Patent Law

Prof. Roger Ford
Monday, April 11, 2016
Class 20 – Infringement III:
indirect and divided infringement

Recap

Recap

→ Infringement by equivalents

→ Experimental use

→ Prior commercial use

Today's agenda

Today's agenda

- → Secondary liability / indirect infringement
- → Divided / joint infringement

Secondary liability

(post-AIA) 35 U.S.C. § 271 — Infringement of Patent

* * *

(b) Whoever **actively induces** infringement of a patent shall be liable as an infringer.

(c) Whoever offers to sell or sells within the United States or imports into the United States a **component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process**, constituting a material part of the invention, knowing the same to be **especially made or especially adapted for use in an infringement** of such patent, and **not a staple article** or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

* * *

Wallace v. Holmes (1871)

- → Tech: a new burner for an oil lamp
- → Claim: a new oil lamp with new burner AND standard fuel reservoir, wick tube, chimney
- → Accused product: new oil lamp minus the chimney
- → Court: this is "palpable interference" with the patent rights

Wallace v. Holmes (1871)

→ How could the patentee have prevented this problem?

Wallace v. Holmes (1871)

→ How could the patentee have prevented this problem?

- Just claim the novel burner separately
- Today: this totally works
- In 1871: not allowed

Wallace v. Holmes (1871)

→ Now codified in § 271(b)–(c):

- § 271(b): inducing infringement
- § 271(c): selling a component of a patented invention, knowing it to be especially made for infringement and not a staple article of commerce

Aro Mfg. (Aro II)

→ Patent: convertible tops for cars

→ Aro: makes replacement fabric parts for when the originals wear out

Aro Mfg. (Aro II)

→ Tops are specially made for GM and Ford

→ GM is licensed

- Previous Supreme Court decision *(Aro I)*: replacing top is "repair," not "reconstruction," so doesn't need a separate license

→ So only Ford parts are at issue here

Aro Mfg. (Aro II)

→ What's the difference between repair and reconstruction?

Aro Mfg. (Aro II)

→ What's the difference between repair and reconstruction?

- Consumers expect to be able to repair their devices – we assume this is a licensed use
- But reconstruction isn't as common
- Note: this is a default rule, changeable by contract

Aro Mfg. (Aro II)

→ Does Ford infringe?

→ Do Ford owners infringe?

→ Does repairing Fords infringe?

→ Does Aro directly infringe?

Aro Mfg. (Aro II)

→ Does Ford infringe? (Yes)
→ Do Ford owners infringe?
→ Does repairing Fords infringe?
→ Does Aro directly infringe?

Aro Mfg. (Aro II)

→ Does Ford infringe? (Yes)
→ Do Ford owners infringe? (Yes)
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Aro Mfg. (Aro II)

→ Does Ford infringe? (Yes)
→ Do Ford owners infringe? (Yes)
→ Does repairing Fords infringe? (Yes)
→ Does Aro directly infringe?

Aro Mfg. (Aro II)

→ Does Ford infringe? (Yes)
→ Do Ford owners infringe? (Yes)
→ Does repairing Fords infringe? (Yes)
→ Does Aro directly infringe? (No!)

Aro Mfg. (Aro II)

→ Court: Aro is supplying a part especially made or adapted for use in the infringing product

→ No other use, so not a staple article of commerce

- Bolts, screws, &c

Aro Mfg. (Aro II)

→ Also: must know that the product was "especially made or especially adapted for use in an infringement"

- Especially suited for putting into Ford cars
- Covered by a patent, but not licensed

→ Here: Aro knew because the patent owner had sent a letter

→ So infringement under § 271(c)

Aro Mfg. (Aro II)

→ Is this a sensible rule?

→ If you make repair parts, how will you behave in light of this rule?

Aro Mfg. (Aro II)

→ Is this a sensible rule?

→ If you make repair parts, how will you behave in light of this rule?

- Bury your head in the sand
- This means patent holders have a lot of pressure to track down infringers
- Who has lower search costs?

