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PATENT PROTECTION FOR HIGH TECHNOLOGY

## Practical Prosecution Tips

Updated advice based on recent Federal Circuit decisions



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# Roadmap

- Case Law Updates
  - 35 USC §101
  - 35 USC §102
  - 35 USC §103
  - 35 USC §112

# 35 USC §101

- *Finjan v. Blue Coat*\*
- *Core Wireless v. LG*\*
- *Finjan and Core Wireless* Memo
- *Berkheimer v. HP*\*
- *Berkheimer* Memo

# 35 USC §101

- *Interval Licensing v. AOL*
- *BSG Tech.*
- *Data Engine v. Google*

# *Finjan v. Blue Coat Systems* (January 10, 2018)

- Patents directed to identifying and protecting against malware and other security-related ideas
- Step 1 inquiry turned on whether the claims focus on “the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.”
- By itself, virus screening is well-known and constitutes an abstract idea (see *IV v. Symantec*)

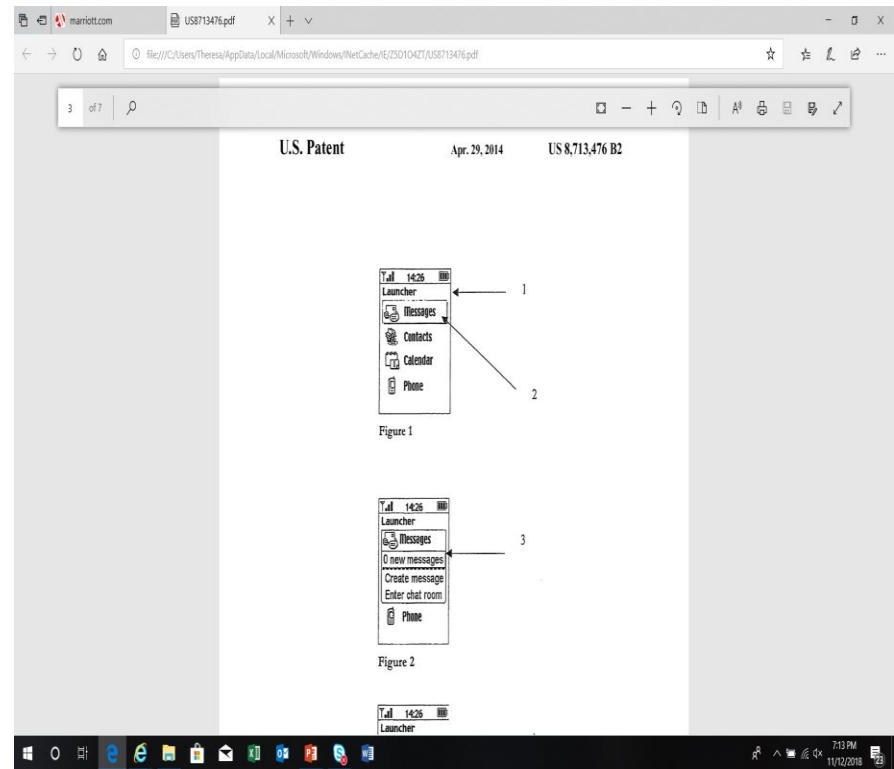
## *Finjan*, cont'd

- *Finjan*'s patent pioneered a behavior-based virus scan that analyzes possible malware code to determine whether it performs potentially dangerous or unwanted operations
- Compare to *Enfish* self-referential database – enables a computer system to do things that it could not do before – non-abstract improvement
- Discloses specific steps and not mere result

# Core Wireless v. LG (January 25, 2018)

- Claim 1 of LG patent 8,713,476:

“...display on the screen a menu listing one or more applications, and additionally being configured to display on the screen an application summary that can be *reached directly* from the menu, ...and is displayed while the one or more applications are in an *un-launched state*.”



# Core Wireless, cont'd

- Compare to *Enfish*, *Thales*, *Visual Memory* and *Finjan*: eligibility based on whether claims were directed to a particular improvement in the computer's functionality
- Claims here directed to improved user interface for computing devices
- Claim discloses specific manner of displaying summary information to user
- No Step 2 analysis needed



# *Finjan and Core Wireless* Memo (April 2, 2018)

- Two cases consistent with *Enfish* and *McRO* confirming that software-based innovations can make “non-abstract improvements to computer technology” and be deemed patent-eligible subject matter

# *Berkheimer v. HP* (February 8, 2018)

- Berkheimer appeals the United States District Court for the Northern District of Illinois' summary judgment holding claims 1–7 and 9 of U.S. Patent No. 7,447,713 ('713 patent) invalid as ineligible under 35 U.S.C. § 101.

