Infringement Part 1

Michael S. Sinha, MD, JD, MPH
Adjunct Faculty, Northeastern University School of Law
Visiting Scholar, NUSL Center for Health Policy and Law
Research Fellow, Harvard-MIT Center for Regulatory Science
Affiliated Researcher, Program on Regulation, Therapeutics, and Law (PORTAL)
Teaching Faculty, Harvard Medical School Center for Bioethics
Lecturer, Department of Health Sciences, California State University, East Bay

Syllabus

• Updated syllabus will be available online
  • SUBJECT TO CHANGE! Consult the online syllabus!
  
• No class November 24th (Thanksgiving break)
• Guest speakers confirmed for December 1:
  • Joanna Brougher, JD, MPH
  • Kelly Morgan, JD, PhD
  • Jonathan Darrow, SJD, JD, MBA


“Shark Tank” Presentations:

• Prepare 1-2 slides (emailed to me) containing Figures and any other details/marketing content you’d like.
  • Due to me by email before 12pm on December 8th
• Each of you will get about 10 minutes total for pitching your invention to the class, answering questions, and voting
  • ~3-5 minutes to present, ~2-3 minutes for questions
• After each presentation, the rest of the class will anonymously vote as to whether they’d like to invest $10,000, $50,000, or $100,000 on your invention.

Patentability Requirements

• Patentable Subject Matter
• Utility
• Novelty
• Nonobviousness
• Adequate Disclosure
  • Written Description
  • Enablement
  • Best Mode
• Claim Definiteness

Levels of Review

• USPTO Actions (e.g., subject to Administrative Procedure Act)
  • District Court (E.D. Va. or other)
  • Federal Circuit
  • Supreme Court
• Infringement or Declaratory Judgment Suits
  • District Court or International Trade Commission (Section 337 investigations)
  • Federal Circuit (generally)
  • Supreme Court

Standards of Review

Court-to-Appellate-Court Review
• “Clear Error” for Questions of Fact
• De Novo for Legal Questions

USPTO-to-Appellate-Court Review
• “Substantial Evidence” for Questions of Fact
  • Zurko (1999); Gartside (Fed. Cir. 2000)
• Statutory Interpretation
  • Skidmore, Not Chevron, Deference on Substance (Merck)
  • Chevron Deference for USPTO’s “Procedural Rules”
Standards of Review

Questions of Fact
• Anticipation
• Written description
• *Graham* factors for nonobviousness
• Infringement (literal or via Doctrine of Equivalents)

Questions of Law
• Claim construction & definiteness
• Printed publication
• Statutory bar (e.g., public use, “on sale”)
• Nonobviousness (can still award summary judgment or JNOV)
• Enablement

Patent Claims: Often the FOCUS of the Dispute

“To use a colloquial term coined by Judge Rich, ‘the name of the game is the claim.’”


Merrill v. Yeomans (1877)

**Background**

• Patent relating to heavy hydrocarbon oils
• Does the patent cover the oils or only the process for making the oils?
• Relevant language: “I claim the above-described *new manufacture of the deodorized heavy hydrocarbon oils*, suitable for lubricating and other purposes, free from the characteristic odors of hydrocarbon oils, and having a slight smell like fatty oil, from hydrocarbon oils, by treating them substantially as is here in before described.

**Merrill v. Yeomans (1877)**

J. Miller’s opinion for the Court

• “The growth of the patent system in the last quarter of a century …

**US Patent Grants, 1800-1850**

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Merrill v. Yeomans (1877)

J. Miller’s opinion for the Court

• “The growth of the patent system in the last quarter of a century … require[s] accuracy, precision, and care in the preparation of all the papers on which the patent is founded …

History of Claiming:
A Relatively New Requirement

• Patent Act of 1836, §6
  • Patent applicant “shall deliver a written description …; and shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery…”

• Patent Act of 1870, §26
  • Patent applicant “shall file … a written description …; and he shall particularly point out and distinctively claim the part, improvement, or combination which he claims as his invention or discovery; and said specification and claim shall be signed …”

§112(f) & MpF/SpF Limitations

“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

• The claim limitation is presumed to invoke § 112(f) when it explicitly uses the phrase “means for” or “step for” and includes functional language.
**Keystone Bridge v. Phoenix Iron (1877)**

- [The inventor] “shall particularly specify and point out the part, improvement, or combination which he claims as his own invention or discovery.”
- “The duty [to ascertain the exact invention] is now cast upon the Patent Office … the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office … [w]hen the terms are distinct (as they always should be), the patentee, in a suit brought upon the patent, is bound by it.”