CR Bard v. Advanced Cardiovascular Sys.

→ Bard patent: method of using a catheter in coronary angioplasty

→ ACS product: only catheter approved by FDA for use in coronary angioplasty

→ Claims:

- § 271(b) – inducing doctors to infringe
- § 271(c) – selling catheter for infringing use

CR Bard v. Advanced Cardiovascular Sys.

→ Problem: three ways to use the catheter

- (1) all side openings in aorta: not infringing
- (2) all side openings in coronary artery: infringing
- (3) some in each place: maybe infringing

→ So, a jury could conclude there are substantial noninfringing uses

- If so, no § 271(c) contributory infringement

CR Bard v. Advanced Cardiovascular Sys.

→ § 271(b) induced infringement:

- Requires actively and knowingly aiding and abetting another's direct infringement
- If instructions taught doctors how to infringe, then ACS is liable <u>even if there are other uses</u>

Global-Tech v. SEB

→ § 271(b): whoever "actively induces infringement" is liable

→ Question: what mental state is required?

- Actual knowledge
- Willful blindness
- Recklessness
- Deliberate disregard of a known risk
- Should have known
- Negligence
- Strict liability

Global-Tech v. SEB

→ Federal Circuit: Deliberate disregard of a known risk is sufficient

→ Supreme Court: No, actual knowledge is required, based on *Aro II*

→ However: Willful blindness is a form of actual knowledge

- Requires: subjective belief that there is a high probability of a patent, and deliberate action to avoid learning about it

Global-Tech v. SEB

→ What was the inducement?

Global-Tech v. SEB

→ What was the inducement?

- Here: encouraging others to sell infringing deep fryers
- In general: actively and knowingly aiding and abetting

Commil v. Cisco

→ Commil patent: methods of improving wifi performance

→ Cisco product: wifi equipment that allegedly induced others to infringe (by using wifi)

→ Cisco's defense: we believed the patents were invalid

Commil v. Cisco

→ Note: The patents were not, it turns out, invalid

- Should this matter?

Commil v. Cisco

→ Legal questions:

- #1: Must Cisco have actual knowledge of the patents and that they would be infringed?
- #2: Is a good-faith belief that the patents are invalid a defense?

Commil v. Cisco

→ #1: Must Cisco have actual knowledge of the patents and that they would be infringed?

- Answered by *Global-Tech* and *Aro II,* but Commil and the United States wanted the Court to reconsider
- Court: No thanks, we'll stick with our previous holding

Commil v. Cisco

→ #2: Is a good-faith belief that the patents are invalid a defense?

- *Global-Tech*: "[W]e now hold that induced infringement … requires knowledge that the induced acts constitute patent infringement."
- Federal Circuit: "It is axiomatic that one cannot infringe an invalid patent." Therefore, it is a valid defense

Commil v. Cisco

→ #2: Is a good-faith belief that the patents are invalid a defense?

- Supreme Court: No, infringement and validity are separate questions
- "[I]nvalidity is not a defense to infringement, it is a defense to liability."

Commil v. Cisco

→ So:

- Good-faith belief that a patent is not infringed: valid defense
- Good-faith belief that a patent is invalid: not a valid defense

→ What effects will this asymmetry have?

Secondary liability

→ Contributory infringement:
- Sale of an article, that is especially made to infringe and not a staple article of commerce, with knowledge of the patent and infringement

→ Induced infringement:
- Aiding and abetting, with knowledge of the patent and infringement
- Possibly active encouragement

