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Responding to Office Actions after *KSR*

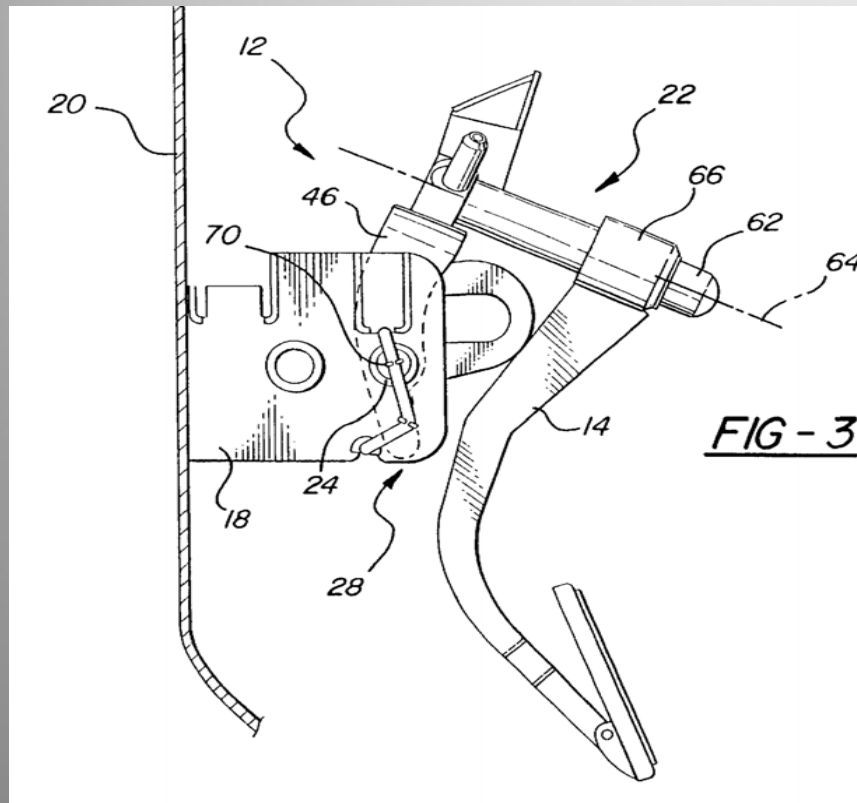
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KSR Int'l Co. v. Teleflex Inc.

127 S.Ct. 1727 (2007)

- Supreme Court redefined the obviousness prong of patentability.
- Made it more difficult to overcome obviousness considerations.
- Obviousness now presents a wider range of themes for challenging patentability.

Patent in Suit -- Engelgau



4. A vehicle control pedal apparatus (12) comprising:

a support (18) adapted to be mounted to a vehicle structure (20);

an adjustable pedal assembly (22) having a pedal arm (14) moveable in force and aft directions with respect to said support (18);

