Mino Lite
  – 8/09 – Tetris Holdings files DMCA takedown to remove apps from Apple store; Xio counsel sends counter notifications
  – 12/09 – filing of lawsuit

Tetris Holdings v. XIO Interactive

• What elements did Tetris assert were copyrightable elements?
  1. Seven Tetrimino playing pieces made up of four equally-sized square joined at their sides;
  2. The visual delineation of individual blocks that comprise each Tetrimino piece and the display of their borders;
  3. The bright, distinct colors used for each of the Tetrimino pieces;
  4. A tall, rectangular playfield (or matrix), 10 blocks wide and 20 blocks tall;
  5. The appearance of Tetriminos moving from the top of the playfield to its bottom;
  6. The way the Tetrimino pieces appear to move and rotate in the playfield;
  7. The small display near the playfield that shows the next playing piece to appear in the playfield;
  8. The particular starting orientation of the Tetriminos, both at the top of the screen and as shown in the “next piece” display;
  9. The display of a “shadow” piece beneath the Tetriminos as they fall;
  10. The color change when the Tetriminos enter lock-down mode;
  11. When a horizontal line fills across the playfield with blocks, the line disappears, and the remaining pieces appear to consolidate downward;
  12. The appearance of individual blocks automatically filling in the playfield from the bottom to the top when the game is over;
  13. The display of “garbage lines” with at least one missing block in random order; and
  14. The screen layout in multiplayer versions with the player’s matrix appearing most prominently on the screen and the opponents’ matrices appearing smaller than the player’s matrix and to the side of the player’s matrix.

Tetris Holdings v. XIO Interactive

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102

103
Tetris Holdings v. XIO Interactive

• "Xio does not concede is that it copied any protected elements. Instead, it argues the elements it copied were not original expression, because they were part of the game itself—the rules, function, and expression essential to the game play—which is not protected. Before releasing its product, Xio researched copyright law, both through its own independent studying and based on advice of counsel, before designing its game."

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Tetris Holdings v. XIO Interactive

• Courts Analysis
• Elements of computer programs may be protectable by copyright law
• What is not protectable 102(b)
  – "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."

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Tetris Holdings v. XIO Interactive

• Idea expression dichotomy
  – "[C]opyright will not protect an idea, only its expression"
• Tests
  – Whelan – “the purpose or function of a utilitarian work would be the work’s idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea.”
  – Abstraction-Filtration-Comparison
Tetris Holdings v. XIO Interactive

- Merger
  - "Merger exists when an idea and its particular expression become inseparable."
  - When there are few or no other ways of expressing an idea
- Scenes a Faire
  - "applies to expression that is so associated with a particular genre, motif, or idea that one is compelled to use such expression"
  - Unprotectable expression

Tetris Holdings v. XIO Interactive

- Protectable Portions
  - Game Labels
  - Game Boards
  - Playing Cards
  - Graphical Works
- Unprotectable Portions
  - Game mechanics
  - Rules

Tetris Holdings v. XIO Interactive

- Xio’s position
  - "Tetris Holding cannot protect by copyright what is only protectible by patent and therefore not only are the ideas of Tetris (or the rules of the game) not protectible, but neither are the “functional aspects” of the game or expressive elements related to the game’s function or play.”
Tetris Holdings v. XIO Interactive

• “Xio is correct that one cannot protect some functional aspect of a work by copyright as one would with a patent. But this principle does not mean, and cannot mean, that any and all expression related to a game rule or game function is unprotectible.”

• “[E]xpression is not protected only when it is integral or inseparable from the idea or the function under the doctrines of merger or scènes à faire.

Tetris Holdings v. XIO Interactive

• Discussion of Lotus Case

• “Tetris Holding cannot copyright a method of operation, but may copyright an expression of a method of operation if it is distinguished from the method itself and is not essential to its operation.”

Tetris Holdings v. XIO Interactive

• “[O]ne’s original expression is protected by copyright—even if that expression concerns an idea, rule, function, or something similar—unless it is so inseparable from the underlying idea that there are no or very few other ways of expressing it.”

• What about when there are no stock elements?
Tetris Holdings v. XIO Interactive

• Did the court find that the games were substantially similar?
• "[I]t is appropriate to compare the two works “as they would appear to a layman” concentrating “upon the gross features rather than an examination of minutiae."

Tetris Holdings v. XIO Interactive

• Other protected expression
  – the dimensions of the playing field,
  – the display of “garbage” lines,
  – the appearance of “ghost” or shadow pieces,
  – the display of the next piece to fall,
  – the change in color of the pieces when they lock with the accumulated pieces, and
  – the appearance of squares automatically filling in the game board when the game is over.

Tetris Holdings v. XIO Interactive

• Result
  – Summary judgment to Tetris Holdings
Discussion

• Is copyright a viable means for protecting computer software?

Program Completed

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