

# Patent Law

Prof. Roger Ford

Wednesday, November 16, 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

- Schedule notes
- Secondary liability / indirect infringement
- Divided / joint infringement
- Midterm notes



**Schedule notes**

# Schedule notes

- Five classes left:
  - Inventorship and inequitable conduct (MOVED UP)
  - Three classes on remedies
  - Antitrust and patent misuse
- No class on Monday 12/5
- Will try to schedule one make-up class
  - Have asked about Tuesday 11/29 or Thursday 12/8

**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?

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## *Aro Mfg. (Aro II)*

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- 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 even if there are other uses

# *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

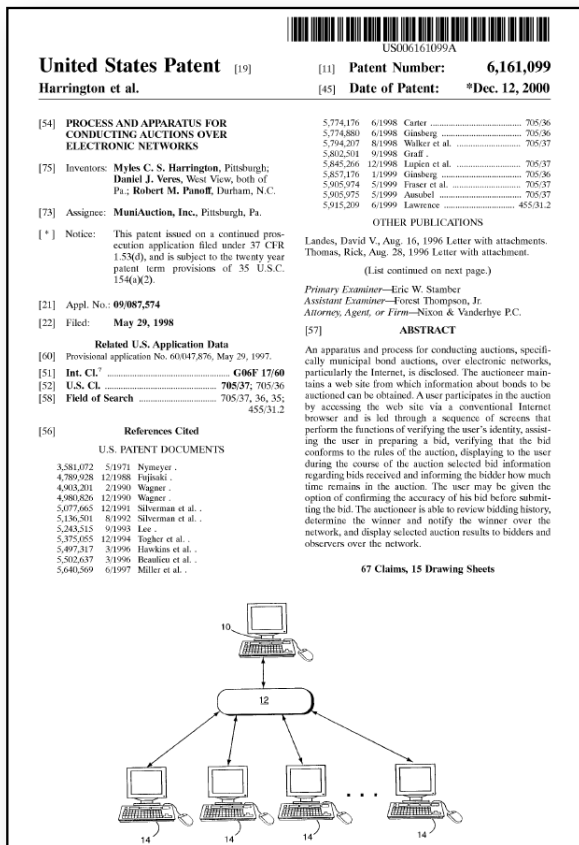
**(post-AIA) 35 U.S.C. § 271 — Infringement of Patent**

(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.

\* \* \*

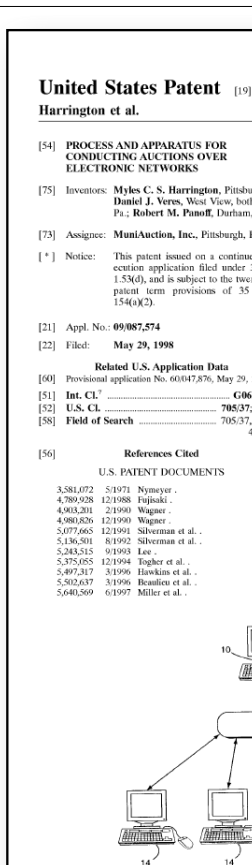
## ***Muniauction v. Thomson***

- Muniauction patent: process for auctioning municipal bonds online
- Issue: Does Thomson's auction system infringe?



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

→ Process and  
apparatus for  
conducting  
auctions over  
electronic  
networks



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

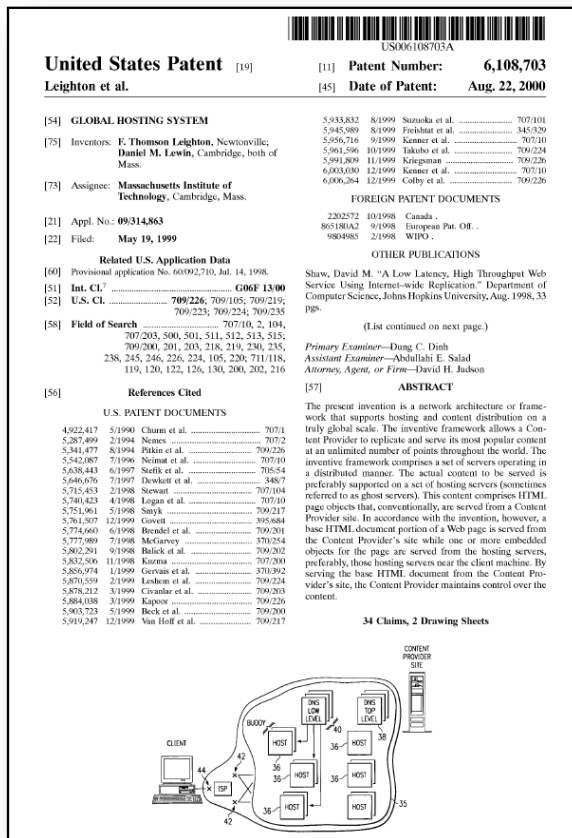
## *Muniauction v. Thomson*

- 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



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

→ Global hosting system

United States  
Leighton et al.