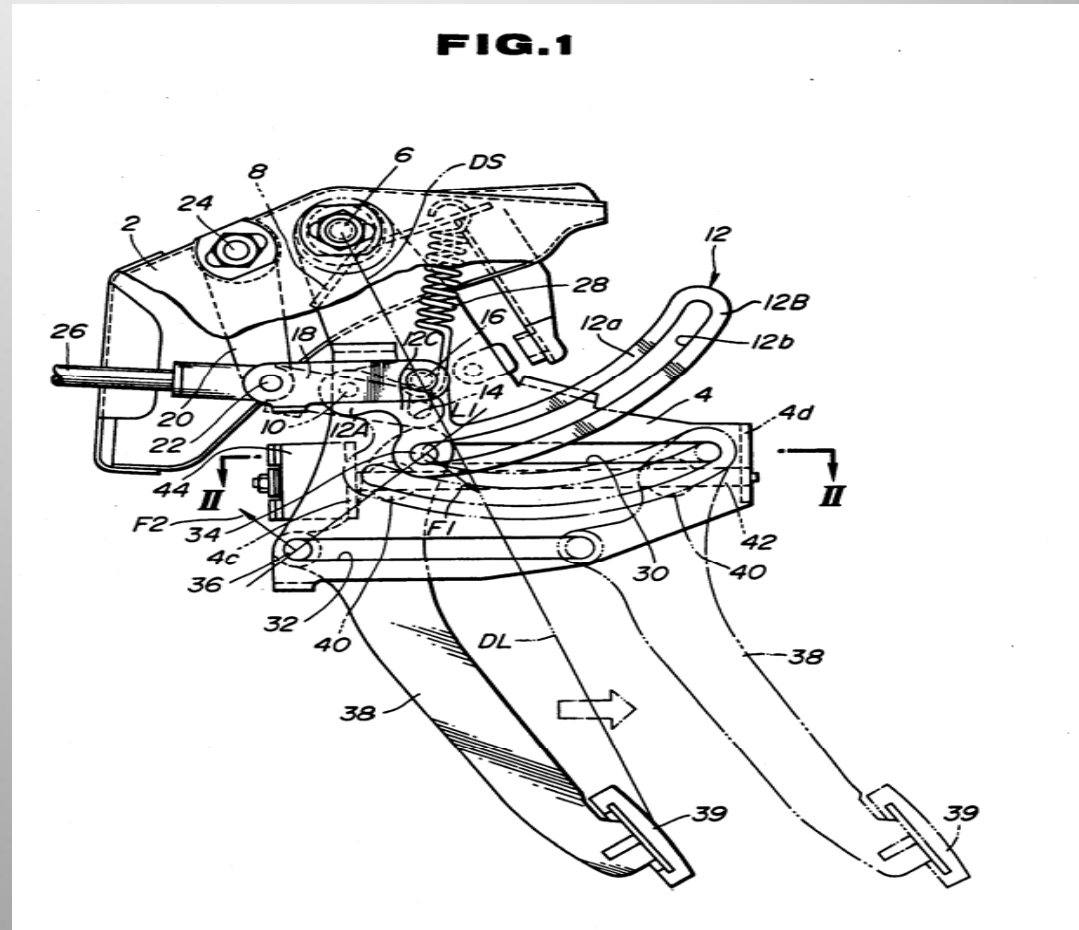
a pivot (24) for pivotally supporting said adjustable pedal assembly (22) with respect to said support (18) and defining a pivot axis (26); and

an electronic control (28) attached to said support (18) for controlling a vehicle system;

said apparatus (12) characterized by said electronic control (28) being responsive to said pivot (24) for providing a signal (32) that corresponds to pedal arm position as said pedal arm (14) pivots about said pivot axis (26) between rest and applied positions wherein *the position of said pivot (24) remains constant while said pedal arm (14) moves in fore and aft directions with respect to said pivot (24).*

