Tech Law Garden

US Copyright Law – Recent Developments Relevant to Free and Open Source Software

SCaLE 15x

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Tennille Christensen- Perspective

Current/Past Open Source Clients:

- Crowdgrader (peer grading software solution)
- Cumulus Networks (Cumulus Linux)
- Mattermost (Slack-alternative)
- Open Whisper Systems (Signal, formerly Redphone/TextSecure)
- OpenGamma (real-time market risk management and analytics)
- RethinkDB (JSON push to apps)
- TomiTribe (Apache TomCat and TomEE)

Seed Funded and Venture Backed Startups: On-call outside legal support, primarily for venture backed start-ups. FOSS is relevant to almost all software IP technology transactions (licensing, sales, technology integration, NDAs, manufacturing, distribution).

Outside special counsel to a few large companies/law firms/individual contributors on FOSS issues.

I do not litigate. My focus is on helping clients navigate the FOSS legal obstacles they encounter, with the goal of avoiding court, or negotiating settlement agreements if they find themselves brought into court where they do not want to litigate.

THE CASES

Oracle v. Google – API(s)

(Copyrightability & Fair Use)

Cisco v. Arista – CLI(s)

(Scenes a faire & Fair Use*)*

Graffiti: FOSS Art

BASIC PREMISES

Software is subject to US Copyright law (17 U.S.C. § 101)

All software (FOSS & Proprietary) is governed by the same copyright law

The licenses and facts of a particular situation may result in different copyright outcomes relating to specific pieces of software

Idea(Function or Method of Operation) vs. Expression:

-Expressions are copyrightable. Ideas are not.

Software *is* functional. It is copied (and modified at times) by the hardware and supporting runtime software when it is used to do stuff.

So how do we know where/what Software is subject to copyright protection and where/what Software isn't?

Bogotá

Where Copyright Law Does Not Apply to Software

A) Not subject to copyright protection (no right to sue)

B) Fair Use (defense)

C) Merger (defense)

D) *Scènes a faire* (defense)

Technical Concepts: CLI(s)

Command Line Interface: a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text (command lines)

Examples: SH, BASH, TCSH (insert your favorite shell)

Technical Concepts: API(s)

Application Programming Interface: A set of tools, protocols, and clearly defined methods for building software applications that run on top of or in connection with a specific technology.

-Linux API: System Call Interface of the Linux Kernel; GNU C Library (glibc) [Similar offerings by Windows, Apple]

-Programming Languages: Java API, C++ Standard Template Library

-HTTP API: a set of HTTP commands that allow developers/applications to access specific online services

Oracle v. Google

-Java introduced in 1996 by Sun, who was later acquired by Oracle. In 2007, Google released Android. Google implemented the Java language, but built their own VM, implementation, etc. Copied the APIs of 37 Java packages.

-May 2012, Judge Alsup, N.D. CA, held that the declaring code and Sequence Structure and Organization of 37 Java packages were not copyright infringement because the declaratory code, Structure, Sequence and Organization at issue were not subject to copyright protection.

-May 9, 2014, Federal Circuit overruled Judge Alsup. Held: the APIs at issue *are* subject to copyright protection.

-Jun 29, 2015, SCOTUS refused to review (despite circuit split)

Copyrightability (Pre Oracle v. Google Circuit Split)

-Judge Alsup primarily relied upon a 1st Circuit case: (Lotus) “method of operation” (the means by which someone operates something – menu structure in Lotus-1-2-3) is *not* copyrightable

-3rd Circuit “if other programs can be written or created which perform the same function, then that program is an expression of an idea and hence copyrightable”

-8th Circuit – classifying a work as a “system” does not preclude copyright for a particular expression of that system

Copyrightability Today (Post Oracle v. Google Circuit Split)

-Fed Cir Applied 9th Cir "abstraction-filtration-comparison test" (from 2nd Cir and adopted by several other circuits).

<u>This test rejects the notion that anything that performs a function is necessarily uncopyrightable.</u>

"this test eschews bright line approaches and requires a more nuanced assessment of the particular program at issue in order to determine what expression is protectable and infringed."

-SCOTUS refused to take Oracle v. Google, so the crazy circuit-by-circuit copyright situation *is* the current state of the law today.

Google v. Oracle: Jury Found Fair Use of the Java API(s) that were copied

4 factors of fair use:

- Purpose and Character of the use
- Nature of the copyrighted work
- Amount of work and substantiality of work copied
- Effect of use upon the potential market for the original work

NOTE: very fact specific analysis.

El beso de los invisibles

Cisco v. Arista

- December 5, 2014, Cisco sued Arista for copyright infringement (as well as patent infringement in the same complaint), alleging that Arista copied the Cisco IOS Command Line Interface (CLI) verbatim.

- Specifically, Cisco alleged that Arista copied over 500 multi-word commands, including the "expression, organization, and hierarchy" of those commands.

- In the complaint, Cisco noted that the CLI could be used directly by a human User, *or* a computer script.

