

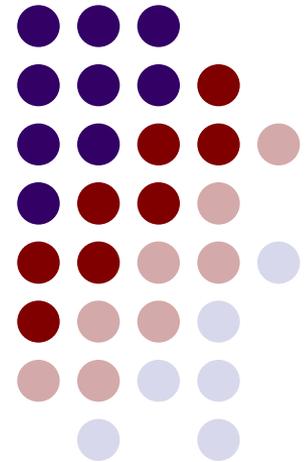


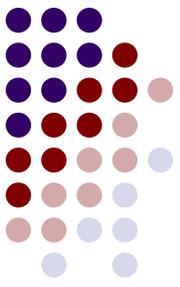
Birch
Stewart
Kolasch
Birch LLP

Interpretation of Functional Language

In re Chudik
(Fed. Cir. January 9, 2017)

Chris McDonald
February 8, 2017



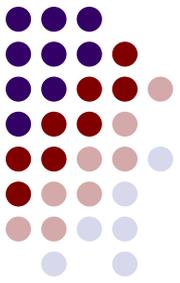


MPEP - Functional Language

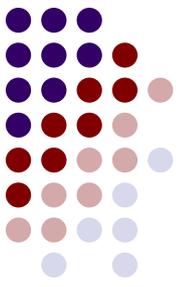
- **MPEP 2173.05(g) Functional Limitations**

A claim term is functional when it recites a feature “by what it does rather than by what it is” (e.g., as evidenced by its specific structure or specific ingredients). In re Swinehart, 439 F.2d 210, 212, 169 USPQ 226, 229 (CCPA 1971). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. Id. In fact, [35 U.S.C. 112\(f\)](#) and pre-AIA [35 U.S.C. 112](#), sixth paragraph, expressly authorize a form of functional claiming (means- (or step-) plus- function claim limitations discussed in [MPEP § 2181](#)

MPEP - Functional Language



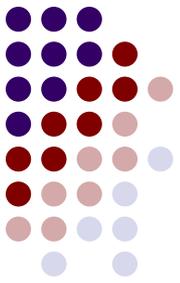
- **2114 Apparatus and Article Claims — Functional Language [R-9]**
- For a discussion of case law which provides guidance in interpreting the functional portion of means-plus-function limitations see [MPEP § 2181](#) - [§ 2186](#).
- **I. APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART**
- While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).
- **II. MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART**
- A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)



PTO Guidelines

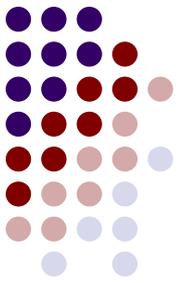
- A claim limitation is functional when it recites a feature by *what it does* rather than by *what it is*
 - The use of functional language does not, by itself, render a claim improper
 - Often functional language is used to tie claim elements together or to provide context
 - A functional limitation must be evaluated like any other limitation for what it conveys to one of ordinary skill in the art
 - No claim limitations can be ignored, but not all limitations will provide a patentable distinction

PTO Guidelines



- functional limitation can provide a patentable distinction by imposing limits on the function of a structure, material or action
- Typically no patentable distinction is made by an intended use or result unless some structural difference is imposed by the use or result on the structure or material recited in the claim, or some manipulative difference is imposed by the use or result on the action recited in the claim

