

# **CHISUM PATENT ACADEMY®**

## **Recent Developments in United States Patent Law:**

### **Selected 2014 Supreme Court and Federal Circuit Decisions**

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# Chisum Patent Academy:

## Next Small Group Seminar

- **Current Developments: Supreme Court and Federal Circuit Blockbusters, Section 101: “Life After *Alice*,” Case Study on Inter Partes Review ... and More**
- **Limit: 10 participants (only 4 seats open as of 12/23/14)**
- **Dates: March 5-6, 2015**
- **Cincinnati, Ohio ([21C Museum Hotel](#))**
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# **Patentability: Sections 101, 102, 103**

## **A. Prior Art**

- 1. Printed Publication; Accessibility to Public**
- 2. America Invents Act; First-Inventor-to File**

## **B. Obviousness**

- 1. Generally**
- 2. Analogous Art**
- 3. Post-Filing Date Evidence**

## **C. Eligible Subject Matter**

# I. A. (Prior Art) 1. Printed Publication

## Accessibility to Public

AIA and Pre-AIA Section 102

In both: two major categories of prior art:

- DOCUMENTARY: matter described in patents or **“printed publication”**
- NON-DOCUMENTARY: sale and use of products and processes (“known” (pre-AIA) “on sale”, “in public use”, “otherwise available to public” (AIA))

# Background, History

## Chisum on Patents Sec. 3.04[2]

- Written in 1977:
- “The concept of a publication requires that a work be circulated to some extent. ... In its most obvious application, publication includes a book, periodical, or newspaper of general circulation. ... However, works of less general circulation, such as trade catalogues, conference papers and the like, may also constitute publications. ... Very little circulation or permanency is required if the work is specially directed to those skilled in the art or trade to which the patent in question relates.”



# Importance

- Importance of determining that prior art is in form of “printed publication.”
- Pre-AIA Section 102: geography irrelevant if matter is “printed publication” (“on sale” and “in public use” must be “in this country”)
- Inventor’s own activity (more than year before filing date)
- AIA: for ex parte reexamination and inter partes review: only patentability in view of patents and publications (true for both pre-AIA and AIA cases).

# Contemporary Dimensions

- What is a publication in an on-line, digital world?
- Problems:
  - Authentication
  - Accessibility
- Two 2014 cases of interest:
  - Enhanced Security Research, LLC, *In re*, 739 F.3d 1347 (Fed. Cir. Jan. 13, 2014) (software manual, copy with missing pages)
  - Suffolk Technologies, LLC v. AOL, Inc., 752 F.3d 1358 (Fed. Cir. May 27, 2014) (on line post, accessibility)

# *In re* Enhanced Security Research, LLC

739 F.3d 1347 (Fed. Cir. Jan. 13, 2014)

- Patent: computer security device, **U.S. Pat. No. 6,119,236**.
- *Ex parte* reexamination: unpatentable over prior software ("NetStalker")?
- Software: *probably* sold and used before relevant date, but *not* a publication (hence not usable in reexamination)
- Question: is a **manual** for the software prior art as a publication (and sufficient to show unpatentability)?
- Patent's filing date: **7 October 7, 1996**
- Manual' apparent date: **May 1996**.



## First issue:

### Was Manual sufficiently publicly available?

- Reexamination requestor submits **declaration** by CEO of company (Haystack Labs.) that produced software
  - (1) Manual available in May 1996,
  - (2) anyone showing an interest in buying software could request one,
  - (3) software was installed on about 12 computers,
  - (4) software advertised in 1995.

# **Holding: Available Vehement Dissent**

- PTO finding: sufficiently available.
- Majority: Affirmed; finding supported by substantial evidence
- Law: "even relatively obscure documents qualify as prior art so long as the public has a means of accessing them"

# Dissent by Judge O'Malley

- "reference was obtained from an interested party--a paid expert for a party opposing [the patent owner] in litigation, the same party who initiated the reexam"
- manual "bore indicia of being a draft document"
  - An incomplete draft was "not likely to be publicly accessible."
- "no indication that the public had any information available to it which would have prompted anyone to make such a request for that particular manual."

## Second issue: Missing pages?

- PTO relied on chapter with missing pages
- Patent owner:
  - case law on “obviousness”: consider reference "as a whole" and in light of any "teaching away"?
  - Impossible with missing pages?
- Majority: no error

# Missing pages; PTO practice

- PTO: allows "partial submissions of prior art documents" so long as the missing portions are not necessary to fully understand the submitted portions."
- E.g. PTO Rule 510(b)(3): party in a reexamination must submit an English translation of a non-English document but only of the "pertinent parts" See MPEP § 2214, § 2218.
- E.g. PTO Rule 105: examiner may request information from a patent owner or associated person; MPEP § 704.14(a): submission of the pages providing the particular subject matter requested when a document is a bound text or exceeds 50 pages.



# Missing pages: no suggestion of pertinence

- nothing in the software manual suggested that "the missing pages were necessary to an understanding of the pertinent parts of the reference."
- Table of contents and list of figures: 3 pages missing from Chapter 5, 7 pages missing from Chapter 7
- Topics of chapters: nothing suggested missing pages contradicted disclosure or were necessary to understand the software as pertinent to patent claims being reviewed

# PTO Reexamination Procedure

- "it would be useful for the PTO to provide a procedure through which an examiner could request further information from the third party requester."

## Third issue: did patent owner show *pre-filing date of invention date*, eliminating Manual?

- Case: governed by law before America Invents Act (AIA) abolition of “first-to-invent” principle
  - AIA “first to file”: applications and patents with claims with effective file date on or after **March 16, 2013**
  - Here, filing date in 1996
  - **First to invent law will remain pertinent in litigation for many years!**

# Rules on Invention Date

## Attorney Diligence

- Conception date *if* inventor (or attorney) exercise reasonable diligence to reduce invention to practice
- filing patent application disclosing invention = "**constructive reduction to practice**"
- Attorney diligence:
  - attorney must work "reasonably hard on the particular application in question during the continuous critical period." *Bey* (1986).
  - Keep records of application procedures (after 1996 for non-U.S. companies) up to 2013: eliminate "prior art" occurring just prior to filing date



# This Case: Insufficient Showing of Attorney Activity

- Attorney records must show: "the exact days when activity specific to [the patentee's] application occurred."
- Here: patent owner' evidence showed that, during five month diligence period
  - the attorney had conversations with the inventor, conducted a prior art search, and drafted an application.
  - the attorney billed for less than 30 hours of work.
- Held: *not* enough



# Suffolk Technologies, LLV v. AOL, Inc.,

752 F.3d 1358 (Fed. Cir. May 27, 2014)

- Controlling whether and to whom a server supplies files to a computer rendering web pages; **U.S. Pat. No. 6,081,835.**

# Background on invention

- A Website disparaging British Telecommunications (BT)
- Hostile Website obtained a BT logo from BT's server simply by directing internet browsers accessing the disparaging website to obtain the BT logo from the BT server and then to display the BT logo as part of the disparaging webpage on the user's computer screen.
- BT server was not capable of controlling access to the BT logo based on the source of the request for the BT logo.
- BT employees devised a method to control access and obtained a patent.

# Suit Against Google

- Patent assigned to the patent owner, Suffolk Technologies, LLC.
- In a suit, the patent owner asserted the patent's claims 1 and 6 against Google, Inc.

# Invalidity Defense

- Asserted prior art: June 29, 1995, "post" on a "newsgroup" on the World Wide Web devoted to **CGI (common gateway interface)**
- Post: nine months before the patent's priority date.
- District court: summary judgment that claims invalid as anticipated by the description in the "post"

# Post: Responding to Question

- In the post, a responder (Gundavaram), a college student, answered a question by another user (Yount).
- The answer sufficiently disclosed the method later claimed in the patent.
- Sufficiency: Established by the patent owner's failure to offer competent expert testimony to overcome Google's showing.
- OUCH!!!



# Arguments on Appeal: Post Not a Publication?

- Patent owner arguments: district court should not have been considered the "post" be an anticipatory "printed publication" under the applicable legal standard
- STANDARD. To be a "publication", the "reference" must be accessible to a person of ordinary skill in the art
- HELD: the arguments were not was sound.

# First argument: Site Only Followed by Beginners? Not Skilled Artisans?

- Patent owner: CGI "newsgroup" "was populated mostly by 'beginners,' not those of ordinary skill in the art""
  - questioner (Yount) said he was a "newbie" and
  - responder (Gundavaram) testified that most of the users were beginners.
- Argument not persuasive for two reasons.

# Site Users: Ordinary Skill (in 1995)

- First, 1995 level of ordinary skill in art: not high:
  - responder testified that there were no courses or books on CGI
  - he learned about CGI through self-study.
- Second, persons of ordinary skill were using such newsgroups.
  - 1995, only persons "with access to a university or corporate computer could use newsgroups"
  - Such persons were ""more likely to be skilled in the art."
  - Patent owner's expert used newsgroups.
  - Responder (Gundavaram) used the newsgroup at issue and later wrote a book on CGI.

## **Second argument: Posts Not Indexed or Searchable**

- Argument: the post was not accessible because the newsgroup posts had titles but were "non-indexed and non-searchable" and "could only be sorted by date"?
- The argument was unpersuasive for two reasons.



# Sufficient Dissemination

- First, the patent owner overstated "the difficulty in locating the Post after publication."
  - The "newsgroups" were "organized in a hierarchical manner"
  - "Someone interested in CGI could easily locate a list of posts in [the CGI] newsgroup."
- Second, "a printed publication need not be easily searchable after publication if it was sufficiently disseminated at the time of its publication."



# Cases Finding Sufficient Dissemination

- *Klopfenstein* (2004) (poster board displayed for several days at industry association meeting)
- *MIT* (1985) (paper delivered orally and at least six copies distributed).

# Dissemination: Distinguish *SRI* (2008)

- Distinguishable from *SRI Int'l* (2008)
  - File posted on a server.
  - Factual issues precluded summary judgment of invalidity because the file was not publicized.
  - Analogy “placing posters at an unpublicized conference with no attendees.
- Analogy: *not* apply to this case.
  - Dialogue with an intended audience: purpose of the newsgroup postings.
  - Post drew at least six responses in a week.
  - Many others "may have viewed the posts without posting anything themselves."

## Third Argument: Reliability? Date?

- The patent owner argued that questions about the reliability and accuracy of the post made summary judgment improper?
  - All the posts on the Usenet newsgroup were "altered to bear a timestamp of 12:00 a.m."
  - Email addresses were altered to protect users from spambots."
  - Small alterations suggested that other parts of the post at issue may have been inaccurate or altered?

# Reliability

- HELD: the patent owner presented "no affirmative evidence challenging the Post's material facts."
- The user who made the post (Gundavaram) testified to authenticate the post
- User recognized
  - his writing style,
  - style in the code set forth, and
  - e-mail address.

# **I. A. (Prior Art) 2. America Invents Act First-Inventor-to File**

- AIA: eliminates ability to rely on pre-filing date of invention to establish either patentability or priority
- Effective for applications and patents with at least one claims with an effective filing date on or after March 16, 2013
- No case yet interpreting or applying the “first-inventor-to-file” provisions of the AIA
- One case: attempt to invalidate FITF provision as unconstitutional



# Madstad Engineering, Inc. v. US PTO,

756 F.3d 1366 (Fed. Cir. July 1, 2014)

- Basis for Constitutional challenge to AIA's "first to file" provision.
- Article I, Section 8 of the U.S. Constitution "lists the powers of Congress. The eighth power is: "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and **Inventors** the exclusive Right to their respective Writings and Discoveries."

# ***Madstad*; Constitutional Challenge to First to File**

- Plaintiffs: AIA violates Section 8 by awarding a patent to the first to file in preference to an inventor who was the first to invent but not the first to file?
- Does “inventors” in Section 8 mean the first person to invent?

# Madstad Engineering-2

- Plaintiffs: individual, who was named as inventor on three patents, and his company, which developed and marketed his inventions
- Suit: in a district court against the PTO seeking a declaratory judgment that the first-inventor-to-file provision of the AIA was unconstitutional and an injunction barring the PTO from enforcing the provision.
- District court: dismissed the suit on the ground that the inventor and company lacked standing.
- The inventor and company appealed.
- HELD: affirmed.

# Federal Circuit Jurisdiction but No Standing

- The Federal Circuit had jurisdiction over the appeal, which potentially required interpretation of the AIA terms "inventor" and "first-inventor-to-file" and the AIA derivation procedure, (hence case “arose under patent law”), but
- The individual and company lacked standing and, therefore, their constitutional argument cannot be addressed.



# General Constitutional Law

## Standing to Challenge Statute

- General constitutional law: a court may determine whether a statute is unconstitutional but only in “case” brought a party who has stand.
- To establish standing, a plaintiff must establish "injury in fact." The injury must be concrete, particularized, and actual or imminent.
- Here, the plaintiffs did not establish such injury.



# Four Alleged Injuries

- Plaintiffs asserted four alleged injuries.
- All were too speculative and were not sufficiently connected to the AIA first to file provision.

# First: "Increased Risk Of Computer Hacking."

- Company: "forced to increase its computer security" because the AIA has made it more attractive and profitable for computer hackers to steal IP and file their own patents."
- HELD: speculative about illegal hacker's capabilities and incentives.
- Hacking: growing threat even before the AIA was enacted.

# Harm from “Hacking”

- No evidence that that, in response to the AIA, hackers would begin launching cyber-attacks that the company's old security system could not handle, but the upgraded system could.
- Assuming the AIA led to increased, successful cyber-attacks, a hacker must, before the inventor files his application
  - interpret the inventor's data,
  - finish developing the product to a point where it can be patented,
  - file for a patent, and
  - prosecute that application successfully.

## Second: "Increased Time And Effort To File Additional Patent Applications"

- The inventor and his company argued that the AIA forced them to divert resources to prepare more applications and file them sooner "to compete in the race to the PTO."
  - smaller companies cannot as easily absorb the added cost as large companies?
  - a first to file system forced "small inventors" to file applications that contained inadequate descriptions or testing data and, therefore, were less likely to ripen into an enforceable patent?
  - AIA caused "current injury": need to spend more to "speed up" the inventive process and "to hire attorneys at an earlier point in time."

# Increased burden to file sooner?

- These arguments were insufficient to show actual injury because, inter alia,
  - the inventor had not filed nor was preparing to file a patent application in the first-inventor-to-file system.
  - the inventor admitted it was speculative whether his current research would result in a patentable invention



# Government's Argument On Standing: File Application Lose Derivation Proceeding?

- Government argued that to establish standing, an inventor must
  - file an application for a patent on an invention,
  - be faced with a rejection based on an earlier filed application on that same invention and
  - lose a derivation proceeding he initiates to challenge that earlier filing.

# ***When would one have standing?***

- Contrary to Government's argument: "filing and losing a derivative action" was *not* "a necessary prerequisite to standing to challenge the first-inventor-to-file provision of the AIA ...."
- There was no need to "define exactly what steps a would-be patent applicant would need to undertake to establish standing to challenge the first-inventor-to-file provision of the AIA."

# Third: Competitive Disadvantage?

- The inventor and his company asserted that the AIA put them at a competitive disadvantage, relative to larger companies
  - AIA put "a premium on the ability to file numerous expensive patent applications."
  - AIA forced them, inter alia, to set up expensive in-house testing facilities.

## **Fourth: "Lost Business And Investment Opportunities."**

- The inventor and his company argued that the AIA inhibited it from "sharing ideas with potential partners and investors, causing lost business and investment opportunities."
- Both three and four: speculative for reasons similar to those in regard to the first two alleged injuries.



# Comments

- Prior experience shows that, for a very large percentage of conflicts, the first to file is also the first to invent. The AIA does not diminish the rights of this large category of first inventors.
- The articulated concern of opponents to first to file priority is that a first inventor will be denied a patent. But the U.S. patent has never guaranteed that all first inventors obtain a valid patent and one ground for denial is tardiness in filing.
- The AIA may be viewed as merely increasing the requirement of prompt filing after a first invention: you must file before someone else files an application disclosing the same invention.



# Comments: Valid Patent to Second Inventor?

## Abolition of Prior Invention Defense

- A less articulated concern is that a valid patent should issue to an inventor who is the first to file but second to invent.
- If the Constitution does mean by “inventor” a first inventor (and that is a debatable proposition), then the constitutionality of issuing such a patent can be seriously questioned.
- In that view, Congress erred in the AIA by abolishing the Section 102(g) prior invention defense.
- **CONCLUSION:** the first entity with “standing” may be one who attacks the validity of a patent on grounds of prior invention

# I. Patentability: B. Obviousness

## 1. Generally

- Obviousness (Section 103): most important and most disputed condition of patentability.
- Most recent decision providing guidance from Supreme Court decision“
  - *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007)
  - KSR: subject to various interpretations on how to apply Section 103 to particular claimed inventions.

# Obviousness: Central Position of Federal Circuit

- Routine appeals funneled to Court of Appeals for the Federal Circuit from
  - rejections or confirmations by the Patent and Trademark Office (PTO) in
    - original and reissue examinations,
    - ex parte reexamination,
    - pre-AIA inter partes reexamination,
    - AIA inter partes review, and
    - AIA post grant review, including business method patent review

# Central Role of Federal Circuit

- Appeals to Federal Circuit from
  - district court decisions in contexts of
    - summary judgment,
    - jury trial,
    - bench trial, and
    - preliminary injunction contexts), and
  - International Trade Commission in importation exclusion proceedings

# ***In re Giannelli***

739 F.3d 1375 (Fed. Cir. Jan. 13, 2014)

- Application: exercise machine "adapted to" a *pulling* rowing motion against selected resistance
- PTO rejection: unpatentable over prior art exercise machine for chest press *pushing* motion against selected resistance.



# PTO Rejection

- PTO Reasoning:
  - "adapted to" reasonably construed as meaning "capable of"
  - the prior art chest press was *capable* of use for pulling (for example, by the user turning around) and, therefore,
  - that the claims were merely to a new use of the prior art machine.
- Held: reversed.

## ***Giannelli*: “adapted to”: Construed as Configured to**

- Properly construed in light of the specification, "adapted to" in the claims meant "made to," "designed to," or "configured to."
- Proper inquiry: would it have been obvious to modify the prior art machine so that it would be designed for pulling?

## ***Giannelli; Physical capacity***

- Physical capability alone did "not render obvious that which is contraindicated."
- The examiner provided "no explanation why or how a person having ordinary skill in the art would modify the prior art chest press machine to arrive at the apparatus of the ... application."
- Any user of an exercise machine knew: "a sure-fire way to cause injury is to use a machine in a manner not intended by the manufacturer."

## ***Giannelli*: No prima facie case**

- PTO did not meet its initial burden to establish prima facie obviousness
- The applicant was "not obligated to submit additional evidence to rebut the examiner's findings of pulling capability."

# K/S HIMPP v. Hear-Wear Technologies, LLC.,

751 F.3d 1362 (Fed. Cir. May 27, 2014)

- To what extent can a patent examiner (or a court) rely on a feature as "well known" or a matter of "**common sense**"?
- In *KSR*, the Supreme Court referred twice to the use of "common sense" in determining obviousness.
- As this case illustrates, Federal Circuit judges disagreed about the extent to which there must be an evidentiary basis for a finding by an examiner about what is "common sense" or "well known."



# Hearing aid; “Prong connection”

- A patent concerned a hearing aid. **U.S. Pat. No. 7,016,512.** Two claims added "**prong connection**" feature.
- Original examination: examiner rejects claims, including two **dependent claims (3 and 9)**, which that added the prong connection feature.
  - Examiner: feature "well known in the art."
  - Response: examiner's "well known" finding not challenged
  - Amend the independent claims to overcome prior art.
  - Claims allow

# ***K/S HIMPP* Inter partes Reexamination**

- *Inter partes* reexamination; primary reference (Shennib).
  - On dependent claims, the requester: added prong connection feature was "no more than the predictable use of prior art elements according to their established functions."
  - Examiner in the PTO's "Central Reexamination Unit" (CRU): refusal to adopt requester's proposed obviousness rejection on the ground that the requester failed to provide evidence.
  - Examiner issues a "Right of Appeal Notice."

# ***K/S HIMPP***

- Requester files a request for *ex parte* reexamination.
  - Cite another reference (Prentiss), which, the requester argued, explicitly taught the features dependent claims 3 and 9 recited.
  - PTO refusal to merge the *ex parte* reexamination with the *inter partes* reexamination
- In the *inter partes* proceeding
  - Patent owner appealed the examiner's rejections of certain claims
  - Requester cross-appealed the refusal to reject claims 3 and 9.

## ***K/S HIMPP***

- Board affirms the refusal to reject claims 3 and 9
  - there was nothing in the record to support the requester's argument that the claim 3 and 9 features were "well known."
  - "In regard to the original examination, it noted the examiner did not take "official notice" that the features were known.
  - Nor did the patent owner acquiesce in the examiner's position that the features were "well known."
- Requester appeals to Federal Circuit. HELD: affirmed.



