The Scope of Patents
Claim Construction & Patent Infringement

Introduction to Intellectual Property Law & Policy
Professor Wagner
Lecture Agenda
Claim Construction
(Literal) Patent Infringement
The Doctrine of Equivalents
What Does Claim Construction Look Like?
What is Claim Construction?

**Claims** define the scope of the patent.

The scope of disclosure
The relationship to prior art
The scope of the right to exclude
What is Claim Construction?

Claims define the scope of the patent.

Claim Construction is the process of determining the scope of the patent.
What is Claim Construction?

1. A sitting device comprising:
   A generally horizontal surface
   A generally vertical surface
   At least four legs
What is Claim Construction?

1. A sitting device comprising:
   - A generally horizontal surface
   - A generally vertical surface
   - At least four legs
Who Decides Claim Construction?
The Court describes claim construction as a ‘mongrel practice’.

The court allocates authority to judges.

For functional reasons:
Judges are better at interpreting written documents
It should better enable Federal Circuit review of decisions
The Centrality of Claim Construction

“In the patent law, the name of the game is the claims” (Judge GS Rich, 1990)
The Debate over Allocation of Authority

In Markman v Westview (1996), the Supreme Court gave claim construction to judges. This meant that the Federal Circuit has dominated claim construction: appellate review has been “de novo” (no deference, a re-do). This in turn resulted in high rates of reversals and dissatisfaction.

In Teva v Sandoz (2015), the Supreme Court revisited, and held that review of claim construction was mostly “de novo”.
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The Interpretive Process of Claim Construction
The Interpretive Process

Phillips v. AWH (2005)
[ The basic infringement inquiry is a two step process ]

Construction of the claim (issue of law)
Comparison of claim to accused device (issue of fact)

Key issue in Phillips: meaning of the term “baffles”
Phillips v. AWH (2005)

“Means disposed inside the shell for increasing its load bearing capacity comprising internal steel **baffles** extending inwardly from the steel shell walls.”
<table>
<thead>
<tr>
<th>Majority</th>
<th>Dissent</th>
</tr>
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<tbody>
<tr>
<td>Baffles must be at angles other than ( 90^\circ ) to the wall</td>
<td>Baffles can be at any angle</td>
</tr>
<tr>
<td>Specification describes deflection as a purpose of the invention; ( 90^\circ ) baffles are part of the prior art</td>
<td>Nothing in the claims suggests a specific angular requirement</td>
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**Phillips v. AWH (2005)**

“Means disposed inside the shell for increasing its load bearing capacity comprising internal steel from the steel shell walls.”
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<tr>
<th><strong>“Holistic” Methodology</strong></th>
<th><strong>“Procedural” Methodology</strong></th>
</tr>
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<tbody>
<tr>
<td>Primary focus on ‘context’ of claim language, via inferences from specification, prosecution history; little interest in dictionaries, ‘plain meaning’</td>
<td>Primary focus on ‘ordinary meaning’ of claim language; specification only useful if it provides a clear definition; typical use of dictionaries, experts for ‘ordinary meaning’</td>
</tr>
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<td>“Procedural” Methodology</td>
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There is no magic formula or catechism for conducting claim construction....

The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.
<table>
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<tr>
<th>Claims ordinarily given their ordinary and accustomed meaning</th>
<th>Claims are intended to be read as part of the specification</th>
<th>“[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning is that which a PHOSITA would ascribe</td>
<td>“The interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim.”</td>
<td>Patentees can be their own lexicographer</td>
</tr>
<tr>
<td>Dictionaries often helpful; terms are often used in their customary manner</td>
<td>Dictionaries often unreliable; patentees often use terms idiosyncratically</td>
<td>“[T]he specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor”</td>
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“[W]hat matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.”
Non-Phillips Canons of Construction

<table>
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<th>Claims are intended to be interpreted so as to save their validity.</th>
<th>Claims are construed according to the purpose of the invention.</th>
<th>Different claims are interpreted differently. [Claim differentiation.]</th>
</tr>
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<tbody>
<tr>
<td>Claims are construed in context with the specification.</td>
<td>Limitations from the specification cannot be imported into the claim.</td>
<td>The claim shall be interpreted to cover the preferred embodiment.</td>
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</tbody>
</table>
The Federal Circuit is Deeply Divided on How to Do Claim Construction (all Federal Circuit opinions on claim construction, 1996-2012)

