

# Patent Law

Prof. Roger Ford

Wednesday, April 6, 2016

Class 19 – Infringement II: doctrine of  
equivalents; experimental & prior use

# Recap

# Recap

- Claim construction
- Claim-construction procedure
- Literal infringement

**Today's agenda**

# Today's agenda

- Infringement by equivalents
- Experimental use
- Prior commercial use

**Infringement by  
equivalents**

# Infringement by equivalents

- There are products that don't meet all limitations of a claim, but are very close
  - Maybe due to strategic behavior (pH = 3.95 when the claim requires 4-6)
  - Maybe due to unforeseeable technology (Velcro<sup>®</sup> instead of mechanical fastener)
  - Maybe due to different design decisions
- Infringement by equivalents fills this gap

# Infringement by equivalents

- Similar role to obviousness
  - Obviousness is there when anticipation doesn't work, but the prior art is very close
  - Equivalents is there when literal infringement doesn't work, but the accused product is very close

# Infringement by equivalents

→ How to think about equivalents:

- Literal infringement: You have to show that every element of the claim is literally met by the accused product
- Except: Under the doctrine of equivalents, you may be able to show that one or more elements of the accused product are equivalents of the claim limitation
- Except: Under prosecution history estoppel (or another doctrine), doctrine of equivalents may not be available

# Infringement by equivalents

→ How to think about equivalents:

- Literal infringement: You have to show that every element of the claim is literally met by the accused product
- Except: Under the doctrine of equivalents, **Factual question** you may be able to show that one or more elements of the accused product are equivalents of the claim limitation
- Except: Under prosecution history estoppel (or another doctrine), doctrine of equivalents may not be available

# Infringement by equivalents

→ How to think about equivalents:

- Literal infringement: You have to show that every element of the claim is literally met by the accused product
- Except: Under the doctrine of equivalents, **Factual question** may be able to show that one or more elements of the accused product are equivalents of the claim limitation
- Except: Under prosecution history estoppel (and other doctrine), doctrine of equivalents **Legal question** may not be available

# Infringement by equivalents

→ Preview: the basic rules

- You still have to show infringement of every element or limitation of a claim (the **all-elements rule**)

# Infringement by equivalents

## → Preview: the basic rules

- Factual question: does the defendant's product contain an **equivalent** of a claim limitation?
- The **function/way/result test**: Does the accused structure or step perform **substantially the same function**, in **substantially the same way**, to achieve **substantially the same result**?

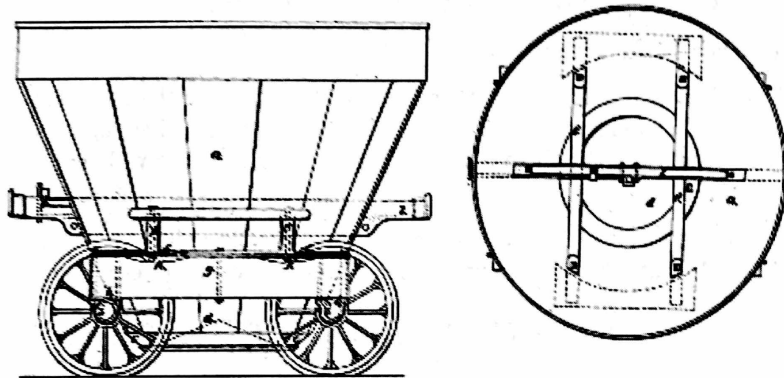
# Infringement by equivalents

## → Preview: the basic rules

- Legal question: is there a **reason to limit the doctrine of equivalents**?
- Four common reasons: **prosecution history estoppel**; the **disclosure-dedication rule**; the **all-limitations rule**; **argument-based estoppel**

# *Winans v. Denmead (1854)*

- Tech: rail car to carry coal with conical design



# *Winans v. Denmead (1854)*

- Accused product: inward-sloping section was eight-sided instead of being conical



# *Winans v. Denmead* (1854)

- Function/way/result test?
  - Function?
  - Way?
  - Result?

# *Festo v. SKKK*

- Prosecution is a negotiation between the applicant and the examiner
- What are an applicant's options when an examiner rejects a claim?

