

Indefiniteness in Patent Prosecution

Drafting Claims to Withstand Challenges

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Indefiniteness

- Case Law
- USPTO Practice
- Withstanding Challenges

Why do we care?

- Section 112 applies to every patent
- All patents in infringement litigation passed PTO review
- Patents are being challenged
 - Court
 - Post-grant

35 U.S.C. 112(b)

“The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.”

Ambiguity is Unavoidable

- Inherent limitations of language
- Clear notice of what is claimed

Ambiguity

“The only reason that there are so many ambiguous claims out there today is that patent attorneys are trained to deliberately include ambiguous claims. Ambiguous claims make the patent monopoly more valuable. Every patent attorney knows that.”

John Vandenberg, attorney for Nautilus in Oral Arguments before Supreme Court (April 28, 2014)

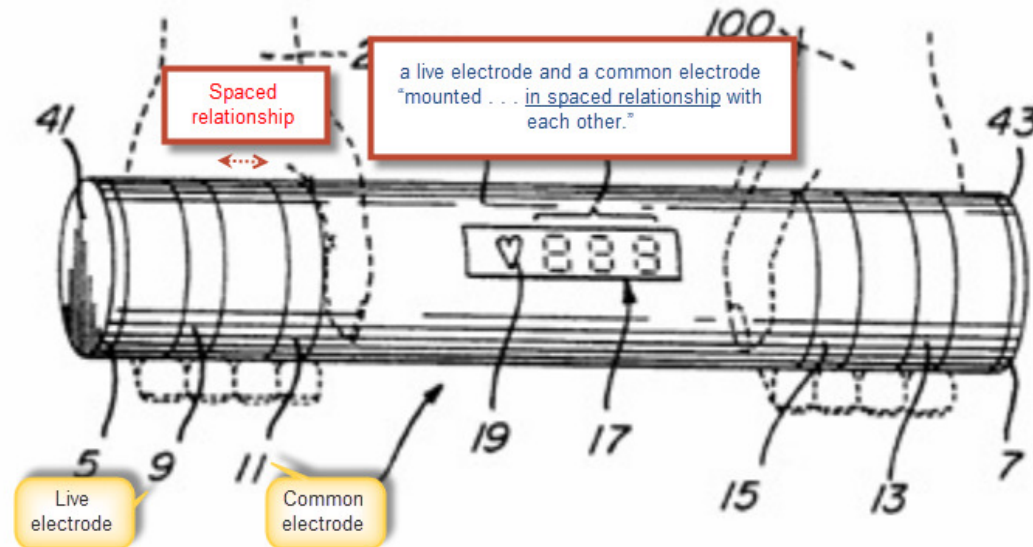
A claim is indefinite when:

- it is not amenable to construction or insolubly ambiguous. (Federal Circuit pre-Nautilus)
- it fails to inform, with reasonable certainty, the scope of the invention (Supreme Court, Nautilus)

- Case Law

Nautilus v. Biosig (S. Ct. 2014)

- Issue
 - Whether “in spaced relationship” as used in the claims rendered the claims invalid.



Nautilus v. Biosig – cont'd

- Holding
 - Vacate and remand for the Federal Circuit to consider if indefinite under the correct legal standard – reasonably certainty.

Nautilus v. Biosig – cont'd

- Change in Law
 - From “insolubly ambiguous” test
 - To “reasonable certainty” test

satisfy the statute’s definiteness requirement. In place of the “insolubly ambiguous” standard, we hold that a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.
- Implied issues – claims, specification, prosecution history, level of ordinary skill

Nautilus v. Biosig (remand to Fed. Cir. 2015)

- Applying the Supreme Court ruling, found that the “reasonable certainty” test was one that already had substantial precedent.
- Found “in spaced relationship” to be reasonably certain.
 - Not “infinitesimally small nor greater than the width of a user’s hands”
 - Looked at the claims, spec, and figures, and determined that there was “sufficient clarity to skilled artisans as to the bounds of the ... term.”
 - Also looked at prosecution history and the described “function” as considered by the examiner.

Interval Licensing v. AOL (Fed. Cir. 2014)

- Federal Circuit considered whether instructions causing display of content “in an unobtrusive manner” is indefinite under 112(2).