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**Interactive Gift v. Compuserve (Fed. Cir. 2001)**

**Claim Construction as an Algorithm?**

1. **Intrinsic Evidence**
   - “the analytical focus must begin and remain centered on the language of the claims themselves”
   - Specification and Prosecution History
   - Patentee as “own lexicographer”
2. **Dictionaries**
3. **Other Extrinsic Evidence**
   - “[e]nsures that [a judge’s] understanding of technical aspects of the patent is not entirely at variance with the understanding of one skilled in the art”

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**Interactive Gift v. Compuserve (Fed. Cir. 2001)**

“If the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed. If however a claim limitation is still not clear, we may look to extrinsic evidence to help resolve the lack of clarity. Relying on extrinsic evidence to construe a claim is "proper only when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence.”

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**Phillips v. AWH Corp. (Fed. Cir. 2005)**

**Background**

- Claim 1 required “baffles”
- Specification only disclosed “baffles” in the form of non-perpendicular structures.
- But:
  - Other claims had specific limitations on angling.
  - Specification described purposes other than “deflect[ing] projectiles.”
- Fed. Cir. concluded that recited “baffles” did not have to be non-perpendicular.
**Phillips v. AWH Corp. (Fed. Cir. 2005)**

**J. Bryson’s opinion for the Court**

- Claims’ determination of patent scope = “a ‘bedrock principle’”
- General applicability of “ordinary and customary meaning” according to ordinary artisan
- “[N]o magic formula”
  - Court not “barred from considering any particular sources or required to analyze sources in any specific sequence … [W]hat matters is for the court to attach the appropriate weight.”

**Sources of Information**

- Claims
- Language in claim being construed
- Other claims
  - consistency of usage
  - doctrine of claim differentiation

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**Phillips v. AWH Corp. (Fed. Cir. 2005)**

**J. Bryson’s opinion for the Court**

**Sources of Information**

- Claims
- Specification
  - “[A]lways highly relevant” & “[u]sually” “dispositive”
  - Description of “invention”
  - “[L]exicography” or disclaimer

- Prosecution History
  - “if in evidence”
  - “Yet … it often lacks the clarity of the specification and thus is less useful …”

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**Phillips v. AWH Corp. (Fed. Cir. 2005)**

**J. Bryson’s opinion for the Court**

**Sources of Information**

- Claims
- Specification
- Prosecution History
- Extrinsic Evidence
  - Generally seen “as less reliable”
  - Categories: “[D]ictionaries and treatises” or “[E]xpert testimony”

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**Based on the Federal Circuit’s opinion, can you tell what was the nonobvious advance associated with the invention in Phillips?**

- Nothing anywhere in the opinion mentions why the wall described in the claims and specification is patentable.
- This approach to claim interpretation seems radically inconsistent with Supreme Court precedent, which held that, in construing a patent, a court should “first look[] into the art to find what the real merit of the alleged discovery or invention is and whether it has advanced the art substantially.” *Eibel Process v. Minnesota & Ontario Paper* (1923)
Claim Construction: Canons & Doctrines

1. Impose a narrow construction to save validity. (At the Federal Circuit this is now the tie breaker “of last resort.”)
2. Don’t “read in” limitations from the specification. (Frequently invoked by the Federal Circuit, but it is naturally in tension with #3)
3. Contextual meaning may trump ordinary meaning. (e.g., if the specification gives a more narrow meaning to a particular word in a patent than its ordinary meaning) 
4. Patentees may be their own lexicographers. (Patentees are free to define words to have special meanings within their patents.)
5. Patentees may also disclaim a broad scope of meaning for terms, and such disclaimers may come in the specification or in representations made during prosecution.
6. The rule of so-called “claim differentiation” is that claims should be interpreted to give each claim some scope different from the scope given to other claims.
7. A claim may be interpreted in light of the purpose or goal of the invention.

Wright Co. v. Paulhan (S.D.N.Y. 1910)

Background

- Wright brothers’ patent on a “flying machine” that could maintain stability in flight via “wing warping with rudder correction”

J. L. Hand’s opinion for the Court

- The Wright patent involved more than mechanics – it taught the concept of obtaining lateral equilibrium through alterations in the angle of incidence of the airfoils and balancing deflections of the rudder to the left or right.
- “the invention is not of a machine, it is not an invention of this means of so turning a rudder, but it is an invention of a combination of which this action of the rudder is a part”
- Use and combination of previously-discovered techniques, “contrary to the assumptions of earlier spectators, who had thought that stability might be achievable by adjusting the wings alone.”

