Infringement Part 2

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2 Variants of Infringement

Literal Infringement

• “[W]hen every limitation recited in the claim appears in the accused device, i.e., when "the properly construed claim reads on the accused device exactly”” DeMarini Sports v. Worth (Fed. Cir. 2001)

Infringement by Equivalence

• When the accused product or process features “each limitation of the claim or its equivalent” (Id.)

Doctrine of Equivalents

• “Mere colorable differences, or slight improvements, cannot shake the right of the original inventor.”
  • J. Story, Odiorne v. Winkley (C.C.D. Mass. 1814)
  • “[A]fter all aids to interpretation have been exhausted, and the scope of the claims have been enlarged as far as the words can be stretched on proper occasions courts make them cover more than their meaning will bear.”
  • J. L. Hand, Royal Typewriter v. Remington Rand (2d Cir. 1948)

Winans v. Denmead (1854)

Background

• The plaintiff claimed a car for the transportation of coal “in the form of a frustum of a cone, substantially as herein described … whereby the force exerted by the weight of the load presses equally in all directions.”
  • The defendant’s product was not in the form of a perfect cone, which has a circular cross-section. Instead, it is in the form of a multi-sided shape.
Winans v. Denmead (1854)

J. Curtis’ opinion for the Court

- The defendant’s device would infringe if it is “so near to a true circle as substantially to embody the patentee’s mode of operation, and thereby attain the same kind of result as was reached by his invention.”
- “[p]atentees sometimes add to their claims an express declaration, to the effect that the claim extends to the thing patented ... But this is unnecessary. The law so interprets the claim without the addition of these words.”
- “to copy the principle or mode of operation described, is an infringement, although such copy should be totally unlike the original in form or proportions”

Winans v. Denmead (1854)

The dissenting opinion for the Court

- “The plaintiff confines his claim to the use of the conical form, and excludes from his specification any allusion to any other. He must have done so advisedly.”
- “Fulness, clearness, exactness, preciseness, and particularity, in the description of the invention, its principle, and of the manner claimed to be invented, will alone fulfil the demands of Congress or the wants of the country.”

Graver Tank & Manufacturing v. Linde Air Products (1950)

J. Jackson’s opinion for the Court

Fairness/Utility Concerns Behind DOE

- “[T]o permit imitation of a patented invention which does not copy every literal detail would be to convert the protection of the patent grant into a hollow and useless thing,” “leav[ing] room for—indeed encourag[ing]—the unscrupulous copyist.”
- Graver Tank established the DOE debate for decades, gradually expanding the scope of patents beyond the claims

Background

- Patent on a dye purifying ultrafiltration process that takes place “at a pH from approximately 6.0 to 9.0.” That phrase was added to distinguish from a previous patent (the “Booth” patent) that disclosed an ultrafiltration process operating at a pH above 9.0.
- The parties disagree as to why the low-end pH limit of 6.0 was included as part of the claim. The accused ultrafiltration process operates at a pH of 5.0.
- The jury found infringement by equivalence, the District Court enjoined “practicing ultrafiltration … below 9.01 pH”, and the Federal Circuit affirmed.

J. Thomas’ opinion for the Court

- “Objective” Test for Equivalence
  - “[L]inguistic framework … is less important than … essential inquiry” whether “accused … contain[s] elements identical or equivalent to each claimed.”
- Alternative Tests
  - Function-Way-Result Test: each at least “substantially the same”
  - Insufficient-Differences Test
  - Interchangeability Factor

- Protecting Public Notice
- “All Elements” Rule
- Prosecution History Estoppel
  - Applies when a patentee attempts to acquire a claim scope during litigation that it surrendered during prosecution
  - “Where no explanation [for a narrowing amendment] is established …, the court should presume that” it was for “a substantial reason related to patentability” and that estoppel therefore applies.

The Court Limits DOE in Important Ways

- Requires the DOE analysis to proceed on an element-by-element basis, describing the “essential inquiry: Does the accused product or process contain elements identical or equivalent to each claimed element of the patented invention?”
- Places the burden of disproving prosecution history estoppel on the plaintiff.
- Rejects imposing any intent requirement. Evidence of “copying” is unnecessary. Indeed, “intent plays no role in the application of the doctrine of equivalents.”

Festo v. Shoketsu Kinzoku Kogyo Kabushiki

Background

• Festo amended claims, adding limitations for “sealing rings” and/or “magnetized alloy”
• District Court found no estoppel because “amendments were not made to avoid prior art.” Federal Circuit panel affirmed, but Supreme Court granted/vacated/remanded in light of Warner-Jenkinson
• Federal Circuit en banc held: estoppel applies to any narrowing amendment “to comply with the Patent Act”; resulting estoppel is “a complete bar”

J. Kennedy’s opinion for the Court

• Notice Concern: concern about “uncertainty” and its potential “chilling” of competition calling for limitation of DOE
  • “If the range of equivalents is unclear, competitors may be unable to determine what is a permitted alternative … and what is an infringing equivalent.”
  • Federal Circuit is right that “a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel”
  • Federal Circuit is wrong that such estoppel creates “complete bar” to DOE

Serial Rebuttable Presumptions

• Warner-Jenkinson presumption that narrowing amendment was “for purposes of patentability”
• Festo presumption that unexplained or for-patentability narrowing amendment is “a complete bar”
• Overcoming the Festo Presumption
  • “unforeseeable” equivalent
  • “tangential relation” to amendment
  • “some other reason”

Embodiment “X”: Infringing under DOE?

Table:

<table>
<thead>
<tr>
<th></th>
<th>Literal Claim</th>
<th>Accused Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warner-Jenkinson</td>
<td>“pH from 6.0 to 9.0”</td>
<td>pH of 5.0</td>
</tr>
<tr>
<td>Festo</td>
<td>“a pair of sealing rings”</td>
<td>Single sealing ring</td>
</tr>
</tbody>
</table>
The Festo-Warner-Jenkinson Flow Chart

SciMed Life v. Advanced Cardiovascular

SciMed Life v. Advanced Cardiovascular (Fed. Cir. 2001)

J. Bryson’s opinion for the Court

- SciMed’s patents referred to prior art catheters, identified them as using the dual lumen configuration, and criticized them as suffering from the disadvantages of having “larger than necessary shaft sizes” and being “stiffer in their distal regions than would be desired”
- Having specifically identified, criticized, and disclaimed the dual lumen configuration, the patentee cannot now invoke the doctrine of equivalents to “embrace a structure that was specifically excluded from the claims.”
- “the doctrine of equivalents cannot be employed in a manner that wholly vitiates a claim limitation”

Westinghouse v. Boyden Power Brake (1898)

Background

- Westinghouse patented the first railcar airbrake, with several improvement patents on his original invention
- New “quick action” automatic brake intended to give additional boost to brakes and activate brakes more quickly
- Crucial element in Westinghouse’s patent claims was the “auxiliary valve”
**Westinghouse v. Boyden Power Brake (1898)**

*J. Brown’s opinion for the Court*

- “[e]ven if it be conceded that the Boyden device corresponds with the letter of the Westinghouse claims, that does not settle conclusively the question of infringement.”
- “We have repeatedly held that a charge of infringement is sometimes made out, though the letter of the claims be avoided. The converse is equally true.”

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**Westinghouse v. Boyden Power Brake (1898)**

*J. Brown’s opinion for the Court*

- “The patentee may bring the defendant within the letter of his claims, but if the latter has so far changed the principle of the device that the claims of the patent, literally construed, have ceased to represent his actual invention, he [should not] be adjudged an infringer … when he has done nothing in conflict with its spirit and intent.”

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**Any questions?**