

Friday Seminar Series

November 4, 2011

35 U.S.C. § 103
Unpatentability

Statutory Basis

- *A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertained. Patentability shall not be negatived by the manner in which the invention was made... 35 U.S.C. §103(a)*

Subject Matter as a Whole

- consideration of the art area and the background of the invention (which may be described in the specification). The examiner may conduct an analysis of obviousness taking into account only the claims of an application, rather the entire specification, which is an incorrect analysis.
- in determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983) (filled PTFE tubing replacing filled rubber tubing – reduced leaks)

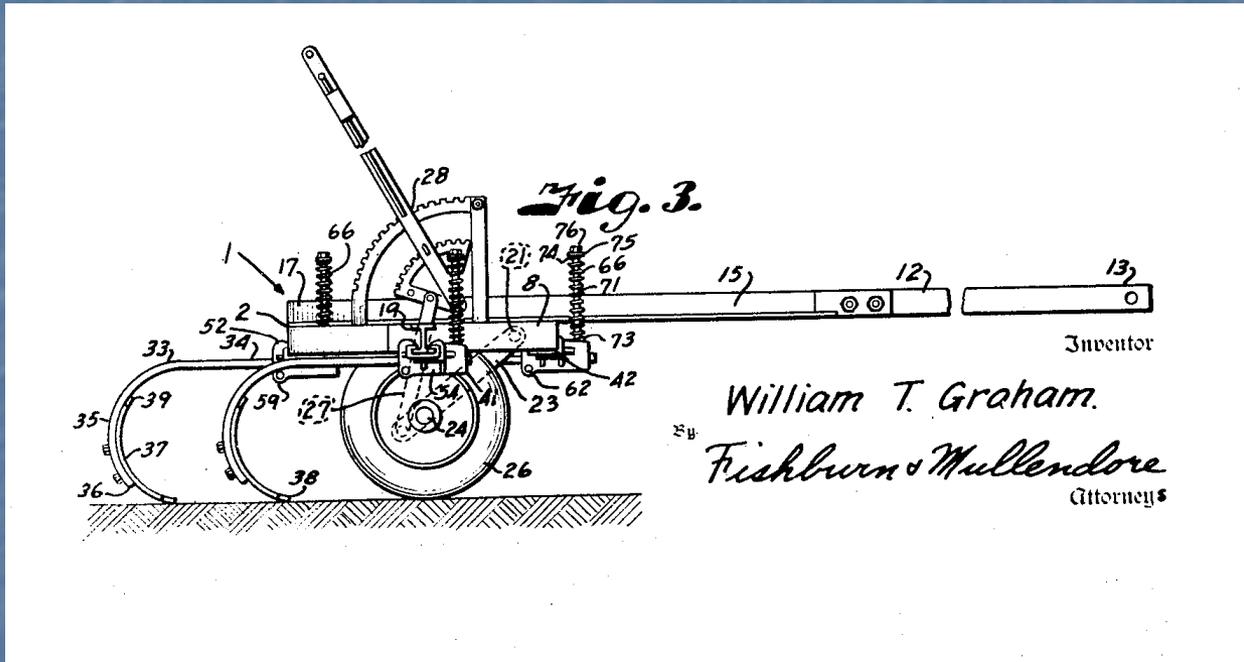
At the Time the Invention was Made

- a determination of obviousness must be with respect to the time at which the invention was made, without considering the knowledge gained by those skilled in the art subsequent to the date of invention.
- AIA goes to first to file.

Ordinary Skill

- Obviousness is determined with respect to “a person having ordinary skill in the art to which said subject matter pertains.” The amount of education and experience this hypothetical person of ordinary skill has will differ from case to case depending upon the particular technology involved.
- Depends on field: PHOSITA could be a tinkerer in some mechanical fields but could be a Ph.D. in biochemistry in biotech.

Graham v. John Deere



USP 2,493,811- a shock absorbing plow – Deere claimed it was a combination of old elements.