## ***K/S HIMPP***

- The Board did *not* err in requiring "record evidence to support an assertion that the structural features of claims 3 and 9 of the ... patent were known prior art elements."
  - *Zurko* (Fed. Cir. 2001): PTO Board's expertise "may provide sufficient support for conclusions as to peripheral issues." However, the patentability of claims with a feature was "more than a peripheral issue."
  - A patentability determination of claims reciting a feature required a "core factual finding" on whether the prior art disclosed the feature, which, in turn, required "some concrete evidence in the record," not a conclusory statement by the Board or a reexamination requester.



# *KSR* on Common Sense

- A requirement of evidence on the record: not inconsistent with *KSR*'s caution against the 'overemphasis on the importance of published articles and the explicit content of issued patents.' " *KSR*, 550 U.S. at 398.
- *KSR*'s caution: use of common sense and knowledge in determining "the **combinability of references** where the limitations were in evidence."
- This case: "the **lack of evidence of a specific claim limitation.**"

# PTO Examination Procedure

- Patent owner's position supported by "PTO examination procedure."
  - An examiner can "rely on common knowledge to support a rejection" but only under "narrow circumstances." See M.P.E.P. § 2144.03.
  - To rely on personal knowledge, an examiner must provide an affidavit or declaration. See 37 C.F.R. § 1.104(d)(2); M.P.E.P. § 2144.03(c)."
- The PTO Board "has subject matter expertise," but it "cannot accept general conclusions about what is 'basic knowledge' or 'common sense' as a replacement for documentary evidence for core factual findings in a determination of patentability. *Zurko*, 258 F.3d at 1385-86."

# Judicial Notice: Reference Cited in Ex parte Reexamination

- Requester: judicial notice of Prentiss reference cited in *ex parte* reexamination request?
  - No expanding review beyond grounds Board relied on. *Applied Materials* (Fed. Cir. 2012).
  - PTO rules: no new prior art evidence in *inter partes* reexamination beyond that cited in request except in limited circumstances. See 37 C.F.R. § 1.948.
  - Scope of *inter partes* reexamination: “otherwise limited to the prior art that raises a substantial new question of patentability as determined by the Director. *Belkin Int'l* (2012).”
- Reference “part of the *ex parte* reexamination” but PTO, “as was within its discretion, explicitly declined to merge the two proceedings.”
- NOTE: comparable issue in **IPR. Rule 42.123** Filing of supplemental information.

# Judge Dyk, Dissenting

- Majority's holding: examiners may not rely on their expert knowledge and common sense about what is well known in the art
- Contrary to *KSR*; *Zurko* was before, and inconsistent with, the *KSR* holding that a fact finder may have recourse to common sense.
- Any purchaser of electrical devices in the United States for the past 50 years is familiar with multipronged electrical connections, but the majority sustains the claims based on the PTO's conclusion that there was no record evidence showing such a connection to be known in the prior art.



# Safeguards

- Majority concerns about potential unfairness in relying on the examiner's specialized knowledge: not well taken in view of recognized safeguards."
  - First, **examiners** must **state on the record** that they are relying on a fact well known in the art and provide their rationale for doing so."
  - Second, applicants must have the **opportunity to challenge** the examiner's determination that particular features were common knowledge in the art."



# Q.I. Press Controls, B.V. v. Lee,

752 F.3d 1371 (Fed. Cir. June 9, 2014)

- Patent "a visual inspection system for printing presses," "web printing", that is, "printing with large rolls of paper."  
**U.S. Pat. No. 6,867,423.**
  - Inspect printed pages (substrate) correct a detected error in printing
  - Image sensor
  - Circular configuration of LED (light-emitting diodes) lights surrounding the sensor to illuminate the substrate.

# Inter Partes Reexamination

- A third party, who the patent owner had accused of infringement in a related case, requested *inter partes* reexamination.
- The PTO granted reexamination of all the claims.
  - Examiner initially rejected the patent's claims (1 to 12) for obviousness.
  - Patent owner responded, adding **60 new claims** (13 to 72).
- NOTE:
  - Illustrate possible abuse: amendments to slow process
  - May explain PTO reluctance to allow amendments in AIA IPR proceedings

# ***QI Press: Three Prior Art References***

- **SAINIO:** *PRINTING PRESS*; SINGLE ILLUMINATION SYSTEM. The Sainio reference showed a printing press with an image sensor and a single high intensity illumination system.
- **ROSS:** CIRCULAR LED LIGHT SYSTEM; INSPECT BANK NOTES IN AUTOMATED TELLER MACHINE. The Ross reference showed a circular LED light system for use in an automated teller machine to inspect bank notes.
- **MARUYAMA:** LASER PRINTER, SINGLE LED LIGHT TO DETECT PROPERTIES OF SHEET. Maruyama showed a laser printer with a sensor to analyze properties of a sheet of paper, the sensor being lit by a single LED light reflected at angle.

# Claims 1-60

- Examiner rejection
  - rejects claims 1-60, including the patent's original claims 1-12
  - Maruyama (laser printer) as the primary reference.
  - Combine with Ross (circular LED for ATM machine)
- **Board reverses**
  - neither Maruyama nor Ross disclosed or suggested a printing press.“
  - "Maruyama disclosed a visual inspection system for a copier or laser printer“, not a printing press
  - Ross disclosed a system for `media recognition, validation and screening."



# Claims 61-72

- Examiner rejection (different combination than for claims 1-60)
  - Sainio as the primary reference: visual inspection system with a printing press.
  - Obvious to modify with Ross' disclosure of a circular LED configuration.
- **Board affirms**
  - "Sainio disclosed a printing press that included an illumination system
  - it would have been obvious to incorporate the illumination system of Ross with Sainio."



# Cross-Appeals

- The reexamination requester appealed, contesting the Board's reversal of the examiner's rejection of claims 1 to 60.
- The patent owner cross-appealed, contesting the Board's affirming of the examiner's rejection of claims 61 to 72.
- “Obvious” question: was the Board inconsistent, assuming that the two sets of claims were basically similar???

# CLAIMS 61-72

## Obvious to combine Sainio and Ross

- Board: no error err in affirming examiner rejections
- Skilled artisan, seeking alternatives to **Sainio** single light source inspection system for printing press, would have increased the number of lights, used LEDs, which were more efficient, and applied the **Ross** teaching of a circular configuration
- Scenario described in *KSR* (2007): "combination of familiar elements according to known methods" that yielded no more than "predictable results."
- OBJECTIVE EVIDENCE.
  - Reexamination requester praised circular LED configuration in marketing materials.
  - Relevant BUT *not* alter the conclusion on obviousness.

# Reversing Rejection of Claims 61-72

## Inherently Contradictory

- The Board's reversing the rejection of claims 1 to 60 was "inherently inconsistent" given its affirming of rejection of similar claims (61-72). That required a remand.
  - Claims 1-60 differed "only slightly from claims 61-72."
  - "Given the minor differences in the claims themselves and similarities in the cited prior art," the **Sainio-Ross** combination disclosed "many of the elements of claims 1-60."

# Sainio-Ross As New Ground For Rejection.

- The Board may not have *sua sponte* rejected claims 1-60 for obviousness over Sainio in view of Ross "because that rejection would have constituted a new ground for rejection on appeal."
- Examiner rejection was *Maruyama* and Ross
- "However, the Board has the discretion to issue a new ground of rejection if it has knowledge of one."



# **Obligation to Public; Not Apply All References to All Claims**

- A court is under "obligation ... to the public not to permit inconsistent results" when all the pertinent references were before the PTO Board and the court and "a proper challenge to that inconsistency is made on appeal."
- "We do not hold that the Board should always apply references that are before it affecting some claims to every other claim on appeal ...."



# I. Patentability: B. Obviousness

## 2. Analogous Art

- Historic roots: **Chisum on Patents** Sec. 5.03[1][a][i]
- “The doctrine of analogous and nonanalogous art has its origin in [the Supreme Court's] *C & A Potts & Co. v. Creager* (1895). ... The patent at issue was for a “clay disintegrator” or pulverizer. The patented device closely resembled a prior device used for an entirely different purpose—wood polishing. The Court upheld the patent. It approached the problem in terms of the “new use” doctrine ... as well as the issue of obviousness.
- Court: “[I]t often requires as acute a perception of the relations between cause and effect, and as much of the peculiar intuitive genius which is a characteristic of great inventors, to grasp the idea that a device used in an art may be made available in another, as would be necessary to create the device de novo.”

# Criteria; *Clay* (1992)

- Contemporary criteria: a prior art reference is analogous, and therefore, available to determine obviousness of an invention if
  - (1) the art is from the same field of endeavor, regardless of the problem addressed or, if the reference is not within that field,
  - (2) the reference is reasonably pertinent to the particular problem with which the inventor is involved. *In re Clay* (1992).

# “Guidance” from Federal Circuit Precedent

- Guidance: when is a reference reasonably pertinent to the problem?
  - A reference is reasonably pertinent if “it is one which, because of the matter with which it deals, **logically would have commended itself** to an inventor's attention in considering his problem.
  - If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection.
- "The pertinence of the reference as a source of solution to the inventor's problem must be recognizable with the foresight of a person of ordinary skill, not with the hindsight of the inventor's successful achievement.

# Scientific Plastic Products, Inc. v. Biotage AB,

766 F.3d 1355 (Fed. Cir. Sept. 10, 2014)

- Three patents: "a resealable cartridge for low pressure liquid chromatography (LPLC)." **U.S. Pat. No. 7,138,061; U.S. Pat. No. 7,381,327; U.S. Pat. No. 7,410,571.**
  - Prior art LPLC cartridges avoided threaded polymers because of a potential problem of leakage after resealing.
  - Claims: complementary tapered threaded sealing surfaces on a polymer cap and on the lip of a polymer container.
- References
  - A primary reference: a LPLC cartridge with all the claims' limitations except the tapering of the cap and lip surfaces.
  - Two other references: tapered threaded polymer cap and lip for resealably closing **containers for beverages, such as carbonated soda.**



# PTO Finding: Analogous

- Majority: substantial evidence supported PTO findings in an *inter partes* reexamination that:
  - the two beverage references were analogous art
  - a person of ordinary skill in the art would have been motivated by the known concern with leakage to combine the primary reference with the taped seal shown in the two beverage references.
- Problem the beverage references addressed: "sufficiently close to the problem addressed by the claimed invention" as to support the Board finding that the references were "available as prior art."

# Prior Art: Implicitly Acknowledge Leakage Problem

- PTO: the known potential leakage problem would have motivated a person of ordinary skill in the art to improve LPLC cartridges by looking to beverage references.
- The primary reference did not *explicitly* describe a leakage problem,
- However, it did *implicitly* acknowledge such a leakage problem by disclosing use of an O-ring with its seal.

# Needs: Specific To Flash Chromatography?

- The patent owner argued
  - the needs the patents identified were "specific to flash chromatography."
  - "chemists in laboratories would not look to `soda-pop' bottle caps to solve problems with flash chromatography cartridges."
- "However, the analogous art inquiry does not exclude references `not within the field of the inventor's endeavor,' if a person of ordinary skill would reasonably look to that reference in order to solve the problem confronting the inventor. *In re Clay*, 966 F.2d at 659."

# Hindsight?

- Patent owner: "the Board improperly relied on the inventors' description of the problem solved in order to find the solution obvious, an analytic procedure that relies on hindsight by using the inventors' own reasoning against them."
  - The patents stated that threaded connections had not been used with polymer LPLC cartridges because of a leakage problem.
  - Without dispute, that statement was *not* correct because the primary reference (Yamada) did use threaded polymer seals.
  - The patent owner argued that "a person of ordinary skill would not have perceived any need to improve" the Yamada cartridge and that "only through improper hindsight was the Board able to justify its finding of a known leakage problem."



# Avoiding Hindsight

- Hindsight was to be avoided.
- However, the issue was *not* whether the Yamada cartridge leaked.
- WAS THERE A CONCERN ABOUT LEAKAGE? Rather, the issue was whether "there was a concern with leakage in LPLC cartridges such that a person of ordinary skill would have provided a known pressure-resistant cap, as in [the beverage references]."
- Substantial evidence supported the PTO finding "there was such a concern."

# Moore, Dissenting:

- Board cancellation "based entirely on hindsight reconstruction."
  - Patent's identification of leakage problem reflected inventor's work and did not indicate that leakage was a problem known in the prior art.
  - No other evidence that leakage was a known problem such as to motivate a modification of the primary reference (Yamada) even though this was a **contested *inter partes* reexamination between sophisticated parties**, each of whom presented expert testimony.
- Board also erred by failing to resolve a dispute on the level of ordinary skill:
  - was it that of a *chemist* seeking to solve problems with flash chromatography cartridges, as the patent owner argued?
  - was it that of a designer skilled in *mechanical engineering*?

## B. Obviousness

### 3. Post-Filing Date Evidence

- *Bristol-Myers Squibb Co. v. Teva Pharmaceuticals USA, Inc.*, 752 F.3d 967 (Fed. Cir. 2014), *rehearing & rehearing en banc denied*, 2014 U.S. App. LEXIS 20062 (**October 20, 2014**) (Newman, Lourie, Reyna & Taranto dissenting)
- Can evidence about the comparative properties of the prior art and of the invention claimed in an application or patent can be used in determining obviousness even though that evidence is generated *after* the effective filing date of the application?

# “Time of Evidence” Issue

- At issue in *Bristol-Myers* were questions about how obviousness applies to a pharmaceutical invention (a drug for treating hepatitis).
- In part, the questions concerned whether evidence about the comparative properties of the prior art and of the invention claimed in an application or patent can be used in determining obviousness even though that evidence is generated *after* the effective filing date of the application.
- Those questions are of importance beyond the pharmaceutical industry.



# Analog of Natural Compound; Structurally-Similar

## Prior Art: Later Found to Be Toxic

- The patent claim at issue was to a specific chemical compound (entecavir). The compound was the basis for the patent owner's hepatitis B treatment drug, Baraclude®, which had annual sales of more than \$300 million.
- The claimed compound was an "analog" of a natural compound.
- It was structurally very similar to another analog (2'-CDG) that was described in a prior art reference. The reference stated, based on *in vitro* tests (i.e., in a laboratory), that the similar analog was effective and non-toxic for treating hepatitis B.
- After the patent owner inventor filed its application (in 1990), animal tests showed that the prior art analog was, in fact, highly toxic and not usable for treating humans.

# Patent Invalid: Obvious to Modify Lead Compound (Later Found to be Toxic)

- Despite that post-filing evidence of toxicity, a district court held the patent's claim to the compound (entecavir) invalid because
  - entecavir was, as of the filing date, an obvious modification of the prior art compound (2'-CDG)
  - researchers had in fact used the prior art compound as a "lead" for making modifications in the search for effective drugs.
- The panel affirms.
- Full court denies en banc review with four dissents.

# Time-of-Evidence: A Puzzle

- If the prior art compound's toxicity had been known in the prior art, then it would likely *not* be deemed to have rendered a similar compound obvious despite the great structural similarity.
- Given the toxicity of the closest prior art, courts could apply well-established standards for obviousness, saying, for example, that
  - the prior art "taught away" from the claimed invention,
  - the novel and unexpected properties of the claimed compound, as nontoxic and effective compared to the "close" prior art, rebutted any implication of obviousness (so-called "prima facie" obviousness) based on that prior art, and/or
  - there was no "motivation to modify" a toxic prior art compound with any "reasonable expectation of success."

# Should Timing Matter?

- Is any rule requiring a patent applicant to gather evidence on the properties of an invention and of the prior art before filing an application disclosing the invention incompatible with the policy encouraging prompt filing of applications?
- On the other hand, has a patent owner provided the full disclosure about an invention that patent law encourages if it fails to disclose in the application as filed the distinguishing characteristics and advantages of the invention compared to the prior art?



# Old, Unresolved Problem

- The timing-of-evidence issue long pre-dates the *Bristol-Myers* decision.
- Indeed, as a young law professor, I published an article on it in **1975!!** Chisum, "*Afterthoughts*" and *Undisclosed Advantages as Evidence of Patentability: From Salt Dredges to Polystyrenes*, 57 J. Pat. Off. Soc'y 437 (1975).
- As my article noted, the pertinent case law from the Supreme Court gave a mixed message.
- As the opinions in *Bristol-Myers* show, some 40 years later, the problem *still* lacks a definitive solution.
- The issue may, at some point, be taken up by the Supreme Court.

# Polar Positions: Dyk v. Newman

- In their opinions, some of the individual Federal Judges take distinct and, arguably extreme, positions.
- Judge Dyk argues that "evidence postdating the invention" can *not* "be used to establish unexpected results," at least under the circumstances of the case.
- Judge Dyk had previously expounded on the timing-of-evidence issue and on the pertinent Supreme Court cases, in his dissenting opinion in *Genetics Inst., LLC v. Novartis Vaccines and Diagnostics, Inc.*, 655 F.3d 1291, 1315 (Fed. Cir. 2011).
- In contrast, Judge Newman argues that "comparative data," that is, evidence on whether a "new product (or device or method) possesses properties not possessed by similar products," does *not* need to "have been previously available or known to the art at the time of the invention."

# Moderates

- Other judges, including Judge O'Malley and Judge Taranto, advocate moderate positions.
- They emphasize
  - the viewpoint for obviousness remains as of the filing date (or the invention date for pre-AIA patents and applications), but
  - later testing and evidence is of evidentiary value in determining what would have been a "reasonable" expectation as of the filing date.

# Taranto Opinion: Methodical

- Why language of Section 103 does not answer timing question.
  - It does refer to whether the invention "would have been obviousness *before*" the invention date (pre-AIA) or effective filing date (AIA).
  - But the question is *not* about what a particular real person knew at that time but, rather, what a hypothetical person with presumptive knowledge would have thought.
- Judge Taranto: purports to merely describe questions that he would like the Federal Circuit to have considered en banc, but his opinion clearly telegraphs his likely position.
- As to the standard formulation of obviousness as requiring a "**reasonable expectation of success**" in modifying the prior art, he suggests that reasonableness should account for "**not just what evidence has been developed but also what evidence could easily be developed but has not yet been.**"



# I. Patentability:

## C. Eligible Subject Matter

- Section 101: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."
- **1793.** The statute largely conforms to a provision in a 1793 Patent Act and has been amended by Congress only once and in a minor way.
- Surprisingly, the interpretation of this old statute has, over the past five years been the "hottest news" in patent law!

# Supreme Court Quartet

- In a quartet of recent decisions, the Supreme Court confirmed that there is a judicially-recognized implied exception to Section 101 for claims directed to "laws of nature, natural phenomenon and abstract ideas."
  - *Bilski v. Kappos*, 561 U.S. 593 (2010)
  - *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012)
  - *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013)
  - *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (June 19, 2014).
- Such claims deemed to be for “patent ineligible subject matter” even though they are worded as to a “process” or a tangible thing (e.g., machine, composition of matter or manufacture).

# *In re* Roslin Institute

750 F.3d 1333 (Fed. Cir. May 8, 2014)

- CLONED MAMMAL; GENETIC IDENTITY. A claim to a "live-born clone of a pre-existing, non-embryonic, donor mammal" was *not* patent eligible.
  - The claimed subject matter may have been a "manufacture" or "composition of matter" within the meaning of Section 101.
  - However, it fell within the judicial exclusion of "natural phenomenon."
- Tests from Supreme Court: a modified product or organism must have "markedly different characteristics from any found in nature and one having the potential for significant utility." *Funk Bros. Seed* (1948), *Chakrabarty* (1980), *Association for Molecular Pathology v. Myriad Genetics, Inc.* (2013)
- Here, the claimed cloned mammal lacked such characteristics because it was genetically identical to the mammal of which it was a clone.
- PHENOTYPIC DIFFERENCES: NOT CLAIMED, NOT FROM INVENTOR'S EFFORTS. Any phenotypic differences between claimed clone and its genetic donor: unclaimed, not from inventors' efforts, confer patent eligibility.

# Alice Corp. v. CLS Bank Int'l

134 S. Ct. 2347 (June 19, 2014)

- Most important Supreme Court decision on patent law since *KSR* (2007).
- The four patents concerned a "computerized scheme for mitigating 'settlement' risk", such as may occur with multiple currency exchange transactions between parties in a day and, at the end of a day, only one party having the ability to pay what it owes through its bank. The scheme used a computer system as a third-party intermediary (escrow). U.S. Pat. No. 5,970,479; U.S. Pat. No. 6,912,510; U.S. Pat. No. 7,149,720; U.S. Pat. No. 7,725,375.



