**preAIA: Novelty and Bars (patent defeating events) in §102**

- **Novelty**
  - sections (a), (e) & (g)
  - the *age* of the prior art reference is earlier
  - “keyed” to the date of invention
  - “first to invent” priority system

- **Statutory Bars**
  - sections (b) & (d)
  - if I delay I am *barred*
  - “keyed” to the filing date

- **Other patent-defeating events**
  - abandonment - §102(c)
  - derivation - §102(f)

---

**PostAIA: First to File, or, First to Publish to bar others, in §102**

<table>
<thead>
<tr>
<th>First to File Attribute</th>
<th>Novelty</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bringing the first to file does not guarantee that an applicant will obtain the patent. Novelty considers the impact of disclosure, not just filing. Novelty defeating events from § 102(a), (g) (patents, publications, public use, sales, otherwise available) that are public disclosures in the sense of § 102(b) immediately defeat novelty for all but the person who made the disclosure (or of another obtained the subject matter from such person and publicly disclosed it)</td>
<td>When an novelty defeating event exists as described immediately to the left, the first to file will obtain priority among multiple persons filing for the claimed invention. In this situation, a new strong independent invention, the first to file was the “first to the patent office” andross the patent should be ultimately issued. See, in part, § 102(a)(1) “another (first-winning) invention’s patent/application was effectively filed before the effective filing date of the challenged invention.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First to Publish Attribute</th>
<th>Novelty</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The first to publish characteristic gives (arguably) a strong and a weak grace period, one year in length in either case. The strong grace period is described immediately to the right. It is strong because anyone who files will be blocked by a novelty defeating event. The weak grace period derives from the word “disclosure” in § 102(b)(3)(A) as contrasted with “public disclosure” elsewhere in § 102(b). It is light of case law surrounding pre-AIA public use and on-sale events and arguments from the structural analogy of sections 102(a) and 102(b). Under “public use,” the pre-AIA case law treated commercially beneficial secret use of a later claimed invention as a barred event (of before the critical date) for that commercialization user who later files. The weak grace period is the year that the commercialization user (arguably) has under the AIA to file. It is weak because a public disclosure by another will cut off the weak grace period.</td>
<td>When a public disclosure of a novelty defeating event exists to do so, the “first” for priority once because she has blocked others, so long as she files within one year of her public disclosure. See § 102(b)(3)(B).</td>
</tr>
</tbody>
</table>
Prior Art References

- “anticipating” references are part of the analysis for both novelty and statutory bar patent defeating events
- What is an “anticipating” reference? (answered different ways that mean the same thing)
  - The reference “has” all the elements of the claim
  - The claim covers what is disclosed by the reference
  - The claim reads upon (or “reads on”) the reference

preAIA §102(b)
102(b) – if the applicant does not file within one year of the date of the prior art reference or activity, then the patentee is barred from applying for the patent.

<table>
<thead>
<tr>
<th>in public use or on sale</th>
<th>patented or printed publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>No purposeful hiding of use. Experimental use exception.</td>
<td>same as 102(a).</td>
</tr>
<tr>
<td>Commercial offer for sale and invention is ready for patenting</td>
<td>same as 102(a).</td>
</tr>
</tbody>
</table>

“the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States ”
**preAIA §102(a)**

102(a) – if the prior art reference occurred prior to the date of invention of what is claimed, then the claim is not novel if that reference anticipates the claim (has all the limitations/elements of the claim).

<table>
<thead>
<tr>
<th>public knowledge or used by others</th>
<th>“Public” is an implied requirement, relates to that segment of the public most interested in the technology, public if no deliberate attempts to keep it secret.</th>
</tr>
</thead>
<tbody>
<tr>
<td>patented or printed publication</td>
<td>One use is sufficient, even if private, remote or widely scattered, public if no deliberate attempts to keep it secret.</td>
</tr>
<tr>
<td>public knowledge or used by others</td>
<td>A grant of exclusive rights, evaluated for what is claimed, accessible to public &amp; not secret</td>
</tr>
</tbody>
</table>

"Public" is an implied requirement, relates to that segment of the public most interested in the technology. Public if no deliberate attempts to keep it secret.

One use is sufficient, even if private, remote or widely scattered. Public if no deliberate attempts to keep it secret.