Graham v. John Deere

- “Section 103...lends itself to several basic factual inquiries. Under Section 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent prior art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or non-obviousness, these inquiries may have relevancy.” *Graham*, 383 U.S. at 17-19, 148 U.S.P.Q. at 467.

Graham v. John Deere

The Graham analysis requires that the following three factors be considered in deciding an obviousness issue:

1. the scope and content of the prior art;
2. the differences between the prior art and the claims under consideration; and
3. the level of ordinary skill in the pertinent art area.

These factors are determined on a case-by-case basis.

KSR v. Teleflex

U.S. Patent

May 29, 2001

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US 6,237,565 B1

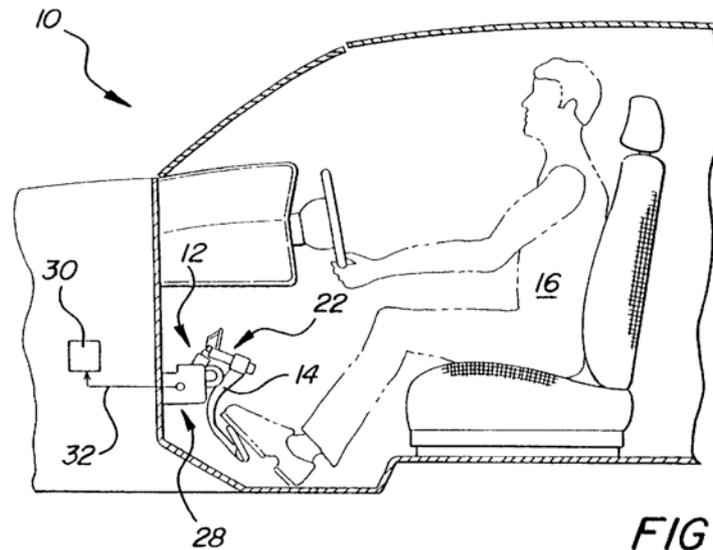
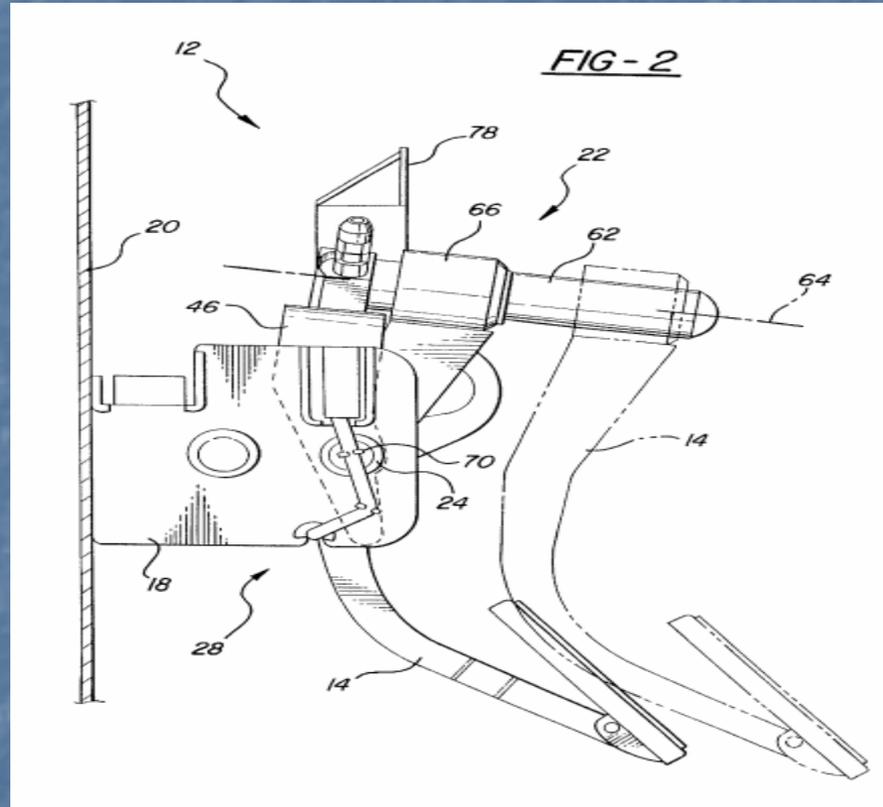


FIG-1

Teleflex, Inc. sued KSR International, claiming that one of KSR's products infringed Teleflex's patent on connecting an adjustable vehicle control pedal to an electronic throttle control. KSR argued that the combination of the two elements was obvious.