# *Alice*

- DISTRICT COURT: summary judgment that the patents' claims to a method, a computer system configured to carry out the method, and a computer-readable medium containing program code for performing the method were invalid as for an abstract idea.
- FEDERAL CIRCUIT: Sitting en banc, the Federal Circuit affirmed but with no opinion commanding a majority.
- HELD: all the claims were invalid as directed to abstract ideas and, therefore, falling within the long-standing judicially recognized exception to Section 101, which excluded "laws of nature, natural phenomena, and abstract idea."

# Chisum on *Alice*

- Chisum, "The Supreme Court's Alice Decision on Patent Eligibility of Computer-Implemented Inventions: Finding an Oasis In the Desert:  
<http://patentlyo.com/patent/2014/06/eligibility-implemented-inventions.html>
- Chisum, "The Patentability of Algorithms," 47 U. Pitt. L. Rev. 959 (1986)

# ***Mayo* Two Steps: Apply to “Abstract Idea” Exclusion**

- Two-step framework Supreme Court adopted in *Mayo* (2012) for medical diagnosis claims challenged as directed to a "law of nature"
- Framework applies to computer implemented inventions challenged as "abstract ideas."

# First *Mayo* Step

- The **first *Mayo* step** asked whether a claim recited an ineligible concept (law of nature, natural phenomenon or abstract idea).
- Here the claims were, "on their face," drawn to the concept of intermediated settlement.
- That was a fundamental economic practice, as reflected in both historic and contemporary texts.



# Not Just “Fundamental Truths” Existing Apart from Humans

- The patent owner, referring to prior Supreme Court decisions, which involved mathematical formulas, argued that an "abstract idea" was confined to a fundamental truth that existed, in principle, apart from any human action.
- That argument was belied by *Bilski* (2010), which held a hedging method to be an abstract idea.
  - Hedging, like intermediated settlement, was a **long standing commercial practice**, but it was a "**method of organizing human activity**," not a "truth" about the natural world that had always existed.
  - Thus, intermediated settlement, as a "**fundamental economic practice**," was an abstract idea.

# Second *Mayo* Step

- The second *Mayo* step asked whether a claim reciting an ineligible concept also recited sufficient additional elements to transform the claim from one to the concept *itself* to one to an *application* of the concept.
  - *Mayo* described step two as a "search for an ` `inventive concept.' “
  - It required more than the addition of the words "apply it" to a concept and more than "conventional steps, specified at a high level of generality.”
  - It required that the claim was more than "a drafting effort designed to monopolize" the abstract idea.
  - Also, *Bilski* required that an addition be more than a limitation of the concept to a particular technological environment.

# Prior Cases:

## Compare *Benson*, *Flook* to *Diehr*

- Prior cases, *Gottschalk v. Benson*, 409 U. S. 63 (1972), and *Parker v. Flook*, 437 U. S. 584 (1978), established that "the mere recitation of a generic computer" did *not* transform a patent-ineligible abstract idea into a patent-eligible invention.
- Another case, *Diamond v. Diehr*, 450 U. S. 175, 188 (1981), held patent claims to a computer-implemented process eligible because the "**improved an existing technological process,**" *not* "because they were implemented on a computer."

# Applying Second Step

- The second step required consideration not only of each claim element individually but also the elements as an "ordered combination."
- METHOD CLAIMS.
  - recite only "the concept of intermediate settlement as performed by a generic computer" and were, therefore, not patent-eligible.
  - not **"improve the functioning of the computer itself"** or **"any other technology or technical field."**
- SYSTEM AND MEDIA CLAIMS.
  - fail for the same reasons as method claims.
  - Patent owner: system claims recited "specific hardware"? but that hardware was "purely functional and generic."
  - Hardware limitations did not meaningfully limit the claims beyond linking the method to a particular technological environment, to wit, "implementation via computers."



# Digitech Image Techn. v. Electronics for Imaging,

758 F.3d 1344 (Fed. Cir. July 11, 2014)

- First Post-*Alice* Federal Circuit decision
- Patent: "digital image processing system." **U.S. Pat. No. 6,128,415.**
- Digital image processing: capture image with a "source device" (e.g. digital camera), alter image, transfer image to "output device" (e.g. a printer).
- Distortion in an image's color and spatial properties because different devices allow different ranges of color and spatial images to be displayed.

# Device Independent Solution: Both Spatial and Color Properties

- Prior art methods to correct distortions:
  - device *dependent* solutions (design device with another in mind), and
  - device *independent* solutions (an image's pixel data from one device was translated to an "independent color space" that could be translated to any number of output devices with reduced distortion).
  - Patent discussed prior art device independent solutions that were limited to *color* information.
- Patent disclosed an improvement on the prior art independent solutions that included *both* spatial and color properties of an imaging device.
- HELD: Both the "device profile" and the "method" claims were to patent ineligible subject matter and thus invalid under Section 101.

# “Device Profile” Claims

- Not to a "process" or to a "tangible or physical thing," which was a requirement for a "machine," "manufacture," and "composition of matter." Thus, the claims were not within any of the four Section 101 categories.
- TWO SETS OF INFORMATION. The claimed device profile was two sets of information for transforming spatial and color information.
  - Claims: not tie the profile to any tangible embodiment of the information, such as physical memory.
  - Contrary to the patent owner's argument, the claims did *not* describe the device as a "tag file appended to a digital image" or "another other embodiment of hardware or software."
- *NUIJTEN* (2007); “SIGNAL” CLAIMS. In *In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2007), claims to a "signal" were ineligible because it was only a transitory physical embodiment. Here, the claims to a "device profile" did "not require *any* physical embodiment, much less a non-transitory one."

# Method of Generating Device Profile

- Claims recited
  - generating a first data set, which described a device dependent transformation of *color* information content of an image to an device independent color space, using existing information (chromatic stimuli and "device response characteristic functions"),
  - generating a second data set, which described a device dependent transformation of *spatial* information content of the image in that space, also using existing information (spatial stimuli and "device response characteristic functions"), and
  - combining the two into a single data set (a "device profile").
- "ineligible abstract process of gathering and combining data" that did "not require input from a physical device."
- A process that employed "mathematical algorithms to manipulate existing information to generate additional information," was, without "additional limitations," *not* patent eligible. *Flook* (1978).



# Method: Not Tied to Image Processor

- The claims did not tie the method to an image processor.
  - The only reference to an image processor was in the claims' preamble, which recited a "method of generating a device profile that describes properties of a device *in a digital image reproduction system* for capturing, transforming or rendering an image ....." (Emphasis added).
  - However, case law prescribed that a preamble did not limit a claim if it merely stated an invention's purpose or intended use. E.g., *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006).
- There was no need to "decide whether tying the method to an image processor" would cause the claims to be "directed to patent eligible subject matter in accordance with the Supreme Court's *Mayo* test. *Alice Corp.*, 573 U.S. \_\_\_, 82 L. Ed. 2d 296, 311 (2014).

# BuySAFE, Inc. v. Google Inc.

(Fed. Cir. Sept. 3, 2014)

- A patent concerned "methods and machine-readable media encoded to perform steps for guaranteeing a party's performance of its online transaction." **U.S. Pat. No. 7,644,019.**
- The patent's claim 1 was to a method with the following steps.
  - An "computer application program" running on a "safe transaction service" provider's computer received "a first party's request for obtaining a transaction performance guaranty service with respect to an online commercial transaction following closing of the online commercial transaction."
  - The program processed the request to provide the service to the party.
  - The provider's computer offered, "via a computer network," the service, which binds the guaranty to the transaction "to guarantee the performance of the first party following closing of the online commercial transaction."

# Discuss “Two Aspects”

## First: Type of Matter within “Abstract Idea”

- Opinion by new judge: **Taranto**. “Fresh phrasing ....”
- Supreme Court decisions addressed the “abstract idea” category. Two aspects were important for assessing the claims in this case.
- **First aspect:** “what type of matter the Court has held to come within the category of ‘abstract idea’.”
  - The Court had found “an abstract idea in certain arrangements involving contractual relations, which are intangible entities.” See *Bilski*, 561 U.S. 593 (2010) (“method of entering into contracts to hedge risk in commodity prices”) and *Alice* (2014) (“methods and systems for ‘exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk’”).
  - “More narrowly, ... both cases relied on the fact that the contractual relations at issue constituted ‘a fundamental economic practice long prevalent in our system of commerce.’ ”

# Business Methods

- In *Bilski* (2010), the Court simultaneously (1) rejected "a general business-method exception to patent eligibility," and (2) found "the hedging claims invalid."
- Thus, *Bilski* made clear that (1) "the formation or manipulation of economic relations may involve an abstract idea," but (2) there was no "business-method exception."
- A claim amounting to a business passes muster under Section 101 if it includes "enough extra."



# Second Aspect

- **Second aspect:** "what invocations of a computer in a claim that involves such an abstract idea are insufficient to pass the test of an inventive concept in the application of such an idea."
- *Alice* held that "generic computer implementation" was *not* a sufficient application of the idea.
- It relied on *Mayo* for the proposition that appending "conventional steps, specified at a high level of generality" was not enough to supply an "inventive concept."
- *Alice* distinguished *Diehr* (1981).
  - In *Diehr*, the patent applicants had "added more than a computer to a mathematical equation in claiming an arguably 'inventive application' in the technology of curing synthetic rubber."
  - *Diehr* explained that "the claimed contribution to the art was the step of 'constantly measuring the actual temperature inside the mold' for the synthetic rubber products. 450 U.S. at 178, 179 n.5."

# Apply Two *Mayo* Steps

- With the *Alice* clarification, it was "a straightforward matter to conclude that the claims in this case are invalid."
  - There was no need to "parse" Federal Circuit precedent, given "the new Supreme Court authority in this delicate area, and the simplicity of the present case under that authority."
  - Claims: at issue did not "push or even test the boundaries of the Supreme Court precedents under section 101."

# First Step

- First *Mayo* step; claims: directed to an abstract idea.
  - "about creating a contractual relationship--a `transaction performance guaranty'."
  - Contractual relationships were "beyond question of ancient lineage. See Willis D. Morgan, *The History and Economics of Suretyship*, 12 Cornell L.Q. 153 (1927)."
  - Dependent claims narrowed the guaranty to "particular types of" relationships," but those were "familiar" and did "not change the analysis"

# Second Step

- Second Mayo step: claims invoked a computer but not sufficiently to add an inventive concept
  - Computer functionality: generic and limited: "a computer receives a request for a guarantee and transmits an offer of guarantee in return."
  - *Alice* found the role of computers in sending information over networks not sufficient.
  - *CyberSource Corp.* (Fed. Cir. 2011), the Federal Circuit had held that use of the Internet "to verify credit-card transaction" did "not add enough to abstract idea of verifying the transaction."
  - ON LINE. That the transactions being guaranteed were online transactions was, at best, "an 'attempt[] to limit the use' of the abstract guarantee idea 'to a particular technological environment,' which has long been held insufficient to save a claim."



# II. Disclosure and Claiming: Section 112

## A. Definiteness

- Pre-AIA: 35 U.S.C. Section 112 (undesignated second paragraph):
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- AIA redesignation: 35 U.S.C. Section 112(b)
  - **(b) Conclusion.**— 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.
- No substantive change. Continues requirement of “definiteness.”

# *In re Packard,*

751 F.3d 1307 (Fed. Cir. May 6, 2014)

- PTO may reject claim for failure to meet Section 112(b) if
  - the PTO makes “a well-grounded rejection that identifies ways in which language in a claim is ambiguous, vague, incoherent, opaque, or otherwise unclear in describing and defining the claimed invention,” and
  - “the applicant fails to provide a satisfactory response,” the PTO “properly reject the claim as failing to meet the statutory requirements of § 112(b).
- Satisfactory response:
  - “modification of the language identified as unclear,”
  - “a separate definition of the unclear language,” or
  - “in an appropriate case, a persuasive explanation for the record of why the language at issue is not actually unclear.”

# PTO Rejection “Unclear”

- An application concerned a thin plastic card with channels for storing different-sized coins.
- Examiner rejection for indefiniteness; e.g. claims recited a **"flat plane"** with **"raised"** edges but a plane could not, by definition be "flat" if it had such raised edges.
- Rather than amend or clarify the claims language, the applicant appealed to the Board.
- The Board affirmed, applying MPEP § 2173.05(e), to wit, that a "claim is indefinite when it contains words or phrases whose meaning is unclear."

# PTO Authority to Reject: Not Tied to Judicial Standard for Issued Claims

- Applicant: the Federal Circuit's "insolubly ambiguous" standard for definiteness should apply not only to issued patents but also to "**applied-for claims**"
- HELD: the question need not be addressed. The PTO did not err in its rejection
- A PTO rejection may be proper "without regard to the proper formulation of the judicially-applied indefiniteness standard," which the Supreme Court was considering in the *Nautilus* case.



# ***Packard; Plager, concurring***

- The PTO may, permissibly, apply the "traditional standard" for definiteness ("what one of skill in the art would understand," in view of the written description) with a "lower threshold" interpretive approach:
- "if one of ordinary skill in the art, after considering the information provided by the applicant including the written description, and after putting the disputed term in the context of the proposed patent, finds the claim to contain words or phrases whose meaning is unclear, then the examiner is to require the applicant to 'more precisely define the metes and bounds of the claimed invention' by issuing an indefiniteness rejection.

# Editorial Note: PTO *Post*-issuance Proceedings

- Per curiam opinion and the concurring opinion: endorse a PTO standard for rejection of "pre-issuance" claims for lack of clarity that may be lower than that a court would require to invalidate an issued patent.
- Neither opinion discusses what standard the PTO can apply in post-issuance proceedings, such as ex parte reexaminations and inter partes review under the America Invents Act.
- In those proceedings, as in original examination but unlike in litigation, an applicant may, to a limited extent, amend claims to remove an apparent ambiguity.

# Broadest Reasonable Construction Rule

- Nor do the opinions consider the impact of the "broadest reasonable construction rule."
- That rule explicitly recognizes a difference between the PTO's approach to claim language and that of the courts in litigation over infringement and validity of issued patents.
- The analysis in the per curiam opinion and the extended discussion in the concurring opinion might have been unnecessary if the court had taken into account that the PTO has the recognized authority to read claims broadly, which, often, may show an ambiguity and justify the PTO requiring amendment.

# Nautilus, Inc. v. Biosig Instruments, Inc.

134 S. Ct. 2120 (June 2, 2014)

- First Supreme Court case on patent claim definiteness since United Carbon (1942).
- HELD: “*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.”
- **EDITORIAL NOTE:** Likely, the Supreme Court meant that one or more *claims* would be invalid for failure to meet the indefiniteness standard, not an *entire patent*, which might contain one or more claims not suffering from the indefiniteness, given the statutory direction that each claim be independently presumed valid. 35 U.S.C. § 282.
- The Federal Circuit's standard, which required only that a claim be "amenable to construction" or not "insolubly ambiguous," was erroneous.



# Nautilus

- Undisputed aspects of “the §112, ¶2 inquiry.”
  - SKILLED PERSON’S PERSPECTIVE. First, an evaluation of definiteness was “from the perspective of someone skilled in the relevant art.”
  - CONSIDER SPECIFICATION AND PROSECUTION HISTORY. Second, to assess definiteness, one read claims in light of (1) the specification, and (2) the prosecution history.
  - TIME: FILING DATE. Third, definiteness is measured definiteness from the skilled person's viewpoint “at the time the patent was filed.”

# ***Nautilus: Delicate Balance***

## **Allow Some Uncertainty**

- Section 112 entailed "a `delicate balance.' “
- THEME: Moderation!
- On the one hand, the definiteness standard accounted for "the inherent limitations of language."
  - The standard allowed some uncertainty in order to assure "appropriate incentives for innovation."
  - Also, patents were addressed to "persons skilled in the relevant art," not lawyers or the general public.

# Not Too Much Uncertainty!

- On the other hand, the patent "must be precise enough to afford clear notice of what is claimed, thereby `appris[ing] the public of what is still open to them.'
- "[A]bsent a meaningful definiteness check ... patent applicants face powerful incentives to inject ambiguity into their claims."
  - The patent drafter was "in the best position to resolve the ambiguity in ... patent claims."
  - "[A] patentee is free to be his or her own lexicographer ...."

# Prior Supreme Court Decisions: Oscillation Between Extremes?

- *Carnegie Steel* (1902), a patent's description sufficiently definite if it informed steel manufacturers "in the language of the art of the definite feature of the invention" and served as "a warning to others of what the patent claims as a monopoly."
- *Eibel* (1923), patent on an improved paper-making machine that required placing a wire at a "high" or "substantial" elevation; definite: those skilled in paper making and use of the machine would have had no difficulty determining the elevation necessary to make the machine operate as the patent described.
- *United Carbon* (1942), claims must "clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise" and without known limits on patents there would be a "zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims."



# Nautilus: Moderate and Reconcile

- "The proper standard for definiteness must reconcile these opposing concerns.
- Proper standard: a patent's claims, viewed in light of the specification and prosecution history, must inform those skilled in the art about the scope of the invention with reasonable certainty."
- That standard mandated "clarity" but recognized that "absolute precision" was "unattainable."

# Prior Opinions

- That standard accorded with prior Supreme Court opinions.
  - *Minerals Separation* (1916): "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter."
  - *United Carbon* (1942): "claims must be reasonably clear-cut."
  - *Markman* (1996): "claim construction calls for 'the necessarily sophisticated analysis of the whole document,' and may turn on evaluations of expert testimony)."

# Federal Circuit Standard

- Federal Circuit's standard ("amenable to construction" or not "insolubly ambiguous): "breed lower court confusion" because it lacked "the precision §112, ¶2 demands."
- That "a court can ascribe *some* meaning to a patent's claims" was *not* sufficient because "the definiteness inquiry trains on the understanding of a skilled artisan at the time of the patent application, not that of a court viewing matters *post hoc*."
- Standard, which tolerated "imprecision just short of that rendering a claim 'insolubly ambiguous'," diminished "definiteness requirement's public-notice function" and fostered "the innovation-discouraging 'zone of uncertainty,' *United Carbon*, 317 U. S., at 236, against which this Court has warned."

# Nautilus: The Patent

- Patent: "a heart-rate monitor for use during exercise." **U.S. Pat. No. 5,337,753.**
- Prior art monitors: inaccurate measurement of heartbeat (ECG) signals because, when a user gripped the monitors, a user's skeletal muscles generated electrical signals of a different sort (EMG), which impeded detection of the ECG signals
- Invention: focused on difference between EMG signals (same polarity from a user's left and right hands) and ECG signals (opposite polarity because of the tilted orientation of the heart).
- Patented device: measure equalized EMG signals detected at each hand, use circuitry "to subtract the identical EMG signals from each other, thus filtering out the EMG interference."



# “Spaced relationship”

- Monitor with a bar with two electrodes ("live" and "common") for each hand. The user grips the bar so that each hand contacts both a live and a common electrode.
- CLAIMS: CRITICAL LIMITATION: on each side of the bar, the live and common electrode must be "**mounted ... in *spaced relationship with each other.***"
  - bar held so that both hands contacted both electrodes on each side
  - EMG signals detected by two electrode pairs: "of substantially equal magnitude and phase" so that "a difference amplifier will `produce a substantially zero [EMG] signal' upon subtracting the signals from one another."

# Reexamination

- In 2004, the patent owner files infringement suit; dismissed pending reexamination requested by accused infringer
- Reexamination "centered on whether the patent was anticipated or rendered obvious by prior art."
- Principal prior art reference: 1984 patent to Fujisaki, "which similarly disclosed a heart-rate monitor using two pairs of electrodes and a difference amplifier."
- To distinguish the prior art, the patent owner submitted a **declaration** by the inventor stating, "among other things," that the patent "sufficiently informed a person skilled in the art how to configure the detecting electrodes so as `to produce equal EMG [signals] from the left and right hands.'" "

# Reexamination

- Inventor explained:
  - the variables of an electrode, including spacing, could not be standardized for all exercise machines but
  - "a skilled artisan could undertake a 'trial and error' process of equalization" by experimenting with "different electrode configurations in order to optimize EMG signal cancellation."
- Inventor's declaration refers to expert report submitted in infringement litigation: laboratory technician, equipped with simple materials and the patent's drawings, built a working monitor in two hours!
- In 2010, the PTO issued a confirmation of the patentability of the patent's claims.
- NOTE: Supreme Court does not say so, but it hints that it believed that the PTO had already resolved the indefiniteness question on spacing.