PTO Guidelines



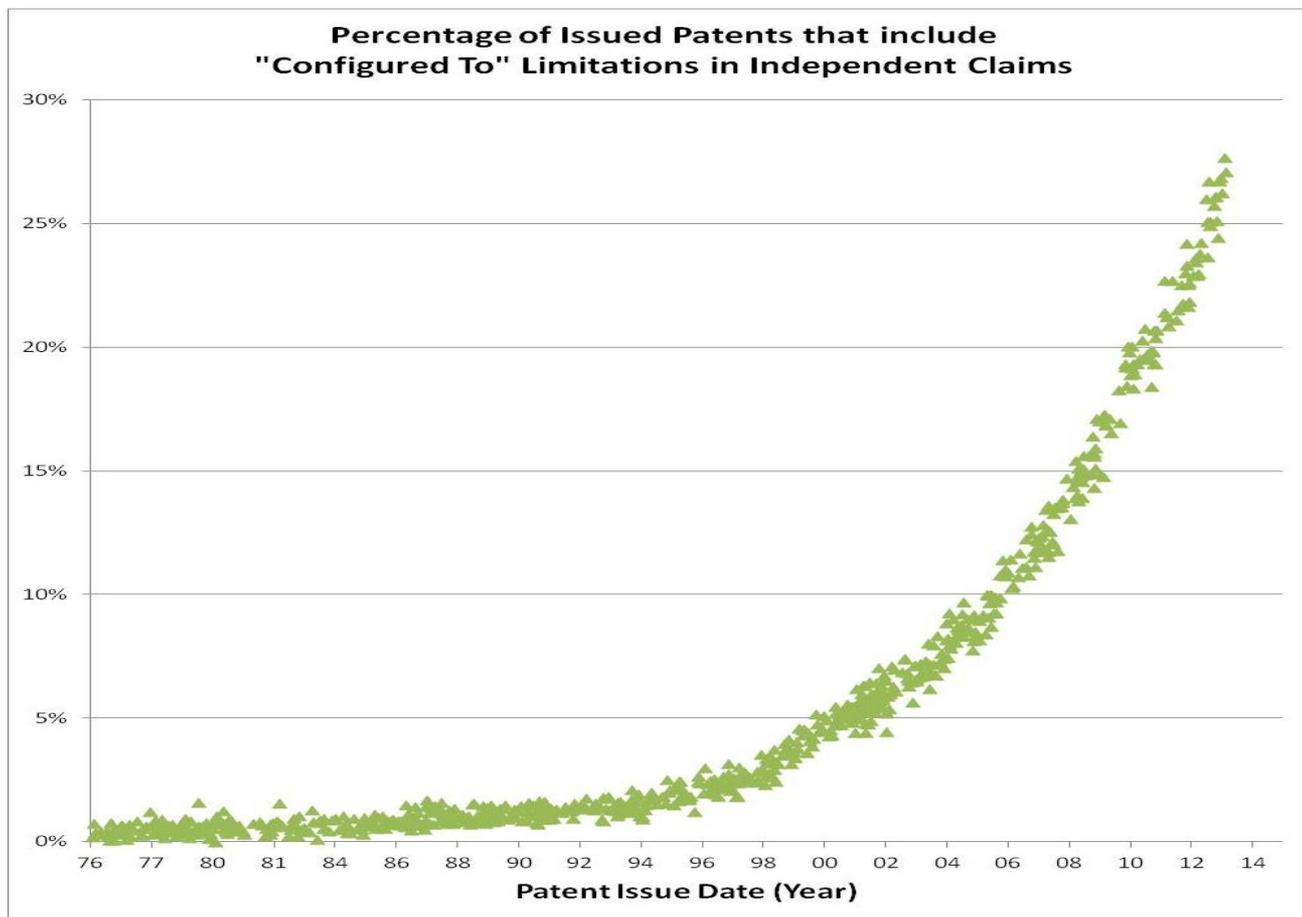
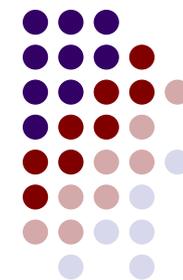
Compare the two following limitations:

... a microprocessor programmed to perform a lossless compression algorithm on a data stream;