# *Festo v. SKKK*

- Prosecution is a negotiation between the applicant and the examiner
- What are an applicant's options when an examiner rejects a claim?
  - Argue
  - Amend
  - Appeal
  - Abandon

# *Festo v. SKKK*

- Prosecution is a negotiation between the applicant and the examiner
- What are an applicant's options when an examiner rejects a claim?
  - Argue – **claim construction**
  - Amend – **prosecution history estoppel**
  - Appeal
  - Abandon

# *Festo v. SKKK*

- Two amendments:
  - Two sealing rings, each with a lip on one side to hold out impurities
  - Magnetizable sleeve

# *Festo v. SKKK*

- Patent claim: Two sealing rings, with one lip each
- Accused product: One sealing ring, with lips on both sides
  - Function?
  - Way?
  - Result?

# ***Festo v. SKKK***

- Patent claim: Magnetizable sleeve
- Accused product: Non-magnetizable sleeve
  - Function?
  - Way?
  - Result?

# ***Festo v. SKKK***

- Two legal questions
  - Should the doctrine of equivalents apply to amendments for reasons other than prior art?
  - What is the scope of the doctrine of equivalents – is it a “complete bar” or a “flexible bar”?

# ***Festo v. SKKK***

- Finally, prosecution history estoppel!
- What's the principle?

# ***Festo v. SKKK***

- Finally, prosecution history estoppel!
- What's the principle?
  - If you originally claimed something broad, but then narrowed it to get a patent, you can't go back and get the broader thing through equivalents
  - The examiner thought there was something wrong with the original claim
  - It's an end run around examination

# ***Festo v. SKKK***

- Finally, prosecution history estoppel!
- What's the principle?
  - And this has little to do with the reason for the narrowing
  - Prior art
  - Written description/enablement
  - Any other reason that relates to patentability

# ***Festo v. SKKK***

- Flexible bar versus complete bar
- Argument for a complete bar?

# ***Festo v. SKKK***

- Flexible bar versus complete bar
- Argument for a complete bar?
  - Administrability – the flexible-bar rule was unpredictable and promoted uncertainty

# ***Festo v. SKKK***

- Flexible bar versus complete bar
- Argument for a flexible bar?

# ***Festo v. SKKK***

- Flexible bar versus complete bar
- Argument for a flexible bar?
  - The prosecution history can tell us what a patent doesn't mean, not what it does mean
  - Just because you've surrendered some claim scope doesn't mean that you've suddenly written the perfect claim

# ***Festo v. SKKK***

- New rule: when can you get equivalents even after a claim was narrowed during prosecution?



# *Festo v. SKKK*

- New rule: when can you get equivalents even after a claim was narrowed during prosecution?
- If the equivalent was unforeseeable; or
  - If the reason for the amendment was tangential to the equivalent you're trying to capture; or
  - For "some other reason"

# *Festo v. SKKK*

- Unforeseeable technology
- mechanical fastener → Velcro®
  - Wright brothers' wing warping → wing flaps or ailerons

# Festo v. SKKK

→ Tangential: *Primos, Inc. v. Hunter's Specialties*

- Claim: required a "plate"
- Amendment: added "differentially spaced" limitation
- Accused product: used a dome instead of a "plate"
- Court: the amendment had nothing to do with the "plate," so it was tangential

# Infringement by equivalents

→ Preview: the basic rules

- Legal question: is there a **reason to limit the doctrine of equivalents?**
- Four common reasons: **prosecution history estoppel**; the **disclosure-dedication rule**; the **all-limitations rule**; **argument-based estoppel**

# Infringement by equivalents

## → Disclosure-dedication rule

- Another form of prosecution-history estoppel
- *Johnson & Johnston* (M&D 826-27): claim required “sheet of aluminum”
- Specification: one could use “other metals, such as stainless steel or nickel alloys”
- Court: patentee had disclosed and dedicated non-aluminum metals to the public

# Infringement by equivalents

## → All-limitations rule

- The doctrine of equivalents cannot apply if it would vitiate an entire claim limitation
- *Freedman Seating v. American Seating*: a rotatably mounted seat cannot be the equivalent of a slidably mounted seat
- *Asyst v. Emtrak*: an unmounted part cannot be the equivalent of a mounted part
- *Novartis v. Abbott Labs*: a surfactant cannot be the equivalent of a nonsurfactant

# Infringement by equivalents

## → All-limitations rule

- But: *Cadence v. Exela* (Fed. Cir. 2015)
- Court: limitation requiring X before Y can be equivalent to Y before X
- “A holding that the doctrine of equivalents cannot be applied ... because it ‘vitiates’ a claim limitation is nothing more than a conclusion that the evidence is such that no reasonable jury could conclude that an element of an accused device is equivalent to an element called for in the claim....”