# District Court and Federal Circuit

- District court:
  - construe “spaced relationship” as a defined relationship “without any reference to the electrodes' width.”
  - Summary judgment: invalid for indefiniteness: the claims did not tell anyone “what precisely the space should be,” or even supply “any parameters” for determining the appropriate spacing”
- Federal Circuit reversed and remanded, applying its prior standard (“not amenable to construction” or “insolubly ambiguous”



# Federal Circuit

- From "intrinsic evidence," the majority found "inherent parameters of the claimed apparatus, which to a skilled artisan may be sufficient to understand the metes and bounds of `spaced relationship.'"
  - On the one hand, the live and common electrodes for each hand must be could be spaced no wider than a user's hands.
  - On the other hand, the evidence taught that the distance could not be so small as to merge the electrodes.
- Additionally, the majority observed that the claim's "functional provisions ... shed additional light on the meaning of `spaced relationship.'"
- In a concurring opinion, Judge Schall employed a "more limited analysis" to reach the same result

# Supreme Court

- Supreme Court:
  - Federal Circuit applied the wrong standard
  - Case remanded for application of the correct standard: whether the claims, read in light of the specification and prosecution history, failed to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

# Disputed Fact Issues? Deference To PTO?

- Patent owner and accused infringer disputed
  - "whether factual findings subsidiary to the ultimate issue of definiteness trigger the clear-and-convincing-evidence standard," and
  - "relatedly, whether deference is due to the PTO's resolution of disputed issues of fact."
- Court: leave those questions "for another day."
- In this case, the Federal Circuit treated definiteness as a legal issue, which it reviewed without deference.
- The patent owner did not call the Court's "attention to any contested factual matter--or PTO determination thereof--pertinent to its infringement claims."
- But did PTO consider definiteness?? See above.

# Interval Licensing LLC v. AOL, Inc.

766 F.3d 1364 (Sept. 10, 2014)

- Two patents concerned an "attention manager"
  - "Manager" engages the attention of a person using a "display device," such as a computer with a screen, by, inter alia, presenting an image with content using "unused capacity" of the display.
  - Presentation avoids interfering with a user's "primary interaction" of the device.



# Two Embodiments

- Specification: two embodiments for utilizing "unused capacity" for a display of an image.
- SCREEN SAVER.
  - displayed the image automatically after an idle period or after a user activated a "screen saver."
  - In past, "screen savers" had been used to prevent "screen burnout" or for "aesthetic or entertainment value."
- WALLPAPER EMBODIMENT
  - display image in areas of the display "not used by the user's primary interaction."
  - "wallpaper"; "a pattern generated in the background portions on a computer display screen."

# Suit; Reexaminations

- **SUIT: ALLEGED INFRINGEMENT BY "POP-UPS."** In a district court suit, the patent owner alleged that accused infringers, including Google and Apple, infringed the patent's claims through products and software that used " `pop-up' notifications to present information" to computer users.
- **REEXAMINATIONS.** Two accused infringers requested *ex parte* reexamination based on cited prior art, which the PTO granted. Another accused infringer requested *inter partes* reexamination, which the PTO also granted.

# Appeal in reexamination

- The district court granted a stay of the infringement suit pending the reexaminations.
- Examiners found the patents' claims patentable in view of the art.
- District court lifted the stay and proceeded with claim construction.
- Later, the requesters appealed, and the Board rejected the claims as unpatentable over the cited prior art.
- Patent owner: intent to appeal the Board's decisions.
- **Because reexamination was limited by statute to questions of patentability over prior art patents and publications, the PTO did not address definiteness.** Following established law, it gave the claims the broadest reasonable construction.

# District court

- District court: claim construction, accused infringer's assertion of invalidity for indefiniteness.
- CLAIMS RECITING "UNOBTRUSIVE MANNER"; INDEFINITE. All the asserted claims but four contained a limitation requiring that a display of an image generated from content data "in an unobtrusive manner that does not distract a user of the display device or an apparatus associated with the display device from a primary interaction with the display device or apparatus."
- District court: the "unobtrusive manner" limitation was indefinite, rendering the claims invalid under Section 112/2.



# District court

- Four claims lacked the "unobtrusive manner" limitation.
  - The district court construed disputed claims terms, including "attention manager" and "instruction."
  - The patent owner and accused infringers stipulated to non-infringement based on the constructions.
- District court granted final judgment.
- The patent owner appealed.

# Supreme Court's Intervening *Nautilus*

- After the appeal was argued, the Supreme Court decided *Nautilus*, which repudiated the Federal Circuit's use of the expressions "insolubly ambiguous" and "amenable to construction."
- In *Nautilus*, the Court decreed that following standard for definiteness: a patent claim, "viewed in light of the specification and prosecution history," must "inform those skilled in the art about the scope of the invention with reasonable certainty."

# Application of *Nautilus*

- WORDS OF DEGREE. *Nautilus* did *not* hold that "terms of degree are inherently indefinite."
  - A patent must provide more than "some standard" for measuring the scope of a phrase.
  - A patent's claim, when read in light of the patent's specification and the prosecution history, "must provide objective boundaries for those of skill in the art."
- Applying this standard, the claims with the "unobtrusive manner" limitation were invalid for indefiniteness.

# Phrase on “Face”: Subjective

- The "unobtrusive manner" phrased was, on its face, "highly subjective" and provided "little guidance to one of skill in the art."
- PHRASE AS A WHOLE, NOT DISTINCT LIMITATIONS. The district court treated the phrases "unobtrusive manner" and "does not distract a user" as distinct limitations. That was error: the phrase was repeatedly used as a whole in the specification and claims.
- Phrase: "no objective indication of the manner in which content images" were to "be displayed to the user."



# Preferences of Particular User

- Whether a display distracted a user depended on "the preferences of the particular user and the circumstances under which any single user interacts with the display.' "
- Making the lack of boundaries "particularly troubling" was the patents' direction that "image" should be broadly construed to include "**any sensory stimulus** that is produced from the set of content data,' including sounds and video."
- As held in *Datamize* (2005), a term of degree failed to provide sufficient notice if it depended "on the unpredictable vagaries of any one person's opinion."

# Look to Specification; Was “Unobtrusive Manner” Tied to Wallpaper Embodiment?

- With a "purely subjective" claim phrase, a court "must look to the written description for guidance."
- Contrary patent owner's argument, the written description (specification) did *not* provide sufficient guidance by tying the "unobtrusive" phrase to the wallpaper embodiment and limiting the phrase to a spatial dimension.
  - Some portions of the patent's specification used "unobtrusive manner" with the wallpaper embodiment.
  - Other portions suggested that the phrase was also tied to the screen saver embodiment.
  - Specification: "at best muddled, leaving one unsure of whether the 'unobtrusive manner' phrase has **temporal dimensions as well as spatial dimensions.**"

# Hazy Relationship; Like *Datamize*

- "The hazy relationship between the claims and the written description" failed to provide the necessary clarity for the subjective claim language, as indicated by prior cases.
- Example: *Datamize* (2005), "aesthetically pleasing" indefinite"
  - The preferred embodiment did provide "examples of aesthetic features of screen displays that can be controlled by the [claimed] authoring system."
  - However, "the specification did not indicate `what selection of these features would be "aesthetically pleasing." ' "

# Prosecution history: Uncertainty in Patent Owner Statements and PTO Responses

- During original 1998 prosecution,
  - patent owner linked language to screen saver embodiment
  - examiner discussed the language only with the wallpaper embodiment.
- In reexamination,
  - the examiner linked the language exclusively to the wallpaper embodiment.
  - On appeal, the Board disagreed: giving the claim the broadest reasonable construction, the obtrusive language included the screensaver embodiment as well as the wallpaper embodiment



# Limit to Narrow Example?

- Therefore, the wallpaper embodiment failed to "provide a reasonably clear and exclusive definition, leaving the facially subjective claim language without an objective boundary.
- As an alternative to linking the phrase to the wallpaper embodiment, the patent owner argued that the court should adopt a "narrow example" in the specification.
- "Summary of the Invention," information should be presented in the unobtrusive manner. Example in parentheses as follows: **"(e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus.)"**

# Narrow Example (e.g., i.e.)

- A patent may satisfy the definiteness requirement by defining "a claim phrase through examples."
- SINGLE E.G. However, it was not proper to "cull out a single `e.g.' phrase from a lengthy written description to serve as the exclusive definition of a facially subjective claim term.
- NOT "I.E." The patent may have provided sufficient clarity if it had provided a definition instead of an example, that is, "if the phrase had been preceded by `i.e.' instead of `e.g.'."

# Not Exclusive Definition

- A skilled artisan would not understand the specification as written as constituting "an exclusive definition of `unobtrusive manner that does not distract a user.' "
- The lone example left the person of ordinary skill wondering:
  - "what other forms of display are unobtrusive and non-distracting"?
  - "What if a displayed image takes up 20% of the screen space occupied by the primary application with which the user is interacting? Is the image unobtrusive?"

# Triton Tech of Texas, LLC v. Nintendo of America,

753 F.3d 1375 (Fed. Cir. June 13, 2014)

- A patent concerned an input device for a computer that allowed a user to communicate with a computer by moving the device in three directions. **U.S. Pat. No. 5,181,181.**
- "INTEGRATION MEANS." The asserted claims required, inter alia, "integration means."



# Summary: Section 112/6 (112(f))

## Means for performing a specified function

- "Section 112 ¶ 6 allows a patentee to express an element of a claim as a means for performing a specified function. 35 U.S.C. § 112 ¶ 6 (2006)."
  - CORRESPONDING STRUCTURE. "In exchange for using this form of claiming, the patent specification must disclose with sufficient particularity the corresponding structure for performing the claimed function and clearly link that structure to the function."
  - FUNCTIONS PERFORMED BY GENERAL PURPOSE COMPUTER. "If the function is performed by a general purpose computer or microprocessor, then the specification must also disclose the algorithm that the computer performs to accomplish that function."
  - DEFINITENESS. "Failure to disclose the corresponding algorithm for a computer-implemented means-plus-function term renders the claim indefinite. *Ergo Licensing LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1363 (Fed. Cir. 2012)."

# Numerically integrate?

- Claim: a conventional microprocessor programmed to read and numerically integrate "acceleration and rotational rate values to calculate the position, attitude, and motion values for the input device."
  - *integrator means* associated with said input device for *integrating said acceleration signals over time* to produce velocity signals for linear translation along each of ... first, second and third axes;
- HELD: No algorithm disclosed for carrying out the integration function.

# Numerical integration: alone sufficient?

- First, the patent owner argued that the phrase "numerical integration" was alone sufficient to disclose an algorithm. However, the phrase disclosed only a class of different algorithms.
  - "[M]erely using the term 'numerical integration' " did "not disclose an algorithm--i.e., a step-by-step procedure--for performing the claimed function.
  - Disclosing a "broad class" of algorithms was "hardly more than a restatement of the integrating function itself."
  - A disclosure that put no limits on how to calculate, combine, or weigh values did not "make the bounds of the claims understandable."
  - That skilled artisans knew of various numerical integration algorithms did not "rescue the claims."

# Disclosure of Two-Step Algorithm?

- Second, the patent owner argued that the patent disclosed a "two-step algorithm for accomplishing the integrating function:
  - (1) sampling measured values over time and
  - (2) accumulating by continuously summing areas defined by the sampled values."
- However, the patent owner waived that argument by failing to make it to the district court



## II. Disclosure and Claiming: Section 112

### B. Priority Based on Prior Application

- 35 U.S.C. Section 120:
  - "An application for patent for an invention disclosed in the manner provided by section 112 (a) (other than the requirement to disclose the best mode) in an application previously filed in the United States, or as provided by section 363, which names an inventor or joint inventor in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and *if it contains or is amended to contain a specific reference to the earlier filed application.*

# Medtronic Corevalve, LLC v. Edwards Lifesciences ,

741 F.3d 1359 (Fed. Cir. Jan. 22, 2014)

- Summary: **Intermediate applications in a priority chain** leading to a patent in suit did *not* properly describe prior intermediate applications.
  - Therefore, the patent was *not* entitled to an early priority application.
  - Absent priority, the asserted claims in the patent were invalid under 35 U.S.C. Sections 102(b) and 102(d) over the prior publication of early applications that described the inventions.

# Priority Chain: Six Applications

- The chain:
  - French national application (filed in 2000)
  - PCT international application based on that application (2001),
  - a continuation-in-part (CIP) application (2003) from the international application,
  - two continuing applications (2006, 2008), and
  - the application from which the patent issued (2009).
- 2003 CIP PRIORITY CLAIM: "this application is ... a continuation-in-part" of the 2001 international application.
- RECYCLED CLAIM. Two intermediate continuing applications (2006 and 2008) simply "recycled" the 2003 application's priority claim, to wit, "**this application** is" a CIP of the 2001 interpretation.

# Recycled Statements: *Not* Accurate

## Example: Proper Priority Claim

- Recycled claims: *not* complete or accurate descriptions of prior applications in the chain because they did *not* refer to the 2003 CIP application.
- Proper priority claim: one patent owner in fact added by amendment to 2009 application:
  - The present application ... claims priority under 35 U.S.C. § 120 as a continuation of U.S. Application Serial No. 12/029,031 ..., filed February 11, 2008, which is a continuation of U.S. Application Serial No. 11/352,614 ..., filed February 13, 2006, which is a continuation of U.S. Application Serial No. 10/412,634 (U.S. Application 4), filed April 10, 2003, which is a continuation-in-part of International Application No. PCT/FR 01/03258 ..., filed October 19, 2001.”



# Argument: “This Application”: Not Self-Referential?

- To salvage priority, the patent owner argued that the phrase "This application" in the 2006 and 2008 applications
  - did not mean "the present application" (that is, was not "self-referential") but
  - in context, referred to the 2003 CIP application.
- Proposed meaning of "this application": "**linguistic gymnastics**", given the phrase's plain meaning.

# Reasonable Person Standard?

- The patent owner argued
  - an interpretation of "this application" "should be based on what a reasonable person would understand it to disclose within the context."
  - a reasonable person would have realized that **only the 2003 CIP could be a continuation-in-part of the 2001 international application.**
  - Instead of entering the national stage (35 U.S.C. § 371), an international PCT application "may be claimed in a continuation application in the United States if filed within thirty months of its priority date."
- Therefore, a reasonable person would have realized that the 2003 CIP was "the only application along the pertinent priority chain ... that was filed within thirty months of the priority date of" the international application.

# Statute and Rule: “Specific Reference”

- The district court properly declined to adopt the "reasonable person" test the patent owner proposed for interpreting "the sufficiency of a priority claim under 35 U.S.C. § 120."
- The standard ran "afoul of the language of:
  - the statutory provision, which requires 'a specific reference' to each earlier filed application, and
  - the implementing regulation for § 120, which requires precise details in priority claims down to the 'application number (consisting of the series code and serial number),' 37 C.F.R. § 1.78(a)(2)(i)."

# Reasons for Precision

- The reasons for requiring precision were apparent.
- For example, in this case, the patent owner had filed **other applications in a related priority chain** that might have been the CIP of the international application.
  - True, "a closer look at the ... patent's complicated priority recitations, as well as an understanding of § 120's disclosure requirements, would have eliminated" that other application.
  - However, a reasonable person could reach that conclusion only with a "sufficient understanding of prosecution procedure and litigation subject matter."
  - Such "nuances" demonstrated "the difficulty in ascertaining the correct priority chain of a patent application that did not contain `specific references.' "



# No Hardship; No “Reasonable Person” Test

- Patent owner: "best suited to understand the genealogy and relationship of her applications," and, therefore, it was "no hardship" to require a clear disclosure.
- Proposed "reasonable person" test improperly placed "the burden of deciphering a priority claim upon the reader or the public.
- *Cf. Sampson v. Ampex Corp.*, 463 F.2d 1042, 1045 (2d Cir. 1972) (observing that the 'specific reference' requirement under § 120 has the purpose of ensuring that someone examining a patent claiming the benefit of an earlier filed application is able to determine the priority date with 'a minimum of effort')."

# ***MacDermid* (2008) Distinguished**

- Patent owner relied on *E.I. du Pont de Nemours & Co. v. MacDermid Printing Solutions, LLC* (2008), but the reliance was misplaced.
- *MacDermid Printing*: issue "whether a reference in a non-provisional application was sufficient to claim priority to a provisional application under 35 U.S.C. § 119(e)."
  - Patent owner "correctly disclosed and identified the relationship between the two applications" but did not use the "magic words" ("claims the benefit of") that the MPEP provided.
  - HELD: reference sufficient.
- Here, the patent owner "used language suggested by the M.P.E.P. in a *contrary* manner, and additionally failed to disclose the correct relationships between the applications at issue."

# Closer Look at *MacDermid*

- An application data sheet (ADS) stated:
  - **"Continuity Data: This application is a non-provisional of provisional 60/273669 2001-03-06 WHICH IS PENDING."**
- MPEP § 201.11,
  - "[w]hen the nonprovisional application is entitled to an earlier U.S. effective filing date of one or more provisional applications under 35 U.S.C. 119(e), a statement *such as* '**This application claims the benefit of U.S. Provisional Application No. 60/ --, filed --, and U.S. Provisional Application No. 60/ --, filed --.**' should appear as the first sentence(s) of the description or in an application data sheet."

## *MacDermid: “A reasonable person ....”*

- Argument: the reference in the ADS was not sufficient because it did not use the language (“claims the benefit....”) that is “authorized by the MPEP to claim the benefit of a provisional application.”
- HELD: the ADS reference “did not run afoul of the MPEP by failing to use magic words.”
- “The MPEP provision requires only that the applicant use a statement “such as” the one provided in Section 201.11. **A reasonable person reading the language in the ADS would have concluded that the applicant was claiming priority to an earlier provisional application.** Thus, we find no defect in the language used to reference the provisional application here.”



# Enocean GmbH v. Face International Corp.,

742 F.3d 955 (Fed. Cir. Jan. 31, 2014)

- An application and patent in an interference concerned a "self-powered switch", which would turn devices on and off without a battery or connection to an outlet. **U.S. Pat. No. 7,084,529; U.S. Pat. App. 10/304,121.**
- At issue were "two sets" of the applicant's claims.
  - Some of the applicant's claims recited "**means for receiving**" and were, indisputably, governed by Section 112/6 (now Section 112(f)).
  - Other claims recited a "**receiver**" for receiving a signal.
- Application claimed benefit of German and PCT applications
  - The priority applications' only reference to a receiver was a statement that a switch emitted "**telegrams which are received by a single receiver ....**"
  - Those applications disclosed no structure for a receiver.

# Board: Priority Denied

- The PTO Board held
  - the applicant's claims lacked support in its priority German and PCT applications, and
  - therefore, the applicant could not eliminate an intervening Section 102(e)(2) prior art reference, which was dated after those applications but before the applicant's U.S. application filing date.
- HELD: the Board erred in construing the claims and in denying priority.

# Was “receiver” a means clause?

- First issue: the Board held that “receiver” was a means clause because it was "defined solely in terms of functional language." HELD: the Board erred.
  - Use of “means” triggers a rebuttable presumption that § 112, ¶ 6 governs a term’s construction
  - A contrary presumption applies if the claim does not use “means.”
  - The "receiver" limitation did not use the word "means" and, therefore, was presumed to define sufficient structure to persons skilled in the art

# Receiver

- The patent owner, as opposing party in the interference, did "not overcome that presumption."
- Unlike the phrase at issue in *Blackboard* (2009), "receiver" was not merely a "black box that performs a recited function" without disclosing "how it does so."
- "Receiver" was not "too broad to recite sufficiently definite structure."
- The application provided "extensive evidence," including scientific literature and expert declarations, that demonstrated that the term "receiver" conveyed "known structure to the skilled person."



# Failure of Priority Applications to Disclose Specific Structure for a “Receiver”

- Second issue: the Board erred by holding that both types of claims were not entitled to priority to prior German and PCT applications because those applications failed to disclose specific structure of a "receiver."
  - German and PCT applications' only reference to a disclosure was a statement that a switch emitted "**telegrams which are received by a single receiver ....**"
  - Board required that the priority documents "expressly describe the structure of the receiver."
  - That was an erroneous standard.
- That a term, such as "receiver," connoted enough structure to avoid invoking Section 112/6 means-plus-function treatment when in a claim, as held above, did not *necessarily* mean that a disclosure of a single receiver in a parent application provided enough structure to support a claim with a Section 112/6 "means for receiving" limitation."

# Receiver Structure: Well Known

- However, in this case, the applicant did demonstrate that a skilled artisan "could understand the bounds of the invention merely by reading the term `receiver,' " which appeared in the parent application.
- Because the applicants did not invent the receiver, and because the Board found that the structure was "well known as of the filing date," the applicants "were `not obliged ... to describe . . . the particular appendage to which the improvement refers, nor its mode of connection with the principal machine.' *Webster Loom Co. v. Higgins*, 105 U.S. 580, 586 (1881)."