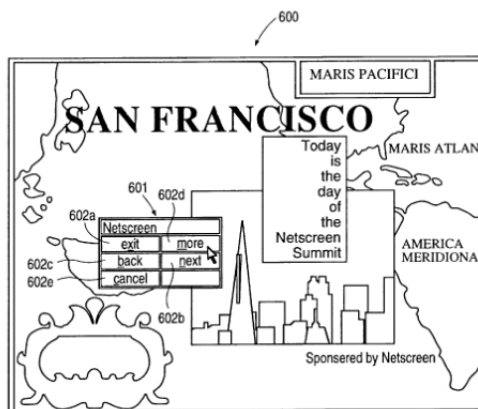


FIG. 6

- *Nautilus* did not prohibit terms of degree in claims
- Claims must provide “objective boundaries” to a POSITA
- “Unobtrusive manner” is “highly subjective”
- Insufficient guidance in the written description to overcome the “purely subjective” claim language
- Typical broadening language in the spec can foreclose a patentee’s attempt to use a preferred embodiment to define the otherwise indefinite claim language

Dow v. NOVA (Fed. Cir. 2015)

- Due to the posture of the case, the Federal Circuit had to specifically determine if *Nautilus* involved a change in the law.
- In this case, the court found claims that were NOT indefinite under the “insolubly ambiguous” standard WERE indefinite under the *Nautilus* “reasonable certainty” test.

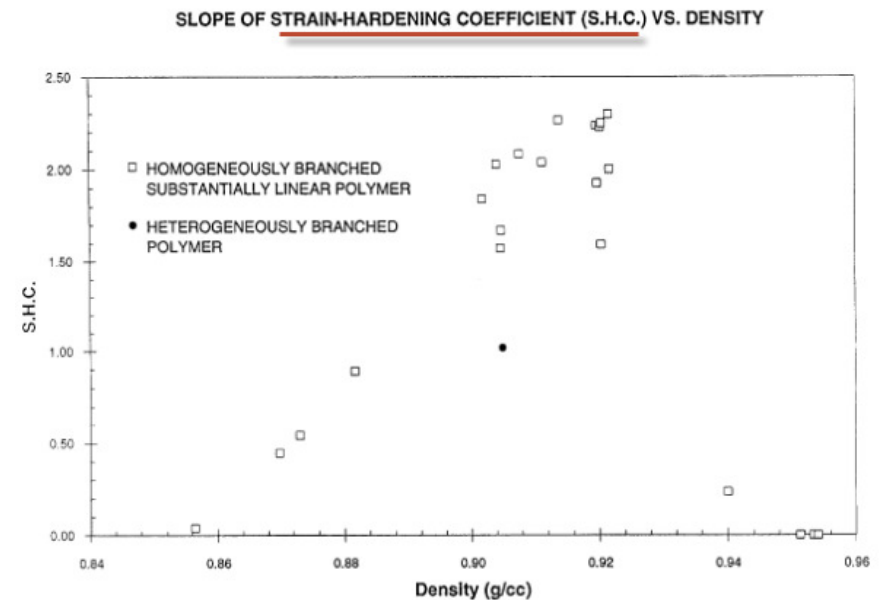
Dow v. NOVA – cont'd

- Claim limitation at issue is the following:
 - (iii) a slope of strain hardening coefficient greater than or equal to 1.3, and
- Thus, under a specific example, found claims that were not indefinite under the “insolubly ambiguous” standard WERE indefinite under the *Nautilus* “reasonable certainty” test.
- The “SRC” was defined in the spec as (slope of strain hardening)* $(I_2)^{0.25}$ where I_2 is the melt index in grams / 10 minutes

Dow v. NOVA – cont'd

- Despite the appearance of definition (particularly relative to the invalid claims of *Interval Licensing*) these claims were found to be invalid.

The main problem again seems to have roots in the specification – the “slope of strain hardening” referenced in the formula underlying the “SHC” referenced a slope illustrated in Fig. 1, the slope was not illustrated there.



Dow v. NOVA – cont'd

- A real strain hardening plot looks like this. What's the “slope”?