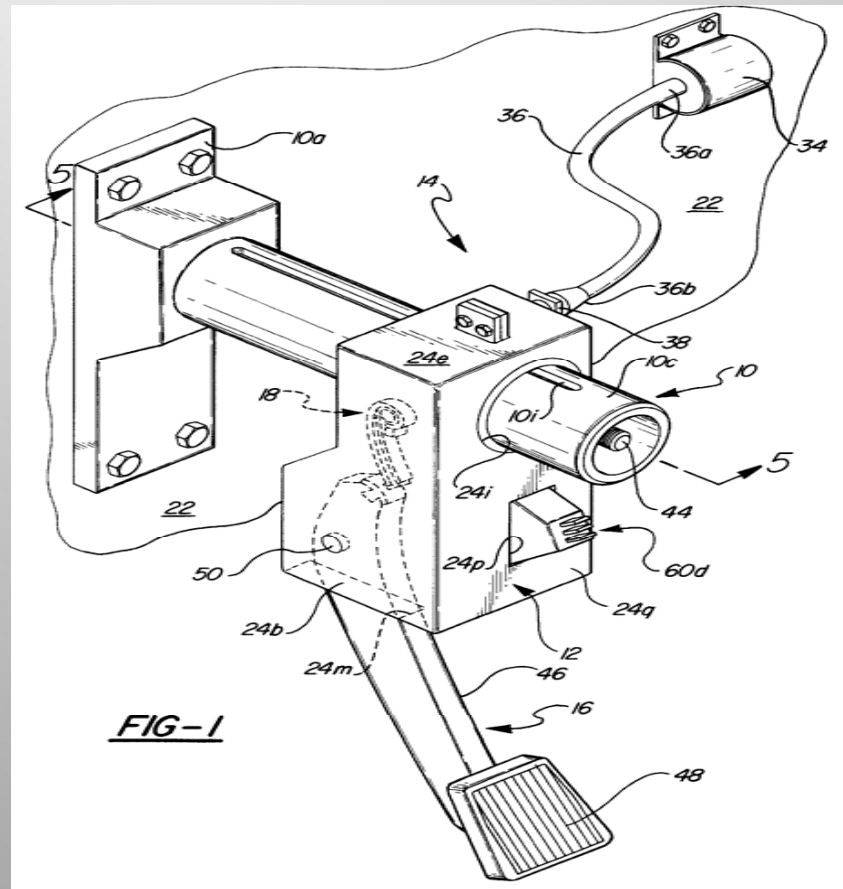
Prior Art -- Asano

- Teaches adjustable Pedal with fixed pivot point



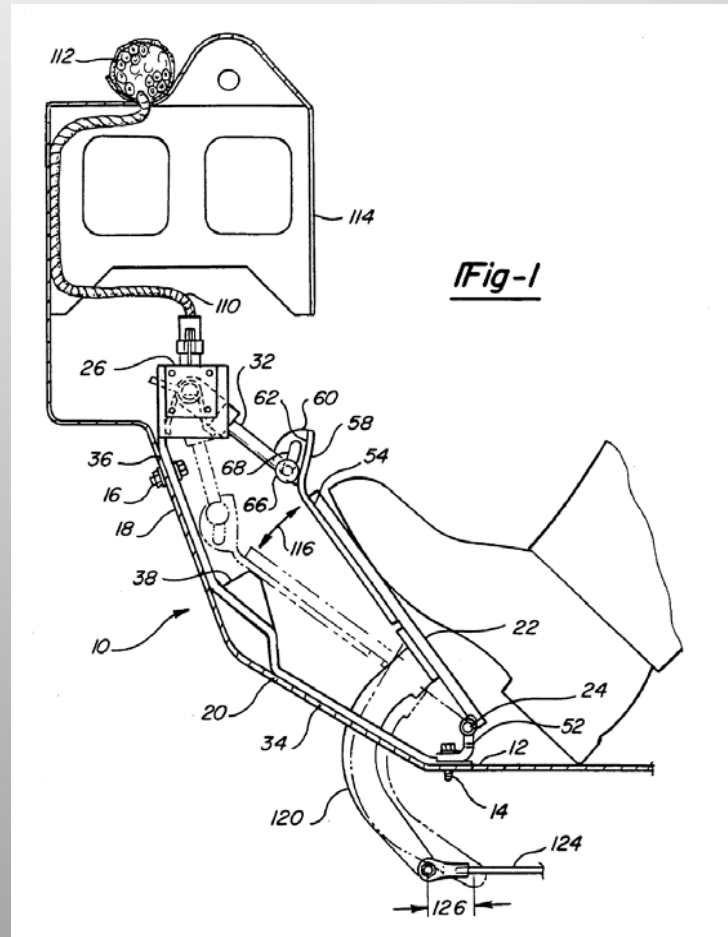
Prior Art -- Rixon

- Teaches sensor with chafing problem



Prior Art -- Smith

- Teaches solution to chafing problem by putting sensor on fixed portion of pedal assembly



Lower Courts

- District Court
 - Summary judgment invalidity
 - Combination teaches sensor in fixed pivot
 - Smith taught solution to chafing was to fix at pivot
- Federal Circuit
 - Reverses, TSM test not met
 - Chafing problem irrelevant to analysis

Standard of Obviousness

- 35 U.S.C. § 103 denies patentability 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 pertains.”