[54] GLOBAL HOS

[75] Inventors: F. T  
Dan  
Mass

[73] Assignee: Max  
Tech

[21] Appl. No.: 09/3

[22] Filed: May

Related U

[60] Provisional applic

[51] Int. Cl.<sup>7</sup>

[52] U.S. Cl.

[58] Field of Search

707  
709  
238, 245  
119

[56] Re

U.S. PA

4,922,417 5/1990

5,287,499 2/1994

5,341,477 8/1994

5,542,087 7/1996

5,638,443 6/1997

5,646,676 7/1997

5,715,453 2/1998

5,740,423 4/1998

5,751,961 5/1998

5,761,507 12/1999

5,774,660 6/1998

5,777,089 7/1998

5,802,291 9/1998

5,832,506 11/1998

5,855,974 1/1999

5,870,559 2/1999

5,876,212 3/1999

5,884,038 3/1999

5,903,723 5/1999

5,919,247 12/1999

U.S. Patent No.

**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.

osting

## 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!

**Midterm notes**

# Midterm notes

## → Part 1:

- § 102 is a detailed and specific statute – you need to go through it carefully to apply it

### Scenario A:

- October 12, 1998: Jimmy conceives of process X, a method of filtering human blood to remove a virus, and performs an experiment to test that process, as documented in a witnessed laboratory notebook.
- October 17, 1998: Gretchen, a rival researcher, files a United States patent application describing process X and claiming device Y, a machine that performs process X. The application does not claim process X.
- October 24, 1998: Jimmy analyzes data from the October 12 experiment and concludes that process X worked. He summarizes his findings in an email to a colleague.
- April 5, 1999: Jimmy publishes an article in the *New England Journal of Medicine* summarizing process X and the supporting data.
- September 1, 1999: Jimmy files a United States patent application claiming process X.
- April 17, 2000: Gretchen's application is published by the PTO.

**Can Jimmy receive a patent claiming process X? Why or why not?**

### Scenario B:

- October 1, 2014: Jimmy publishes an article in the *Journal of Virology* describing a machine, device X, for filtering a different virus from blood.
- March 3, 2015: Gretchen publishes a commentary in the *Journal of Virology* discussing Jimmy's invention, device X, and suggesting an improved variant, device Y.
- September 15, 2015: Gretchen files a United States patent application describing device X and claiming device Y.
- September 28, 2015: Jimmy files a United States patent application claiming device X and device Y.
- March 15, 2017: Gretchen's application is published by the PTO.

**Can Jimmy receive a patent claiming device X? Device Y?  
Why or why not?**

## Midterm notes

### → Part 2:

- Written description and enablement are different requirements – make clear you understand which one is at issue
- Written description, enablement, and definiteness are highly fact-dependent and contextual – spend much of your answer discussing and applying the facts



1. A combination travel and laundry bag, comprising:

- a main compartment having a substantially parallelepiped shape with a first side that is longer and substantially orthogonal to a second side;
- a first opening on the first side that is selectively closed for providing access to the main compartment as a travel bag; and
- a second opening on the second side that is selectively closed;

wherein a plurality of mesh bags are selectively attached to the interior of the bag using at least one hook configured to attach to at least one ring situated on the interior of the bag and wherein the plurality of mesh bags are configured to hang within the interior of the bag; and

wherein at least one of said first and second openings is constructed of *opaque semipermeable material configured to permit aeration when closed.*

Laundry bags, hampers or duffle bags are not easily transportable once filled with laundry. Conventional travel devices such as suitcases or roller duffle bags are not suitable for maintaining dirty laundry such as hampers. **Although suitcases and duffle bags are certainly constructed to carry clothing, they are not ideally suited to allow dirty garments to “breathe.” Hampers allow garments to breath through vents or holes or by having a wide opening on a top side which helps prevent the growth of mold or other odor causing bacteria.**

Folding carts that are used by many to carry laundry have many of the characteristics of a hamper, but are not ideally suited to carry clothes for travel purposes. Folding carts fail to have an enclosed main compartment that would prevent clothes from falling out during transport or prevent clothes from additional accidental soiling during transport. Furthermore, access to clothes or other items in a folding cart is primarily restricted to a top opening, which makes it difficult to fold, sort or even retrieve items from the folding cart. **Many folding carts may also fail to provide privacy by exposing dirty (or clean) laundry during transport.**

Thus, a need exists for a combined travel and laundry bag or hamper that is easily transportable, provides adequate access to garments and further provides adequate aeration to the garments. Such a bag should enable the use of the bag as a hamper and laundry basket in one mode and the use of the bag as a travel bag in a second mode without the detriments described above.



**Next time**

**Next time**

→ **Inventorship and inequitable  
conduct**