A grant of exclusive rights, evaluated for what is claimed, accessible to public & not secret.

"the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent"
**“Printed Publication” – In re Hall (Fed. Cir. 1986)**

- Hall’s effective filing date is 2/27/79
- During September 1977 the anticipating doctoral thesis of Dr. Foldi was submitted to the Dept. of Chemistry and Pharmacy at a university in Germany
- German library says that its dissertations are made available to the public by being cataloged, indexed and placed in the collection
- Dr. Foldi’s thesis was likely available for general use during December 1977
  - This is based on library’s estimation of its typical timeliness in processing received dissertations
  - The known date of receipt was in November, 1977
- Implications if the library’s estimate is incorrect by 3 months?
  - This would put the library cataloging/indexing of the dissertation into March 1978 – how would this impact the outcome?

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**Egbert v. Lippman (1881)**

- How does Egbert deal with the following considerations in determining whether a use is “public use”?
  - Number of articles in use?
  - Number of users?
  - Significance of public observation?
  - Number of observers?
  - Extent to which observers understand the disclosed technology?
- Significance of efforts to keep it secret?
  - Presence or absence of a confidentiality agreement?
  - Can close personal relationships substitute?
**City of Elizabeth v. Pavement Co. (1877)**

- Experimental use doctrine
  - If the doctrine applies, then the public use is not a patent defeating statutory bar event under §102
- Fundamental inquiry
  - *is the use necessary to demonstrate workability of the invention, i.e., suitability for its intended purpose*
- Does doctrine apply to Mr. Nicholson’s road pavement invention?
  - Abandonment is not the issue here

---

**City of Elizabeth v. Pavement Co. (1877)**

- Must experiment on street pavement in public
  - Some experiments, such as for durability, may take time
- A use is not a “public use,” even if the public benefits, if the use is still an experiment
- Nicholson’s situation
  - He controlled the experiment, had consent and performed it on the premises of the company he had some influence over
  - Experiment had the valid purpose of testing for durability and needed the public venue to properly test this characteristic
  - While it was a long test, the length seems reasonable
  - Users did not pay any additional amounts for the use of the invention, the road was already a toll road
  - Mr. Nicholson was constantly inspecting the road and monitoring its performance, asking the toll gate operator how travelers liked it
**Experimental Use factors**

- Factors for experimental use exception to public use statutory bar – to help determine whether the experiment is leading to an actual reduction to practice:
  - Control by inventor (most important)
  - Confidentiality / secrecy agreements
  - Necessity of public testing
  - Length of test period, number of prototypes
  - Did users pay? Commercial exploitation?
  - Progress reports, monitoring, records of performance
  - The experiment must be for claimed features of the invention, or perhaps for general purpose/utility of the invention
  - Are experiments hidden?

**On Sale Bar**

- Subject of a commercial sale or offer for sale
- Intention is "ready for patenting," i.e., it is “complete,” satisfied in either of two ways:
  - Actual Reduction to Practice
    - invention in existence and proven to operate for its intended purpose
      - This could mean it has been “built” or could be met though other forms of evidence
  - OR
  - “Ready for patenting”
    - Sufficiently specific information is available to prove that the invention is fully conceived, such as drawings, technical descriptions
      - Must enable a person skilled in the art to practice the invention.
      - Analogous to a “Constructive Reduction to Practice” – a term sometimes used to refer to the filing of a patent application

- Pfaff invents new socket for Texas Instruments (TI)
  - His normal practice is not to make or test a prototype before offering to sell it in commercial quantities
  - District court rejects Wells' §102(b) On Sale Bar (OSBar) defense

1980
- Pfaff shows sketch to TI (3/17/81)
- Pfaff files for patent (4/19/82) CRITICAL DATE is thus 4/19/81
- Pfaff starts working on socket at TI's request (Nov. 1980)

1981
- Dwgs to mfg. (Feb. / Mar. 1981)
- Pfaff files first order (July 1981) First Reduced to Practice (RtoP) in summer of 1981
- TI provides Pfaff w/ written conf. of oral PO (4/8/81) 30,000 sockets, $91,155

1982


- Federal Circuit Opinion
  - Four of Six claims are invalidated by OSBar
  - The remaining two claims are invalid under the obviousness test when the four invalidated claims are considered as prior art references
    - If invalid under the OSBar, these 4 claims would be Prior Art to the two remaining claims