# Infringement by equivalents

## → Argument-based estoppel

- An applicant who surrenders claim scope in argument before the examiner cannot regain that scope
- *PODS v. Porta Stor*: To overcome a prior-art rejection, the applicant argued: “As the Examiner acknowledges, the Dousset reference clearly lacks the teachings of the singular rectangular-shaped frame.”
- Court: PODS cannot get a non-rectangular frame through the doctrine of equivalents

# Experimental use

## Experimental use

- Two kinds of experimental use:
- Common-law experimental use – very narrow
  - § 271(e)(1) experimental use – fairly broad, but basically only for pharmaceuticals and medical devices

# Experimental use

- Two kinds of experimental use:
  - Common-law experimental use – very narrow
  - § 271(e)(1) experimental use – fairly broad, but basically only for pharmaceuticals and medical devices

## *Madey v. Duke Univ.*

- Madey: Physics professor
  - Stanford → Duke → Hawaii
  - Owns laser patents
  - At Duke: ran free electron laser lab
  - After: Duke kept using his patents

# *Madey v. Duke Univ.*

→ Issue: Is Duke's use "experimental" and so noninfringing?

# *Madey v. Duke Univ.*

→ Issue: Is Duke's use "experimental" and so noninfringing?

- Court: no, Duke infringes
- Experimental use applies to uses "for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry"
- Not a commercial/noncommercial line
- Duke is in the business of research

# Experimental use

→ So why so narrow?

# Experimental use

→ So why so narrow?

- No statutory hook whatsoever
- Congress can create an exception if it wants
- Universities are de facto commercial enterprises
- Would harm incentive to create research tools



# Experimental use

→ Should it be broader?

# Experimental use

→ Should it be broader?

→ Arguments for yes:

- Improvements and follow-on research
- Experiments are unpredictable, and if one works, then a license is needed before commercialization
- Experiments provide value to society and little added innovation incentive

# Experimental use

- Should it be broader?
- Arguments for no:
  - Is a hard line-drawing problem: Which research is experimental?
  - Could hurt development of research tools
  - Real experiments won't be sued, so maybe the law is fine as is

# Experimental use

- Internationally: much broader
  - “[N]o doubt if a man makes things merely by way of bona fide experiment, and **not with the intention of selling and making use of the thing so made for the purpose of which a patent has been granted**, but with the view to improving upon the invention the subject of the patent, or with the view to seeing whether an improvement can be made or not, that is not an invasion of the exclusive rights granted by the patent. Patent rights were **never granted to prevent persons of ingenuity exercising their talents in a fair way.**”

# Experimental use

- Two kinds of experimental use:
- Common-law experimental use – very narrow
  - § 271(e)(1) experimental use – fairly broad, but basically only for pharmaceuticals and medical devices

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

\* \* \*

(e) (1) It shall **not be an act of infringement to make, use, offer to sell, or sell** within the United States or import into the United States **a patented invention** (other than a new animal drug or veterinary biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act and the Act of March 4, 1913) which is primarily manufactured using recombinant DNA, recombinant RNA, hybridoma technology, or other processes involving site specific genetic manipulation techniques) **solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs** or veterinary biological products.

\* \* \*

# Experimental use

- § 271(e)(1) experimental use:
- Applies broadly to developing and testing pharmaceuticals and medical devices
  - Applies to most phases of the development process, if “appropriate” for regulatory submission
  - Might even apply to research tools!

**(Post-AIA) Prior  
commercial use**

# Prior commercial use

- Prior use is not normally a defense!
  - Prior use is relevant if it's prior art
  - Public use / on sale
  - Trade secrets may not be prior art!
  - (Also: invalidity requires clear and convincing evidence)

# Prior commercial use

- AIA: Prior commercial use can be a defense, but it's limited
  - Clear and convincing evidence
  - Only processes or things used in manufacturing or commercial processes
  - Only post-AIA patents
  - Only use that comes (a) more than a year before the effective filing date, and (b) before the § 102(b) grace period begins to run
  - Not transferrable between companies or sites
  - Penalty for unreasonable assertions: attorney fees

# Prior commercial use

- So far, not much use
  - No reported cases in Westlaw

**Next time**

# Next time

→ Indirect and joint infringement