KSR v. Teleflex



KSR v. Teleflex

Judge Kennedy: "In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under §103. One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims."

"The proper question to have asked was whether a pedal designer of ordinary skill, facing the wide range of needs created by developments in the field of endeavor, would have seen a benefit to upgrading [a prior art patent] with a sensor."

KSR v. Teleflex

- The holding of KSR strengthens the TSM test and reinstates concepts such as “obvious to try”.
- Overrules CAFC cases that “dumbed down) §103 such as In re Dembichak, In re Kotzab, In re Lee.

Key Principle #1 From *KSR*

- “For over a half century, the Court has held that a ‘patent for a combination which only unites old elements with no change in their respective functions ... obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men’”
- “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results”
- Known techniques to “improve” or “upgrade” a device may be obvious to apply to other devices
- “[A] court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions”

Key Principle #2 From *KSR*

- Motivation to combine prior art can come from “any need or problem known in the field of endeavor at the time of invention”
 - o Courts may consider market demands, common knowledge, and common sense
 - o TSM test remains useful only if not rigidly applied – Inappropriate to place “overemphasis” on published patents/articles
 - o Person of ordinary skill has “ordinary creativity”
 - Previously, under *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985), a person of ordinary skill was “not one who undertakes to innovate”
 - o Patentee’s motivations are essentially irrelevant

Key Principle #3 From *KSR*

- “Obvious to try” is a valid test for obviousness “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions”
 - This approach is consistent with the Federal Circuit’s decision in *In re O’Farrell*, 853 F.2d 894 (Fed. Cir. 1988) [*See Bayer Schering Pharma AG v. Barr Labs., Inc.*, 575 F.3d 1341, 1347 (Fed. Cir. 2009)]
 - Under *O’Farrell*, an invention is **not** obvious to try when (1) one would have to vary all parameters or try numerous possible choices, and the prior art does not indicate which parameters are critical or provide direction as to which choices may lead to success or (2) success, the prior art is too vague to provide sufficient guidance towards a particular solution

Key Principle #4 From *KSR*

- Obviousness issues may be amenable to summary judgment
 - The ultimate question of obviousness is a legal determination for the court
 - Conclusory expert affidavits do not create a genuine factual dispute.

Key Principle #5 From *KSR*

- “Real innovation” required for patentability
 - **“Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress** and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility” [emphasis added]
 - “And as progress beginning from higher levels of achievement is expected in the normal course, **the results of ordinary innovation are not the subject of exclusive rights under the patent laws.** Were it otherwise patents might stifle, rather than promote, the progress of useful arts” [emphasis added]
 - Ultimately, the Court was simply unimpressed with the Engelgau patent, which it viewed as merely “upgrading Asano with a sensor”
 - Are incremental advances no longer patentable?

Rationales for Obviousness

- **Aesthetic Design Changes**
- **Omission of an Element and Its Function Is Obvious if the Function of the Element Is Not Desired**
- **Automating a Manual Activity**
- **Changes in Size/Proportion**
- **Changes in Shape**

MPEP 2144

Rationales for Obviousness

- Changes in Sequence of Adding Ingredients
- Making Portable
- Making Integral
- Making Adjustable
- Making Continuous
- Reversal of Parts

Rationales for Obviousness

- **Duplication of Parts**
- **Rearrangement of Parts**
- **Purifying An Old Product**
- **Overlap Of Ranges**
- **Optimization Of Ranges (Routine Experimentation)**
- **Only Result-Effective Variables Can Be Optimized**

Rebutting the *Prima Facie* Case

- The meaning of a *prima facie* case is that the US PTO has the burden of proof to show that the combination is obvious. The Examiner requires three prongs to establish *prima facie* obviousness, which are:
 - (1) the elements of the claims,
 - (2) analogous art and
 - (3) a motivating reason to make the combination.

