

Patent Law

- Slides for Module 8
- Infringement

Infringement

- 35 U.S.C. §271
 - (a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.



Claim Interpretation – Sources / Canons / Procedure		
Source(s)		Canons
Plain meaning	Dictionaries	Claim / Specification relationship - Don't read a limitation into a claim - One may look to the written description to define a term already in a claim limitation Presumptive breadth - Claim should be interpreted so as to preserve validity - If a claim is subject to two viable interpretations, the narrower one should apply Others - Inventor's interpretations after issuance are given no weight - Claim differentiation - <u>Patentee can't construe narrowly before the PTO and broadly in court</u>
Specification	The specification can be used to enlighten the court as to the meaning of a claim term	
Prosecution history	Effect on claim construction? <u>Considered if in evidence</u>	
Extrinsic Evidence	Proper to resort to extrinsic evidence?	
<ul style="list-style-type: none"> ● Procedure <ul style="list-style-type: none"> ● <u>Markman</u> – the meaning of the claims is a question of law, and thus subject to de novo review and a matter for the judge, not the jury 		

Infringement – <u>Autogiro</u> (Ct. Claims 1967)
<ul style="list-style-type: none"> ● Claims <ul style="list-style-type: none"> ● Even if free from ambiguity, no limit on reviewing sources of interpretation ● Approximate precision of words & unintended idea gaps ● Patentee as lexicographer <ul style="list-style-type: none"> ● “lurking in the background are documents that may completely disrupt initial views on [the claim’s] meaning” ● Canons <ul style="list-style-type: none"> ● Only add confusion to the problem of claim interpretation <ul style="list-style-type: none"> ● But, they are a BIG PART of making arguments about claim construction ● Sources <ul style="list-style-type: none"> ● File Wrapper estoppel (in claim construction, sometimes called “argument estoppel”) <ul style="list-style-type: none"> ● What matters is the applicant’s acquiescence with regard to the PA or in accepting a limitation

Infringement – Autogiro (Ct. Claims 1967)

- **her-me-neu-tics 1.** The science and methodology of interpretation, especially of scriptural text
- Interpretation \neq construction
 - “During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow”
- Defendant’s intent is irrelevant to infringement inquiry
 - But, may be relevant to indirect infringement (inducement, contributory)

Literal Infringement – Markman v. Westview, (Fed. Cir. 1996) (en banc)

- System that is
 - “capable of monitoring and reporting upon the status, location and throughput of inventory in an establishment”
 - Clothing sorted and grouped for processing, later “desorted” for return to customer
- Written record of computer record of initially logged customer/transaction information
 - Record has various portions

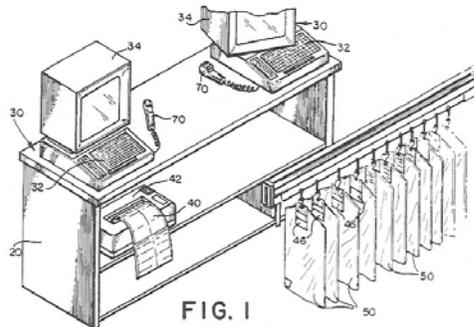


FIG. 1

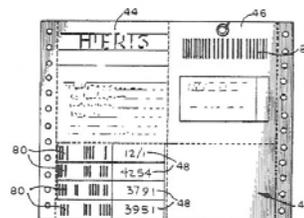


FIG. 2

Markman

- Written record
 - Customer ticket or receipt
 - Management ticket copy
 - Plurality of article tags
- Accused device – made by Westview
 - Two separate items
 - DATAMARK – print tickets, retain only invoice list
 - Stationary unit, keyboard, display, processor, printer
 - Prints a bar-coded ticket
 - Retains permanently in memory only the invoice number, date and cash total
 - DATASCAN
 - Portable device, download invoice list to it, scan tickets in the shop to determine whether invoices are missing

Markman

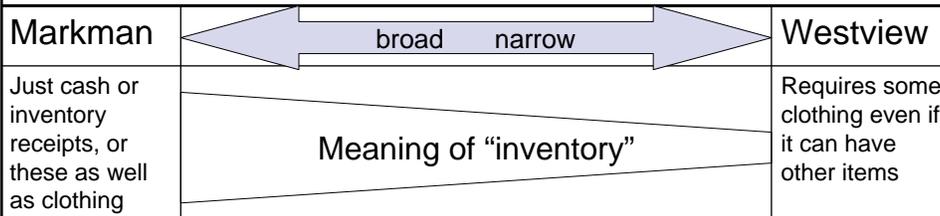
1. The inventory control and reporting system, comprising:	
a data input device for manual operation by an attendant, the input device having switch means operable to encode information relating to sequential transactions, each of the transactions having articles associated therewith, said information including transaction identity and descriptions of each of said articles associated with the transactions;	
a data processor including memory operable to record said information and means to maintain an inventory total , said data processor having means to associate sequential transactions with unique sequential indicia and to generate at least one report of said total and said transactions, the unique sequential indicia and the descriptions of articles in the sequential transactions being reconcilable against one another;	
a dot matrix printer operable under control of the data processor to generate a written record of the indicia associated with sequential transactions, the written record including optically-detectable bar codes having a series of contrasting spaced bands, the bar codes being printed only in coincidence with each said transaction and at least part of the written record bearing a portion to be attached to said articles ; and,	
at least one optical scanner connected to the data processor and operable to detect said bar codes on all articles passing a predetermined station,	
whereby said system can detect and localize spurious additions to inventory as well as spurious deletions therefrom.	

Markman

- Claim construction – miscellaneous points
 - Prosecution history and specification should not be used to “enlarge, diminish or vary” the limitations in the claims
- Extrinsic evidence
 - Includes expert and inventor testimony, dictionaries, and learned treatises
 - This evidence may be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history
 - It may demonstrate the state of the prior art at the time of the invention

Markman

- It was proper for district court to hear two items of intrinsic evidence & proper to reject it to the extent it contradicted the court’s claim construction of the claim terms
 - Testimony from Markman himself
 - Testimony from Markman’s patent expert
- Disputed claim term – “inventory”



Markman

- Claim construction
 - Sources
 - Plain meaning of term “inventory”? – minimal use of this source
 - Language of the claim – very important source
 - How is the word used in the claim
 - Use of inventory in the claim does not apply well if dollars or receipts are inserted – these items don’t move through the system the way clothing does
 - One can’t localize dollars or invoice totals – they don’t move through the system
 - Specification
 - Pervasively uses the term inventory to refer to articles of clothing
 - Prosecution history
 - Markman amended claim 1 over an obvious rejection to add the language
 - whereby said system can detect and **localize spurious additions to inventory** as well as spurious deletions therefrom
 - Arguments to examiner – inventory is a running list in items input and output from the cleaning system
 - Extrinsic evidence of Markman and his patent expert
 - Court is free to use or ignore

Markman

- **in-ven-to-ry** *n.* **1. a.** A detailed, itemized list, report, or record of things in one's possession, especially a periodic survey of all goods and materials in stock. **b.** The process of making such a list, report, or record. **c.** The items listed in such a report or record. **d.** The quantity of goods and materials on hand; stock. **2.** An evaluation or a survey, as of abilities, assets, or resources. *v.* **1.** To make an itemized report or record of. **2.** To include in an itemized report or record.