→ After *Global-Tech,* the line between the two is very blurry

Divided / joint infringement

(post-AIA) 35 U.S.C. § 271 — Infringement of Patent

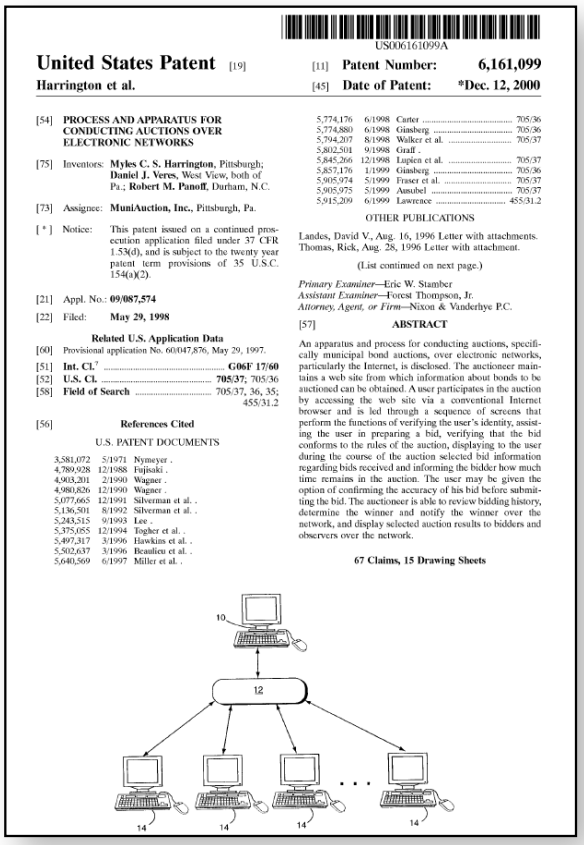
(a) Except as otherwise provided in this title, whoever without authority **makes, uses, offers to sell, or sells any patented invention**, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

* * *

Muniauction v. Thomson

→ Muniauction patent: process for auctioning municipal bonds online

→ Issue: Does Thomson's auction system infringe?



US006161099A

United States Patent [19]
Harrington et al.

[11] **Patent Number: 6,161,099**
[45] **Date of Patent: *Dec. 12, 2000**

[54] **PROCESS AND APPARATUS FOR CONDUCTING AUCTIONS OVER ELECTRONIC NETWORKS**

[75] Inventors: **Myles C. S. Harrington**, Pittsburgh; **Daniel J. Veres**, West View, both of Pa.; **Robert M. Panoff**, Durham, N.C.

[73] Assignee: **MuniAuction, Inc.**, Pittsburgh, Pa.

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **09/087,574**

[22] Filed: **May 29, 1998**

Related U.S. Application Data

[60] Provisional application No. 60/047,876, May 29, 1997.

[51] **Int. Cl.**[7] **G06F 17/60**

[52] **U.S. Cl.** **705/37**; 705/36

[58] **Field of Search** 705/37, 36, 35; 455/31.2

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Primary Examiner—Eric W. Stamber
Assistant Examiner—Forest Thompson, Jr.
Attorney, Agent, or Firm—Nixon & Vanderhye P.C.