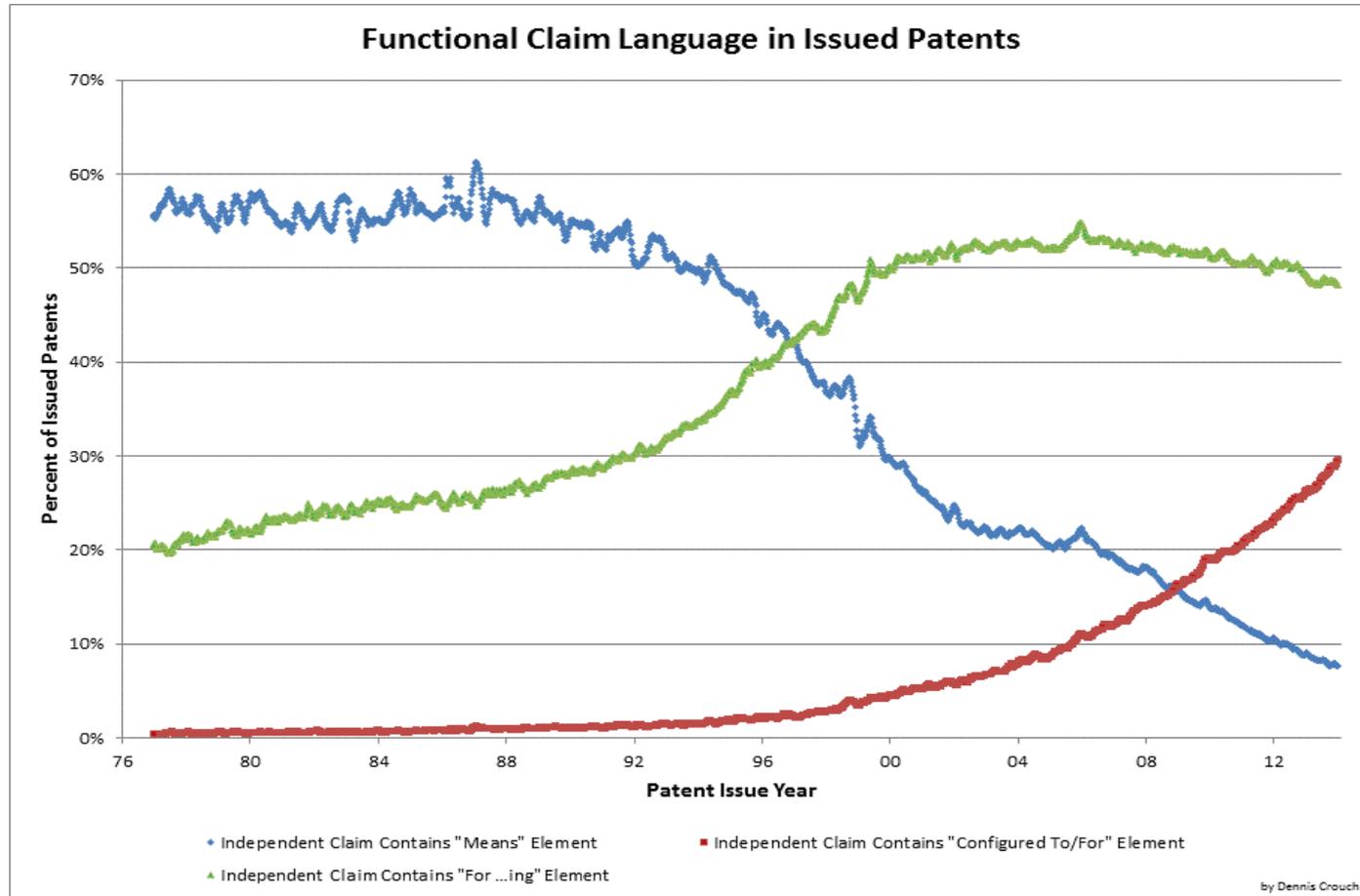
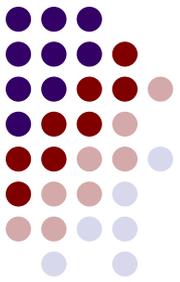
... a microprocessor programmed for data compression;

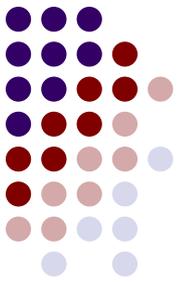
- The first limitation recites the structure of a microprocessor followed by a specific function (a lossless compression algorithm) that it is programmed to perform. The limitation should be interpreted as a microprocessor capable of performing the programmed algorithm. As such, the programmed function could provide a patentable distinction over the prior art.
- The second limitation recites the structure of a microprocessor followed by a result (data compression) that it is programmed to accomplish. In this case, there is no limit imposed on how the claimed microprocessor obtains the result. As such, any microprocessor that has programming capable of obtaining the result of data compression in any way (i.e., using any algorithm that achieves the result) would meet this limitation.