Cisco v. Arista

- December 2016 - 2 week jury trial in San Jose
- Defense argued that the jury could find for Arista in several ways:
  - There was no actual copying
  - The copying was fair use (like Oracle v. Google)
  - The copying was subject to the merger doctrine
  - The copying was *Scènes a faire*

Cisco v. Arista: Fair Use

- The jury found that Arista did copy Cisco's CLI.
- The jury also found that Arista's copying of the CLI was *not* fair use.

Cisco v. Arista: Merger

The merger doctrine in copyright:

If an idea and the expression of the idea are so tied together that the idea and its expression are one - there is only one conceivable way or a drastically limited number of ways to express and embody the idea in a work - then the expression of the idea is uncopyrightable because ideas may not be copyrighted.

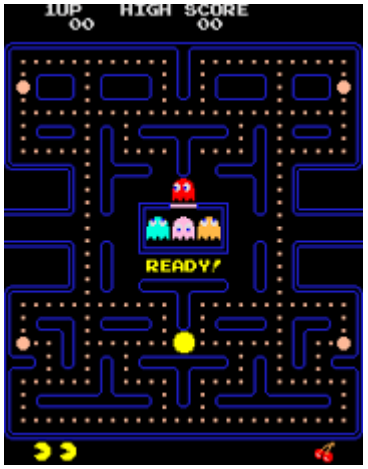
The jury found there was no merger defense.

Cisco v. Arista: *Scènes a faire*

- Jury found that Arista was not liable for damages as a result of copying Cisco's CLI under the *Scènes a faire doctrine.*
- Not much case law on this doctrine
- *Data East USA Inc. v. Epyx Inc.*, 862 F.2d 204 (9th Cir. 1988):

Nor can copyright protection be afforded to elements of expression that necessarily follow from an idea, or to "scenes a faire," i.e. expressions that are "as a practical matter, indispensable or at least standard in the treatment of a given [idea]

PacMan – Where it all began



Prior Quote Citation: Aliotti, 831 F.2d at 901 (quoting *Atari, Inc. v. North American Phillips Consumer Elecs Corp.,* 672 F.2d 607, 616 (7th Cir. 1982), *cert. denied,* 459 U.S. 880, 103 S.Ct. 176, 74 L.Ed.2d 145 (1982))

Atari: *The maze and scoring table are standard game devices, and the tunnel exits are nothing more than the commonly used "wrap around" concept adapted to a maze-chase game. Similarly, the use of dots provides a means by which a player's performance can be gauged and rewarded with the appropriate number of points, and by which to inform the player of his or her progress.*

Karate

Data East USA Inc. v. Epyx, Inc.

The fifteen features listed by the court "encompass the idea of karate." These features, which consist of the game procedure, common karate moves, the idea of background scenes, a time element, a referee, computer graphics, and bonus points, result from either constraints inherent in the sport of karate or computer restraints.

After careful consideration and viewing of these features, we find that they necessarily follow from the idea of a marital arts karate combat game, or are inseparable from, indispensable to, or even standard treatment of the idea of the karate sport. As such, they are not protectable.

SEE v. DURANG
711 F.2d 141, **143** (9th Cir. 1983)

- We also disagree with plaintiff's contention that the district court improperly applied the "scenes a faire" doctrine.

- The court's characterization of the doctrine as relating to unprotected "ideas" may have been technically inaccurate, but the court properly applied the doctrine to hold unprotectable forms of expression that were either stock scenes or scenes that flowed necessarily from common unprotectable ideas. "Common" in this context means common to the works at issue, not necessarily, as plaintiff suggests, commonly found in other artistic works. Nor has the doctrine "fallen into disuse in this circuit" as plaintiff suggests. See Jason v. Fonda, 698 F.2d 966, incorporating by reference 526 F. Supp. at 777.

9th Circuit, Current Status

Oracle v. Google – copying of API can be fair use.

Cisco v. Arista – copying of CLI can be scenes a faire.

DISCUSS

Question 1

Within the FOSS community, there are many who feel that Judge Alsup's original ruling in Oracle v. Google (that the APIs were not subject to copyright protection at all) was the correct one, but SCOTUS denied CERT. Where does this leave the argument that APIs should not be subject to copyright protection, period?

Question 2

I know we don't have crystal balls, but I'd still like each of you to comment on what you think the overall outcome of Cisco v. Arista will be.

Do you think the ruling will stand at the circuit court?

If so, do you think Cisco will appeal, and what do you think CAFC's opinion will likely be?

Question 3

Hypothetical – A client wants like to reproduce the API of one of their competitors in offering a competitive online service (that they have developed themselves without access to anything other than the competitor's HTTP API). They plan to open source their platform, but deliver and manage the service for a fee. Given the current state of copyright case law, what would you tell them?

Question 4

How do you think these cases affect (if at all) APIs/CLIs that are covered by the GPL or other copyleft licenses?

Question 5

Do you think there is (or should be) a meaningful legal distinction between APIs and CLIs?

If so, what?

If not, how do we reconcile the different findings on fair use in Oracle v. Google and Cisco v. Arista?

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Questions?

Please feel free to reach out to me directly at tennille[AT]techlawgarden.com