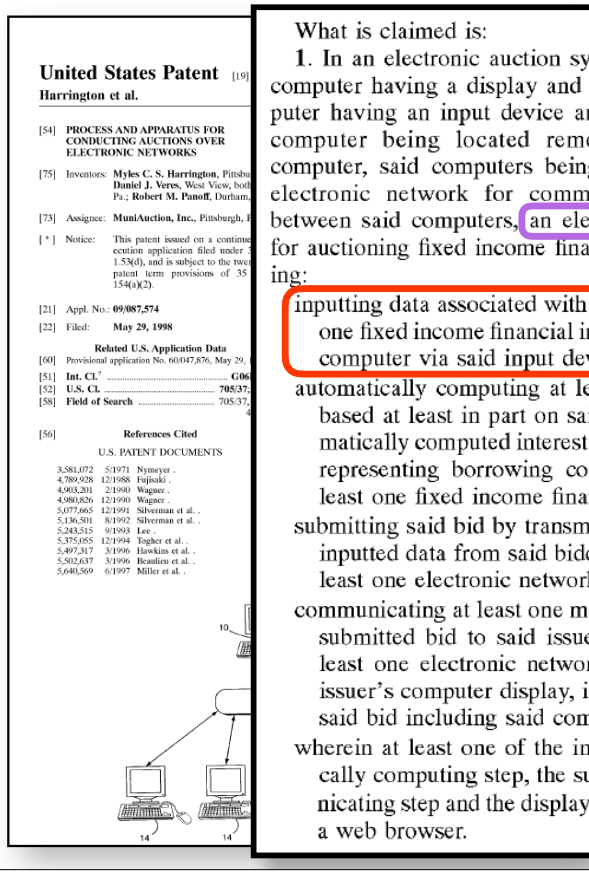
[57] **ABSTRACT**

An apparatus and process for conducting auctions, specifically municipal bond auctions, over electronic networks, particularly the Internet, is disclosed. The auctioneer maintains a web site from which information about bonds to be auctioned can be obtained. A user participates in the auction by accessing the web site via a conventional Internet browser and is led through a sequence of screens that perform the functions of verifying the user's identity, assisting the user in preparing a bid, verifying that the bid conforms to the rules of the auction, displaying to the user during the course of the auction selected bid information regarding bids received and informing the bidder how much time remains in the auction. The user may be given the option of confirming the accuracy of his bid before submitting the bid. The auctioneer is able to review bidding history, determine the winner and notify the winner over the network, and display selected auction results to bidders and observers over the network.

67 Claims, 15 Drawing Sheets

U.S. Patent No. 6,161,099

→ Process and apparatus for conducting auctions over electronic networks



United States Patent [19]
Harrington et al.

[54] **PROCESS AND APPARATUS FOR CONDUCTING AUCTIONS OVER ELECTRONIC NETWORKS**

[21] Appl. No.: **09/087,574**

[22] Filed: **May 29, 1998**

What is claimed is:

1. In an electronic auction system including an issuer's computer having a display and at least one bidder's computer having an input device and a display, said bidder's computer being located remotely from said issuer's computer, said computers being coupled to at least one electronic network for communicating data messages between said computers, an electronic auctioning process for auctioning fixed income financial instruments comprising:

inputting data associated with at least one bid for at least one fixed income financial instrument into said bidder's computer via said input device;

automatically computing at least one interest cost value based at least in part on said inputted data, said automatically computed interest cost value specifying a rate representing borrowing cost associated with said at least one fixed income financial instrument;

submitting said bid by transmitting at least some of said inputted data from said bidder's computer over said at least one electronic network; and

communicating at least one message associated with said submitted bid to said issuer's computer over said at least one electronic network and displaying, on said issuer's computer display, information associated with said bid including said computed interest cost value,

wherein at least one of the inputting step, the automatically computing step, the submitting step, the communicating step and the displaying step is performed using a web browser.

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"With respect to the '099 patent, the parties do not dispute that **no single party performs every step of the asserted claims**. For example, at least the inputting step of claim 1 is completed by **the bidder**, whereas at least a majority of the remaining steps are performed by **the auctioneer's system** (e.g., Thomson's BidComp/Parity® system). The issue is thus **whether the actions of at least the bidder and the auctioneer may be combined** under the law so as to give rise to a finding of direct infringement by the auctioneer."

Muniauction v. Thomson, slip op. at 15–16

Muniauction v. Thomson

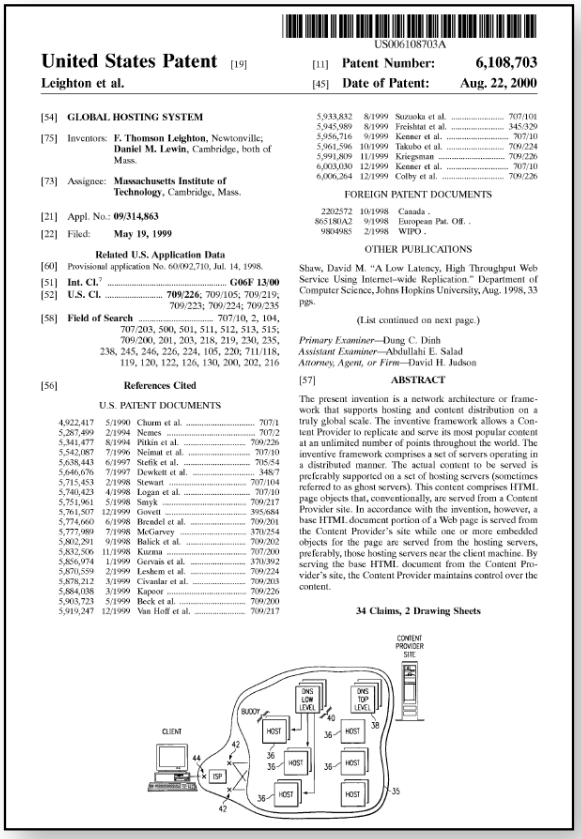
→ Court: A single party must perform, or be responsible for, every step of the method claim to infringe