# III. Reexamination and Inter Partes Review

## A. Appeals from PTO Decisions

- Statutes governing institution of inter partes review
- 35 U.S.C. Section 314(a), (d)
- (a) Threshold.— The Director may not authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a **reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims** challenged in the petition.
- ...
- (d) No Appeal.— **The determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable.**

# Time Bars to Inter Partes Review

- 35 U.S.C. Section 315(a)(1), (b):
- (1) INTER PARTES REVIEW BARRED BY CIVIL ACTION. —An inter partes review may not be instituted if, before the date on which the petition for such a review is filed, the petitioner or real party in interest filed a civil action challenging the validity of a claim of the patent.
- ....
- (3) TREATMENT OF COUNTERCLAIM. —A counterclaim challenging the validity of a claim of a patent does not constitute a civil action challenging the validity of a claim of a patent for purposes of this subsection.
- (b) PATENT OWNER'S ACTION. —An inter partes review may not be instituted if the **petition** requesting the proceeding is filed **more than 1 year after** the date on which the petitioner, real party in interest, or privy of the **petitioner is served with a complaint alleging infringement of the patent**. The time limitation set forth in the preceding sentence shall not apply to a request for joinder under subsection (c).



# St. Jude Medical v. Volcano Corp.,

749 F.3d 1373 (Fed. Cir. April 24, 2014)

- A petitioner for inter partes review had been served by the patent owner with a counterclaim for infringement.
- PTO: a “counterclaim” is a “complaint within the meaning of Section 315(b), which bars a petition filed more than a year after the petitioner is “served with a complaint alleging infringement of the patent.’
- The petitioner appealed to the Federal Circuit
- HELD: Federal Circuit has no jurisdiction over attempted appeal

# Distinguish: PTO Decision to Institute from Final Written Decision

- Statutory provisions on petitions for *inter partes* distinguished
  - the PTO decision to "institute" an *inter partes* review based on a petition from
  - the conduct of the review once instituted, the conduct resulting in a "final written decision."
- Statutes authorized appeals from the final written decision but did not authorize, and expressly barred, an appeal by a petitioner from a PTO Board decision not to institute review.
- No need to decide: does Section 314(d) preclude "all review by any route"?

# ***In re Dominion Dealer Solutions, LLC,***

749 F.3d 1379 (Fed. Cir. April 24, 2014)

- Accused infringer timely filed petitions for inter partes review of the patents' claims.
- Applying Section 314(a), PTO decision: not institute review, no reasonable likelihood that petitioner would prevail on at least one challenged claim.
- Petitioner seeks writ mandamus to vacate the PTO's non-institution decisions.
- Federal Circuit denies petition.
  - Requirement for mandamus: showing of a "clear and indisputable" right to relief.
  - Given *St. Jude*, petitioner has no clear right "to challenge a non-institution decision directly in this court, including by way of mandamus."

# ***In re Procter & Gamble Co.,***

749 F.3d 1376 (Fed. Cir. April 24, 2014)

- A petitioner filed and then voluntarily dismissed a suit for a declaratory judgment of invalidity of a patent.
  - The petitioner then filed a petition for inter partes review of the patent.
  - Section 315(a)(1) provides: "An inter partes review may not be instituted if, before the date on which the petition for such a review is filed, the petitioner or real party in interest filed a civil action challenging the validity of a claim of the patent."
  - In granting a review, the PTO determined that a petitioner's prior declaratory judgment action, which it dismissed without prejudice, "never existed" for purposes of Section 315(a)(1).
- The patent owner sought mandamus.



# Decision to Grant Review: Not Reviewable by Mandamus in Federal Circuit

- The Federal Circuit held that immediate judicial review by mandamus was not appropriate.
  - A requirement for mandamus was a showing of a "clear and indisputable" right to relief.
  - *Dominion* held that there was no such right for a **non-institution** decision, and there was, similarly, no such right for an **institution** decision.
- Mandamus was not available "simply to relieve [the patent owner] of the burden of going through the *inter partes* review." See *In re Roche Molecular Sys., Inc.* (Fed. Cir. 2008).

# Separate Question: Reviewability on Appeal from Final Decision

- There was a "separate question": did section 314(d), which stated that the PTO Director's determination "whether to institute an inter partes review under this section shall be final and nonappealable," mean that a PTO decision to institute an inter partes review was unchallengeable in a later appeal from a Board's final decision?
- Section 314(d)'s broad language might preclude "all judicial review of the institution decision, even in an eventual section 319 appeal."
- No need to decide that question; address in a section 319 appeal.
- Also, the Federal Circuit did not address whether an immediate challenge could be brought in *district court*.

# Consumer Watchdog v. Wisconsin Alumni Research Foundation, 753 F.3d 1258 (Fed. Cir. June 4, 2014)

- A public charity, "Consumer Watchdog," could *not* appeal a PTO Board decision, rendered in an *inter partes* reexamination that the charity had requested, confirming the patentability of claims concerning human embryonic stem cell cultures. See **U.S. Pat. No. 7,029,913**.
- The charity failed to identify "a particularized, concrete interest in the patentability of the '913 patent, or any injury in fact flowing from the Board's decision."
- Because, "aside from its procedural right to appeal," the charity only "alleged a general grievance concerning the '913 patent," it lacked standing to appeal, as required by Article III of the U.S. Constitution.

# No Research or Commercial Activity

- The charity did not allege that it was involved in research or commercial activities involving stem cells or other activity that would form the basis of an infringement claim. Nor was it an actual or potential competitor of the patent owner (the Wisconsin Alumni Research Foundation).
- Also, the charity stated that it "was concerned about the potential preemptive reach of the '913 patent and the alleged burden it places on taxpayer-funded research in the State of California." That was insufficient.



# Any Third Party: Right Request Reexamination.

- The inter partes reexamination statute any third party to request and participate in reexamination, but "it did not guarantee a particular outcome favorable to the requester." The PTO afforded the charity those rights.
- The statute allowed a third party requester to appeal, but a statute cannot eliminate the constitutional requirements in Article III for a justiciable case, which included the injury in fact requirement.
- NOTE: The inter partes review statute, like that for the superceded inter partes reexamination procedure, states no standing requirement.

# Standing; Appeals from Administrative Agencies

- "Article III standing is not necessarily a requirement to appear before an administrative agency," but the Article III requirement of an injury in fact applied "to appeals from administrative agencies, such as the U.S. Patent and Trademark Office (PTO), to the federal courts. See *Sierra Club v. E.P.A.*, 292 F.3d 895, 899, 352 U.S. App. D.C. 191 (D.C. Cir. 2002)."
- When Congress grants "a procedural right to a litigant, such as the right to appeal an administrative decision, certain requirements of standing--namely immediacy and redressability, as well as prudential aspects that are not part of Article III--may be relaxed. See *Massachusetts v. E.P.A.*, 549 U.S. 497, 517-18 (2007)."
- "However, the `requirement of injury in fact is a hard floor of Article III jurisdiction that cannot be removed by statute.' [*Summers v. Earth Island Inst.*, 555 U.S. 488, 497 (2009)]."

# III. Reexamination and Inter Partes Review

## B. Stays

- America Invents Act Section 18 created a "Transitional Program for Covered Business Method Patents" (CBM Program).
- Parties sued or threatened with suit for infringement of certain business method patents may petition the PTO for a special form of “post-grant” review.
- AIA Section 18(b) authorizes a district court to stay a suit for infringement of a patent pending a PTO CBM review.
- **FOUR FACTORS.** Section 18(b)(1) lists four factors the district court must consider
  - (A) whether a stay, or the denial thereof, will simplify the issues in question and streamline the trial;
  - (B) whether discovery is complete and whether a trial date has been set;
  - (C) whether a stay, or the denial thereof, would unduly prejudice the nonmoving party or present a clear tactical advantage for the moving party; and
  - (D) whether a stay, or the denial thereof, will reduce the burden of litigation on the parties and on the court.

# Appeals from Grants and Denials of Stays

- GENERAL RULE. Stays pending a PTO reexamination or inter partes review is generally discretionary with a district court and a decision granting or denying a stay is *not* appealable.
- SECTION 18 REVIEWS. As a stark exception, Section 18(b)(2) provides for an appeal of the grant or denial of a stay:
  - “A party may take an immediate interlocutory appeal from a district court’s decision under paragraph (1). The United States Court of Appeals for the Federal Circuit shall review the district court’s decision to ensure consistent application of established precedent, and such review may be de novo.”



# VirtualAgility, Inc. v. Salesforce.com, Inc., 759 F.3d 1307 (Fed. Cir. July 10, 2014)

- Eastern District of Texas denies a motion to stay a suit for infringement of a patent pending post-grant review of the patent's claims by the PTO Patent Trial and Appeal Board (PTAB) under the America Invents Act Section 18 "Transitional Program for Covered Business Method Patents" (CBM Program).
- HELD: the district court abused its discretion because
  - "[t]hree of the four factors weigh heavily in favor of a stay in this case: simplification of the issues and streamlining of the trial, whether discovery is complete and a trial date has been set, and reduction of the burden of litigation on the parties and the court, and
  - "[t]he undue prejudice factor, at best, weighs slightly in favor of denying a stay."

# Chronology:

**January 2013:** a patent owner, VirtualAgility Inc., filed suit against multiple accused infringers, including Salesforce.com and its customers in the Eastern Texas district court,

U.S. Pat. No. 8,095,413: generally concerns a system and method for "supporting management of a collaborative activity by persons involved therein."

(1) PETITION FOR CBM REVIEW. **May 24, 2013:** accused infringer Salesforce filed a petition with the PTAB for CBM review of all the patent's claims. It alleged that

- (a) the claims were eligible for CBM review because the patent was a "covered business method patent" (AIA § 18(a)(1)),

- (b) it had standing to file the petition because it had been sued for infringement (AIA § 18(a)(1)(B)), and

- (c) the claims were "more likely than not" unpatentable, the standard for post-grant review set in 35 U.S.C. § 324(a), because the claims were

- (i) for patent-ineligible subject matter (Section 101) and

- (ii) anticipated or obvious over cited prior art references (Sections 102 and 103).

# Stay Motion, Discovery Orders, PTAB Institution, Stay Denied

- (2) STAY MOTION (**May 29, 2013**): accused infringers file joint motion to stay.
- (3) DISTRICT COURT DISCOVERY ORDER (**August 2013**), district court "issued a discovery order and held a scheduling conference, setting an April 2014 date for a claim construction hearing and a November 2014 date for jury selection."
- (4) **August 2013**: patent owner files a "Preliminary Response" with the PTAB, opposing the petition.
- (5) PTAB GRANTS REVIEW (**November 2013**) PTAB grants the petition in part, concluding all the claims were
  - (a) to a "covered business method," and
  - (b) were more likely than not patent-ineligible under 35 U.S.C. § 101 and invalid under § 102 as anticipated by" a prior art "Ito" patent.
- (6) STAY DENIED (**January 2014**): the district court denied the motion to stay.

# Appeal

(7) INTERLOCUTORY APPEAL; STAY REQUEST. Accused infringers file an interlocutory appeal and motion in the district court and in the Federal Circuit to stay the district court proceedings pending the appeal.

(8) MOTION TO AMEND CLAIMS CONTINGENT ON INVALIDATION (**January 28, 2014**). In the PTO CBM proceeding, on January 28, 2014, the patent owner filed a motion to amend the claims "contingent on the claims' invalidation."

(9) FEDERAL CIRCUIT STAY (**February 12, 2014**): the Federal Circuit ordered the district court to stay the proceedings pending the appeal.



# Standard of Review?

- Prior to the AIA, district court orders on stays pending PTO proceedings were either not appealable or reviewed under an abuse of discretion standard.
- However, AIA Section 18(b)(2) created an immediate right to appeal stay orders and indicated that the review "may be *de novo*."
- In this case, the Federal Circuit did *not* need to determine the appropriate standard of review: the district court's denial of a stay was erroneous "even under the abuse of discretion standard" that the patent owner advocated.

# First and Fourth Factors

- FIRST AND FOURTH FACTORS. Contrary to the district court's findings, the first factor (issue simplification and trial streamlining) and fourth factor (party and court litigation burden reduction) strongly favored a stay.
- The district court erred by reviewing the PTO PTAB determination that the patent claims were "more likely than not invalid."
  - The statute gave district courts "no role in reviewing the PTAB's determinations."
  - A district court challenge to the PTAB determination was "an improper collateral attack"

# Review Removed; Factors Favor Stay

- With that review removed, the remaining evidence concerning the first and fourth factors heavily favored a stay.
  - Weighing heavily in favor of a stay was that the PTAB granted review of all the claims asserted in the litigation and did so on separate, alternative grounds. The CBM cancellation of the claims would be "the ultimate simplification of issues" (first factor) and would "entirely eliminate" the litigation burden, not just reduce it (fourth factor).
  - The patent owner had moved to amend claims during the CBM: that "could only weigh further in favor of granting the stay so as to avoid unnecessary claim construction of what could potentially be a moving target in terms of claim language."

## Second Factor

- Third factor (whether "**discovery is complete and whether a trial date has been set**") heavily favored a stay.
- The district court did not err by waiting to rule on the stay motion until the PTAB decided whether to institute CBM review.
- After the PTAB made its decision, the district court was obligated to resolve expeditiously the stay motion.



# Timing

- In considering "whether discovery is complete" and "whether a trial date has been set", the district courts should "generally" use "the date of the stay motion."
  - However, the district court did not err in "also taking into account the stage of litigation as of the date that CBM review was granted."
  - Also, a district court "may consider evidence that develops after the date of the stay motion--for example, the fact that the PTAB granted the CBM petition, any claim amendments proposed or entered in the post-grant proceeding, further evidence of competition, and so on--as it pertains to the other three factors."

# Case at “Infancy”

- In this case, the timing factor heavily favored the accused infringers whether the date was
  - motion filing (May 2013), when the case was less than four months old, discovery not begun, and no trial date had been set, or
  - PTAB institution (November 2013), when there remained eight months of fact discovery, claim construction statements had not been filed, and "jury selection was a year away."
- At either time, the litigation was "at its infancy."

# Third Factor

- Third factor: whether grant or denial of a stay "**would unduly prejudice the nonmoving party or present a clear tactical advantage for the moving party.**"
- The district court found that the factor heavily favored denying a stay. It erred.
- At best, the factor weighed "slightly" against a stay.
- On **undue prejudice**, the evidence of **direct competition** between the parties was weak and the patent owner delaying filing suit and failed to seek a preliminary injunction.
- On **tactical advantage**, the accused infringer did **withhold two items of prior art from its CBM petition** but that was reasonable given the lack of evidence on those items.

# III. Reexamination and Inter Partes Review

## C. Effect; Res Judicata

- 35 U.S.C. § 307(a)
- (a) In a reexamination proceeding under this chapter, when the time for appeal has expired or any appeal proceeding has terminated, the Director will issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent any proposed amended or new claim determined to be patentable.
- 35 U.S.C. § 318(a), (b)
- (a) Final Written Decision.— If an inter partes review is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 316 (d).
- (b) Certificate.— If the Patent Trial and Appeal Board issues a final written decision under subsection (a) and the time for appeal has expired or any appeal has terminated, the Director shall issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent by operation of the certificate any new or amended claim determined to be patentable.



# Senju Pharmaceutical Co., Ltd. v. Apotex Inc.,

746 F.3d 1344 (March 31, 2014)

- FIRST SUIT: CLAIM INVALID; SECOND SUIT: CLAIM AMENDED IN REEXAMINATION.
- NO NEW CAUSE OF ACTION. A PTO reexamination certificate that amended and added claims in a patent did *not* create a new cause of action such that a patent owner could file a second suit for infringement of the claims by an accused infringer's ANDA product (abbreviated new drug application) after a final judgment in a first suit by the patent owner against the accused infringer that the patent's original claims were infringed by the ANDA product but were invalid for obviousness.
- As concluded in *Aspex Eyewear* (2012), "claims that emerge from reexamination do not in and of themselves create a new cause of action that did not exist before."
- Absent a "clearly showing" that there was a "material difference" between an original claim and a reexamined claim, it could be assumed the reexamined claims was a "subset" of the original claims and created no new cause of action..

## **O'Malley, Dissenting: Failure To Consider Validity.**

- If infringement were "the only consideration," then reexamined claims could not expand a patent owner's rights.
- Traditional notions of claim preclusion (res judicata) and issue preclusion (collateral estoppel) would bar a subsequent action on the claims.
- However, the majority failed to consider "how issues of validity" affected claim preclusion

# Unique Aspects of “ANDA” Case: Identical Product and Infringing Act

- *Senju Pharmaceutical* is an “ANDA” case (Abbreviated New Drug Application) brought under Section 271(e)(2). Thus, in the two suits, both the accused product and the allegedly infringing act were exactly the same in both the first suit (in which broad claims were held invalid) and second suit (in which narrower claims obtained by reexamination were asserted).
- SUBSEQUENT ACTS, DIFFERENT PRODUCTS. The “res judicata” problem would differ when a patent owner asserts new reexamination claims against an accused infringers’ acts of alleged infringement that occur after the filing of the first suit and involve either the same or different accused products. Cf. *Brain Life, LLC v. Elekta Inc.*, 746 F.3d 1045 (Fed. Cir. 2014), discussed below.

# ***Brain Life* (2014); Post-Judgment Infringement**

- *Brain Life, LLC v. Elekta Inc.*, 746 F.3d 1045 (Fed. Cir. 2014), does not deal with a suit on new claims obtain in reexamination or inter partes review, but it is pertinent to the questions of claim and issue preclusion that would arise in such a suit.
- **METHOD CLAIM AND APPARATUS CLAIM.** A patent contained an apparatus claim and a method claim. The **apparatus** claim recited, inter alia, **means for converting images to a format**. The **method** claim recited a similar **"converting" step**.



# First Suit; Focus on Apparatus Claims

- In a first suit against an accused infringer (E), the patent owner asserted infringement of the method claim and apparatus claim by the accused infringer's products (**GK, GP, and SP**).
- The district court construed the means clause as including digital-to-digital conversion because the patent disclosed software as well as hardware as corresponding structure.
- At the parties' request, the district court did not construe the method claim and dismissed it without prejudice.
- Based on a jury verdict, the district court entered judgment of infringement.

# Apparatus claims: not infringed; Means Not Covering Digital

- The Federal Circuit reversed, reasoning that the patent did not adequately disclose software as corresponding structure, the apparatus claim did not cover digital-to-digital conversion, and, consequently, there was no infringement of the apparatus claim. *Medical Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1207-08 (Fed. Cir. 2003).
- On remand, the district court refused to reopen the case to allow assertion of the method claim. The judgment became final.

## Second Suit: Assert Method Claims

- Thereafter, the patent owner granted a license.
- The licensee filed a second suit against the accused infringer E and other accused infringers, asserting infringement of the patent's *method* claim.
- The licensee charged infringement by the current versions of the products previously litigated (**GK, GP, and SP**) and by a product (**ERGO**) that the accused infringer E had acquired subsequent to the final judgment in the first case.

# No Claim or Issue Preclusion; *Kessler* Doctrine: Products Essentially the Same as Those Found Not Infringing

- The district court severed the case against the accused infringer E and dismissed it as barred by the judgment in the first suit.
- The accused infringer E appealed.
- METHOD CLAIM BROADER (DIGITAL TO DIGITAL CONVERSION). Subsequently, as against the other accused infringers, the district court construed the method claim as broader than the apparatus claim and as encompassing digital-to-digital conversion.
- HELD:
  - neither claim preclusion nor issue preclusion barred the licensee's assertions of infringement insofar as they concerned the *method* claim and acts of infringement after the final judgment in the first suit, but
  - the distinct "*Kessler* doctrine" barred the assertions as to post-judgment acts involving products essentially the same as those found to be non-infringing.



# Claim Preclusion: Acts Pre-Dating and Post-Dating Judgment

- For *acts predating the judgment* in the first suit, claim preclusion would have barred infringement assertions of both the apparatus claim and the method claims because those claims were or could have been asserted in the first suit.
- It was irrelevant that the method claims had been dismissed without prejudice.
- For *acts postdating the judgment*, claim preclusion was no bar, as recognized in *Aspex Eyewear Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1343 (Fed. Cir. 2012), because the particular acts of infringement could not have been brought in the first action

# Issue Preclusion

- Issue preclusion was a doctrine distinct from claim preclusion; it barred subsequent litigation of an issue of law or fact actually litigated.
- Issue preclusion would bar the licensee from asserting infringement of the same products (GK, GP, and SP) by the *apparatus* claim.
- Issue preclusion would *not* bar the *method* claim, which was not actually litigated in the first suit. In that suit, the district court had not construed the method claim and dismissed it without prejudice.
- Issue preclusion would also not bar the method claim or the apparatus claim as asserted against the *new product* (ERGO), which was not at issue in the first suit. If the ERGO product were similar to the adjudicated products (GK, GP, and SP), non-infringement of the apparatus claim might have been a "foregone conclusion."

# ***Kessler* Doctrine: Distinct Bar**

- The *Kessler* doctrine is yet another distinct potential bar.
- PRODUCT ACQUIRES NON-INFRINGEMENT STATUS. Applied to this case, the doctrine meant that the specific products adjudicated in the first suit (GK, GP, and SP) acquired a non-infringing status that precluded assertion of infringement of claims of the same patent against "essentially the same" products, even as to post-judgment activity.
- The licensee did not dispute that the currently accused versions of the products (GK, GP, and SP) were essentially the same as those at issue in the first suit.
- It mattered not that the *method* claim might differ in scope from the *apparatus* claim because the patent owner could have asserted the method claim in the first suit.
- The *Kessler* doctrine did not extend to the *new* product (ERGO), which was not at issue in the first suit.