Markman - notes

- Is claim construction a “mongrel” mixed fact/law practice?
- Effect of Markman?
 - Benefits / disadvantages of the court determining claim meaning
 - Benefits / disadvantages of a de novo standard or review
- Patentee’s commercial embodiment (typically disclosed somewhat in the specification) is not relevant to comparison of claim to alleged infringing product/process
 - But, at times, it becomes relevant in claim construction
 - BE CAREFUL – sometimes court somewhat “mix” the construction/comparison steps
 - CCH Fitness in essence does this



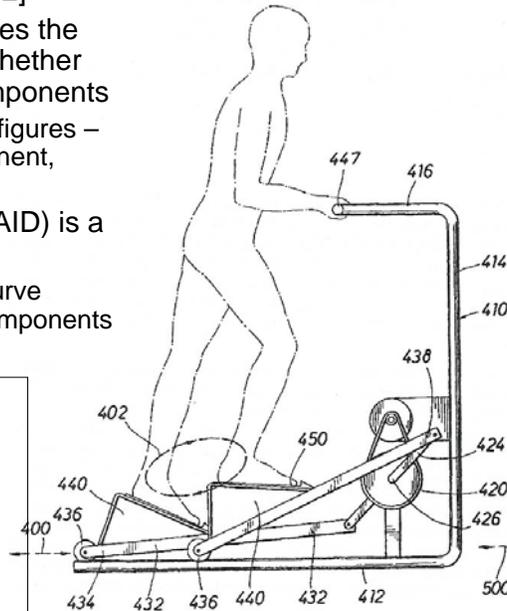
Markman - notes

- Vitronics (1996) – intones a rigid-ness to the hierarchy of sources for claim construction evidence
 - Dictionaries are a special “favored” form of extrinsic evidence
 - Extrinsic evidence can’t contradict or vary clear claim terms
 - Inventor’s subjective intent has no effect
- Pitney Bowes (1999) – clarifies
 - Not a prohibition on hearing/examining extrinsic evidence, even if clear claims
 - Merely a warning not to rely on it to contradict meaning discernable from the intrinsic evidence
 - Concurrence – trial level claim construction benefits from expert testimony (technological understanding, POSITA standard, patent process itself)

CFC Fitness v. Brunswick, (Fed. Cir. 2002) (Michel)

- “reciprocating members” [432]
- Nothing in 3 patents describes the shape of the members, or whether they are one or multiple components
 - other than the embodiment figures – which show a single component, straight bar
- Accused Infringing Device (AID) is a Life Fitness product
 - AID has pedal levers that curve upward and use multiple components to attach to crankshaft

9. An apparatus for exercising comprising: a frame having a base portion adapted to be supported by a floor; first and second *reciprocating members*, each reciprocating member having a first and a second end, a portion of said first and second reciprocating members being adapted for substantially linear motion;....



CFC Fitness v. Brunswick, (Fed. Cir. 2002) (Michel)

- District court analysis
 - “reciprocating” refers to back and forth movement
 - Parties agreed on this term
 - Illustrations of members show
 - one contiguous piece of hard material, no connections or joints
 - a straight bar
- Federal Circuit
 - Heavy presumption of ordinary and customary meaning
 - Particularly when a claim recites general structure – construe for all known types of that structure
 - Dictionary meaning can inform this inquiry – so long as it does not fly in the face of the disclosure
 - Patentees need not disclose every conceivable and possible future embodiment of his invention
 - Ways to constrict the ordinary meaning of a claim term

CFC Fitness v. Brunswick, (Fed. Cir. 2002) (Michel)

- Federal Circuit
 - Ways to constrict the ordinary meaning of a claim term
 - Patentee lexicographer
 - But, lexicographic definition must be clear and precise
 - Also, some cases say it cannot be repugnant to the ordinary meaning of the word
 - Distinguish from prior art
 - Claim term chosen by the patentee deprives the claim of clarity, requiring resort to the other intrinsic evidence
 - Step or Means plus function
 - First source – language of the claim & term at issue
 - "member"
 - "structural unit such as a ... beam or tie, or a combination of these" [technical dictionary]
 - "distinct part of a whole" [regular dictionary]
 - Thus supports not limiting "member" to a single-unit straight bar

CFC Fitness v. Brunswick, (Fed. Cir. 2002) (Michel)

- Federal Circuit
 - Second source – specification
 - Only shows an embodiment
 - Third source – prosecution history
 - Nothing that bears on the shape or number of components in member
 - Fourth source – extrinsic evidence
 - No prior art definitions to apply
 - Battle of experts is inconclusive, not particularly helpful

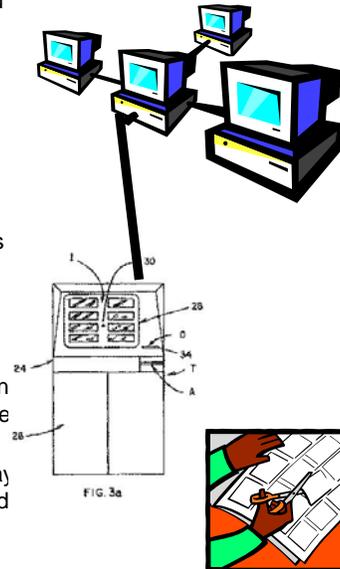
CFC Fitness v. Brunswick, (Fed. Cir. 2002) (Michel)

- Federal Circuit
 - Not like SciMed where
 - “lumen” in claim term meant “coaxial lumen”
 - This “limitation” was “imported” from the specification/prosecution history because
 - “all embodiments of the present invention” use coaxial lumens
 - Distinguished from prior art, which used dual lumens, by describing the advantages of coaxial lumens
 - Not like Toro where
 - Limited “cover” in “said cover including means for increasing pressure” to the cover shown in the patent’s specification and drawings
 - Dictionary **definitions of “cover” and “including” did not “shed dispositive light” on the scope of the claim**
 - Specification described structure disclosed as “important” to the invention

- Role in the claim **Claim preamble**
 - States the general use or purpose of the invention
 - Helps to show the area of technology
- Under what conditions does it limit the claim?
 - Difficult rule to state
 - Issue arises in the claim construction process
 - Depends on importance of the preamble to give meaning to the claim
 - A preamble term serves as a limitation “when it matters”
 - Preamble has the import that the claim as a whole assigns to it
 - Other ways to formulate the test – the preamble is limiting when
 - It is “essential to point out the invention defined by the claim”
 - The body of the claim refers back to terminology in the preamble
 - A preamble term “recites not merely a context in which the invention may be used, but the essence of the invention without which performance of the recited steps is nothing but an academic exercise”

Catalina Mktg. Int'l v. Coolsavings.com, Inc. (Fed. Cir. 2002) (Rader)

- 1. A system [sic] for controlling the selection and dispensing of product coupons at a plurality of remote terminals **located at predesignated sites such as consumer stores** wherein each terminal comprises:
 - activation means for activating such terminal for consumer transactions;
 - display means operatively connected with said activation means for displaying a plurality of coupons available for selection;
 - selection means operatively connected with said display means provided to permit selection of a desired displayed coupon by the consumer;
 - print means operatively connected with said selection means for printing and dispensing the coupon selected by the consumer; and
 - control means operatively connected with said display means for monitoring each consumer transaction and for controlling said display means to prevent the display of coupons having exceeded prescribed coupon limits.



Catalina Mktg. Int'l v. Coolsavings.com, Inc.