The 4 invalidated claims become PA as of this date, and thus the 2 remaining claims have to be judged for obviousness against them; this is a tough obviousness situation for Pfaff because the two remaining claims merely add additional elements of minor significance

TI provides Pfaff w/ written conf. of oral PO (4/8/81) 30,000 sockets, $91,155

Pfaff files for patent (4/19/82) CRITICAL DATE is thus 4/19/81

*Supreme Court*

- Well settled that an invention may be patented before an Actual Reduction to Practice (ARtoP)
  - Only reference to term RtoP in statute is §102(g)
  - This reference demonstrates that the date of the patent right is keyed to the conception date
- To file without an ARtoP, the filed application must meet the Specification Requirements (enablement, written description, best mode, definiteness), but this does not always require building a prototype

---

- Pfaff could have patented the invention at the time of the PO
  - The drawings Pfaff provided to the manufacturers described the invention with “sufficient clearness and precision to enable those skilled in the matter” to produce the invention
  - Thus, the invention was “ready for patenting” at the time of the PO
- However, even though Pfaff loses, the Supreme Court agrees that the Federal Circuit’s “substantially complete” Totality of the Circumstances (ToC) test is the wrong standard
- Inventor can both understand and control the timing of the first commercial marketing of the invention
- Here, there was a commercial offer for sale by Pfaff, a response from TI with a purchase order, and an acceptance; all at a time when the invention was “ready for patenting”
The obviousness inquiry

State of the Art

Nonobviousness “Patent-free” zone

No Hindsight!!!

§103 – The obviousness inquiry

- A patent may not be obtained
  - notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 [distinguishes from novelty],
  - if the differences between [(2) ascertain differences]
    - the claimed invention
    - and
    - the prior art are such that [(1) scope & content]
  - the claimed invention [A] as a whole [B] would have been obvious [C] before the effective filing date of the claimed invention [D] to a person having ordinary skill in the art to which the claimed invention pertains. . . . [(3) assess level of skill]

- Patentability shall not be negativied by the manner in which the invention was made
§103 – The obviousness inquiry

- Fundamental Inquiries
  - **{1}** scope & content of the prior art
  - **{2}** ascertain differences between
    - the claimed invention & the prior art
      - As a whole; claim by claim
    - for the claims at issue on a claim by claim basis
  - **{3}** assess level of skill of a POSITA
  - **{4}** “secondary” or objective indicia
    - One formulation of the list of these indicia
      - Commercial success
      - Long-felt but unsolved need
      - Failure of others
      - Prompt copying, licensing
      - Unexpected results
      - Recognizing the problem
      - Teaching “away”
      - Results unexpected
      - Disbelief / incredulity

- Graham v. John Deere Co. (US 1966)
  - Split among the circuits on Graham’s ‘798 plow shank patent
    - The 8th circuit says that the patent is invalid
      - ultimately affirmed by the Supreme Court
      - 8th applied the traditional standard of “invention”
    - The 5th circuit said that the patent was valid
      - It produced an old result in a cheaper and otherwise more advantageous way
Graham – how to deal w/ the statutory change

- How to draw the line
  - “between the things which are worth the public embarrassment of an exclusive patent and those which are not”
  - Jefferson only wrote the utility and novelty requirements into the original patent act
- Hotchkiss (US 1851)
  - (U)less more ingenuity and skill . . . were required . . . than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention. In other words, the improvement is the work of the skilful mechanic, not that of the inventor
  - 103 codifies this “additional” requirement of patentability
  - Recharacterize “invention” test as a “label”
  - Clear emphasis on new word – nonobviousness
    - Difference between the subject matter sought to be patented and the prior art
    - New statutory language not intended to change the general level of “patentable invention”
    - as evidenced by the legislative history’s apparent references to Hotchkiss

Figure 1.—GRAHAM ’791 PATENT

Figure 2.—FLEX COMPARISON

Graham 1950

Graham 791 Patent

Note that Shank flexes away from hinge plate (greatly exaggerated)

Note that Shank tends to flex when restrained by hinge plate
Two items are different in the ‘798 patent compared to the ‘811 patent:

- Stirrup and bolted connection
- Position of the shank, moved from above the hinge plate to below it

---

Graham

- **{1} scope & content of the prior art**
  - Graham ‘811
  - Glencoe device
    - Shank is above hinge plate, like the ‘811 patent, but it provides a stirrup about which the hinging action occurs.