Use of “configured to”



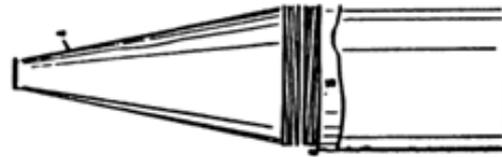
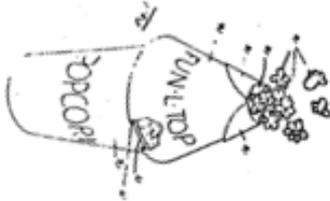
Use of “configured to”





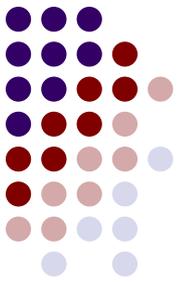
In re Schreiber

- *In re Schreiber* (Fed. Cir. 1997)
- Popcorn dispenser vs. Oil dispensing can



- *“A dispensing top ... [with] an opening ... [that] allows several kernels of popped popcorn to pass through at the same time.”*
- Federal Circuit held: oil dispensing top is capable of passing several kernels at the same time, regardless of inventor’s intent to dispense popcorn v. liquid oil.

In re Chudik (nonprecedential)



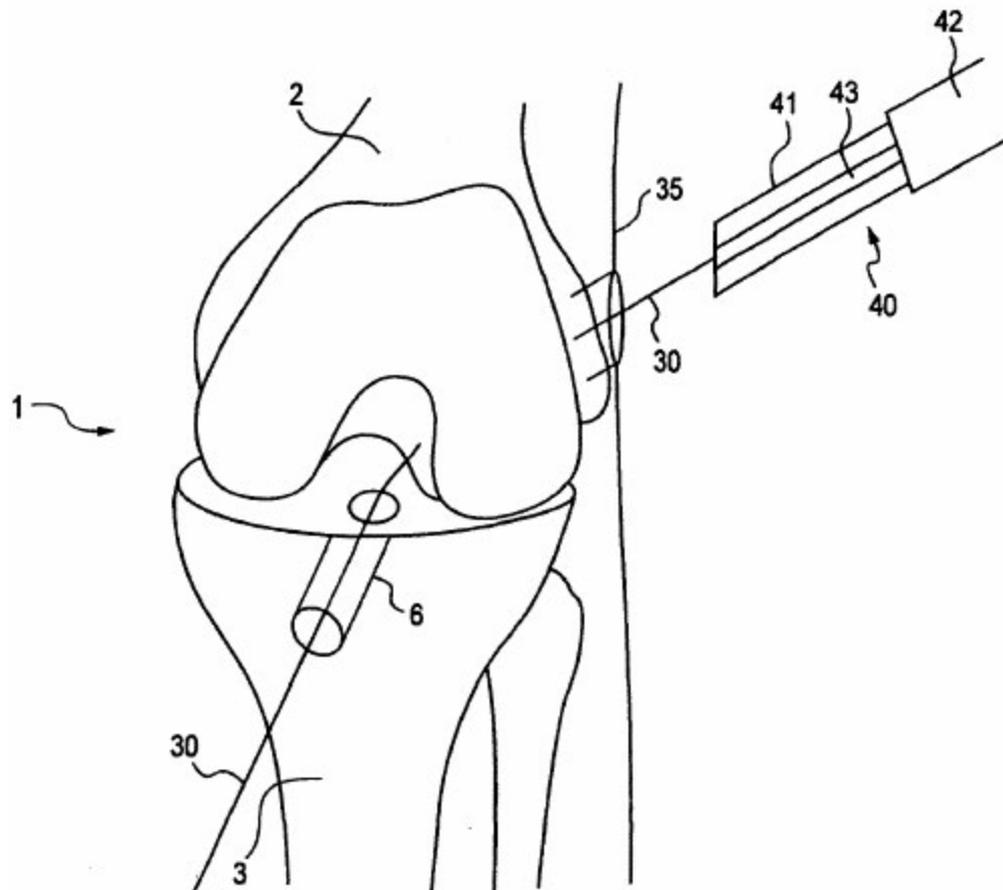
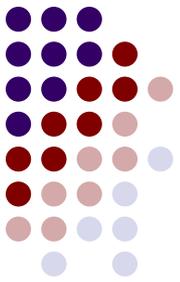
A cannulated scalpel comprising;

- a blade having a blade and configured for creating a passageway through skin and soft-tissue to a target site on a bone,

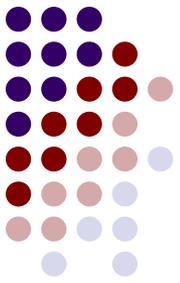
- a flat handle adjacent blade arranged in the same plane as the blade end, and

- a longitudinal cannulation in the handle and the blade of forming a passageway adapted to accept a guide pin through the handle and blade.