- 1. A system [sic] for controlling the selection and dispensing of product coupons at a plurality of remote terminals **located at predesignated sites such as consumer stores** wherein each terminal comprises:
 - activation means . . . ;
 - display means . . . ;
 - selection means . . . ;
 - print means . . . ; and
 - control means

- 25. A system for controlling the selection and dispensing of product coupons at a plurality of remote terminals **located at predesignated sites such as consumer stores**, comprising:
 - a plurality of free standing coupon display terminals **located at predesignated sites such as consumer stores**, each of said terminals being adapted for
 - bidirectional data communication with a host central processing unit; each of said terminals comprising
 - activation means . . . ;
 - display means . . . ;
 - selection means . . . ;
 -

Catalina Mktg. Int'l v. Coolsavings.com, Inc.

- Prosecution activity
 - Amendments in response to obviousness rejection
 - Catalina did not argue that the location of terminals in stores distinguished the invention from the prior art, but did state that their invention involved terminals “located in stores” for dispensing coupons “on-site”
- Potentially infringing system
 - Coolsaving’s internet-based coupon review and printing web site
- Issues
 - Was the preamble phrase “**located at predesignated sites such as consumer stores**” a limitation?
 - If so, was the district court’s claim construction correct?
 - This was the only claim term the court construed to conclude that there was no literal or DOE infringement

Catalina Mktg. Int'l v. Coolsavings.com, Inc.

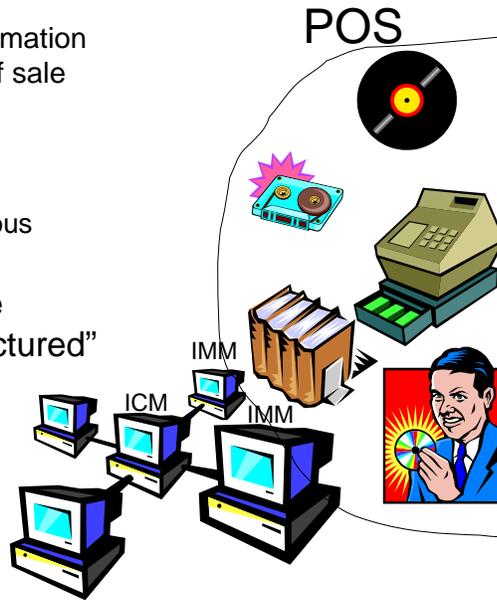
Limit?		Does not limit
Does	Recites essential structure or steps , or if it is “ necessary to give life, meaning, and vitality ” to the claim	a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention (patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure)
Does	Jepson claiming (“the improvement comprising”)	
May	Dependence on a particular disputed preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention	preamble language merely extolling benefits or features of the claimed invention does not limit the claim scope without clear reliance on those benefits or features as patentably significant
Does	the preamble is essential to understand limitations or terms in the claim body	
May	Recites additional structure or steps underscored as important by the specification	
Does	clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention	the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention

Catalina Mktg. Int'l v. Coolsavings.com, Inc.		
	Claim 1	Claim 25
Recites essential structure or steps , or if it is " necessary to give life, meaning, and vitality " to the claim	No – no use of the phrase " located at predesignated sites such as consumer stores " to define the invention	Repeated in claim body, thus is limiting
Jepson claiming ("the improvement comprising")	No	No
Dependence on a particular disputed preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention	No	Mostly
the preamble is essential to understand limitations or terms in the claim body	No	No
Recites additional structure or steps underscored as important by the specification	No	???
clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention	No – getting past the obviousness rejection was based on amendments in the claim body, the examiner considered terminal location insignificant	No
Patents, Spring 2008, Prof. Greg R. Vetter	page 534-540	8-25

Claim construction canons
<ul style="list-style-type: none"> • Ordinarily, each claim in a patent has a different scope; ordinarily, a dependent claim has a narrower scope than the claim from which it depends; and, ordinarily, an independent claim has a broader scope than a claim that depends from it. (these generalizations are referred to as the doctrine of claim differentiation); • Ordinarily, claims are not limited to the preferred embodiment disclosed in the specification; • Ordinarily, different words in a patent have different meanings; • Ordinarily, the same word in a patent has the same meaning; • Ordinarily, the meaning should align with the purpose of the patented invention; • Ordinarily, general descriptive terms are given their full meaning; • If possible, claims should be construed so as to preserve their validity; • Ordinarily, absent broadening language, numerical ranges are construed exactly as written; • Ordinarily, absent recitation of order, steps of a method are not construed to have a particular order; and • Absent highly persuasive evidentiary support, a construction should literally read on the preferred embodiment.
Patents, Spring 2008, Prof. Greg R. Vetter
8-26

Interactive Gift Exp. v. Comuserve (Fed. Cir. 2001) (Linn)

- Patent
 - System for reproducing information in material objects at point of sale (“POS”) locations
 - Like “on demand printing”
 - Except that the “printing” is copying information to various types of material objects
- Catalog code identifies the information to be “manufactured”
 - Request Reproduction Code conveys the Catalog Code from IMM to ICM
 - Authorization Code from ICM to IMM



Interactive Gift Exp

- 1. A method for reproducing information in material objects utilizing information manufacturing machines located at **point of sale** locations, comprising the steps of:
 - providing from a source remotely located with respect to the information manufacturing machine the information to be reproduced to the **information manufacturing machine**, each information being uniquely identified by a catalog code **[real-time transactions]**;
 - providing a request reproduction code including a catalog code uniquely identifying the information to be reproduced to the information manufacturing machine requesting to reproduce certain information identified by the catalog code in a **material object**;
 - providing an **authorization code** at the information manufacturing machine authorizing the reproduction of the information identified by the catalog code included in the request reproduction code; and
 - receiving the request reproduction code and the authorization code at the information manufacturing machine and reproducing in a material object the information identified by the catalog code included in the request reproduction code in response to the authorization code authorizing such reproduction.

Interactive Gift Exp

- Alleged infringing activity?
 - On-line sales of software or documents
 - CDs with books, can be decrypted with a code
- Claim construction – intrinsic evidence
 - **Claim language** ->
specification ->
prosecution history
- When claim is clear on its face, use specification and prosecution history to see if deviation from that clear meaning is specified
 - Ways to specify a “deviation” - lexicographer, amendment, argument
- Fine line between reading a claim in light of specification, and reading in a limitation
 - Context is entirety of invention

Interactive Gift Exp

- Extrinsic evidence
 - Disfavored to construe a claim term
 - Always available to understand the technology
- All through the eyes of a POSITA
- Waiver & claim construction
 - Can't change scope of construction offered at trial
 - But, one could argue alternative scopes at the trial level
 - Can bring new arguments in support of that scope



Interactive Gift Exp

- Improper importation of limitations (the second claim term below was not discussed by the casebook)

Claim term	Improper limitations	Reason(s)
Point of sale location	Not restricted to retail, but does not include the home	Not new to have the home be a POS Claim terms themselves don't limit Specification disclosed two embodiments including the home as a POS Specification described a POS as "a location where a consumer goes to purchase material objects embodying predetermined or preselected information"
	POS must have blank material objects available for sale to consumers	No such idea in the claim language Nothing in the specification mentions this (there is only a statement that retailers are reimbursed for the cost of blanks)

Patents, Spring 2008, Prof. Greg R. Vetter page 767-776 8-31

Interactive Gift Exp

Claim term	Improper limitations	Reason(s)
Material object	"[m]ust be offered for sale independently from the information that may be reproduced onto the material object."	Not a proper "limitation" to add via construction for the same reasons as given in the row above

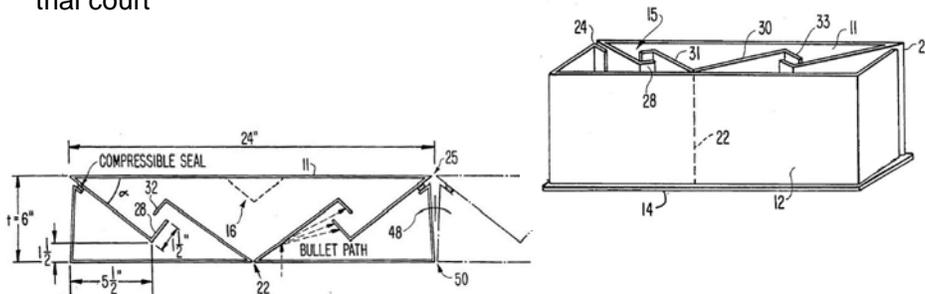
• Notes

- Meaning of "a"
- Claim differentiation
 - Disfavored?
 - Why?