- **{2} ascertain differences between**
  - the subject matter sought to be patented & the prior art
    - Graham ‘811
      - Does not have the stirrup & bolt
      - The shank is above the hinge plate
    - Glencoe
      - The shank is also above the hinge plate
      - Has the stirrup and has a bolt
  - for the claims at issue on a claim by claim basis
Graham

- **(3) assess level of skill of a POSITA**
  - The court notes that Graham’s expert stated that “flexing” in the ‘798 patent was not a significant feature
  - Without documenting much of its basis for saying so, the court determines that this change in the cooperation among the elements would have been obvious
    - In large part based on the belief that a POSITA would have instantly thought so
  - What is the “flexing” argument? Why is it rejected by the court?

- **(4) “secondary” or objective indicia**
  - The court does not do much with its quote:
    - Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.
  - However, this quote becomes the basis for significant development of this fourth fundamental inquiry by the Federal Circuit
For a designer starting with Asano, the question was where to attach the sensor. The consequent legal question, then, is whether a pedal designer of ordinary skill starting with Asano would have found it obvious to put the sensor on a fixed pivot point. The prior art discussed above leads us to the conclusion that attaching the sensor where both KSR and Engelgau put it would have been obvious to a person of ordinary skill.

The '936 patent taught the utility of putting the sensor on the pedal device, not in the engine. Smith, in turn, explained to put the sensor not on the pedal's footpad but instead on its support structure. And from the known wire-chafing problems of Rixon, and Smith's teaching that "the pedal assemblies must not precipitate any motion in the connecting wires," the designer would know to place the sensor on a nonmoving part of the pedal structure. The most obvious nonmoving point on the structure from which a sensor can easily detect the pedal's position is a pivot point. The designer, accordingly, would follow Smith in mounting the sensor on a pivot, thereby designing an adjustable electronic pedal covered by claim 4.

Just as it was possible to begin with the objective to upgrade Asano to work with a computer-controlled throttle, so too was it possible to take an adjustable electronic pedal like Rixon and seek an improvement that would avoid the wire-chafing problem. Following similar steps to those just explained, a designer would learn from Smith to avoid sensor movement and would come, thereby, to Asano because Asano disclosed an adjustable pedal with a fixed pivot.
<table>
<thead>
<tr>
<th>claim limitation</th>
<th>reference(s) providing elements corresponding to the limitation</th>
<th>apparent reason for POSITA to combine</th>
</tr>
</thead>
<tbody>
<tr>
<td>a support . . .</td>
<td>Asano; Redding</td>
<td></td>
</tr>
<tr>
<td>an adjustable pedal assembly having a pedal arm moveable . .</td>
<td>Asano; Redding</td>
<td></td>
</tr>
<tr>
<td>a pivot for pivotally supporting said adjustable pedal assembly . .</td>
<td>Asano</td>
<td>Not merely useful to a POSITA as an example of how to solve the “constant ratio problem” (even force for the pedal throughout its range of movement)</td>
</tr>
<tr>
<td>- position of said pivot remains constant while said pedal arm moves . .</td>
<td>Asano</td>
<td>Rixon, an adjustable pedal with electronic sensor on the footpad, discussed wire chafing problems; eliminating such problems is suggested by a fixed pivot to eliminate/reduce wire movement</td>
</tr>
<tr>
<td>an electronic control attached to said support . .</td>
<td>’936 patent (detect the pedal position on the pedal structure, not in the engine area); Smith (how to mount a sensor on the pedal’s support structure, noting wire chafing problems in Rixon)</td>
<td>Market conditions show demand for computerized throttle control, suggesting eventual use of electronic sensors to transfer pedal position to engine controls</td>
</tr>
<tr>
<td>- responsive to said pivot for providing a signal that corresponds to pedal arm position . .</td>
<td>’068 patent (modular sensor); use of modular sensors in Chevrolet trucks</td>
<td>For non-adjustable pedals, Chevrolet had used modular sensors for measuring pedal position by attachment to the rotating pedal shaft</td>
</tr>
</tbody>
</table>