- "[W]here the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed only if one party exercises 'control or direction' over the entire process such that every step is attributable to the controlling party, i.e., the 'mastermind.'" –*Muniauction* (per J. Gajarsa)

Limelight v. Akamai

→ Akamai patent: content distribution network (CDN) for internet traffic

→ Limelight product: Limelight performs most steps; leaves "tagging" and "serving" steps to customers to perform



US006108703A

United States Patent [19]
Leighton et al.

[11] **Patent Number: 6,108,703**
[45] **Date of Patent: Aug. 22, 2000**

[54] **GLOBAL HOSTING SYSTEM**

[75] Inventors: **F. Thomson Leighton**, Newtonville; **Daniel M. Lewin**, Cambridge, both of Mass.

[73] Assignee: **Massachusetts Institute of Technology**, Cambridge, Mass.

[21] Appl. No.: **09/314,863**

[22] Filed: **May 19, 1999**

Related U.S. Application Data

[60] Provisional application No. 60/092,710, Jul. 14, 1998.

[51] **Int. Cl.**[7] **G06F 13/00**

[52] **U.S. Cl.** **709/226**; 709/105; 709/219; 709/223; 709/224; 709/235

[58] **Field of Search** 707/10, 2, 104, 707/203, 500, 501, 511, 512, 513, 515, 709/200, 201, 203, 218, 219, 230, 235, 238, 245, 246, 226, 224, 105, 220; 711/118, 119, 120, 122, 126, 130, 200, 202, 216

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Assistant Examiner—Abdullahi E. Salad
Attorney, Agent, or Firm—David H. Judson

[57] **ABSTRACT**

The present invention is a network architecture or framework that supports hosting and content distribution on a truly global scale. The inventive framework allows a Content Provider to replicate and serve its most popular content at an unlimited number of points throughout the world. The inventive framework comprises a set of servers operating in a distributed manner. The actual content to be served is preferably supported on a set of hosting servers (sometimes referred to as ghost servers). This content comprises HTML page objects that, conventionally, are served from a Content Provider site. In accordance with the invention, however, a base HTML document portion of a Web page is served from the Content Provider's site while one or more embedded objects for the page are served from the hosting servers, preferably, those hosting servers near the client machine. By serving the base HTML document from the Content Provider's site, the Content Provider maintains control over the content.

34 Claims, 2 Drawing Sheets

U.S. Patent No. 6,108,703

→ Global hosting system

U.S. Patent No.