Patents, Spring 2008, Prof. Greg R. Vetter page 767-776 8-32

Phillips v. AWD

- “baffle” in Phillips’ patent for modular walls did not require inward extension from the wall shell at an acute or oblique angle
- Deemphasized the importance of general dictionaries in claim construction
- Emphasized the § 112 statutory references to claim context arising from the specification
 - In construing “baffle,” the court relied on claim differentiation and the specification
- Judge Mayer dissented, joined by Judge Newman, arguing that the court should have taken up the question of claim construction deference to the trial court



Patents, Spring 2008, Prof. Greg R. Vetter

8-33

Graver Tank v. Linde Air Products (US 1950)

- Idea underlying DOE
 - Pirates of an invention “may be expected to introduce minor variations to conceal and shelter the piracy”
 - We don’t want to put the inventor “at the mercy of verbalism”
- 35 USC §271
 - (a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.
- “reverse” DOE (pg. 778)
 - The wholesome realism of this doctrine is not always applied in favor of a patentee but is sometimes used against him. Thus, where a device is so far changed in principle from a patented article that it performs the same or a similar function in a substantially different way, but nevertheless falls within the literal words of the claim, the **[reverse]** doctrine of equivalents may be used to restrict the claim and defeat the patentee’s action for infringement.

- No more on this for now

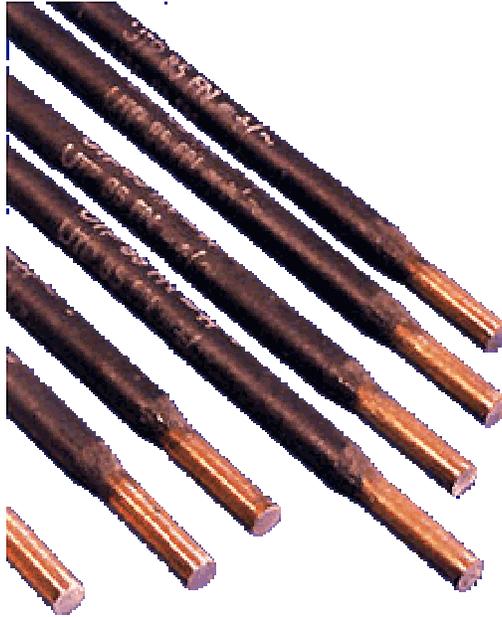
Patents, Spring 2008, Prof. Greg R. Vetter

page 777-780

8-34

Graver Tank

- DOE
 - Even if accused infringing device (AID) does not fall in the literal meaning of the claims, infringement can still be found if the AID meets the tripartite test: SSF-SSW-SSR
 - “Area” of equivalence varies with the circumstances
 - What factors cause the variance?
- Technology
 - Welding compositions, i.e., fluxes



Graver Tank

	Linde Air Products (patentee)	Graver (accused infringer under DOE)
product name	Unionmelt Grade 20	Lincolnweld 660
claim	flux “containing a major proportion of alkaline earth metal silicate” and calcium fluoride	N/A
substance	embodiment used silicates of calcium and magnesium [#12]	used silicates of calcium and manganese [#25]
other factors	(both alkaline earth metals)	(manganese is not an alkaline earth metal)
	Identical in operation and produce the same kind and quality of weld	

Graver Tank

“The question which thus emerges is whether the substitution of the manganese which is not an alkaline earth metal for the magnesium which is, under the circumstances of this case, and in view of the technology and the prior art, is a change of such substance as to make the doctrine of equivalents inapplicable; or conversely, whether under the circumstances the change was so insubstantial that the trial court's invocation of the doctrine of equivalents was justified.”

Graver Tank

- Evidence:
 - Chemists testified that manganese and magnesium were similar in many of their reactions.
 - Alkaline earth metals are often found in manganese ores in their natural state and they serve the same purpose in the fluxes.
 - One chemist testified that “in the sense of the patent” manganese could be included as an alkaline earth metal.
 - These points were corroborated in texts on inorganic chemistry.
 - The prior art taught the use of manganese silicate in welding fluxes.
 - There is no evidence that the accused infringing product was developed as a result of independent research
 - Does this matter?

Graver Tank

- Majority:
 - The trial court should evaluate this type of evidence. It did for three weeks, visiting labs and observed demonstrations
 - Trial court found that the accused infringing flux is substantially identical in operation and result
 - This determination is adequately supported by the record
 - This case is uniquely appropriate for the application of DOE

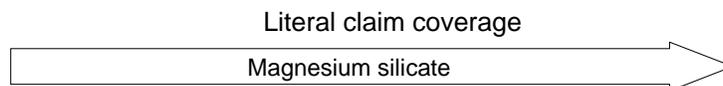
Graver Tank

- Dissents:
 - Claim is to a flux “containing a major proportion of alkaline earth metal silicate”
 - Manganese is fully disclosed in the patent
 - Because it is disclosed but not claimed, it is dedicated to the public
 - DOE may not be used to capture structures in the prior art, the use of manganese was in the prior art
 - The differences in the flux are not nearly so slight as to justify DOE infringement

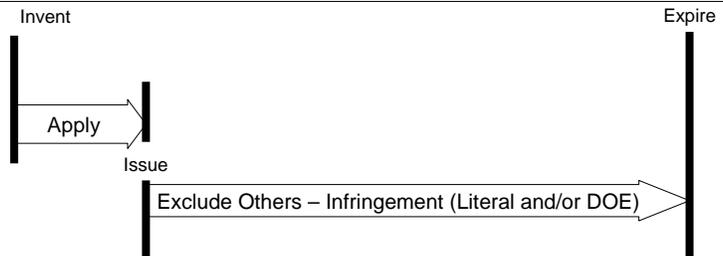
Graver Tank - notes

- Criticism as a matter of chemistry?
 - Both metals that start with “m” and have three syllables
- Is DOE a vehicle for correcting applicant errors?
 - Interaction with “dedication doctrine”
- Hypo One
 - Manganese is not known before patent filed and issued
 - Later discovered as providing almost exactly the same function as magnesium silicate