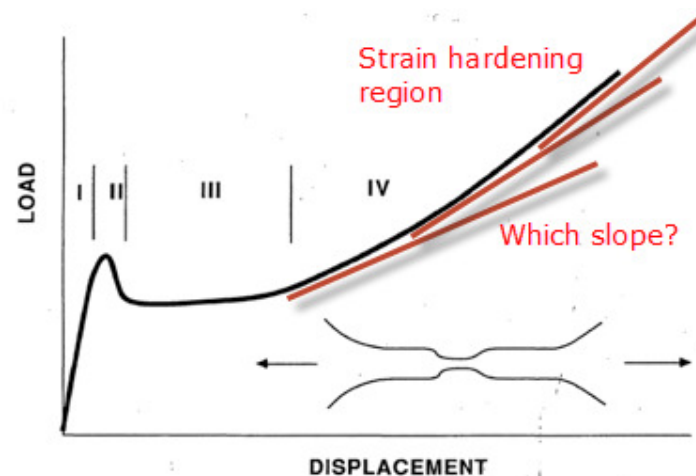


Figure 8. A typical load-displacement curve.

- The court found that it would be the “final” slope, but STILL found indefiniteness as the patent didn't describe how to measure the slope!

- USPTO Practice

USPTO Standard

The USPTO employs a lower threshold of ambiguity when reviewing a pending claim for indefiniteness than those used by post-issuance reviewing courts. *Ex Parte Miyazaki*, BPAI, 2008

The court cases are relevant

- The USPTO will not catch all issues
 - The examiner's allowance of a claim does not prevent challenge
 - The applicant must be confident claims will survive - especially independent claims

High Standard-Better Specification

- Law on relative language, subjective language, etc., was developed pre-Nautilus
- Establishing “reasonable certainty” will likely require an invigorated discussion of the factors/tests/measurements for supporting these more open limitations.
- Techniques understood from prior case law may or may not be effective.

USPTO Standard

- “A claim is indefinite when it contains words or phrases whose meaning is unclear.”
MPEP § 2173.05(e)
- Broadest reasonable interpretation

USPTO Guidelines

- Guidance is not new - 2011
- Increased attention
 - PTO implements training programs
 - Experience verifies that rejections have changed since 2011

White House

“The USPTO has developed and implemented a training program to help its examiners rigorously examine so-called ‘functional claims’ to ensure claims are clear and can be consistently enforced.”

White House Press Release, “Answering the President’s Call to Strengthen Our Patent System and Foster Innovation,” Feb. 24, 2014

Functional language and Indefiniteness

- A claim element is to be interpreted under § 112(f) (§ 112, sixth par.)
- Specification does not teach any corresponding structure
- Claim is invalid as indefinite under § 112(b) (§ 112, second par.)

Functional Language

35 U.S.C. § 112(f) - an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

3-Prong Analysis

(A) the claim limitation uses the term “means” or a term used as a substitute for “means” that is a generic placeholder;

(B) the term “means” or the generic placeholder is modified by functional language; and

(C) the term “means” or the generic placeholder is not modified by sufficiently definite structure or material for performing the claimed function.

Williamson v. Citrix

Fed. Cir. en banc, June 2015

- Overrules the presumption that 112(f) applies to claims with word “means.”
- “The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.”

3-Prong Analysis

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(B) the term “means” or the generic placeholder is modified by functional language; and

(C) the term “means” or the generic placeholder is not modified by sufficiently definite structure or material for performing the claimed function.

Functional Language

- 112(f) will apply
 - a verbal construct that is not recognized as the name of structure
 - a non-structural term that is a nonce word

(nonce word - a word coined and used only for a particular occasion)

Functional Language

- 112(f) **will not** apply
 - the term is the name for the structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function
 - Examples: filter, brake, clamp, lock

Functional Language

- mechanism for
- module for
- device for
- unit for
- component for
- configured to
- adapted to
- designed for
- capable of

Avoid 112(f)/112(b) Rejection

- Amend or argue so claim not interpreted under 112(f)
- Provide specification support for corresponding structure
- Draft a method claim

Prosecution Tips

- Describe elements using known terms
 - “analog-to-digital converter” rather than “circuit configured to convert the measured signal to a data signal”
- Associate elements by connection rather than function
- Include specific examples in specification

Software Cases

- Specification
 - provide structure (processor and memory)
 - describe algorithm
 - as a mathematical formula, in prose, in a flow chart, or “in any other manner that provides sufficient structure.”