Once the Examiner has these three items, the Examiner has established a *prima facie* case.

Negative Teachings – Teaching Away

A “negative teaching” is a prior art reference which specifically teaches against a particular combination of references. It is referred to as a reference that “teaches away” from the combination.

It is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)(sodium containing compositions). A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the invention. In re Geisler, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997)(protective layer).

Rebutting the *Prima Facie* Case

- o Prove prior invention – Declaration Under 37 CFR 1.131 – AIA goes to first to file
- o Emphasize invention as a whole (weaker after KSR)
- o Invention was not design choice (weaker after KSR)
- o Hindsight reconstruction (weaker after KSR).

D 310,023



Rebuttal: Applicant Admitted Prior Art

- In *In re Nomiya* the CCPA found that an admission of prior art was allowable, but if the admission of prior art points out the problem that the invention solves, the motivation to combine references was destroyed. "The court must be ever alert not to read obviousness into an invention on the basis of the Applicant's own statements, that is, we must view the prior art without reading into that art appellant's teachings." *In re Nomiya*, 509 F.2d 566, 184 USPQ 607, 612 (CCPA 1975) (Figures in the application labeled "prior art" held to be admission that what was pictured was prior art relative to Applicant's invention).

Secondary Considerations – Rebuttal in a Declaration

a. Commercial success

A showing of commercial success of a claimed invention has been held to be relevant to a determination of patentability. In addition, a showing of commercial success, wherever it occurs, is relevant, even if the commercial success occurs abroad. In *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company*, 221 U.S.P.Q. 481 (Fed. Cir. 1984)

Secondary Considerations – Rebuttal in a Declaration

b. Unexpected results - data comparing to the closest prior art.

MPEP 716.02:

"Any differences between the claimed invention and the prior art may be expected to result in some differences in properties. The issue is whether the properties differ to such an extent that the difference is really unexpected. In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) (differences in sedative and anticholinergic effects between prior art and claimed antidepressants were not unexpected). In In re Waymouth, 499 F.2d 1273, 1276, 182 USPQ 290, 293 (CCPA 1974), the court held that unexpected results for a claimed range as compared with the range disclosed in the prior art had been shown by a demonstration of "a marked improvement, over the results achieved under other ratios, as to be classified as a difference in kind, rather than one of degree." Compare In re Wagner, 371 F.2d 877, 884, 152 USPQ 552, 560 (CCPA 1967) (differences in properties cannot be disregarded on the ground they are differences in degree rather than in kind); Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) ("we generally consider a discussion of results in terms of 'differences in degree' as compared to 'differences in kind' . . . to have very little meaning in a relevant legal sense")."

Types of Unexpected results

- A greater than expected result
- Unexpected advantageous property
- Property not possessed by the prior art
- Absence of a property possessed by the prior art

Overlapping Range

- Applicants can rebut a *prima facie* case of obviousness based on overlapping ranges by showing the **criticality** of the claimed range. "The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).
- Applicant can rebut a presumption of obviousness based on a claimed invention that falls within a prior art range by showing "(1) [t]hat the prior art taught away from the claimed invention...or (2) that there are new and unexpected results relative to the prior art." *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1322, 73 USPQ2d 1225, 1228 (Fed. Cir. 2004).

Other Secondary Considerations

- c. Copying by competitors of the patentee's claimed invention
- d. Expressions of disbelief by experts

Rule 132 Declaration

- 4 sections:
 - 1 - identify declarant and background
 - 2 – declarant understands invention and prior art
 - 3 – data/observations
 - 4- promise not to lie pursuant to §1001 of Title 18 of US code
- Sign and date

Conclusions

- Post KSR environment
- Strong vs. weak rebuttal
- Unexpected results

Thank You