**In re Bigio**

**Analogous?**

---

*IP Survey, Fall 2012, Vetter*

- Claim 1. A component for use in manufacturing articles such as printed circuit boards comprising:
  - a laminate constructed of a sheet of copper foil which, in a finished printed circuit board, constitutes a functional element and a sheet of aluminum which constitutes a discardable element;
  - one surface of each of the copper sheet and the aluminum sheet being essentially uncontaminated and engageable with each other at an interface,
  - a band of flexible adhesive joining the uncontaminated surfaces of the sheets together at their borders and defining a substantially uncontaminated central zone inwardly of the edges of the sheets and unjoined at the interface.
- RES products use gapped adhesive

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**Johnson & Johnston Assocs. v. R.E. Serv. Co (both cases together)**

<table>
<thead>
<tr>
<th>claim 1 - laminate</th>
<th>AID</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – sheet of aluminum</td>
<td>? – sheet of steel</td>
</tr>
<tr>
<td>B – copper foil</td>
<td>B – copper foil</td>
</tr>
<tr>
<td>C – band of adhesive</td>
<td>? – gapped band</td>
</tr>
</tbody>
</table>

Does the zone of "equivalents" under the DOE reach to a steel substrate sheet?
**Warner-Jenkinson v. Hilton Davis (US 1997)**

- Hilton holds the '746 patent to a process for ultrafiltration of dyes
  - Claim:
    - In a process for the purification of a dye . . . the improvement which comprises: subjecting an aqueous solution . . . to ultrafiltration through a membrane having a nominal pore diameter of 5-15 Angstroms under a hydrostatic pressure of approximately 200 to 400 psig, *at a pH from approximately 6.0 to 9.0*, to thereby cause separation of said impurities from said dye . . .
  - The Claim was amended
    - to distinguish a prior art patent, to Booth, that disclosed an ultrafiltration process operating above 9.0
    - But, disagreement as to why the lower limit is included
      - Warner says lower limit added because "foaming" below 6.0 pH
      - Hilton says process tested to 2.2 pH w/ no foaming, but gives no other reason as to why 6.0 selected

---

**Warner-Jenkinson v. Hilton Davis (US 1997)**

- Jury found patent infringed under DOE
- Federal Circuit affirms in fractured opinion
  - Dispute is over scope of DOE – i.e., scope of equivalents
- Supreme Court reverses

<table>
<thead>
<tr>
<th>Item</th>
<th>Hilton (claim)</th>
<th>Warner (allegedly infringing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pore Diameter (Angstroms)</td>
<td>5-15</td>
<td>5-15</td>
</tr>
<tr>
<td>Pressure (p.s.i.g.)</td>
<td>200-400</td>
<td>200-500</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 – 9.0</td>
<td>5.0 pH</td>
</tr>
</tbody>
</table>
**Warner-Jenkinson v. Hilton Davis (US 1997)**

- DOE, broadly applied, conflicts with the definitional and public notice function of the claims
- To resolve that tension, apply DOE on an “element by element” basis

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**Warner-Jenkinson v. Hilton Davis (US 1997)**

- Concepts are later modified by Festo
  - Where the reason for the change was not related to avoiding the prior art, the change may introduce a new element, but it does not necessarily preclude infringement by equivalents of that element
    - Festo expands this to other reasons that can trigger PHE
  - Warner-Jenkinson implements a presumption against the patentee in cases where the reason for the amendment is not revealed on the record
    - Place the burden on the patentee to establish the reason for the amendment
    - If not established, rebuttably presume that it is for a RRtoPat – in which case PHE applies to exclude what the patentee surrendered
- In the present case, no reason given for 6.0 limitation, so presumption should be evaluated on remand
**Warner-Jenkinson v. Hilton Davis (US 1997)**

- Infringement, including DOE infringement, is intent neutral and an objective inquiry

- Proper time to evaluate DOE and interchangeability for DOE purposes is at the time of infringement
  - Not at time of patent issuance
  - As a result, after-arising technology can be equivalent

---

**Warner-Jenkinson v. Hilton Davis (US 1997)**

- Linguistic framework of the DOE test
  - SSF-SSW-SSR or
  - Insubstantial Differences?
    - An analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element
Johnson & Johnston v. R.E. Service (Fed. Cir. 2002)

- J&J won DOE jury verdict against RES
- Federal Circuit reversed

Specification

- While aluminum is currently the preferred material for the substrate, other metals, such as stainless steel or nickel alloys, may be used. In some instances, polypropylene can be used.