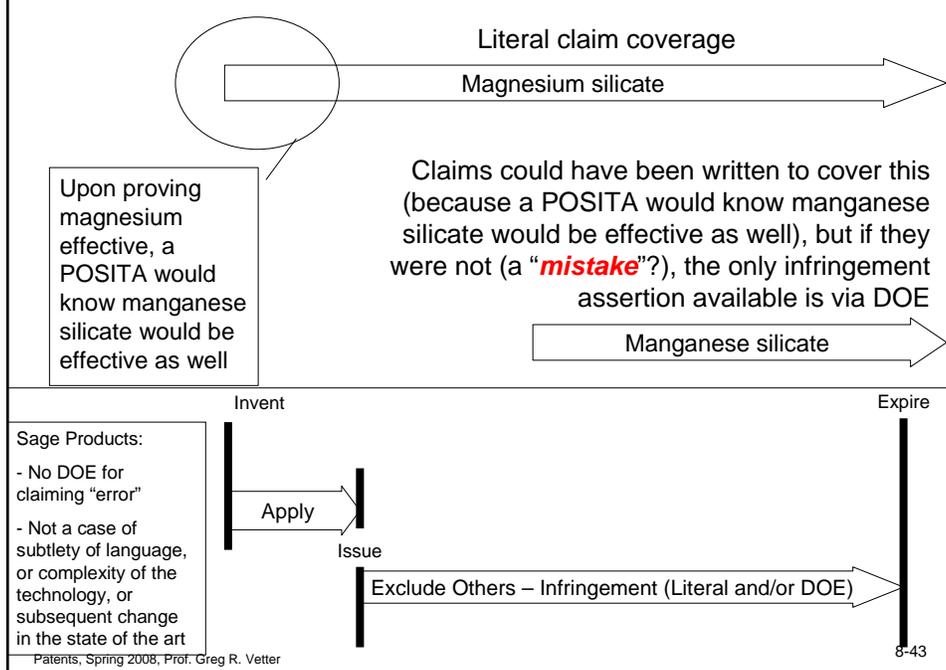
Hypo One – pg. 781



No claims could have been written to cover this (it was not yet discovered, and a POSITA would not have known that it would work), so only infringement assertion available is via DOE



Hypo Two – pg. 781



DOE – limitations preview

- There are several limitations to DOE, meaning that there are legal tests/doctrines that restrict the scope of equivalents that the patentee can assert, or eliminate the ability to assert any equivalents
 - “All elements” rule
 - Application of DOE can’t “vitate” a claim element
 - PHE
 - “Traditional” Prosecution History Estoppel – scope of equivalency is given up during prosecution
 - Dedication – disclosing but not claiming
 - Prior Art
 - Equivalents should not encompass the PA
- Sage Products – no correction of claiming errors for simple technology and the limiting effect is 4Cable
 - On a much less solid footing than the other doctrines

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 PA 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

Item	Hilton (claim)	Warner (AID)
Pore Diameter (Angstroms)	5-15	5-15
Pressure (p.s.i.g.)	200-400	200-500
pH	6.0 – 9.0	5.0 pH

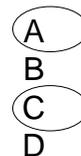
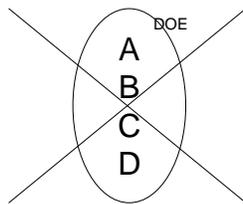


Warner-Jenkinson v. Hilton Davis (US 1997)

- Four arguments to “speak the death of DOE” – set in the general proposition that DOE did not survive the 1952 Patent Act revision
 - (1) The doctrine of equivalents is inconsistent with the statutory requirement that a patentee specifically “claim” the invention covered by a patent
 - (2) the doctrine circumvents the patent reissue process-- designed to correct mistakes in drafting or the like--and avoids the express limitations on that process
 - (3) the doctrine is inconsistent with the primacy of the Patent and Trademark Office (PTO) in setting the scope of a patent through the patent prosecution process; and
 - (4) the doctrine was implicitly rejected as a general matter by Congress' specific and limited inclusion of the doctrine in one section regarding “means” claiming
 - In the court’s discussion of this fourth argument, it makes the following statement, which should not be taken literally
 - “This is an application of the doctrine of equivalents in a restrictive role, narrowing the application of broad literal claim elements.”
 - This statement confuses the “reverse” DOE referred to in Graver Tank with the “equivalence” available under §112¶6

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
 - In the discussion of this rule on page 787, the court also provides the basis for the “All elements” limitation on DOE
 - “It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.”



Warner-Jenkinson v. Hilton Davis (US 1997)

- Discussion on pages 788-789 is further 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 [pg. 789]
 - 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
 - Despite the remarks in Graver Tank relating to
 - piracy and
 - absence of independent development
 - Treat as bearing on whether there was known interchangeability, an express objective factor from Graver Tank in determining the substantiality of the differences
- 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
- Decline to address Federal Circuit's conclusion that DOE is a question for the jury

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



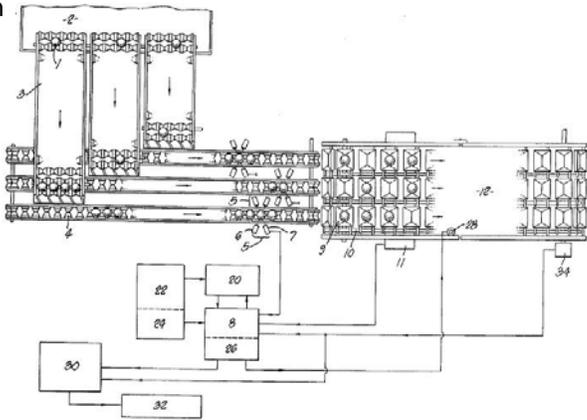
Warner-Jenkinson v. Hilton Davis (US 1997)

- Ginsburg dissent
 - This new presumption upsets expectations of patents already issued
- Federal Circuit remand
 - Again found sufficient evidence to support the jury's determination that 5.0 was equivalent to "approximately 6.0 to 9.0"
 - POSITA would know that it would work at 5.0
 - Applying equivalency does not vitiate the claim limitation
- What effect if the range is
 - 6 to 9?
 - 6.0 to 6.5?
 - 6.0 to 65.0?
 - 6.0 to 650.0?
- The Dolly problem
 - In Warner-Jenkinson terms:
"a pH of about 6-9, but not 5.0"
 - Claim language may itself expressly and ambiguously negate a theory of equivalents?
 - Or, does this occur via the process of claim construction?

Infringement – comparison of “equivalence” types			
Literal		§112¶6 Equiv.	DOE
<p>§112¶6: Find the structure in the specification that implements the function</p> <p>Other: claim construction and comparison to the AID</p>	F-W-R approach or test (tripartite test)	Identical Function	Substantially Similar Function (SSF)
		SS Way	SS Way
		SS Result	SS Result
	Insubstantial Differences approach or test	Identical Function	SSF
		Insubstantial Differences	Insub. Diff.

Pennwalt v. Durant-Wayland (Fed. Cir. 1987)

- Genesis of the element by element approach ultimately approved by the Supreme Court in Warner-Jenkinson
 - Equivalent of a “position indicating means” had to be found in the AID
 - The AID used software to store information about the location of fruit in the system
 - System was not programmed to record position – if it had been there might have been a greater chance for infringement



The image shows a technical drawing of a fruit storage system. The top part is a perspective view of a long, narrow storage bin with multiple rows of fruit. Below this is a schematic diagram of the system's components, including numbered boxes (20, 22, 24, 26, 28, 30, 32) and lines representing connections or data flow between them.