# *Berkheimer, cont'd*

Independent claim 1 recites:

1. A method of archiving an item in a computer processing system comprising:
  - presenting the item to a parser;
  - parsing the item into a plurality of multipart object structures wherein portions of the structures have searchable information tags associated therewith;
  - evaluating the object structures in accordance with object structures previously stored in an archive;
  - presenting an evaluated object structure for manual reconciliation at least where there is a predetermined variance between the object and at least one of a predetermined standard and a user defined rule.

# *Berkheimer, cont'd*

- Court held claims directed to abstract idea of using a generic computer to collect, organize, compare and present data for reconciliation prior to archiving
- Berkheimer argued that there were improvements to the functioning of the computer described in the specification

# *Berkheimer, cont'd*

- Analysis goes to Alice step two, where court concludes claims do not contain an inventive concept because they describe steps that employ only well-understood, routine and conventional computer functions and are claimed at a high level of generality
- Question of whether something is well-understood, routine and conventional at the time of the patent is a factual determination and summary judgement is therefore improper

# *Berkheimer* Memo (April 19, 2018)

- Clarifies and reiterates that examiner conclusion of whether an element represents well-understood, routine, conventional activity must be based on a factual determination
- Seeks to separate 101 analysis from 102/103 analysis – “whether a particular technology is well-understood, routine and conventional goes beyond what was simply known in the prior art”
- Memo revises procedures set forth in MPEP 2106.07(a) and (b) – Formulating a Rejection for Lack of Subject Matter Eligibility and Evaluating Applicant’s Response

# *Interval Licensing v. AOL* (July 20, 2018)

- Claims directed to presenting two sets of information in a non-overlapping way, on a display screen
- Claims directed to results, did not explain how functionality was to be accomplished
- Claims did not impose meaningful limitations that would improve a computer as a tool

# *BSG Tech. v. BuySeasons* (August 15, 2018)

- Claims not patent-eligible under 35 U.S.C. § 101.
- patents directed to a “‘self-evolving generic index’ for organizing information stored in a database.”
- BSG Tech argued that the claims recited unconventional features that provided benefits over conventional prior art databases.



## *BSG Tech.*, cont'd

- Under step 1 of the *Alice* test, the claims were directed to the abstract idea “of considering historical usage information while inputting data.”
- Under step 2, “it was irrelevant whether considering historical usage information while inputting data may have been non-routine or unconventional as a factual matter.
- As a matter of law, narrowing or reformulating an abstract idea does not add “significantly more” to it.”

# *Data Engine v. Google* (October 9, 2018)

- Representative claim: “a method of implementing a notebook-tabbed interface, which allows users to easily navigate through three-dimensional electronic spreadsheets.”

# *Data Engine v. Google, cont'd*

- The district court held that the asserted claims are directed to abstract ideas and fail to provide an inventive concept.
- Federal Circuit disagreed, because claims directed to a specific improved method for navigating through complex three-dimensional electronic spreadsheets.
- Court cautioned against conflating 102/103 with 101

# 35 USC §101 takeaways

- Stress the improvements provided by the patent-make sure the improvements are captured in claim
- Cite to (and follow) memos: *Enfish*, and *McRO* still come in handy, *Berkheimer* is useful
- Compare claims to those previously found patent eligible or not patent eligible
- Tie-in to functional claiming ideas – describe the manner in which functions are accomplished
- When arguing *Berkheimer*, consider also preemptively discussing *BSG*

# 35 USC §102

- *Helsinn v. Teva*
- *Nobel Biocare v. Intradent*
  - *See also: GoPro v. Contour IP Holding*

# *Helsinn v. Teva* (May 1, 2017)

- Four patents in suit
  - Three covered under pre-AIA and fourth under AIA
- CAFC: AIA did not change statutory meaning of “on-sale”
- CAFC: on-sale bar can be triggered by a sale whose existence is public, even if the details of the invention are not publicly disclosed in terms of sale