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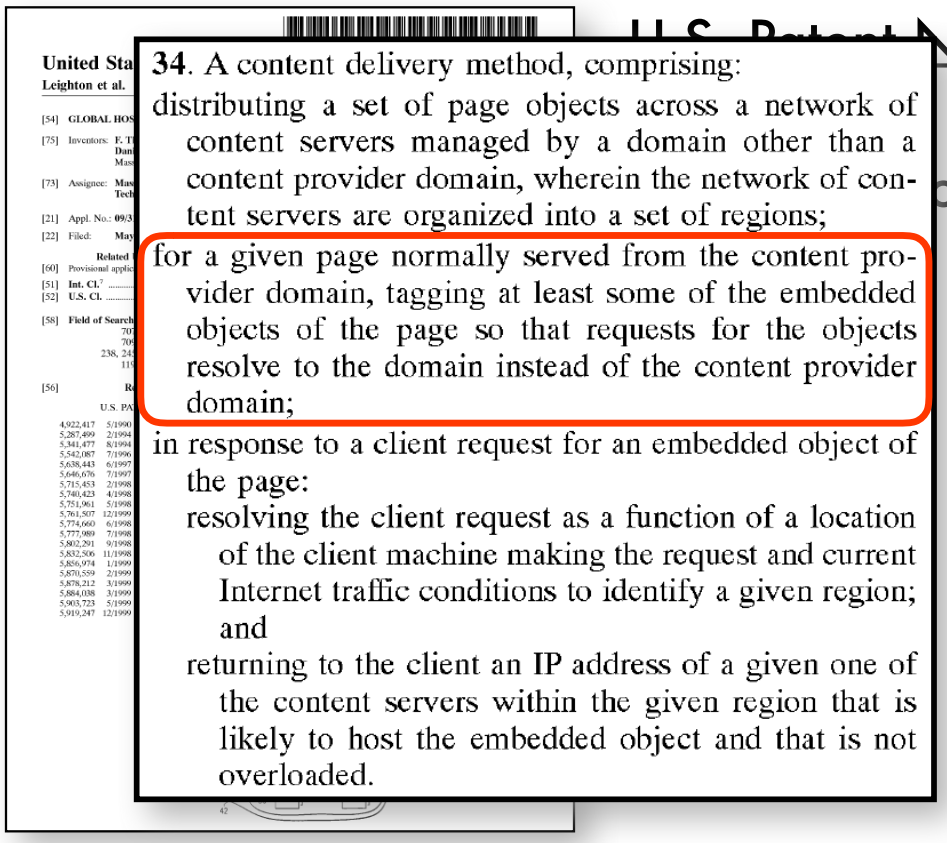

34. A content delivery method, comprising:

distributing a set of page objects across a network of content servers managed by a domain other than a content provider domain, wherein the network of content servers are organized into a set of regions;

for a given page normally served from the content provider domain, tagging at least some of the embedded objects of the page so that requests for the objects resolve to the domain instead of the content provider domain;

in response to a client request for an embedded object of the page:

resolving the client request as a function of a location of the client machine making the request and current Internet traffic conditions to identify a given region; and

returning to the client an IP address of a given one of the content servers within the given region that is likely to host the embedded object and that is not overloaded.

Limelight v. Akamai

→ Federal Circuit, en banc: There is no direct infringement (§ 271(a)) but there is induced infringement (§ 271(b))

- No party directs or controls all steps, so no direct infringement has occurred
- Inducement requires direct infringement
- But "infringement" can mean something different for the two sections – infringement for purposes of § 271(b) can exist when multiple parties cooperate, even if the steps aren't attributable to one party

Limelight v. Akamai

→ Supreme Court: this is stupid

- "The Federal Circuit's analysis fundamentally misunderstands what it means to infringe a method patent."
- Induced infringement requires, well, infringement, and under *Muniauction,* that requires one defendant responsible for all elements of the claim

Akamai v. Limelight

→ The Supreme Court invited the Federal Circuit to reconsider *Muniauction,* so they did...

- ...and changed the law just enough to find Limelight infringing

Akamai v. Limelight

→ Now, to infringe under § 271(a):

- One party must perform, direct, or control all elements, OR
- Two or more parties in a joint enterprise can be charged with each others' acts:
  - agreement
  - common purpose
  - community of pecuniary interest
  - equal right of control

Akamai v. Limelight

→ Are Limelight and its customers a joint enterprise?

Akamai v. Limelight

→ Are Limelight and its customers a joint enterprise?

- No – no common purpose, community of pecuniary interest, or equal right of control

Akamai v. Limelight

→ Does Limelight direct or control its customers' actions?

Akamai v. Limelight

→ Does Limelight direct or control its customers' actions?

- Yes – it requires customers to take certain steps for the system to work
- But – the same thing was true of Thomson's auction system!

Next time

Next time

→ Remedies: injunctions