Claim 1. A component for use in manufacturing articles such as printed circuit boards comprising:

- a laminate constructed of a sheet of copper foil which, in a finished printed circuit board, constitutes a functional element and a sheet of aluminum which constitutes a discardable element;
- one surface of each of the copper sheet and the aluminum sheet being essentially uncontaminated and engageable with each other at an interface,
- a band of flexible adhesive joining the uncontaminated surfaces of the sheets together at their borders and defining a substantially uncontaminated central zone inwardly of the edges of the sheets and unjoined at the interface.

RES products use sheet of steel as a substrate rather than aluminum
Johnson & Johnston v. R.E. Service (Fed. Cir. 2002)

- Maxwell (Fed. Cir. 1996)
  - Claiming fastening tabs between inner and outer soles
    - Disclosed, did not claim, fastening the tabs into the lining seam of the shoes
  - So, Dedicated it!
  - Policy
    - Avoided examination
    - POSITA would think its public domain

- YBM (Fed. Cir. 1998)
  - Claim magnet alloy
    - 6k to 35k ppm oxygen
      - Specification allegedly disclosed a range below 6k
    - AID used 5.45k to 6k
  - Cabined Maxwell to situations where the unclaimed alternative was “distinct”

Johnson & Johnston v. R.E. Service (Fed. Cir. 2002)

- How does the patentee protect herself?
  - Claim everything?
  - What happens if the claim is later invalidated?
  - It is in the patentee’s hands to “get it right” during prosecution
SMC’s cylinder, rather than using two one-way sealing rings, employs a single sealing ring with a two-way lip.

SMC’s sleeve is made of a nonmagnetizable alloy.

Thus, no literal infringement.

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**Festo (US 2002)**

- Should PHE
  - Apply to every type of amendment made?
    - In other words, what qualifies as an amendment for a “Reason Related to Patentability” (RRtoPat) for purposes of applying PHE to limit the DOE?
  - Bar all equivalents (complete bar)
    - Or, bar only some, i.e., the equivalents “surrendered” (flexible bar)

- Limits of language to describe technology versus policy reasons to “distinctly claim”
- The Fed. Cir. had said the flexible bar was “unworkable”
  - “the clearest rule of patent interpretation, literalism, may conserve judicial resources but is not necessarily the most efficient rule”
Festo (US 2002)

- Implications of the “indescribable” theory underlying the Supreme Court’s opinion
  - The court assumes that, under the limits of language, there is an inference that “a thing not described was indescribable”
    - Meaning that we should allow DOE to “expand” the claim element’s coverage because language does not reasonably allow for effective description of the asserted equivalent
  - In the court’s view, PHE acts to rebut this inference of “indescribability” that “authorizes” equivalents under DOE
  - When there is an amendment, the rationale for not applying the complete bar is that
    - Even though an amendment was made, that does not mean that the claim is “so perfect in its description that no one could devise an equivalent”

Festo (US 2002)

- What qualifies as a RRtoPat?
  - Traditionally, amendments triggering PHE were in response to PA
  - But, amendments related to the form of the patent, primarily §112 amendments, should also qualify as RRtoPat
    - Patentee has either
      - Conceded an inability to claim the broader subject matter or
      - At least has abandoned his right to appeal a rejection
  - Once an amendment occurs for a RRtoPat – what effect does this have on the scope of equivalents?
    - The complete bar implemented the very same literalism that the DOE exists to resist
    - Once amended, there is no more reason to treat the claim literally than there is to treat the original claim literally, except for the surrendered material
    - Courts must be cautious before disrupting the settled expectations of the inventing community
**Festo (US 2002)**

- **Presumption when there is an amendment:**
  - surrender of all subject matter between broad earlier claim and narrow amended claim
  - Patentee bears burden of rebutting the presumption

- **General principle to rebut:**
  - show at time of amendment POSITA could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent

- **Three ways to implement the general principle to rebut:**
  - equivalent unforeseeable at time of application [*foreseeability*]
  - rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question [*tangentialness*]
  - some other reason that the patentee could not reasonably be expected to have described the insubstantial substitute in question [*reasonable expectations of those skilled in the art*]