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<thead>
<tr>
<th></th>
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<tr>
<td>Pre-Phillips</td>
<td>203</td>
<td>393</td>
</tr>
<tr>
<td>%</td>
<td>34.1%</td>
<td>65.9%</td>
</tr>
<tr>
<td>Post-Phillips</td>
<td>42</td>
<td>74</td>
</tr>
<tr>
<td>%</td>
<td>36.2%</td>
<td>63.8%</td>
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Judges’ Methodological Approaches – Post-Phillips

The chart shows the percent of opinions coded “procedural” by various judges. The vertical axis represents the percentage, ranging from 0% to 100%. The horizontal axis lists the judges, with abbreviations for each. The bars indicate the percentage of opinions coded as “procedural” when the judge acted as an author (in red) and as a panelist (in blue).
Basics of Patent Infringement
The patent right:

The right to exclude others from...

- making
- using
- selling
- offering to sell
- importing

... within the scope of the claims.
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The patent right:
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Categories of Patent Infringement

Direct infringement
[ party to suit infringed ]

Indirect Infringement
[ 3rd party infringed, party to suit enabled ]
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Direct infringement
[ party to suit infringed ]

Indirect Infringement
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Forms of Direct Infringement

Literal Infringement

Infringement via the Doctrine of Equivalents
Forms of Direct Infringement

Literal Infringement

Infringement via the Doctrine of Equivalents
Literal Infringement

1. A writing implement comprising:
   A wooden cylinder with a hollow core
   A cylinder of graphite in the hollow core
   A small cylinder of eraser material attached to one end of the wooden cylinder

Which of the following infringes?

1. A wooden pencil with a small metal clip for shirt-pocket storage
2. A plastic pencil (body made of plastic)
3. A pencil without an eraser
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- Recall: the basic rule of literal infringement:
  - All elements of the claim must be (identically) present in the accused device

- The Doctrine of Equivalents:
  - Allows elements in an accused device to be “substantially equivalent” and still be ‘present’ for purposes of infringement
  - Thus, the basic rule of infringement changes to:
    - All elements of the claim must be (identically or equivalently) present in the accused device
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The Policy of the Doctrine of Equivalents

The Patent Law emphasizes the “public notice” function of patent claims. Does the Doctrine of Equivalents relate to this goal?
The Policy of the Doctrine of Equivalents
The Policy of the Doctrine of Equivalents

Equivalents

Claim Language

Patent Scope

Claim Language

Equivalents

Equivalents

Equivalents
The Case for the DOE

Without equivalents, a patent is a “hollow and useless thing” [Graver Tank].

The DOE furthers the Patent Law’s incentive structure. [Graver Tank, Warner-Jenkinson]

Settled expectations: Patentees assume DOE coverage when seeking patents. [Warner-Jenkinson, Festo]

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- Which of the following infringes the claim?
  - A wooden pencil with a small metal clip for shirt-pocket storage
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Limits on The Doctrine of Equivalents
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Prosecution History Estoppel

Patent ‘123 discloses a lighting system, using colored bulbs; a blue color is given as an example. The prior art contains very similar systems, including those using red colored bulbs.

Scenario 1

Original claim:
1. A lighting system comprising:
   ... a colored bulb ...

Amended claim:
1. A lighting system comprising:
   ... a blue light bulb ...

Scenario 2

Original claim:
1. A lighting system comprising:
   ... a blue light bulb ...

No amendments.
Prosecution History Estoppel

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No amendments.

Lighting systems with blue bulbs.
Lighting systems with red bulbs.
Lighting systems with green bulbs.
## Prosecution History Estoppel

### Scenario 1

**Original claim:**
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   ... a colored bulb ...

**Amended claim:**
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- Lighting systems with **blue** bulbs.
- Lighting systems with red bulbs.
- Lighting systems with green bulbs.

### Scenario 2

**Original claim:**
1. A lighting system comprising:
   ... a blue light bulb ...

No amendments.

- Lighting systems with **blue** bulbs.
- Lighting systems with red bulbs.
- Lighting systems with **green** bulbs.
The result is that patentees have a (strong) disincentive to amend claims — and thus an incentive to claim correctly right away.

The doctrine helps enforce desirable behavior by patentees.
Recap on Infringement

Infringement analysis is a two-step process

Construction of the claim (for the judge)

Comparison of claim to accused device (for the jury)
Recap on Infringement

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Infringement analysis requires an element-by-element comparison.

Each claim element must be either literally present or equivalently (under the DOE) present.

The DOE has important limitations.
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