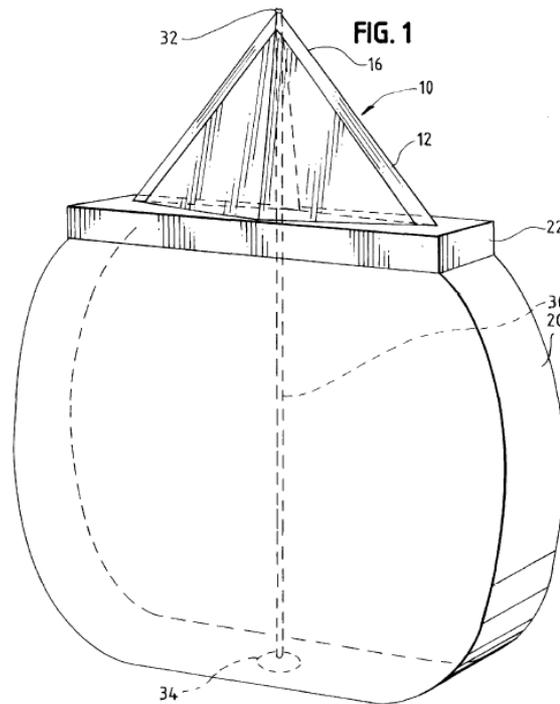
In re Chudik

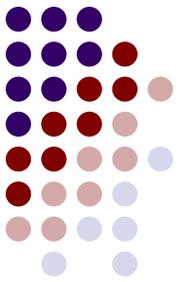


In re Chudik



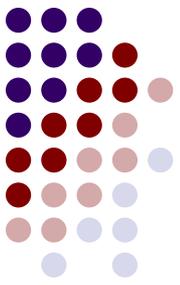
- Rejected over Samuels (US Patent 5,843,108)





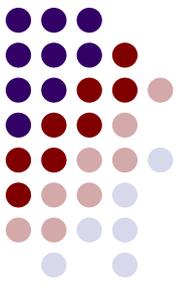
In re Chudik

- Scalpel disclosed by Samuels creates “skin nicks” to allow for easy insertion of percutaneous devices such as catheter tubes
- Examiner asserted that Samuel’s blade is capable of reaching shallow bone. Board agreed with Examiner's assessment and upheld rejection



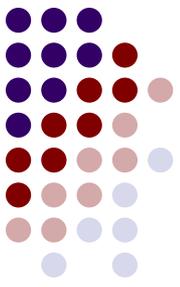
In re Chudik

- Parties agreed that Samuels discloses all structural limitations of claim, so the only question is whether the functional limitation of the claim is found in Samuels
- Chudik referred to disclosure of Samuels to assert that Samuel's blade never actually penetrates through the skin into soft tissue. The Board interpreted the disclosure of Samuels of "into the patients with skin" to identify location of, rather than depth of, the decision.



In re Chudik

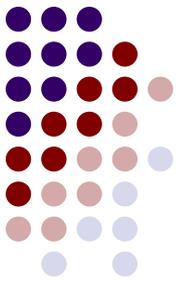
- Chudik questions whether Examiner had “reason to believe” that blade could reach any shallow bones mentioned by Examiner.
- Establishing such "reason to believe" would shift burden to Applicant to disprove the Examiner's belief
- Court noted that Examiner believed, and Board affirmed, that the scalpel was inherently capable of reaching a shallow bone but that no justification for belief was provided



In re Chudik

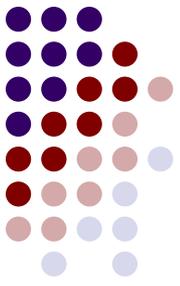
- Court then noted that Samuels disclosed that the design prevented incisions that can damage structures near the skin
- Samuels discloses that "inadvertently deep skin nick may sever the structure of concern with potentially disastrous consequences"
- Examiner and Board did not address how "potentially disastrous consequences" would be avoided