Software Cases

- Claim example

A device comprising:

- a processor; and

- a non-transitory computer-readable storage medium storing a program to be executed by the processor, the program including instructions for:

Definitions

- nonce word - a word coined and used only for a particular occasion
 - If structure is defined in the specification, the term will be definite
- Personally, we rarely include any definitions in the specification
 - Other practitioners will disagree
 - PTO certainly disagrees

Breadth of Claims

- A broad claim is not indefinite merely because it encompasses a wide scope of subject matter provided the scope is clearly defined. MPEP 2173.04
 - a genus claim that covers multiple species is broad, but is not indefinite if otherwise clear
 - but a genus claim that could be interpreted in such a way that it is not clear which species are covered would be indefinite

Breadth of Claims

- Experience indicates examiners will still give a 112(b) rejection if overly broad
- While this rejection may be improper, the corresponding 112(a) rejection may be proper

Promega v. Life Technologies

Fed. Cir., Dec. 2014

- Claim: **a set of** short tandem repeat **loci** which can be co-amplified **comprising** HUMCSF1PO, HUMTPOX, and HUMTH01
- By using the term “comprising” the set is not limited to the three recited loci
 - any combination that includes the three are within the scope of the claim

Promega v. Life Technologies

Fed. Cir., Dec. 2014

- The scope of the claims must be less than or equal to the scope of enablement
- In this field of technology, introducing a single STR locus to an existing loci multiplex significantly alters the chemistry of, and has an unpredictable effect on, whether the resulting multiplex will successfully co-amplify

Magsil v. Hitachi Global Storage

Fed. Cir., Aug. 2012

- Claim: a device wherein applying energy “causes a change in the resistance by at least 10% at room temperature.”
- Encompasses range from 10% to infinity
 - skilled artisan at the time could achieve 11.8%
 - goal at the time was to achieve around 24%
 - sought to cover later-invented devices at 600%

Magsil v. Hitachi Global Storage

Fed. Cir., Aug. 2012

- Claim is invalid: Specification must contain sufficient disclosure to enable the entire scope of the claimed invention
- Question
 - Specification must enable the “entire scope of the claimed invention” or
 - Specification must enable the scope of the claimed invention as being asserted

Unclaimed Matter

- 112(a) rejection:
 - omits matter disclosed to be essential to the invention (MPEP 2172.01)
 - feature taught as critical in a specification and not recited in the claims (MPEP 2164.08(c))
- 112(b) rejection:
 - claim fails to interrelate essential elements of the invention as defined in specification (MPEP 2172.01)

Unclaimed Matter

- An enablement rejection is valid
 - only when the language of the specification makes it clear that the limitation is critical for the invention to function as intended
 - broad language in the disclosure, including the abstract, omitting an allegedly critical feature, tends to rebut the argument of criticality.

Breadth of Claims

- Practice Tips
 - Include many examples in specification
 - Include text of same scope as broadest claim language (all claim language if filing ROW?)
 - Include discussion that various embodiments can be used in combination
 - Be careful of form paragraphs that do not apply to this specific application

- Withstanding Challenges

PGR & CBMs

- Mostly “MIA” so far:
 - Legislative expansion?
 - Expanded use due to more post-AIA patents being available?
- Increased activity is expected – poses a “trap for unwary” patent owners.

PGR & CBMs

- Threshold for cancellation through the PTAB will undoubtedly be much lower than invalidation.
 - Preponderance < C&C
 - Broadest Reasonable Interpretation
- Proactive prosecution is advised.

PGR & CBMs – Sec. 112 tips for patent owners

- Draft tighter claims
 - Don't overreach for breadth beyond key markets

- Draft better, fuller specs
 - You can't expect thin and vaguely worded patents to hold up
 - Include discussion of performance advantages of elements

PGR & CBMs – tips cont'd

- Consider Rule 132 Affidavits in prosecution
 - Cancellation rate is high on instituted claims -- try to avoid the institution decision!
 - Currently there is no ability for the patent owner to introduce pre-institution testimony unless it is already in the record – so put some positive testimony into the prosecution history.
 - A file history supporting the understanding of certain types of claim terms – relative, subjective, etc. – could help avoid the institution decision.

PGR & CBMs – tips cont'd

- Using your fuller spec ...
 - Include a larger number of claims of varying scope – including commercially significant and meaningful dependent claims – challenge the challenger to knock them all out!
- Keep a continuation alive
- Include at least some 112(f) claims

- Questions