# Helsinn, (cont'd)

- AIA 102 similar to pre-AIA 102 but not identical
  - What is meant by “available to the public”?
  - Cert granted June 25, 2018
  - Issue: *whether under the Leahy-Smith America Invents Act, an inventor’s sale of an invention to a third party that is obligated to keep the invention confidential qualifies as prior art for purposes of determining the patentability of the invention.*

# *Nobel Biocare v. Intradent* (Sept. 13, 2018)

- Nobel's claims were anticipated by catalog distributed at dental conference
- Court will look to evidence as to whether a printed publication was publicly available



# 35 USC §102 takeaways

- Supreme Court grants cert in *Helsinn* (June 25, 2018)
- Sale can trigger on-sale bar even post-AIA even if details of invention not disclosed or documented
- Fact-based evidence for whether a printed publication is “public enough”

# 35 USC §103

- *Polaris Indus., Inc., v. Arctic Cat*
- *DSS v. Apple*\*
- *EI Du Pont v. Synvina*\*

# *Polaris Industries, Inc., v. Arctic Cat, Inc.*

Arctic Cat filed two inter partes review petitions challenging Polaris's patent, which is directed to all-terrain vehicles (ATVs) with two side-by-side seats. In the first IPR ("the 1427 IPR") the Board found the claims unpatentable as obvious over one combination of references, and in the second IPR ("the 1428 IPR") the Board found that the claims were not proven unpatentable over a second combination of references. Both parties appealed.



# *Polaris Industries* (cont'd)

On appeal, Polaris challenged the Board's finding of a motivation to combine

Polaris argued that the reference relied on by the Board taught away from including such a fuel tank because the reference taught that maintaining a low center of gravity was a goal of the disclosure.

The Board dismissed this argument, stating that the low center of gravity was a "subjective preference" that did not rise to the level of a teaching away.

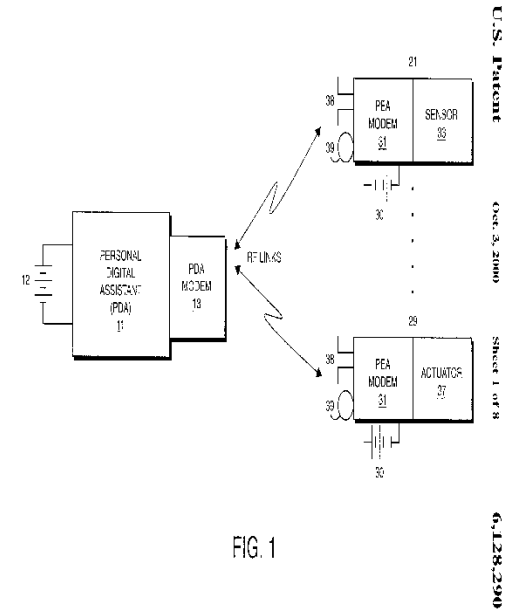
The Federal Circuit reversed, finding that the "subjective preference" test had no basis in precedent, and instructed the Board to perform the usual teaching away analysis on remand.

# *Polaris Industries* (cont'd)

Takeaway: Evaluation of “teaching away” requires discrediting, disparagement, etc.

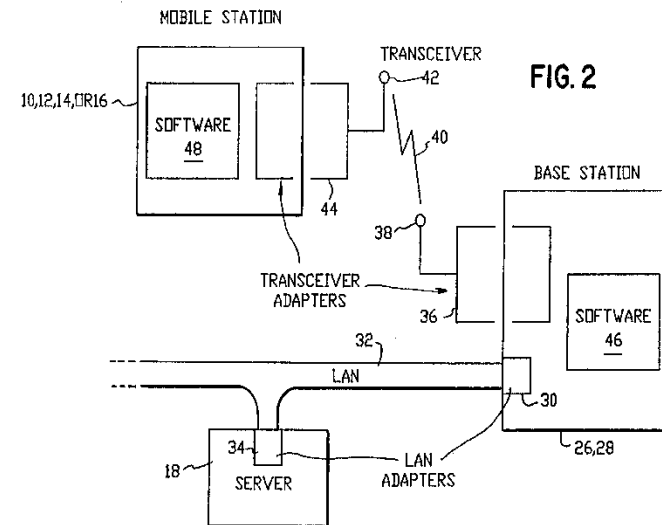
# DSS v. Apple (March 23, 2018)

- DSS bring suit appealing PTAB finding that claims of 6,128,290 patent were invalid for being obvious
- Federal Circuit reversed because PTAB did not provide a sufficient explanation for its conclusions of obviousness