Example of “vitiating” an element

- The idea is that extending the DOE equivalent to cover the AID would result, practically, in the same result as if the claim element were not present to limit the claim
 - Note that this doctrine, along with the “element by element” command for DOE, make important what is an “element”

Example of “vitiating” an element

- Example
 - Composition claim element at issue
 - co-micronized mixture of particles of fenofibrate and a solid surfactant, wherein the mean particle size of the co-micronized mixture is less than 15 μm .
 - This means that the fenofibrate and solid surfactant are combined and then “micronized” – i.e., made smaller to less than 15 μm
 - The accused infringing composition reduced particle size of the fenofibrate and surfactant without combining or joining them until the very end of the manufacturing process after “micronization” was finished
 - As a result, extending a DOE equivalent to cover this accused composition would violate the “all elements” rule and the patentee lost its infringement suit

Corning Glass v. Sumitomo (Fed. Cir. 1989) (Nies)

- Court affirms DOE infringement judgment against Sumitomo
- Claimed technology is glass-clad / glass-core fiber
 - Outer cladding layer has lower RI
 - Fiber used for optical communications needs to limit the fiber-transmitted light to preselected “modes”
 - Optimum is a single “mode”
- Corning Inventors – developed first 20db/km fiber – single or low number of modes
 - Properties due to
 - pure fused silica cladding
 - a fused silica core containing approximately three percent by weight of titania as the dopant in the core
 - careful selection of the core diameter and the RI differential between the core and the cladding

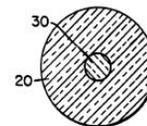
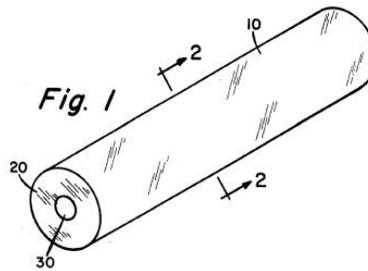
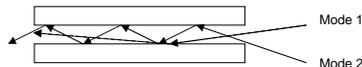


Fig. 2



Corning Glass v. Sumitomo (Fed. Cir. 1989)

- Claim 1 [‘915 patent]
 - An optical waveguide comprising
 - (a) a cladding layer formed of a material selected from the group consisting of
 - pure fused silica and
 - fused silica to which a dopant material on at least an elemental basis has been added, and
 - (b) a core formed of fused silica to which a dopant material on at least an elemental basis has been added
 - to a degree in excess of that of the cladding layer so that the index of refraction thereof is of a value greater than the index of refraction of said cladding layer,
 - said core being formed of at least 85 percent by weight of fused silica and an effective amount up to 15 percent by weight of said dopant material.

Corning Glass v. Sumitomo (Fed. Cir. 1989)

- Follow up invention – ‘550 patent
 - Use germania dopant in order to eliminate strength-reducing heat treatment step
- Second follow up invention – ‘454 patent
 - Method of making the fibers to eliminate light-absorbing ions that increase attenuation
- Sumitomo’s S-3 fiber – the Accused Infringing Device (AID)
 - Under SSF-SSW-SSR test
 - SSF & SSR are met
 - SSW is at issue
 - The “Way” part of the tripartite test is usually the crux of the issue

Corning Glass v. Sumitomo (Fed. Cir. 1989)

Claim 1 [‘915 patent]	Application to AID
(a) a cladding layer formed of a material selected from the group consisting of pure fused silica and fused silica to which a dopant material on at least an elemental basis has been added, and	This claim language literally reads on the AID
(b) a core formed of fused silica to which a dopant material on at least an elemental basis has been added to a degree in excess of that of the cladding layer so that the index of refraction thereof is of a value greater than the index of refraction of said cladding layer, said core being formed of at least 85 percent by weight of fused silica and an effective amount up to 15 percent by weight of said dopant material.	Claim limitation calling for addition of dopant to the core was not literally met District court found that addition of fluorine dopant to the cladding (reducing its RI) equivalently met the limitation

Corning Glass v. Sumitomo (Fed. Cir. 1989)

- An aside to discuss the preamble [partially to explain the reference on page 803 to the limitations of claim 1 required by the preamble]
 - An **optical waveguide** comprising
- Sumitomo argued that the '915 patent was anticipated by a PA reference
- Sumitomo would have won this argument, except that Corning successfully argued that the preamble phrase optical waveguide was limiting
 - “The specification then sets forth in detail the complex equation for the structural dimensions and refractive index differential necessary, in accordance with the invention, for an optical waveguide fiber comprising a fused silica core and cladding to transmit preselected modes of light.”
 - “To read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality.”

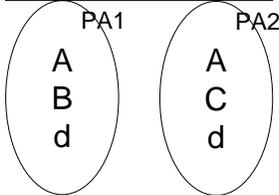
Corning Glass v. Sumitomo (Fed. Cir. 1989)

- Is fluorine dopant in the cladding of the AID a SSW to obtain the SSF & SSR compared to
 - The claim's requirement of dopant in the core?
 - If the answer given is “yes” – does that mean the “all elements” rule has been broken?
- The Federal Circuit says the “all elements” rule has not been broken
 - “Sumitomo's analysis is faulty in that it would require equivalency in components, that is, the substitution of something *in the core* for the absent dopant.”
 - The application of DOE was not allowed such broad play as to effectively eliminate that element ***in its entirety***

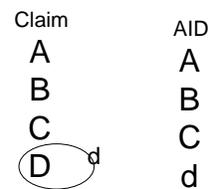
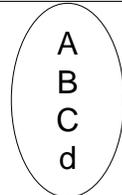
Corning Glass v. Sumitomo (Fed. Cir. 1989)

- The Federal Circuit also says that the “don’t encompass the prior art” restriction on DOE is not triggered here as well
 - Why?
 - The answer relates to whether the “known interchangeable” negative cladding dopant is itself in the PA, or
 - appears in the PA in a combination that would read on the full claim

Equivalent not encompassed by PA unless ABCd is obvious in light of these two references (or other references that might be found)

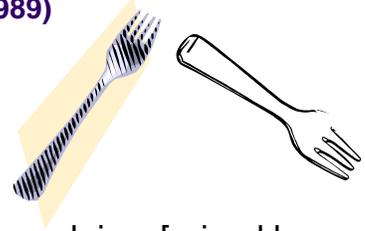


Equivalent encompassed by PA because ABCd is anticipated by a single PA reference



Corning Glass v. Sumitomo (Fed. Cir. 1989)

- Notes
 - A fork . . . four tines attached to said handle
 - A fork . . . ; a first tine . . . ; and a fourth tine
- Terminology on relationships among claims [raised by note 3’s use of “sub-combination” on page 807]
 - But, not all claims related in other ways or that share elements have one of these types of relationships



More broad	Example	Less broad	Example
Sub-combination	ABC	Combination	ABCD
Dominant	ABC	Subservient	ABCD
Genus	ABR ₁ where R ₁ is . . . X . . .	Species	ABX

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)
- 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



Festo (US 2002)

- 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”
- Statements to disregard or not take literally
 - “Estoppel is a ‘rule of patent construction’” [pg. 812]

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
 - Are the limits of language the problem, or the nature of the system the problem?
 - 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**]

Festo (US 2002)

- Present case
 - The amendment was made to add the sealing rings and magnetizable 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.

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.

Festo (US 2002)

- Notes
 - Argument estoppel [note 2 – calls it PHE]
 - Canceling a broader claim with a similar element
 - Should this trigger PHE for a remaining claim with the same element when the cancellation was due to a RRtoPat with respect to the common element?
 - Is Festo a win for Festo?
 - “There is no reason why a narrowing amendment should be deemed to relinquish equivalents unforeseeable at the time of the amendment and beyond a fair interpretation of what was surrendered.”
 - “Nor is there any call to foreclose claims of equivalence for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted.”

Festo – order for additional briefing (9/20/02)

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]

Festo – En Banc opinion on remand (9/26/03)

- Festo claim scope surrender presumption rebuttal
 - Question of law or fact or ???
 - law, although based on underlying factual findings
- How do the Warner-Jenkinson and Festo presumptions operate together?
 - was there a narrowing amendment?
 - if so, was it for a RRtoP?, and if the record about that is unclear, apply the Warner-Jenkinson presumption that it is for a RRtoP
 - determine the scope of claim subject matter surrendered as unable to be asserted as an equivalent, and apply the Festo presumption unless it is rebutted
 - assess whether the patentee can rebut the full Festo scope surrender by rebutting the Festo presumption for the equivalent(s) in question.