# ePlus, Inc. v. Lawson Software, Inc.

760 F.3d 1350 (Fed. Cir. July 25, 2014)

- VACATING INJUNCTION AND CIVIL CONTEMPT CITATION AFTER PTO CANCELLATION OF PATENT CLAIM IN REEXAMINATION.
- A patent owner sued an accused infringer, alleging infringement of two patents.
- A district court found two system claims and three method claims not invalid. A jury found infringement.
- On appeal, the Federal Circuit held the systems claims invalid and two of the three methods claims not infringed. *ePlus v. Lawson*, 700 F.3d 509, 512 (Fed. Cir. 2012).
  - It affirmed the verdict of infringement as to two accused product configurations based only on one method claim ('683 patent claim 26).
  - It reversed as to infringement of a third configuration. It remanded the case to the district court to consider modification of the injunction.



# Modification of Injunction

## PTO Cancellation of Claim

- The district court modified the injunction to eliminate the non-infringing configuration but rejected the accused infringer's arguments that the injunction should be modified in other ways.
  - The district court also found the accused infringer in contempt for violating the injunction, rejecting the accused infringer's arguments that it had modified its product and that the modified product was more than colorably different from the enjoined product and did not infringe claim 26.
  - The accused infringer appealed the judgment modifying the injunction and the contempt judgment.
- Meanwhile, the PTO completed a reexamination of the patent and found claim 26 invalid.
  - The patent owner appealed the PTO decision, the Federal Circuit affirmed, *In re ePlus, Inc.*, 540 Fed App'x 998 (Fed. Cir. 2013) (per curiam)
  - The PTO cancelled the claim in April 2014.

# Vacate Injunction and Contempt

- TWO ISSUES:
- **INJUNCTION AFTER CANCELLATION.** "The first is whether an injunction can continue after the PTO has cancelled the only claim on which the injunction was based" (and the Federal Circuit affirms the cancellation).
- HELD: the injunction cannot continue because the rights the claim conferred "ceased to exist" once the Federal Circuit mandate issued confirming the PTO finding that the claim was invalid and the PTO cancelled the claim.
- **CIVIL CONTEMPT.** "The second is whether civil contempt remedies based on the violation of an injunction are appropriate when the injunction has been overturned on direct appeal."
- HELD: the contempt remedies of a compensatory award for violating the injunction "must be set aside in light of the cancellation" of the claim upon which the injunction was based because, at the time of the cancellation, the judgment granting the injunction was not yet final, the Federal Circuit having remanded it to the district court for consideration of modifications.

# Contempt; Judgment *Not* Final

## *Fresenius.*

- *Proveris Scientific Corp.* (2014), the Federal Circuit had held that a "defendant cannot raise invalidity as a defense to contempt when the underlying injunction is final and not on appeal."
- Here, the injunction was not final when the PTO cancelled the claim at issue even though the district court and Federal Circuit had previously held the claim at issue infringed and not invalid.
  - The Federal Circuit did not affirm injunction but, rather, remanded it for necessary changes.
  - *Fresenius* (2013) held that an intervening PTO invalidation decision applied when a judgment was not final because, though the judgment had affirmed a patent claim's validity and infringement, the judgment was remanded for a determination of the scope of relief.
  - Here, in the prior appeal, the Federal Circuit had affirmed infringement of the claim, which was to a method, but had remanded the injunction for modification.

# O'Malley, Dissenting

## *Judgment Final*

- The judgment on the validity of the claim was final.
- The majority relied on *Fresenius* (2013), but there were "crucial differences" between *Fresenius* and the present case.
  - In *Fresenius*, the accused appealed the judgment of no invalidity of all the relevant claims.
  - Here, the accused infringer did *not* appeal the district court judgment that claim 26 was not invalid.
  - Hence, the district court judgment on the validity issue became final before the PTO cancellation.



# IV. Infringement

## A. Direct and Indirect Infringement

- **35 USC Section 271(a), (b), (c)**
- **(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.
- **(b)** Whoever actively induces infringement of a patent shall be liable as an infringer.
- **(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.

# Limelight Networks v. Akamai Technologies

134 S. Ct. 2111 (June 2, 2014)

- A person may *not* "be liable for inducing infringement of a patent under 35 U. S. C. §271(b) when no one has directly infringed the patent under §271(a) or any other statutory provision."
  - Federal Circuit erred by holding that an accused infringer, who performed fewer than all an asserted method claim's steps but who had instructed its customers to perform the remaining steps, could be liable as an inducer under Section 271(b).
  - The Federal Circuit had ruled that, under its *Muniauction* "control or direct" rule, the accused infringer was not liable as a direct infringer under Section 271(a). See *Muniauction, Inc. v. Thomson Corp.*, 532 F. 3d 1318 (2008).

# Problems with *Muniauction*

## “Control or Direct” Rule

- The Court acknowledged concerns that a "would-be infringer" could "evade liability by dividing performance of a method patent's steps with another whom the defendant neither directs nor controls."
- However, that possible anomaly followed from the Federal Circuit's interpretation of Section 271(a) in *Muniauction* and not from the proper interpretation of Section 271(b).
- The Court declined to review the *Muniauction* rule because, inter alia, Section 271(a) liability was neither raised in the petition for certiorari nor argued in the petitioner's opening brief.
- The Federal Circuit may "revisit the §271(a) question if it so chooses."

# Divided Infringement Problem

- *Limelight* bears on the problem of "divided infringement."
  - Simply put, a claim requires step A and then step B.
  - An accused infringer performs step A but instructs his customers on how to perform step B.
  - Traditionally, "direct" infringement requires performance of all steps of a method.
  - If that means that a single entity or person must perform all the steps, there is no direct infringement.



# Careful Claim Drafting

- *Careful drafting of a claim* can avoid a divided infringement problem by focusing on the actions of a single entity.
- Redrafted claim: same scope for purposes of establishing patentability and infringement.
  - In the example the claim could be to step B performed in a system in which step A has occurred.
  - Then the customers performing step B would be direct infringers and the supplier potentially an active inducer.
- Also, an invention that might be viewed as a multiple step method or complex system engaging multiple entities can be claimed in the form of a device as used in a defined system or method.
- A good example is a claim construed in *HTC Corp. v. IPCom GmbH & Co., KG*, 667 F.3d 1270 (Fed. Cir. 2012) to a "mobile station for use with a network" that achieved a "handover" by a series of steps.

# IV. Infringement B. Claim Construction

## 1. Generally

- Leading Federal Circuit decision:
  - *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), cert. denied, 126 S. Ct. 1332 (2006).
  - Phillips: comprehensive discussion
- Yet, divisions in emphasis remain among individual Federal Circuit judges
  - One “school”: ordinary meaning to a skilled artisan controlling unless clear disclaimer or redefinition in specification or prosecution history
  - Another school: important to construe claims in accordance with invention disclosed in specification (though not limited to example or embodiments)
- Significant dispute: weight given to “claim differentiation” (e.g. claim 1 reciting “fluid”; claim 2 reciting the fluid comprises a liquid; ;error to read “fluid” as limited to a liquid)
- Continuing flow of case examples

# Hill-Rom Services, Inc. v. Stryker Corp.

755 F.3d 1367 (Fed. Cir. June 27, 2014)

- Three patents concerned "systems and methods for enabling hospital personnel to remotely monitor the status of hospital beds." **U.S. Pat. No. 5,699,038; U.S. Pat. No. 6,147,592; U.S. Pat. No. 7,538,659.**
- After a district court construed four disputed phrases in asserted claims, a patent owner stipulated to non-infringement and appealed.
- HELD: the district court erred in its construction.
  - It failed to give the phrases their full ordinary meaning, which claim differentiation supported.
  - There was no disclaimer, disavowal or lexicography in the patents' specification or prosecution history.
  - No judicial estoppel arose from statements the patent owner made about the disclosures in the patents in suit in prosecuting a later, unrelated application.
- Dissent by Judge Reyna.

# “Datalink”

- **"DATALINK"**: The claims required, inter alia, a processing station coupled with an interface board by a "datalink."
  - The district court construed "datalink" as limited to a "cable", that is, a wired datalink, which the patent disclosed in its preferred embodiment.
  - HELD: the district court erred.
  - "Datalink" had its "plain and ordinary meaning," to wit, "a link that carries data in a wired or wireless fashion."



# Ordinary Meaning

- A court gave a claim its plain and ordinary meaning to a person skilled in the art when read in the context of the specification and prosecution.
- There were only two exceptions: lexicography and disavowal, the standards for which were "exacting."
  - Here, the patents contained no language describing a datalink as limited to wired datalink.
  - The disclosed embodiment used a cable, but that was not enough to read a limitation into the claims.
- **NO ADVANTAGES TO WIRED.** The patents did not express "the advantages, importance, or essentiality of using a wired as opposed to wireless datalink."

# Evidence

- **EXAMINER STATEMENT IN LATER PROSECUTION.** During the prosecution of a later, unrelated application by the patent owner, an examiner stated that the patents in suit did not teach a bed with a wireless receiver.
  - That statement indicated nothing about the meaning of "datalink"; it only indicated that the patents did not disclose a wireless embodiment.
  - Also, a patent specification "need not disclose or teach what is known in the art."
- **ONLY EVIDENCE ON UNDERSTANDING AT TIME OF FILING: PATENT OWNER'S EXPERT.** The only evidence on the understanding of "datalink" by a person of skill in the art at the patents' priority date (1993) was the testimony of the patent owner's expert, which indicated that "datalink" did not refer solely to a physical connection and could be by a wired, wireless, optical or other connection.

# Reyna, dissenting

- Claim construction "must be tethered to" the priority date the patents claim (1993).
- "DATALINK" AS *PHYSICAL* STRUCTURE. All the intrinsic evidence indicated that "datalink" was a physical structure.
- Patent owner: the ambiguous, conclusory and litigation-inspired testimony of an expert that a person skilled in the art in 1993 would understand "datalink" as encompassing wireless communication.
- EXPANSIVE FUNCTIONAL INTERPRETATION: The majority's construction, which "reaches any and every method of communicating data," was "an expansive functional interpretation--defining the `datalink' structure by what it does rather than what it is." Such functional claiming was "not only prohibited outside of the context allowed by 35 U.S.C. § 112(f)," but was "also not supported by the record."

# Majority Response to Dissent

- The dissent's arguments were not persuasive.
- FUNCTIONAL? Defining "datalink" in functional terms: not improper.
- UNKNOWN TECHNOLOGIES?
  - “Unknown” technologies were not at issue.
  - Wireless communication was known at the relevant time as established by the patent's disclosure of a prior patent discussing infra-red data transfer and by expert testimony.



# Interface Board Including a Processor

- CAPACITY TO RECEIVE AS WELL AS SEND MESSAGES: The district court erred by construing the phrase as requiring that the board have the capacity to *receive* messages as well as send them and that the board receive the messages through a "wall interface unit."
- "INTERFACE." An "interface" sometimes required both sending and receiving and sometimes only receiving.
  - Here, the claims themselves articulated only functions of sending bed condition messages, not receiving them.
  - No "disavowal or lexicography" in the patents
  - The patents did not state that an interface capable of sending and receiving was "important, essential, or a critical part of the invention."
  - DEPENDENT CLAIMS. Dependent claims added limitations on receiving messages. Under claim differentiation, the independent claims were presumed not to include the receiving message limitations.
- WALL UNIT. The patents stated that messages were sent to a "wall interface unit" "in accordance with the present invention", but that was only in the context of an embodiment.

# Information Techs. v. Research in Motion,

2014 U.S. App. LEXIS 16181 (Fed. Cir. Aug. 22, 2014)

- ORDER OF STEPS

- GENERAL RULE. "As a general rule, '[u]nless the steps of a method [claim] actually recite an order, the steps are not ordinarily construed to require one.' "
- EXCEPTIONS: However, a claim 'requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written, or the specification directly or implicitly requires' an order of steps." E.g. *Function Media* (concluding that a claim that recites 'processing' an 'electronic advertisement' necessarily indicates that 'the creation of the ad must happen before the processing begins')."

# Remotely Managing Wireless Device

- A patent concerned a method for "remotely managing a wireless device," particularly a smartphone used by a employees of a business that required protection for sensitive information. **U.S. Pat. No. 6,970,917.**
  - In a district court suit, the patent owner asserted infringement by an accused infringer's "Blackberry" system.
  - The method disclosed a way, remotely, to delete sensitive data from a smartphone that has been lost and to deploy software updates.

# Complete Establishing Connection Before Transmitting Message

- A district court did not err in construing a method claim with steps and sub-steps as requiring an order of steps as to two sub-steps:
  - First sub-step: establishing a connection between a server and a device.
  - Second sub-step: transmitting a message from the server to the device).
- **NO INFRINGEMENT.** On that basis, the district court properly granting JMOL overturning a jury verdict of infringement as lacking substantial evidentiary support.
- In the accused system, the first sub-step (establishing a connection between a server and a device) was begun but not completed before initiation of the second sub-step (transmitting a message from the server to the device).



# Rendering Substep Superfluous

- Reading the "establishing connection" sub-step in the claim without a temporal limitation (that is, as not needing to be completed before the "transmitting" sub-step) would have rendered the separate limitation on "establishing" a connection superfluous because "transmitting" necessarily required establishing a connection.
- Also, other sub-steps inherently required an order of steps, which indicated that the claim had "at least some temporal limitations."
- Finally, construing the sub-step as requiring an order conformed to the sole embodiment disclosed in the patent.

# Nazomi Communs. v. Nokia

739 F.3d 1339 (Fed. Cir. Jan. 10, 2014)

- Two patents concerned a "Java Virtual Machine (`JVM')." **U.S. Pat. No. 7,080,362; U.S. Pat. No. 7,225,436.**
- **HARDWARE AND SOFTWARE TO CARRY OUT FUNCTION.** Properly construed, claims to an apparatus (a central processing unit) for carrying out a specified function, to wit, processing stack-based instruction sets as well as register-based instruction sets, required both hardware and software to carry out the function.
- The claim language on the function were limitations, not merely a reference to the environment in which the apparatus would be used, as in cases such as *Silicon Graphics* ( 2010).

# Illustrative Claim

- **48.** A central processing unit (CPU) capable of executing a plurality of instruction sets comprising:
- an *execution unit* and associated register file, the execution unit *to execute instructions of a plurality of instruction sets, including a stack-based and a register-based instruction set*;
- a mechanism to maintain at least some data for the plurality of instruction sets in the register file, including maintaining an operand stack for the stack-based instructions in the register file and an indication of a depth of the operand stack;
- a stack control mechanism that includes at least one of an overflow and underflow mechanism, wherein at least some of the operands are moved between the register file and memory; and
- a mechanism to generate an exception in respect of selected stack-based instructions.

# Devices With Hardware Capacity But Lacking Necessary Software: Not Infringe

- Accused infringers' devices contained a CPU from a vendor that had the hardware *capacity* for carrying out the function. However, the function could be performed only with "JTEK" software separately available from the vendor. The accused devices did not contain that software.
- As held in *Typhoon Touch Technologies*, (2011), the accused devices were not presently structured to perform the claimed functions. Rather, the devices would infringe only if modified by the addition of software.



# ***Finjan* (2010) Distinguished**

- SOFTWARE UNLOCKED WITH KEY. The case was unlike *Finjan* (2010), in which "the infringing software capable of practicing the claim limitations was on the accused devices and could be unlocked by purchasing a product key."
- Here, the structure (software) necessary to enable the function was "not only inactive": it was "not even presented on the accused products." Therefore, a district court correctly granted summary judgment of no infringement.
- Also, because the accused products were not "designed to be used" with the software, it was not necessary "to consider whether the design of a device that contemplates use in an infringing manner could establish direct infringement, as opposed to induced or contributory infringement."

# IV. Infringement B. Claim Construction

## 2. Appellate Review

- Case law, including the foregoing examples, demonstrates that
  - (1) claim construction is often pivotal in resolving an infringement question,
  - (2) the Federal Circuit frequently reverses district court constructions, and
  - (3) individual Federal Circuit judges often disagree with each other.
- Since the 1998 en banc decision, *Cybor v. Fas Technologies*, and, to an extent before that decision, the Federal Circuit has exercised plenary authority to interpret claims independently of a construction or purported findings of fact by a district court (or the PTO).

# Federal Circuit: Status Quo; Supreme Court Review

- In 2014, in *Lighting Ballast*, the Federal Circuit revisited the question of "de novo" review and, unexpectedly, confirmed its prior position even though many individual Federal Circuit judges had questioned that standard of review.
- Shortly thereafter, the Supreme Court granted review in another case, *Teva v. Sandoz*, to review the standard of review question.
- On October 15, 2014, the Supreme Court held oral argument. Likely, the Court will rule on this important question no later than January or February 2015.

# Lighting Ballast Control v. Philips Electronics North America, 744 F.3d 1272 (Fed. Cir. Feb. 21, 2014) (en banc)

- Sitting en banc, the court reconsidered whether it should
  - continue to review claim construction as a whole and *de novo* on the record," as held in *Cybor* (1998 en banc), or, rather,
  - "should change to a different system that at best would
    - require [the court] to identify any factual aspects and how the trial judge decided them, and
    - review any found or inferred facts not for correctness but on a deferential standard, with or without also giving deferential review to the ultimate determination of the meaning of the claims."



# Stare Decisions, Uniformity, Experience

- HELD: the proposed "changed procedure" was "not superior to the existing posture of plenary review of claim construction."
  - STARE DECISIS. "[W]e apply the principles of *stare decisis*, and confirm the *Cybor* standard of *de novo* review of claim construction, whereby the scope of the patent grant is reviewed as a matter of law."
  - NATIONAL UNIFORMITY, CONSISTENCY AND FINALITY ON MEANING AND SCOPE OF PATENT CLAIMS. "After fifteen years of experience with *Cybor*, we conclude that the court should retain plenary review of claim construction, thereby providing national uniformity, consistency, and finality to the meaning and scope of patent claims."
  - TOTALITY OF EXPERIENCE. The totality of experience has confirmed that *Cybor* is an effective implementation of [*Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996)], and that the criteria for departure from *stare decisis* are not met."

# Teva Pharmaceuticals USA v. Sandoz, 723 F.3d 1363 (Fed. Cir. July 26, 2013), *cert. granted*, 134 S. Ct. 1761 (March 31, 2014)

- **COPOLYMER; MIXTURE OF MOLECULES WITH VARYING MOLECULAR WEIGHT.** Seven patents concerned a copolymer ("copolymer-1") consisting of four different amino acids. A sample of the copolymer consisted of a mixture of individual molecules having varying molecular weights.
- **TWO GROUPS OF CLAIM.** The claims, which fell into two groups (Group I and Group II), used two different ways to describe a "distribution of molecular weight values."

# Group I

- GROUP I; STATISTICAL MEASURES OF AVERAGES. First, the Group I claims used statistical measures of averages. A representative claim required a copolymer-1 "having a **molecular weight of about 5 to 9 kilodaltons.**"
- THREE MEASURES FOR MOLECULAR WEIGHT DISTRIBUTION; DIFFERENT VALUES. There were three measures for an average, which, for a typical sample, gave different values.
  - $M_p$ ; PEAK AVERAGE MOLECULAR WEIGHT.  $M_p$  was "the molecular weight of the most abundant molecule in the sample."
  - $M_n$ ; ARITHMETIC MEAN; ALL MOLECULES DIVIDED BY NUMBER.  $M_n$  was "the arithmetic mean": total mass of all molecules divided by the number of molecules.
  - $M_w$ ; ANOTHER MEASURE.  $M_w$  was another measure.

# Group II

- GROUP II; PERCENTAGE OF MOLECULES WITHIN RANGE.  
Second, Group II described "how many molecules in a polymer sample have molecular weights that fall within an arbitrarily set range."
  - For example, a sample might be described as: 99% within a range of 1 to 100 kilodaltons (kDa).
  - 75% FROM 2 TO 20 KILODALTONS. A representative claim required a copolymer-1 "having 75% of its mole fraction within the molecular weight range from about 2 kDa to about 20 kDa."
- GROUP II The Group II claims were *not* invalid because the claims did not use statistical averages but, instead, recited precise end points for a range of molecular weights.



# Group I: Invalid

- GROUP I; AMBIGUITY IN MEASURE FOR CLAIMS RECITING MOLECULAR WEIGHT: THREE MEASURES OF AVERAGE. The Group I claims were invalid for indefiniteness because the claims recited a statistical measure of average molecular weight and it was unclear which of three measures for the average should be used.
  - PROSECUTION HISTORY. Patents' prosecution history did not resolve the ambiguity because patent owner made contradictory statements, indicating in one prosecution that a skilled person would understand that one measure ( $M_p$ ) should be used but indicating in another prosecution that the skilled person would understand that another measure ( $M_w$ ) should be used.
  - EXPERT TESTIMONY. The patent owner's expert testimony did not resolve the ambiguity.