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**Festo (US 2002)**

- **Present case**
  - The amendment was made to add the sealing rings and composition of the sleeve
  - These amendments were made in response to a §112 rejection, and may also have been made for reasons having to do with PA
  - Thus, these are RRtoPat triggering the presumption
**Festo (US 2002)**

- From the press files . . .
  - Robert Bork attacked the Court of Appeals for the Federal Circuit’s (CAFC) ruling saying that it “radically undermines the patent system” with a rule that would not reduce patent litigation. Mr. Bork also stated “one thing this rule does not do is eliminate uncertainty.”
  - Bork’s second argument rested on Constitutional grounds. In essence, Mr. Bork asserted that the CAFC in *Festo* went outside the judiciary power by making sweeping changes to the patent prosecution system. Mr. Bork accused the CAFC of making legislative decisions; he argued that only Congress or the Patent Office, not the circuit court, has authority under the Constitution to make such changes in the patent system.

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**Festo (US 2002)**

- From the press files . . .
  - Lastly, Mr. Bork argued that the retroactive application of the rule would render millions of patents “virtually worthless.” Mr. Bork was referring to the millions of patent holders that are now holding on to essentially less valuable patents because prior to the decision in *Festo*, patent attorneys and inventors freely and frequently amended the claims during the examination process, often at the request of examiners seeking clarification. Mr. Bork also said that patent attorneys, fearful of triggering any claim amendments during prosecution, would seek patents that are too narrow to start with, and therefore would be of “little value” to the inventor, thereby discouraging innovation in the future. Furthermore, Mr. Bork added that “if this were done by anything other than a court, it would be a taking” in violation of the Fifth Amendment.
1. Whether rebuttal of the presumption of surrender, including issues of foreseeability, tangentialness, or reasonable expectations of those skilled in the art, is a question of law or one of fact; and what role a jury should play in determining whether a patent owner can rebut the presumption.

2. What factors are encompassed by the criteria set forth by the Supreme Court.

3. [omitted]

4. [omitted]

Foreseeability
- Objective
- Evaluated at the time of the amendment
  - “Usually, if the alleged equivalent represents later-developed technology (e.g., transistors in relation to vacuum tubes, or Velcro® in relation to fasteners) or technology that was not known in the relevant art, then it would not have been foreseeable.
  - In contrast, old technology, while not always foreseeable, would more likely have been foreseeable.
  - Indeed, if the alleged equivalent were known in the prior art in the field of the invention, it certainly should have been foreseeable at the time of the amendment.”

Tangentialness
- Objective
- Discernible from the prosecution history record
  - “whether the reason for the narrowing amendment was peripheral, or not directly relevant, to the alleged equivalent”
  - an amendment made to avoid prior art that contains the equivalent in question is not tangential

Reasonable expectations of those skilled in the art
- Narrow, linguistic limitations, probably objective
  - “When possible, it should be evaluated from the prosecution history”
1. You make AID₁ in the United States and it is the same as the Diagram except that its baffles extend inwardly from a horizontal line where they connect to the outer metal shell, but at an angle that points them upward and downward, respectively from each side, at about thirty degrees measured from the long side of the outer metal shell. In other words, their connection to the shell is horizontal, rather than vertical as shown in Diagram and as recited in the claim. A POSITA would say that the horizontally inclined baffles perform a substantially similar function in a substantially similar way with a substantially similar result. What result for an infringement claim based on the hypothetical claim?

2. Add or change the following facts from problem number one. A POSITA would say that horizontally inclined baffles perform a substantially similar function with a substantially similar result, but that the way the function is performed is not at all substantially similar. What result for an infringement claim based on the hypothetical claim?

3. Add or change the following facts from problem number one. A POSITA would say that horizontally inclined baffles are an insubstantial difference as compared to vertically inclined baffles, particularly because, according to the POSITA, all artisans would recognize that horizontally inclined baffles are interchangeable with vertically inclined baffles. What result for an infringement claim based on the hypothetical claim?

4. Add or change the following facts from problem number one. The specification of the patent containing the hypothetical claim (it is the only claim in the patent, and was the only originally filed claim) states: “for any purpose that the baffles need to fulfill in this invention, horizontally inclined baffles will meet that need.” What result for an infringement claim based on the hypothetical claim?