Festo – En Banc opinion on remand (9/26/03) – Scope of Evidence for Rebuttal

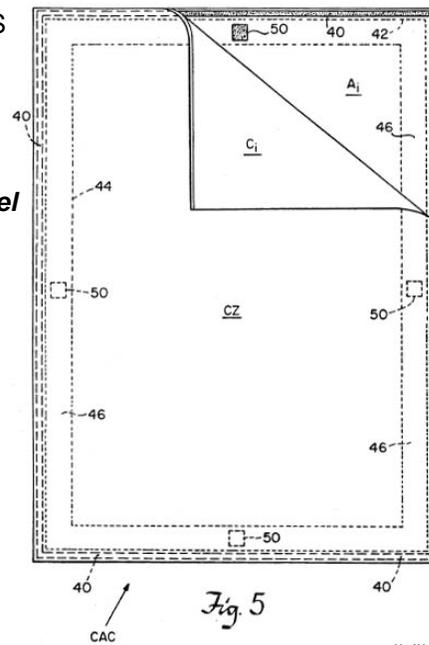
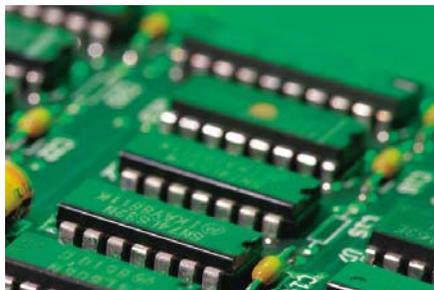
- Warner-Jenkinson presumption
 - restricted to the evidence in the prosecution history record
- Festo presumption – case-by-case development for rebuttal, but with guidance:
 - Foreseeability
 - Evaluated at the time of the amendment
 - Usually, after-developed technology is not foreseeable
 - Old technology is more likely to be foreseeable
 - “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”

Festo – En Banc opinion on remand (9/26/03) – Scope of Evidence for Rebuttal

- Tangentialness
 - Asks: “whether the reason for the narrowing amendment was peripheral, or not directly relevant, to the alleged equivalent”
 - objective inquiry
 - “should be discernible from the prosecution history record, if the public notice function of a patent and its prosecution history is to have significance”
 - No other evidence, except experts to interpret the record
 - “an amendment made to avoid prior art that contains the equivalent in question is not tangential”
- Some other reason . . . not reasonably expected to describe the equivalent
 - When possible, it should be evaluated from the prosecution history
 - additional development left to future cases
 - linguistic limitations may be a possible factor
 - Can't be used in alleged equivalent is in the prior art
- Outcome for present case?

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 [sic] can be used.



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

- 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)

- Graver I
 - Claims to the following were held invalid (because the silicates were inoperative, a now defunct invalidity doctrine)
 - silicates
 - metallic silicates
- Graver II
 - DOE for alkaline earth metals - manganese was equivalent to magnesium
 - But, manganese is also a “metallic silicate”
- The court recited Graver I & II for what purpose?

Spec	Claim
Silicates	Silicates
Metallic silicates	Metallic silicates
Alkaline earth metals	Alkaline earth metals

Note: In the original image, a red 'X' is drawn over the 'Silicates' and 'Metallic silicates' entries in the Claim column. An arrow labeled 'DOE' points from 'Metallic silicates' in the Spec column to 'Metallic silicates' in the Claim column.

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

- Warner-Jenkinson
 - The specification parroted the claim language
 - it is preferred to adjust the *pH to approximately 6.0 to 8.0* before passage through the ultrafiltration membrane
 - The “foaming” that occurred below 6.0 was not a disclosure in the specification but evidence arising during the case
- Arguments
 - Following Maxwell is consistent with Graver & Warner-Jenkinson
 - Neither command a different result
 - Policy
 - Notice function of claims
 - Allowing DOE for what is disclosed but unclaimed creates perverse incentives
 - a patentee cannot narrowly claim an invention to avoid prosecution scrutiny by the PTO, and then, after patent issuance, use the doctrine of equivalents to establish infringement because the specification discloses equivalents.

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

- How does the patentee protect herself?
 - Claim everything
 - Even if the claim is invalidated, it falls under Graver as not dedicated
 - Reissue and Reexamination
 - It is in the patentee's hands to "get it right" during prosecution
 - File a continuation application
 - J&J did that here – filed two continuation applications that claim a steel supporting substrate
- Concurrence – Judge Rader
 - DOE does not encompass subject matter reasonably foreseeable
 - Tension between notice function of the claims and DOE
 - Claims would be the sole definition of claim scope in all 4Cable circumstances – under an objective standard
 - We have already applied this principle in Sage Products
 - Simple structural device with "over said slot" limitation, no after developed technology
 - Sage has its followers

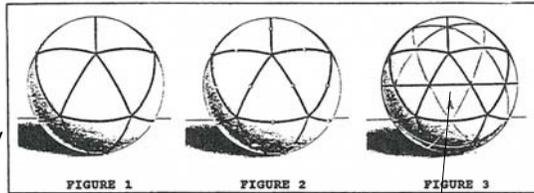
Johnson & Johnston - notes

- Does the J&J doctrine penalize disclosure?
 - Why treat 4Cable, unclaimed and disclosed items different from 4Cable, unclaimed and undisclosed when POSITAs know about the item?
- Burn the file wrapper?
 - Notice is a poor justification to use prosecution history (PH) in claim interpretation in light of lawsuits on day of issue
 - Does application publication change this argument?
 - It creates poor incentives for PTO examiners, they rely on the PH rather than requiring clarity, formulaic applicant responses
 - Using PH promotes a cyclical search for meaning, increases burdens rather than lessening them
 - Was there actual reliance on by the accused infringer on the PH?
 - Under the "encompassing the prior art" doctrines, courts already possess techniques to account for PA in claim construction
 - If un4Cability is the gatekeeper to equivalency, why look at PH at all? Nothing there could illuminate what is unknown to the applicant

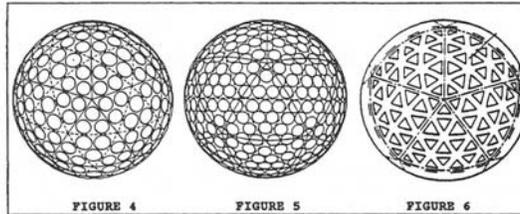


Wilson v. David Goeffrey & Assoc. (Fed. Cir. 1990) (Rich, J.)

- 1. A golf ball having
 - a spherical surface with a plurality of dimples formed therein and
 - six great circle paths which do not intersect any di[m]ples,
 - the dimples being arranged by dividing the spherical surface into twenty spherical triangles corresponding to the faces of a regular icosahedron,
 - each of the twenty triangles being sub-divided into four smaller triangles consisting of a central triangle and three apical triangles by connecting the midpoints [of the sides] of each of said twenty triangles along great circle paths,
 - said dimples being arranged so that the dimples do not intersect the sides of any of the central triangles.
[Bracketed insertions ours.]



This is the "central triangle" because it is in the center of the 4 triangles resulting from subdividing the larger triangle. The 3 surrounding triangles are the apical triangles.



Wilson v. David Goeffrey & Assoc. (Fed. Cir. 1990) (Rich, J.)