# Group 1: Which measure for average?

## Fatally Unclear

- DISTRICT COURT; NOT AMBIGUOUS; USE  $M_p$  (PEAK AVERAGE WEIGHT). In a claim construction order, a district court rejected an accused infringer's argument that "molecular weight" was insolubly ambiguous because it did identify which of the three measures should be used.
  - It construed "molecular weight" as  $M_p$  (peak average weight).
  - Subsequently, after a bench trial, it held that the claims were infringed and not invalid for obviousness or lack of enablement.
- HELD: the district court erred; the Group I claims were indefinite.
- CLAIMS: PLAIN LANGUAGE; NO INDICATION WHICH MEASURE. The claims' plain language gave no indication which average molecular weight measure was intended.
- Neither the specification nor the prosecution history resolved the ambiguity.

# Prosecution History: Contradictory

- The prosecution history did not resolve ambiguity because it was contradictory.
- '539 PATENT; INDEFINITENESS REJECTION: SKILL PERSON WOULD UNDERSTAND:  $M_p$  (PEAK AS IN FIGURE 1).
  - Examiner rejected the claims as indefinite because the patent did specify which the measure.
  - Response: a person of ordinary skill would have understood that "average molecular weight" referred to  $M_p$ , that is, "the molecular weight at the peak of the molecular weight distribution curve shown in Figure 1."
  - Thereafter, the examiner allowed the claims.
- '847 PATENT: PERSON OF ORDINARY SKILL COULD UNDER STAND THAT KILODALTON UNITS IMPLIES A WEIGHT AVERAGE MOLECULAR WEIGHT ( $M_w$ ).
  - Examiner: analogous rejection.
  - Argument: person of ordinary skill "could understand that kilodalton units implies [sic] a weight average molecular weight,' *i.e.*,  $M_w$ ."

# Specification; Expert Testimony

- SPECIFICATION. The specification did not resolve the ambiguity.
- EXPERT TESTIMONY: FIGURE 1; DATA GENERATED BY SEC METHOD. The patent owner's expert testified that
  - an ordinarily skilled artisan would have known that  $M_p$  was the measure after examining the patents' Figure 1 and the discussion in Example 1 of gel filtration with an SEC method because...
  - Only  $M_p$  could be read directly from the figure without further calculation.
- DE NOVO REVIEW; SEC METHOD DATA CAN YIELD ALL THREE MEASURES WITH SOME CALCULATIONS. On de novo review, it was clear that the expert's testimony did not save the claims from ambiguity.
  - Expert admitted: SEC did not "exclusively provide  $M_p$ --both  $M_n$  and  $M_w$  can also be obtained from the data generated by the SEC method after some calculations."
  - Also, the Figure 1 curve peaks did "not correspond to the values denoted as 'average molecular weight' in the figure's legend."



# Evaluation of Expert Testimony

- This last point may strike the Supreme Court justices as extraordinary (and therefore possibly in error).
- Generally, the evaluation of witness testimony, including that of an expert is within providence of a trial court.
- An appellate court must give that evaluation at least some deference, usually a lot!

# IV. Infringement

## C. Doctrine of Equivalents

- The doctrine of equivalents allows a finding of infringement of a patent claim by an accused product or process that does not “literally” conform to all the claim’s limitations.
- The doctrine has long been a feature of the U.S. patent system.
  - It is controversial because it undermines to some extent the “notice” function of claims.
  - Nevertheless, the Supreme Court has consistently sustained the doctrine, most recently in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997).
- The major restrictions on the doctrine are
  - There must be an equivalent of every claim limitation (“all elements rule”), and
  - “Prosecution history estoppel” arising from a patent owner’s narrowing amendment of a claim. See *Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722 (2002).

# Federal Circuit: Trend Away from “Vitiation” Doctrine

- Some Federal Circuit decisions restricted the doctrine with rules such as one precluding a theory of equivalents that “vitiates” a claim limitation. E.g. Sage Products, Inc. v. Devon Industries, Inc., 126 F.3d 1420 (Fed. Cir. 1997) (opinion by Rader)
- Recent Federal Circuit decisions evidence a trend toward a more liberal approach.
- The following are examples.

# Ring & Pinion Serv. v. ARB Corp.

743 F.3d 831 (Fed. Cir. Feb. 19, 2014)

- A patent concerned an automobile locking differential. **U.S. Pat. No. 5,591,098.**
- CLAIMS: “CYLINDER MEANS FORMED IN” CARRIER..
- STIPULATION. Patent owner and accused infringer stipulated that
  - (a) an accused device literally contained all the patent claim's limitations but one, a "cylinder means",
  - (b) the accused device contained an element equivalent to the cylinder means,
  - (c) the equivalent was foreseeable to a person of ordinary skill in the art at the time the application for the patent was filed, and
  - (d) the device would not infringe under the doctrine of equivalents if but only if the court held that "foreseeability of an equivalent at the time of application" barred use of the doctrine of equivalents.
- DISTRICT COURT: foreseeability bar but grant summary judgment of no infringement because equivalence finding would vitiate cylinder means limitation..



# No Foreseeability Restriction

- HELD: the district court correctly held that there is no foreseeability restriction, but it erred by failing to give effect to the stipulation.
- VITIATION. Vitiating was not an exception to the doctrine of equivalents but, rather, was a legal determination that two elements were not equivalent.
- The stipulation was binding, and its statement that accused device included an equivalent of the cylinder means limitation precluded a conclusion of vitiating

# EPOS Technologies v. Pegasus Technologies

766 F.3d 1338 (Fed. Cir. Sept. 5, 2014)

- PENS THAT DIGITIZE WRITING; DEVICES FOR RETROFITTING WRITING SURFACES TO DIGITALLY CAPTURE WRITING. Six patents concerned "pens that digitize writing and devices for retrofitting writing surfaces so that writing can be digitally captured." **U.S. Pat. No. 6,266,051; U.S. Pat. No. 6,326,565; U.S. Pat. No. 6,392,330; U.S. Pat. No. 6,501,461; U.S. Pat. No. 6,724,371; U.S. Pat. No. 6,841,742.**
- ERRONEOUS READING LIMITATIONS INTO CLAIMS; IMPROPER "SHORT-CUT" OF DOCTRINE OF EQUIVALENTS BY ADOPTING BINARY CHOICE. A district court construed disputed claim terms and granted summary judgment of noninfringement. HELD: as to **four patents**, the district court erred by reading limitations into the claims; as to a **fifth patent**, the district court improperly "shortcut" an inquiry into infringement under the doctrine of equivalents by identifying a "binary choice" between a claim element (intermittent transmission) and an accused device (continuous transmission).

# Claim: Intermittent signal

## Accused device: continuous signal

- HANDHELD DEVICE FOR USE WITH BOARD; RECEIVING AND TRANSMITTING "**INTERMITTENT**" ULTRASOUND SIGNAL. The '371 patent concerned a handheld device for use with a board.
  - The device received and transmitted an "intermittent" ultrasound signal "in a mode dependent manner."
  - The signal informed a processing system when the device's tip was in contact with the board.
- ACCUSED DEVICE GENERATES *CONTINUOUS* ULTRASOUND SIGNAL. The accused devices generated a continuous ultrasound signal.

# District Court: No Infringement

- DISTRICT COURT: SUMMARY JUDGMENT OF NO INFRINGEMENT; The district court granted summary judgment of no infringement.
- ADOPT PATENT OWNER'S CONSTRUCTION OF "INTERMITTENT": "OCCASIONALLY" OR "NON-CONTINUOUS." The district court adopted the patent owner's proposed construction of "intermittent" as "something that occurs occasionally, in a non-continuous manner, in a random or unpredictable manner, or at selected times."
- DOCTRINE OF EQUIVALENTS. After finding no literal infringement, the district court devoted only two sentences to alleged infringement under the doctrine of equivalents. It reasoned that allowing such infringement "would eliminate the intermittent limitation entirely."



# No Binary Choice Shortcut

- REQUIRED INQUIRY; *DEERE* (2012). Assessment of asserted infringement under the doctrine of equivalents required an inquiry into "whether an asserted equivalent is an 'insubstantial difference' from the claimed element, or whether it matches the 'function, way, and result of the claimed element.'" *Deere* (2012).
- CAUTION AGAINST SHORTCUTTING INQUIRY BY IDENTIFYING A "BINARY" CHOICE (ELEMENT PRESENT OR NOT?); *DEERE; BRILLIANT INSTRUMENTS* (2013). *Deere* cautioned against shortcutting the required "inquiry by identifying a 'binary' choice in which an element is either present or 'not present.'" See also *Brilliant Instruments* (2013).

# Continuous May Be Equivalent to Intermittent

- In this case, the district court took that prohibited "short cut" "by identifying a binary choice (continuous or intermittent)," which neither the patent nor the evidence compelled.
  - FUNCTIONING OF ACCUSED DEVICES. District court failed to consider the "functioning" of the accused products.
  - PATENT OWNER'S EXPERT DECLARATION. District court also failed to consider a declaration by the patent owner's expert, which explained why the accused products' signals were equivalent to the claimed intermittent ultrasound signal.
- The district court must "more thoroughly" consider whether "a reasonable jury could conclude that intermittent and continuous signals are equivalent."

## IV. Infringement D. Defenses

- There are “defenses” to a charge of infringement, that is, matters that preclude a patent owner from recovering even if a defendant “infringes” such as by marketing a product or using a process that falls within a patent’s claims.
- The most important defense: **invalidity** of the patent.
- Other defenses: **implied license** (and the related concept of **exhaustion**), **inequitable conduct**, **laches**, and **estoppel**.

# 1. Implied License

- **Endo Pharmaceuticals Inc. v. Actavis, Inc.**, 746 F.3d 1371 (Fed. Cir. March 31, 2014)
- NO IMPLIED LICENSE TO PATENTS ISSUING AFTER A SETTLEMENT THAT LICENSED ONLY SPECIFIC PATENTS AND EXPRESSLY PRECLUDED IMPLIED RIGHTS; CASES ON LEGAL ESTOPPEL: LIMITED TO ASSERTION OF PATENTS ISSUING ON **CONTINUATIONS**; *TRANSCORE* (2009).



# Endo Pharmaceuticals

- Patent owner settles a suit and grants an accused infringer a license to specific patents (and continuations) and a covenant not to assert the patents against the accused infringer's generic drug product. The agreement expressly provided that it conferred no implied rights.
- **PRIORITY TO SAME PROVISIONAL APPLICATION.** Patent owner sued the accused infringer, alleging infringement by the *same* product of a patent that issued after the settlement.
  - The asserted patent claimed priority a provisional application.
  - The licensed patents licensed in the settlement also claimed priority to that provisional application.
- The accused infringer asserted the defenses of express license or implied license. **HELD:** there was no license defense.

# No Express License

- *NOT CONTINUATIONS.* Express license did not cover asserted patent because it was not a "continuation" of the licensed patent even though they shared a common parent application
- *REQUIREMENTS TO BE A "CONTINUATION": CROSS-REFERENCE, SAME DISCLOSURE.* To be a "continuation" of a prior application, an application must have contained an express cross-reference to the prior application and must have had the same disclosure as that application. "See Manual of Patent Examining Procedure (MPEP) § 201.07 (8th ed. Rev. 9, Oct. 2012)."
- *NOT SAME DISCLOSURE; NO CLAIM TO PRIORITY.* The asserted patent did not have the same disclosure as, or refer to, the application that issued as the licensed patent.

# No Implied License

- No implied license because the license expressly excluded any license in patents other than the specified patent and continuations.
- *TRANSCORE* (2009); LEGAL ESTOPPEL. *TransCore* held that a patent owner "was legally estopped from bringing a second infringement action even though the earlier settlement agreement stated that it `shall not apply to any other patents."
  - However, the principle of legal estoppel *TransCore* and later decisions recognized was limited to patents on continuations that disclosed the same inventive subject matter and were necessary to practice the licensed patent.
  - If the accused infringers desired freedom to market their generic products free from any threat of an infringement suit by the patent owner, they could have negotiated for an agreement with language appropriate to that desire.
- **DYK, DISSENTING IN PART:** NO MEANINGFUL DISTINCTION BETWEEN PROVISIONAL RELATIONSHIP AND CONTINUATION PATENT RELATIONSHIP. There was "no meaningful distinction between the provisional patent relationship at issue in this appeal and the continuation patent relationships at issue in our earlier decisions."



## 2. Inequitable Conduct

- Precedential Federal Circuit Panel Decision Since *Therasense*
- NO INEQUITABLE CONDUCT.
  - 1. Network Signatures, Inc. v. State Farm Mutual Automobile Insurance Co., 731 F.3d 1239 (Fed. Cir. 2013)
  - 2. Novo Nordisk A/s v. Caraco Pharmaceutical Laboratories, Ltd., 719 F.3d 1346 (Fed. Cir. 2013)
  - 3. *In re* Rosuvastatin Calcium Patent Litigation, 703 F.3d 511 (Fed. Cir. 2012)
  - 4. Outside the Box Innovations, LLC v. Travel Caddy, Inc., 695 F.3d 1285 (Fed. Cir. 2012)
  - 5. 1st Media, LLC v. Electronic Arts, Inc., 694 F.3d 1367 (Fed. Cir. 2012)
  - 6. Santarus, Inc. v. Par Pharmaceutical, Inc., 694 F.3d 1344, 1349 (Fed. Cir. 2012)
  - 7. Cordis Corp. v. Boston Scientific Corp., 658 F.3d 1347 (Fed. Cir. 2011)



# Cases Ruling Against Patent Owner

- INEQUITABLE CONDUCT
  - 1. Apotex Inc. v. UCB, Inc. 763 F.3d 1354 (Fed. Cir. 2014)
  - 2. American Calcar, Inc. v. American Honda Motor Co., 768 F.3d 1185 (Fed. Cir. 2014)
  - 3. Ohio Willow Wood Company v. Alps South, LLC, 735 F.3d 1333 (Fed. Cir. 2013)
  - 4. Intellect Wireless, Inc. v. HTC Corp., 732 F.3d 1339 (Fed. Cir. 2013)
  - 5. Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324 (Fed. Cir. 2012)

# Apotex Inc. v. UCB, Inc.

2014 U.S. App. LEXIS 15670 (Fed. Cir. Aug. 15, 2014)

- A patent concerned a process for making a drug tablet. U.S. Pat. No. 6,767,556.
- HELD: a district court did not commit clear error or abuse of discretion in finding that the named inventor engaged in material misconduct rendering the patent unenforceable for inequitable conduct.
- INVENTOR'S AFFIRMATIVE MISREPRESENTATIONS OF FACT ABOUT ACCUSED INFRINGER'S PRIOR ART PRODUCT, MADE THROUGH COUNSEL AND A HIRED EXPERT, OVERCOMING REJECTIONS AND CORRESPONDING PRECISELY WITH EXAMINER'S ERRONEOUS BELIEF REGARDING THE PRIOR ART.

# ***Apotex, Facts***

- The inventor was chairman of the patent owner, had prior experience with patent prosecution and litigation, drafted the application for the patent and was actively involved in its prosecution.
- The inventor repeatedly affirmatively misrepresenting facts concerning the nature of an accused infringer's product, a drug tablet that had been on the market for many years.
- The inventor became aware of the true nature of the accused infringer's product (to wit, that it had a reaction of two components, as the patent later claimed, and not an unreacted combination of the components, as represented) through testing shortly after filing the application.
- During prosecution, an examiner relied on the product to reject the inventor's claims.

# Materiality

- MATERIALITY. Misrepresentations: "but-for material" under the standard of *Therasense* (2011 en banc), because the examiner would not have allowed the claims but for the misrepresentations.
- EXAMINER RELIANCE. The examiner withdrew rejections only after stating, as the reasons for allowance, an "erroneous belief regarding the prior art" that corresponded "precisely" with the inventor's "repeated misrepresentations made through his counsel" and through a declaration from an expert from whom known facts were withheld.
- No need to determine: did inventor's conduct rise to the level of egregious misconduct such that, under *Therasense*, materiality could be presumed?
- No need to address the materiality of (1) the inventor's failure to disclose other prior art cited by the PTO in an examination of a similar application by the inventor or (2) the inventor's description in the patent's specification, in the past tense, of examples that were not actually carried out but, rather, were "made up in [the inventor's] head."



# Intent

- District court did not clearly err in finding that deceptive intent was the "single most reasonable inference that can be drawn from the evidence."
- Inventor's testimony at trial, in which he denied knowledge about the prior art: not credible.
- Statements at issue:
  - factual in nature and "contrary to the true information" the inventor possessed
  - "not mere advocacy for a preferred interpretation" of the prior art.

### 3. Laches and Estoppel:

- Most stable area of Federal Circuit patent jurisprudence because of thorough en banc opinion by Judge Nies in *A. C. Aukerman Co. v. R. L. Chaides Construction Co.*, 960 F.2d 1020, 1032, 22 USPQ2d 1321, 1328 (Fed. Cir. 1992), which fully considered Supreme Court authority.
- Example: in *Aukerman*, the patent owner argued:
  - “it is improper to utilize laches as a defense to completely bar recovery of prefiling damages flowing from a continuing tort, such as patent infringement”,
  - that is, “because each act of infringement is deemed a separate claim, the laches defense, like a statute of limitations, must be established separately with respect to each such act”.

# ***Aukerman*: Response to Argument That Laches Should Not Bar Damage Claims**

- “[The] theory conflicts with the precedent of the Supreme Court in which laches has been applied against continuing torts as in *Lane & Bodley*, 150 U.S. 193 (patent infringement) and *Menendez v. Holt*, 128 U.S. 514 Copyright Cases or Patent Cases (1888) (trademark infringement).
- “In those cases, as well as in our precedent and that of other circuits, laches has been viewed as a single defense to a continuing tort up to the time of suit, not a series of individual defenses which must be proved as to each act of infringement, at least with respect to infringing acts of the same nature. ... To that extent, continuing tortious acts may be deemed to constitute a unitary claim.
- “In any event, [the] argument, which focuses on acts of the defendant, distorts the basic concept of laches. Laches focuses on the dilatory conduct of the patentee and the prejudice which the patentee’s delay has caused.”

# Petrella v. Metro-Goldwin-Mayer, Inc., 134 S. Ct. 1962 (May 19, 2014)

- SUPREME COURT: LACHES IN **COPYRIGHT** INFRINGEMENT CASES; NO BAR TO DAMAGES RECOVERY IN SUITS BROUGHT WITHIN THREE-YEAR STATUTE OF LIMITATION; BAR TO *EQUITABLE* RELIEF, INCLUDING INJUNCTIONS AND INFRINGER PROFIT DISGORGEMENT; ESTOPPEL BARRING ALL RELIEF.
- The equitable defense of laches comprises "unreasonable, prejudicial delay in commencing suit."
  - Laches did *not* apply to bar *all* relief in suits for copyright infringement brought within the Copyright Act's three-year statute of limitations because "courts are not at liberty to jettison Congress' judgment on the timeliness of suit."
  - Therefore, a copyright owner may recover *damages* for separate infringing acts occurring during the three year period before filing suit even if the owner knew of, and failed to take action against, similar infringing acts occurring years before that period.



# Equitable remedies

## Estoppel

- **EQUITABLE REMEDIES.** Laches may limit or bar "equitable" remedies, including injunctions and the disgorgement of infringer profits.
- **ESTOPPEL.** Also, an estoppel may arise and bar all potential remedies when a copyright owner "engages in intentionally misleading representations concerning his abstention from suit, and the alleged infringer detrimentally relies on the copyright owner's deception."

# Footnote on Laches in Patent Infringement Suits

- The Supreme Court indicated the following about whether its decision constricting laches for damages recovery in *copyright* should apply to *patent* cases.
  - SECTION 286; SIX-YEAR LIMITATION ON DAMAGES. "The Patent Act states: '[N]o recovery shall be had for any infringement committed more than six years prior to the filing of the complaint.' 35 U. S. C. § 286."
  - SECTION 282: NONINFRINGEMENT, ABSENCE OF LIABILITY FOR INFRINGEMENT, UNENFORCEABILITY. "The Act also provides that '[n]oninfringement, absence of liability for infringement or unenforceability' may be raised 'in any action involving the validity or infringement of a patent.' § 282(b) (2012 ed.)."
- "Based in part on § 282 and commentary thereon, legislative history, and historical practice, the Federal Circuit has held that laches can bar damages incurred prior to the commencement of suit, but not injunctive relief. *A. C. Aukerman Co. v. R. L. Chaides Constr. Co.*, 960 F.2d 1020, 1029-1031, 1039-1041 (1992) (en banc)."
- POSITION: NOT REVIEWED. "We have not had occasion to review the Federal Circuit's position."