Aspex Eyewear, Inc. v. Marchon Eyewear

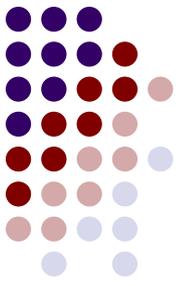


- *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.* (Fed. Cir. 2012)
- “said arms and said pair of magnetic members adapted to extend across respective side portions of a primary spectacle frame”
- Interpreted as: the arms and the pair of magnetic members are made to extend across the top of the respective side portions of the primary frame
- Question is whether “adapted to” is broad as is in “capable of” or “suitable for” or whether it is narrow such as “designed to” or “configured to.”
- Referred to *Boston Scientific Corp. v. Cordis Corp.*, as construing “adapted to” to mean “configured to”, not “capable of.”

Aspex Eyewear, Inc. v. Marchon Eyewear

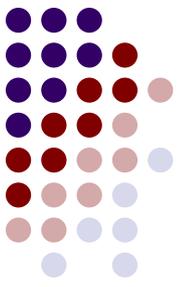


- “Configured to” in claims requires a structure that is more than just capable of performing a function, but is actually made to perform the function.
- “Adapted to,” however, can be broader than “configured to” and embrace mere capability, depending on the specific usage and evidence in the case
- Intrinsic evidence (*i.e.*, the specification, file history, or other claims) may provide the context for determining the interpretation of “adapted to.”
- In this case, referred to other claim as using “capable of” as evidence that “adapted to” meant something different



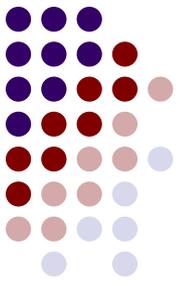
In re Giannelli

- *In re Giannelli*, 739 F.3d 1375 (Fed. Cir. 2014).
- Claim 1. *A row exercise machine comprising ... a first handle portion **adapted to** be moved from a first position to a second position by a pulling force ... in a rowing motion...* [Emphasis added].
- The Board noted that the recitation of a new intended use for an old product did not make a claim to that old product patentable, and consequently determined that the application simply recited the new intended use of rowing for the prior art chest press apparatus.



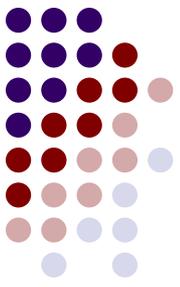
In re Giannelli

- Giannelli argues that the Board’s decision sustaining the examiner’s rejection is based on an incorrect assertion that the chest press machine disclosed in the ‘447 patent could be used as a rowing machine rather than considering how it would be used.
- The Board premised its conclusion on its theory that the machine described in the ‘447 patent was “capable of” having its handles pulled.



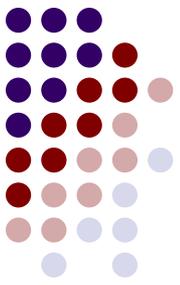
In re Giannelli

- Federal Circuit held: *“The phrase ‘adapted to’ is frequently used to mean ‘made to,’ ‘designed to,’ or ‘configured to,’ ... Although the phrase can also mean ‘capable of’ or ‘suitable for,’ here the written description makes clear that ‘adapted to,’ as used ... has a narrower meaning.”*



In re Giannelli

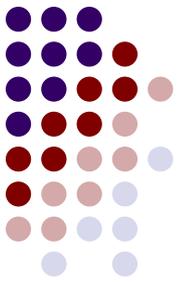
- There is no question that the '447 patent does not have handles that are adapted to be pulled in a rowing motion
- The written description describes the exercise machine's structure as allowing a movement that "simulates as natural a human musculoskeletal outward pushing motion as possible while maintaining proper biomechanical alignment of the user's joints.
- *Physical capability alone does not render obvious that which is contraindicated*
- The mere capability of pulling the handles is not the inquiry that the Board should have made; it should have determined whether it would have been obvious to modify the prior art apparatus to arrive at the claimed rowing machine.



Conclusion

Examiner must have at least a reason to believe that the prior art can perform function recited in claim to establish *prima facie* case of anticipation or obviousness

“capable of” is construed broadly and “configured to” is construed narrowly. “Adapted to” can be construed either way, and the courts will look to specification and other evidence in deciding the scope of the claimed limitation



Questions