Abbott Laboratories v. Sandoz
**Abbott Laboratories v. Sandoz (Fed. Cir. 2009)**

**Background**
- Patent at issue is a secondary drug patent: a crystalline version of the antibiotic cefdinir.
- The '507 patent was not the first cefdinir patent. The '334 patent describes the discovery of cefdinir as a compound demonstrating high antimicrobial activity. It expired on May 6, 2007.

**J. Rader’s opinion for the Court**
- “In sum, it is both unnecessary and logically unsound to create a rule that the process limitations of a product-by-process claim should not be enforced in some exceptional instance when the structure of the claimed product is unknown and the product can be defined only by reference to a process by which it can be made.”
- “Such a rule would expand the protection of the patent beyond the subject matter that the inventor has particularly pointed out and distinctly claimed” as his invention.

**Limelight Networks v. Akamai Technologies (2014)**

**Background**
- Patent exclusively licensed to Akamai covered method of “tagging” content for storage on servers and providing access to the tagged content.
- Limelight placed content on servers but “required its customers to do their own tagging.”
- District Court found infringement, 3-judge panel at the Federal Circuit affirmed, en banc Federal Circuit reversed.

**J. Alito’s opinion for the Court**
- “[i]nducement liability may arise ‘if, but only if, [there is] … direct infringement”
- “A method patent claims a number of steps; under this Court’s case law, the patent is not infringed unless all the steps are carried out.”
- “A party who performs some of the steps itself and induces another to perform the remaining steps that constitute infringement has precisely the same impact on the patentee as a party who induces a single person to carry out all of the steps.”

**Markman v. Westview Instruments**
**Markman v. Westview Instruments (1996)**

**Background**

- Claimed “inventory … system” comprising
  1. “input device” for entering data on “transactions having articles associated”;
  2. “data processor” with “means to maintain an inventory total”;
  3. “printer” to make bar-coded “written record”; &
  4. “optical scanner”; “whereby said system can detect & localize spurious additions to inventory as well as spurious deletions.”

- Jury found infringement by product “list[ing dry-cleaning] charges … on bar-coded tickets.”
- District Court granted judgment as a matter of law of non-infringement, holding “inventory” in claim must include “actual physical inventory.”
- Federal Circuit affirmed

**J. Souter’s opinion for the Court**

- Claim Construction = “exclusively” a judge issue, not a jury issue
  - 7th Amendment jury right applies to “infringement cases,” but does not apply to claim construction.
  - “[F]unctional considerations” relevant “[w]here history and precedent provide no clear answers”

- Competence Rationale
  - “The construction of written instruments is one of those things that judges often do and are likely to do better than jurors.”
  - “[C]redibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document …”

- Uniformity Rationale
  - “[W]e see the importance of uniformity … as an independent reason … it was just for the sake of such desirable uniformity that Congress created … the Federal Circuit.”

**Claim Construction after Markman**

- *Markman* only decided that the jury would have no role in claim construction
- The case did NOT decide the proper allocation of responsibility among other actors in the patent system – Federal Circuit, trial court, USPTO
- What is the appropriate standard for appellate review?
Background

• Patent has a single claim:
  1. A method of manufacturing copolymer-1, comprising reacting protected copolymer-1 with hydrobromic acid to form trifluoroacetyl copolymer-1, treating said trifluoroacetyl copolymer-1 with aqueous piperidine solution to form copolymer-1, and purifying said copolymer-1, to result in copolymer-1 having a molecular weight of about 5 to 9 kilodaltons.

• Patentee Teva argued “molecular weight” means “peak average molecular weight.”

• Sandoz, saying Fig. 1 of patent contradicts Teva construction, argued claim “is fatally indefinite” because it could refer to (1) peak average, (2) number average, or (3) weight average.

• District Court adopted Teva construction after crediting Teva expert’s testimony that Fig. 1 does not contradict it.

• Federal Circuit rejected “Teva’s expert’s explanation … without finding … District Court’s contrary determination … ‘clearly erroneous.’”

J. Breyer’s opinion for the Court

• Further blow to the notion of Patent Exceptionalism
  • Federal Circuit must apply “clearly erroneous” standard to factfinding underlying claim construction—same standard for “trial judge’s factfinding [as] in other cases.”
  • FRCP 52(a)(6) “does not make exceptions”
  • Legacy of Markman
    • As indicated in Markman, claim construction can have “evidentiary underpinnings”
    • Seventh Amendment jury question was resolved on ground of judge’s comparative competence

• Deferential review applied only when a district court has made findings about “extrinsic evidence”

• When a court only reviews “intrinsic evidence” (patent claims, specifications, prosecution history), de novo review is appropriate because “the judge’s determination will amount solely to a determination of law”

• Does this distinction make sense to you?

15 Minute Break