# DSS, cont'd

- Claim 1 at issue claimed a “data network for coordinated operation of...electronic devices...server and peripheral transmitters energized in low duty cycle RF bursts.”
- PTAB relied on Natarajan and Neve as prior art



# DSS, cont'd

- Construction of “energized in low duty cycle RF bursts”
- Obviousness analysis – user equipment functions analogous to base station functions?
- Issue on appeal – PTAB finding that it would have been obvious to modify the base station transmitter in Natarajan to be “energized in low duty cycle RF bursts”
- Here, the limitation at issue is not particularly easy and is part of a complex communications protocol/system – common sense would not be a reason to add the missing limitation to Natarajan
- Takeaway? – watch out for conclusory Examiner statements in similar cases. Cite to this case for support



# *EI DuPont v. Synvina* (September 17, 2018)

- The Federal Circuit reversed a USPTO inter partes review decision that Synvina’s claims were not obvious.
- The patent claimed a method of producing 2,5-furan dicarboxylic acid (FDCA) by oxidizing 5-hydroxymethylfurfural (HMF).
- DuPont argued that the USPTO erred in refusing to apply the appropriate burden-shifting framework for “overlapping range cases.”
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## *EI DuPont, cont'd*

- “[W]here there is a range disclosed in the prior art, and the claimed invention falls within that range, the burden of production falls upon the patentee to come forward with evidence’ of teaching away, unexpected results, or other pertinent evidence of nonobviousness,”

# 35 USC §103 takeaways

There are multiple strategies for arguing against the combination of references under 35 U.S.C. § 103.

Start with the low-hanging fruit first:

- 1) Are the references prior art?
- 2) Do the references disclose all of the claimed elements?

If (1) and (2) are satisfied, see if the strongest arguments apply. In my experience, you would ask, in this order:

- Does the combination make the primary reference unsuitable for its intended purpose?
- Did the Examiner provide articulated reasoning?
- Do any of the references teach away from the claimed combination? (Polaris)
- Is the reference being relied upon analogous art? (Tinnus (not discussed today))

# 35 USC §103 takeaways

Tips on challenging the motivation to combine the references:

- Do any of the references make disparaging remarks about a particular feature? Caution: do not disparage your own art (client can tell you which cases we should watch out for in particular)

If you can't attack the motivation to combine the references, then consider whether the Examiner's rationale is sufficient:

- Does the Examiner make any conclusory statements about combining the references? “Common sense” is not a sufficient reason for combining references!
- Does the Examiner explain *how* a reference discloses a claimed feature, and not simply state that the reference does disclose the claimed feature?

# 35 USC §103 takeaways

If you can't attack the motivation to combine the references, then consider whether the Examiner's rationale is sufficient:

- Does the Examiner adequately explain *how* the combination of references would work?

# 35 USC §112

- *Knowles Electronics v. Cirrus Logic*
- *Zeroclick v. Apple*
- *Diebold Nixdorf v. ITC*

## *Knowles v. Cirrus* (March 1, 2018)

- Knowles Electronics appealed the PTAB's decision affirming an examiner's rejection of claims 1-4 of the '231 patent as being anticipated and proposed claims 23-27 for lack of an adequate written description.
- Claims directed to package including microphone, substrate, cover and housing, and lower surface comprising plurality of solder pads
- Disclosure did not describe solder pads or their attachment in detail

# *Zeroclick v. Apple* (June 1, 2018)

- The claims were for methods of modifying devices' graphical user interfaces to enable user control via touch or pre-defined pointers.
- Curbs Examiners from over-extending Williamson
- District court erred in considering “program” and “user interface code” as nonce words



## *Diebold v. ITC* (August 15, 2018)

- “Check standby unit” is a nonce phrase
- Patent owner didn’t have evidence showing that the term has sufficiently definite structural meaning
- "Although these passages suggest that the 'cheque standby unit' must have some structure to perform the function of holding checks and then either returning them to the user or continuing to process them pending a user instruction, the '235 patent does not offer any clues as to what such a structure might be"

# 35 USC §112 takeaways

- When describing a process or a structural arrangement, include variations in the process or structure
- Always disclose where functions take place
- Disclosure should show how a computer would perform each function claimed (for computer-implemented claims)
- Detailed flow chart, even in non-software specifications
- Include inputs and outputs for each structure in claim



## Thanks for your attention! Questions?



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