- Bottom line of claim 1
 - No dimple intersects any "great circle"
 - Alternative statement of the same thing
 - No dimple intersects the side of any "central triangle"
- Suit against Dunlop (Maxifli ball) and its distributor DGA (Slazenger ball)
- Law invoked
 - DOE limited by that which would "improperly ensnare the prior art"
 - Methodology is important
 - Claims are not expanded
 - As an analysis tool – conceive of a hypothetical claim which covers the AID
 - Alternative approach is to compare the AID directly to the PA
 - Determine whether this hypothetical claim would have been allowed by the PTO
 - Can be "not allowable" for issues of both novelty/anticipation and obviousness

Wilson v. David Goeffrey & Assoc. (Fed. Cir. 1990) (Rich, J.)

- Prior art
 - 1932 patent to Pugh
 - Divides ball into 20 triangles
 - then each of these divided into 16 triangles
 - but the court takes this as implicit subdivision into 4 “intermediate” triangles
 - Uniroyal ball
 - 6 great circles with 30+ dimples intersecting by about 12/15 thousands of an inch
- PA and the hypothetical claim analysis
 - The “hypothetical claim” is not a recipe for trial procedure
 - The burden is on Wilson to show infringement
 - Wilson must show that the hypothetical claim would have been patentable to be able to assert the equivalent covering the AID



Wilson v. David Goeffrey & Assoc. (Fed. Cir. 1990) (Rich, J.)

C1	Hypo. C1 to cover AID – Dunlop balls	Key limitations of Hypo. C1	PA - Uniroyal
1. A golf ball having ... said dimples being arranged so that the dimples do not intersect the sides of any of the central triangles.	1. A golf ball having ... said dimples being arranged so that some of the dimples may partially intersect the sides of any of the central triangles, to the following degree	<u># dimples intersecting:</u> Less than 14%	<u># dimples intersecting:</u> Approx. 12%
		<u>Intersection permitted:</u> 13% or less of dimple radius	<u>Intersection permitted:</u> 17-21% of dimple radius

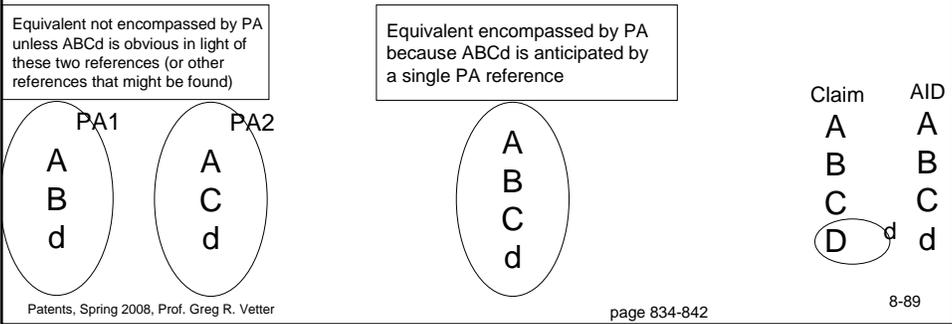
Ball	Dimples	Dimples Intersected	Dimple Radius	Extent of Intersection
MD	432	60	60-80	7.5
HT	432	60	60-80	8.7
Interlock (S)	480	60	60-80	4.0
Interlock (B)	480	60	60-80	4.0

Hypothetical claim would have been obvious according to the court



Wilson v. David Goeffrey & Assoc. (Fed. Cir. 1990) (Rich, J.)

- Dependent claims
 - It is axiomatic that dependent claims cannot be found infringed unless the claims from which they depend have been found to have been infringed
 - But, this logic does not apply to the “hypothetical claim” DOE ensnaring the PA analysis
- Hypothetical claim analysis is not “obligatory”
 - It is not a good idea for trial procedure – too confusing for the jury
 - Hypothetical claim validity versus “real” claim validity being submitted to the jury
 - Limit the hypothetical claim analysis to only expand limitations, not narrow them
 - Fit with the underlying mechanism of DOE?



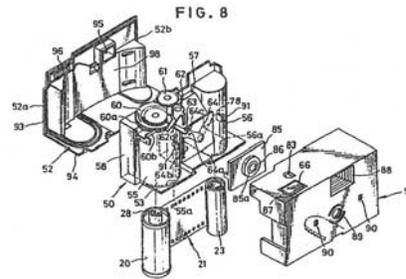
Indirect Infringement

- Inducement – §271(b)
 - (b) Whoever actively induces infringement of a patent shall be liable as an infringer.
- Contributory infringement - §271(c)
 - (c) Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

Jazz Photo v. US (Fed. Cir. 2001)

- Import proceeding before the Int'l Trade Commission
 - Determination that Jazz and others infringed all or most of Fuji's 14 US patents
 - Order to stop importing "single-use" cameras called "lens-fitted film packages" (LFFP)
 - LFFPs refurbished in various overseas factories
- The 8-step refurbishment process at issue here is repair, not reconstruction

- Claim 1 paraphrase
 - Casing w/ opening for exposure
 - Unexposed rolled film
 - Film container on opposite side of film, having a winding spool, film from roll attached
 - Means for winding
 - Winding control means, externally operable, advancement for one frame, including a sprocket wheel driven by movement of the film
 - Frame counter driven by the sprocket wheel, means for disabling the winding control means



Jazz Photo v. US (Fed. Cir. 2001)

- Law or Repair / Reconstruction
 - Personal property rights attach from the sale, only subject to patentee's right to "make"
 - But, must give owner the right to preserve the useful life of the original article
 - For example, replacing the blades in a machine when the machine lasts several years and the blades need replacing 60-90 days
 - Does the activity "in fact make a new article" after the original entity, viewed as a whole, has become spent
 - Mere repair
 - Disassembly and cleaning
 - "overhauling" gun mounts – even when done using an assembly line method
 - Rebuilding truck clutches – even when done in a large scale commercial operation
 - Repair parts purchased from the patentee
 - Patentee contemplated rebuilding
- Related and underlying – principle of exhaustion

Jazz Photo v. US (Fed. Cir. 2001)

- Exhaustion
 - Arises from the unrestricted sale by the patentee or with authority of the patentee
 - “exhausts” the patentee's right to control further sale and use of that article by enforcing the patent under which it was first sold
 - The “exhaustion” “runs with the res”
 - No exhaustion of US patent rights by sales overseas
- Here, the reversal of the Commission’s infringement determination applies only to articles that have been “exhausted”

Jazz Photo v. US (Fed. Cir. 2001)

- Reconstruction
 - Infringing reconstruction must be a “second creation”
 - Patentee’s unilateral intent cannot govern the inquiry
 - Somewhat contrary to this approach is the Sandvik case [note 1, pg. 874]
 - The drill bit at issue was not designed nor intended to be a replaceable part or to be “retipped”
 - It did not have a differing life expectancy from the shank
 - No sales of replacement tips, nor instructions on how to do so
 - Not necessarily any specific factors that are controlling
 - a license to use a patented combination includes the right to preserve its fitness for use
 - the remaining useful capacity of the article
 - the nature and role of the replaced parts in achieving that useful capacity

Jazz Photo v. US (Fed. Cir. 2001)

- Common steps for refurbishment
 - (1) removing the cardboard cover,
 - (2) cutting open the plastic casing,
 - (3) inserting new film and a container to receive the film,
 - (4) replacing the winding wheel for certain cameras,
 - (5) replacing the battery for flash cameras,
 - (6) resetting the counter,
 - (7) resealing the outer case, and
 - (8) adding a new cardboard cover
- These are more like Aro and the other precedents
- For patented components that were simply reused, no issue at all of repair/reconstruction

Jazz Photo v. US notes

- §271(f)
 - (1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.
 - (2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.