# *SCA Hygiene Products v. First Quality Baby Products,*

2014 U.S. App. LEXIS 17830 (Sept. 17, 2014),

- Patent owner delayed more than six years to sue after sending a letter charging an accused infringer.
- *Petrella* “left *Aukerman* intact.”
- Because *Aukerman* may only be overruled by the Supreme Court or an en banc panel of this court, *Aukerman* remains controlling precedent.“

# SCA: Laches

- LACHES. Applying *Aukerman*, the six-year delay created a presumption that the necessary elements of laches, unreasonable delay and prejudice to the accused infringer, were met.
- Patent owner failed to produce evidence rebutting the presumption.
- REEXAMINATION. After sending the letter, the patent owner requested and obtained reexamination of the patent by the PTO in view of the prior art that the accused infringer had cited.
- THREE YEARS TO SUE. The reexamination did not excuse the entire delay because, inter alia, the patent owner further delayed three years after the reexamination to sue.



# SCA: Equitable Estoppel

- ESTOPPEL. District court erred in granting summary judgment that *equitable estoppel* barred all relief
- No presumption applied and there were fact issues on elements necessary for estoppel: misleading communication and reliance on that communication.
- The interaction between the patent owner and accused infringer was too limited to conclude that a "misleading communication by omission" was the only possible inference from the evidence.
- There was a fact issue whether the accused infringer had relied on its own opinion as to the patent's invalidity, or simply ignored the patent, rather than relying on the patent owner's silence.

# V. Litigation; Jurisdiction and Procedure

## A. Declaratory Judgment Suits

- A wonderful description of role of Declaratory Judgment Act in patent law
- Arrowhead Industrial Water v. Ecolochem 846 F.2d 731, 734–35 (Fed. Cir. **1988**):
- “This appeal presents a type of the sad and saddening scenario that led to enactment of the Declaratory Judgment Act ... . In the patent version of that scenario, a patent owner engages in a danse macabre, brandishing a Damoclean threat with a sheathed sword ... . Guerrilla-like, the patent owner attempts extra-judicial patent enforcement with scare-the-customer-and-run tactics that infect the competitive environment of the business community with uncertainty and insecurity ... . Before the Act, competitors victimized by that tactic were rendered helpless and immobile so long as the patent owner refused to grasp the nettle and sue. After the Act, those competitors were no longer restricted to an in terrorem choice between the incurrence of a growing potential liability for patent infringement and abandonment of their enterprises; they could clear the air by suing for a judgment that would settle the conflict of interests. The sole requirement for jurisdiction under the Act is that the conflict be real and immediate, i.e., that there be a true, actual ‘controversy’ required by the Act.”

# Medtronic, Inc. v. Mirowski Family Ventures

134 S. Ct. 843 (Jan. 22, 2014)

- A patent owner entered into a licensee agreement with a party (licensee) requiring the licensee to pay royalties on products that would infringe the patent owner's patents.
- The licensee brought suit against a patent owner seeking a declaratory judgment that the licensee's new products did not infringe the licensed patents or that the patents were invalid.
- A district court found that the patent owner had the burden of proof on infringement and failed to establish infringement.

# ***Medtronic: Burden of Proving Infringement Remains on Patentee***

- On appeal, the Federal Circuit reversed, holding that the licensee, as plaintiff in the declaratory action, bore the burden of proof because, inter alia, the patent owner could not counterclaim for infringement due to the subsisting license.
- HELD: the Federal Circuit erred:
- “When a licensee seeks a declaratory judgment against a patentee to establish that there is no infringement, the burden of proving infringement remains with the patentee.”
- Thus, "the burden of persuasion is with the patentee, just as it would be had the patentee brought an infringement suit."



# Three Legal Propositions; Simple Legal Logic; Settled Case Law

- Three "legal propositions," which rested on "settled case law," taken together, indicated that, as a matter of "simple legal logic," "the burden of proving infringement should remain with the patentee."
- First, case law established that the burden of proving infringement generally rested upon the patent owner.
- Second, case law established that the Declaratory Judgment Act was "procedural" and did not change substantive rights.
- Third, case law established that the burden of proof is a "substantive" aspect of a claim.

# Practical Considerations: Same Conclusion

## First: Post-Litigation Uncertainty

- Hypothetical example:
  - accused infringer loses in a declaratory judgment suit because the evidence was inconclusive and, therefore, the accused infringer failed to prove non-infringement.
  - accused infringer or others continue to engage in "same allegedly infringing behavior."
  - subsequent suit by the patent owner: patent owner loses because the evidence was inconclusive and, therefore, the patent owner failed to carry the burden of proof.
  - "uncertainty among the parties and others who seek to know just what products and processes they are free to use."
- The example was not "fanciful." ...[R]elitigation of an issue, such as infringement, decided in a first suit would not be precluded a subsequent suit when the burden of persuasion shifted from the party against whom preclusion was sought (such as the accused infringer) to an adversary (such as the patent owner).

## Second. Understanding The Patent Owner's Infringement Theory.

- Shifting the burden of proof might "create unnecessary complexity by making it difficult for the licensee to understand upon just what theory the patentee's infringement claim rests."
  - MANY CLAIMS AND LIMITATIONS. A "complex" patent might contain "many pages of claims and limitations."
  - PATENT OWNER: BETTER POSITION TO KNOW WHERE, HOW AND WHY A PRODUCT OR PROCESS INFRINGES A CLAIM. A patent owner was better able "to know, and to be able to point out, just where, how, and why a product (or process) infringes a claim of that patent."
  - UNTIL THE PATENT OWNER DOES SO, AN ACCUSED INFRINGER WORKS IN DARK, NEGATING EVERY CONCEIVABLE INFRINGEMENT THEORY. Until the patent owner did so, an accused infringer would "have to work in the dark, seeking, in his declaratory judgment complaint, to negate every conceivable infringement theory."



# Third: Purpose Of Declaratory Judgment Act.

- Shifting the burden of proof was not readily reconciled with "a basic purpose of the Declaratory Judgment Act."
  - *MEDIMMUNE* (2007); AMELIORATING THE ACCUSED INFRINGER'S DILEMMA. In *MedImmune*, (2007), the Supreme Court noted that the "very purpose" of the Declaratory Judgment Act was to "ameliorate" the "dilemma" posed by putting a party who challenged a patent's scope to a choice between abandoning rights or risking an infringement suit that carried the risk of an injunction, treble damages and attorney fees. A declaratory judgment suit rescued the party from that dilemma.
  - FEDERAL CIRCUIT BURDEN SHIFTING RULE: SIGNIFICANT OBSTACLE TO SUCH RELIEF. The Federal Circuit's shifting of the burden of proof did not deprive a party of the right to bring a declaratory judgment suit, but it did create a "significant obstacle to use of that action." There was no "strong reason for creating that obstacle."



# General Public Considerations

- IN BALANCE. "General public considerations" were, at most, "in balance" and did "not favor a change in the ordinary rule imposing the burden of proving infringement upon the patentee."
- MAINTENANCE OF WELL-FUNCTIONING PATENT SYSTEM. The public interest favored "the maintenance of a well-functioning patent system."
- KEEP PATENT MONOPOLIES WITHIN LEGITIMATE SCOPE. However, the public had a "paramount interest" in keeping "patent monopolies" "within their legitimate scope." *Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U. S. 806, 816 (1945).
- ROYALTIES ON IDEA BEYOND SCOPE OF PATENT MONOPOLY. A patent owner could not "exact royalties for the use of an idea" if the idea was "beyond the scope of the patent monopoly granted." *Blonder-Tongue Laboratories, Inc. v. University of Ill. Foundation*, 402 U. S. 313, 349-350 (1971)."
- LICENSEE: OFTEN ONLY INDIVIDUAL WITH ECONOMIC INCENTIVE TO LITIGATE QUESTION OF PATENT'S SCOPE; *LEAR* (1969). A licensee might be the only party with "enough economic incentive" to litigate questions of a patent's scope. *Lear, Inc. v. Adkins*, 395 U. S. 653, 670 (1969)."

# V. Litigation; Jurisdiction and Procedure

## B. Attorney Fee Awards

- PATENT REMEDIES STATUTES: QUITE SIMPLE AND SHORT
- **35 U.S.C. Section 283:** The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.
- **35 U.S.C. Section 284:**

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. Increased damages under this paragraph shall not apply to provisional rights under section 154 (d).

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.
- **35 U.S.C. Section 285: The court in exceptional cases may award reasonable attorney fees to the prevailing party.**

# Octane Fitness v. Icon Health & Fitness

134 S. Ct. 1749 (April 29, 2014)

- SIMPLE STANDARD FOR "EXCEPTIONAL"; FACTORS.
- An "exceptional" case, for purposes of an attorney fee award under 35 U.S.C. Section 285, is "simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated."
- A district court may exercise its discretion to find a case "exceptional" based on the "totality of the circumstances," considering various factors, including
  - frivolousness,
  - motivation,
  - objective unreasonableness (both in the factual and legal components of the case) and
  - the need in particular circumstances to advance considerations of compensation and deterrence.



# Federal Circuit's *Brooks Furniture*: Too Complex and Rigid

- Federal Circuit's complex and rigid framework, set forth in *Brooks Furniture Mfg., Inc. v. Dutailier Int'l, Inc.*, 393 F.3d 1378 (2005),
- It required either litigation misconduct or a showing of both subjective bad faith and objective baselessness to finding a case "exceptional"
- It was contrary both
  - (A) to the regional circuit decisions interpreting the original 1946 statute and the 1952 codification, which substituted the word "exceptional" for "discretion," and
  - (B) prior Federal Circuit decisions,
- It was not "consistent with the statutory text" of Section 285, in view of the ordinary meaning of "exceptional" in 1952,
- It did *not* follow from the Supreme Court's *PRE* (1993) decision on the sham exception to the doctrine of immunity from antitrust liability for litigation against competitors, and
- It would render the statute superfluous in light of the common-law inherent power of a court to award fees for bad faith litigation.
- NOT CLEAR AND CONVINCING EVIDENCE. The Federal Circuit further erred by requiring proof of exceptionality by "clear and convincing evidence."



# Octane Fitness

- A patent concerned an exercise machine.
- The patent owner, ICON, sued an accused infringer, Octane, a competitor, for infringement. A district court granted Octane's motion for summary judgment of non-infringement.
- The exonerated accused infringer moved for an award of attorney fees.
- Applying the *Brooks Furniture* framework, the district court denied an award.

# Octane Fitness

- On objective baselessness, accused infringer: noninfringement should have been "a foregone conclusion" upon inspection of its machines. District Court: patent owner's infringement arguments were neither "frivolous" nor "objectively baseless."
- E-MAILS. On subjective bad faith, accused infringer relied on
  - patent owner was a larger company suing on a patent that it had not commercialized and
  - on a series of e-mails among executives of the patent owner, which stated, inter alia, that the patent owner was bringing out a "greater product" and "throwing a lawsuit on top of that" and that the suit was on an **"old patent we had for a long time that was sitting on the shelf"**. They are **just looking for royalties**."
- Remarks: merely "stray comments by employees with no demonstrated connection to the lawsuit."

# Octane Fitness

- On appeal, the Federal Circuit affirmed, rejecting the accused infringer's argument that the district court "applied an overly restrictive standard in refusing to find the case exceptional under § 285." It "declined to `revisit the settled standard for exceptionality.'" “
- SUPREME COURT: remand case for application of proper standard.

# Highmark v. Allcare Health Management System

134 S. Ct. 1744 (April 29, 2014)

- STANDARD OF APPELLATE REVIEW.
- Federal Circuit held that the question whether litigation is 'objectively baseless' under *Brooks Furniture* 'is a question of law based on underlying mixed questions of law and fact,' 'an objective-baselessness determination is reviewed on appeal 'de novo' and 'without deference.' " HELD: the Federal Circuit erred.
- *Octane Fitness* rejected the *Brooks Furniture* framework as unduly rigid.
- *Octane Fitness* held that a district court should determine whether a case is "exceptional" "in the case-by-case exercise of their discretion, considering the totality of the circumstances."
- *Octane* settled the issue in the present case because, traditionally, an appellate court reviews matters of discretion for an "abuse discretion." That is unlike questions of law, which an appellate court reviews de novo, and questions of fact, which it reviews for clear error.



# Highmark

- Supreme Court decisions involving fee-shifting statutes similar to Section 285 apply an abuse of discretion standard. *Pierce* (1988) (Equal Access to Justice Act); *Cooter* (1990) (Federal Rule of Civil Procedure 11).
- APPELLATE CORRECTION OF LEGAL OR FACTUAL ERROR. An abuse of discretion standard did not prevent "an appellate court's correction of a district court's legal or factual error." A district court determination was necessarily an abuse of discretion if it was based "on an erroneous view of the law or on a clearly erroneous assessment of the evidence."

# Highmark

- Patent: "utilization review" in a "managed health care system."
- A company, Highmark, brought a declaratory judgment suit against the patent owner. The patent owner counterclaimed for infringement. The district court granted summary judgment of noninfringement, which the Federal Circuit affirmed.
- District court grants the accused infringer's motion for an attorney fee award (**\$ 4 million**). It found
  - Patent owner "engaged in a pattern of `vexatious' and `deceitful' conduct throughout the litigation.
  - Suit: part of plan to identify potentially infringing companies through an "informational" survey and then to threaten the companies with suit to force purchase of licenses.
  - Patent owner maintained its claims after its own experts determined that the claims lacked merit.

# Highmark

- A Federal Circuit panel
  - affirmed the "exceptional" case determination as to one asserted claim of the patent
  - reversed as to another claim
  - on the latter, it exercised *de novo* review to determine that the patent owner's assertion of the claim was not objectively baseless under *Brooks Furniture*.
  - Rehearing en banc denied with five judges dissenting.
- REMAND. The Supreme Court reversed and remanded.

# V. Litigation; Jurisdiction and Procedure

## C. Venue; Severance and Transfer

- 28 U.S.C. Section 1404(a):

For the convenience of parties and witnesses, in the interest of justice, a district court may transfer any civil action to any other district or division where it might have been brought or to any district or division to which all parties have consented.

- Rule 21, Federal Rules of Civil Procedure: "... The court may ... sever any claim against a party."



# In re Nintendo,

756 F.3d 1363 (Fed. Cir. June 25, 2014)

- SUIT AGAINST MANUFACTURER AND ITS CUSTOMERS IN EASTERN TEXAS DISTRICT; ABUSE OF DISCRETION TO DENY MOTION TO SEVER CLAIMS AGAINST MANUFACTURER AND TRANSFER TO MORE CONVENIENT DISTRICT (WESTERN WASHINGTON).
- A company that "acquires, licenses, and enforces patents," Secure Axxess, filed suit in the Eastern Texas district alleging infringement of a patent on a video game system by a manufacturer, Nintendo, and eleven of its customers ("retailers") that sold Nintendo's accused system either as a stand-alone product or bundled with video games and accessories.

# Denial of Motion to Sever and Transfer

- Nintendo and the retailers moved to sever the claims against Nintendo, transfer them to the Western Washington district, the location of Nintendo's business, and stay the remaining claims against the retailers.
- Eastern Texas district court denied the stay.
- HELD: denial was abuse of discretion warranting issuance of a writ of mandamus directing the district court to grant the motion

# Severance When Entire Suit Cannot Be Transferred

- SEVER TO ALLOW TRANSFER. Section 1404(a) authorized transfer of an action to a district "where it might have been brought." Where, as here, the entire action could not have been brought in a convenient transferee district because some defendants were not subject to jurisdiction in that district, a court could "sever defendants for purposes of transfer," as Rule 21 provided. See *Wyndham Assocs. v. Bintliff*, 398 F.2d 614, 618 (2d Cir. 1968).

# Convenience; Case Law

- TRANSFERS; MARKED DISPARITY OF CONVENIENCE OVERCOMING PLAINTIFF'S CHOICE OF "HOME." In this case, there was a "stark contrast in relevance, convenience, and fairness" between the transferor and transferee district, which favored transfer to the Western Washington district.
- Case resembled prior cases in which the Federal Circuit had granted mandamus despite a plaintiff's argument that its choice to sue in a "home district" deserved deference. E.g., *In re Microsoft Corp.*, 630 F.3d 1361, 1364 (Fed. Cir. 2011) ; *In re Nintendo Co.*, 589 F.3d 1194, 1198 (Fed. Cir. 2009).



# Comparing Conveniences

- PATENT OWNER: PRINCIPAL PLACE OF BUSINESS (SMALL OFFICE SPACE) IN EASTERN TEXAS? The patent owner's executives worked "in various parts of the country." Their business cards indicated that the patent owner's principal place of business was in Plano, Texas, in the Eastern Texas district. The patent owner leased 200 square feet of office space. **EDITORIAL NOTE:** a typical small hotel room would be more than 200 square feet.
- MANUFACTURER. Accused manufacturer (Nintendo)
  - coordinated its manufacture and marketing of its products from a campus in Western Washington
  - employed over 800 persons there.
  - campus was where key executives worked and documents relating to sales, licensing, and product development were located.
- RETAILERS. Two of the eleven retailers were located in Texas but not in the Eastern District. None had "any information relating to the development or design of the accused Nintendo products."

# Customer Suit Exception to First-to-File

- DOES CUSTOMER SUIT EXCEPTION TO FIRST-TO-FILE RULE "TEMPER" TRANSFER? In denying severance and, in consequence, transfer, the district court suggested that the "customer suit" exception to the "first-to-file" rule, which gave precedent to suits against manufacturers over those against customers, "tempered" Section 1404 transfers.
- THE EXCEPTION; MANUFACTURER AS "TRUE DEFENDANT." Under the exception, a manufacturer's suit for a declaratory judgment of invalidity or noninfringement of a patent took precedent over a patent owner's earlier suit for infringement against the manufacturer's customer despite the general rule that a first filed suit should proceed. *Spread Spectrum Screening LLC v. Eastman Kodak Co.*, 657 F.3d 1349, 1357 (Fed. Cir. 2011); *Katz v. Lear Siegler, Inc.*, 909 F.2d 1459, 1464 (Fed. Cir. 1990). The exception avoided trial burdens on a customer because the manufacturer was the "true defendant" in the dispute.

# Manufacturer as “True Defendant”

- SAME GENERAL PRINCIPLE GOVERNS THIS CASE: MANUFACTURER AS "TRUE DEFENDANT." The circumstances of this case differed from the typical one for the exception because the case was a single infringement suit against manufacturer and customers. However, as the district court recognized, the "same general principles" governed: the manufacturer Nintendo was the "true defendant."
- The district court erred in viewing the exception as "tempering" transfer.
- The customer-suit exception, Rule 21 on severance, and Section 1404(a) on transfer were "all designed to facilitate just, convenient, efficient, and less expensive determination." See *Van Dusen v. Barrack*, 376 U.S. 612, 616 (1964).

# Efficiency and Convenience

- GRANTING MOTION: MORE EFFICIENT AND CONVENIENT RESOLUTION OF ISSUES. Granting the motion to sever and transfer would resolve the infringement claims "more efficiently and conveniently."
  - COMMON ISSUES OF INFRINGEMENT AND VALIDITY. The issues of infringement and valid were common to the manufacturer and the retailers.
  - COLLECTING ROYALTIES FROM MANUFACTURER: PRECLUDE SUIT AGAINST RETAILERS. If the patent owner collected royalties from the manufacturer, that would "preclude suit against" the manufacturer's customers (the retailers).
  - WITNESSES. All the manufacturer's identified witness resided in the transferee district (Western Washington) or "would find travel to and from that venue significantly more convenient." The patent owner identified no witness residing in the transferor district (Eastern Texas).



# Patent Owner: High Royalty for Customers?

- PURSUE HIGHEST ROYALTY RATE AMONG DEFENDANTS? "severance should be denied so that it may pursue, and have its choice of, the highest royalty rate among the defendants."
- RETAILERS; HIGHER PRICES, BUNDLING ACCUSED SYSTEMS WITH VIDEO GAMES AND ACCESSORIES: "it could obtain a higher royalty against the Retailers in light of `higher retail prices and the retailers' practice of bundling the accused systems with video games and other accessories."

# Argument: “Outweighed”

- *KATZ* "held that '[a]lthough there may be additional issues involving the defendants in [the customer] action, their prosecution will be advanced if [the plaintiff] is successful on the major premises being litigated in [the manufacturer litigation], and may well be mooted if [the plaintiff] is unsuccessful.' 909 F.2d at 1464."
- Here, the patent owner had no claim against the retailers unless the patent owner prevailed in its infringement claims against the manufacturer, Nintendo.
- Because the manufacturer's liability was a "predicate to recovery from any of" the retailers as customers of the manufacturer, the case against the manufacturer "must proceed first, in any forum."

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