Standard of Obviousness

- *Graham v. John Deere* (1966)
 - First Supreme Court interpretation of § 103
 - Required 3 factual inquiries:
 - Scope and content of prior art
 - Differences between prior art and claims at issue
 - Level of ordinary skill in the pertinent art
- *Federal Circuit*
 - Developed Teaching-Suggestion-Motivation test (“TSM” test)

TSM Test

- Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention unless there is some teaching or suggestion supporting the combination. *ACS Hosp. Sys.*
- The “absence of such a suggestion to combine is dispositive in an obviousness determination.” *Gambro Lundia AB v. Baxter Healthcare Corp*
- Knowledge of one skilled in the art may provide the “teaching, suggestion, or inference” to combine references. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc*

Supreme Court Case

- Reversed Federal Circuit (04/07)
 - Found Obviousness
 - Rejected TSM test as rigid inquiry
 - “We begin by rejecting the rigid approach of the Court of Appeals.”
 - TSM was a “helpful insight” of the CCPA to identify a reason for combining prior art
 - “no necessary inconsistency” between the TSM idea and *Graham*, but TSM cannot become a rigid rule that limits the obviousness inquiry

Supreme Court Case

- Obviousness not any combination of old elements
 - "... a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art."
 - Important to identify a reason that would have prompted a person of ordinary skill in the art to combine the elements in the way the claimed new invention does.

Supreme Court Case

- Predictability is now a factor:
 - “If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”
 - “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results ...”
 - “... a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.”
- Revives “obvious to try” as a factor in obviousness inquiry

Supreme Court Case

- Ordinary innovation is not enough
 - "... the results of ordinary innovation are not the subject of exclusive rights under the patent laws."
 - "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."

Supreme Court Case

- Flexible instead of rigid approach
- Common sense
 - Mentioned 5 times
 - “Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”
 - Person of skill is person of ordinary creativity, not an automaton

Supreme Court Case

- Must determine if there was a reason to combine
 - Teachings of patents
 - Demands of marketplace
 - Knowledge of person of skill in the art
- Examiner / Court must provide explicit reasoning to support obviousness rejection

Errors by Federal Circuit

- Error to look at only the problem that the patentee tried to solve.
- Error to assume a person of skill in the art attempting to solve a problem will be led only to prior art designed to address that same problem.
- “Obvious to try” can be a valid way to show obviousness.
- Cannot have rigid rules that deny recourse to common sense.

McNeil-PPC v. Perrigo Co.

(Decided 7/3/2007)

- McNeil owns Patent No. 5,817,349 claiming an antacid and famotidine combination, wherein impermeably coated famotidine granules were substituted for uncoated granules
- McNeil asserts an unexpected result: degradation of famotidine went from 25-70% in prior art to 2% in claimed invention

McNeil-PPC v. Perrigo Co.

(Decided 7/3/2007)

- Claims in patent found invalid as obvious. Famotidine has a bitter taste, and the court held that the use of impermeably coated famotidine granules would have been obvious, because it masks the bitter taste
- “[T]he patent in suit is rendered obvious for reasons entirely unrelated to the medicament's instability, and the inventor himself declared that impermeable coating would be used for taste-masking purposes regardless of whether famotidine interacted with the antacids. The invention was therefore obvious even if the level of interaction was surprising.”

Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.

(Decided 6/28/2007)

- Takeda owns Patent No. 4,687,777 for a drug used to control blood sugar in patients suffering from Type 2 diabetes
- Alphapharm is a maker of generic drugs
- Alphapharm argues that claimed compounds would have been “obvious to try” because the prior art compound falls within “the objective reach of the claim.”

Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.

(Decided 6/28/2007)

- District Court finds claims valid, uses TSM test (before KSR)
- On appeal, Federal Circuit finds claims valid, despite use of TSM test
- “[a]s long as the (TSM) test is not applied as a “rigid and mandatory” formula, that test can provide “helpful insight” to an obviousness inquiry.”

Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.

(Decided 6/28/2007)

- “Rather than identify predictable solutions for anti-diabetic treatment, the prior art disclosed a broad selection of compounds any one of which could have been selected as a lead compound for further investigation. Significantly, the closest prior art compound (compound b, the 6-methyl) exhibited negative properties that would have directed one of ordinary skill in the art away from that compound. Thus, this case fails to present the type of situation contemplated by the Court when it stated that an invention may be deemed obvious if it was "obvious to try." The evidence showed that it was not obvious to try.”

Andersen Corp. v. Pella Corp.

(Decided July 31, 2007)

- Andersen owns patent No. 6,880,612
 - claims fine mesh screening for windows that allowed air to move while blocking out insects in effort to obtain less-visible screen
- District Court initially denied motion for summary judgment of invalidity
 - After KSR, permitted re-briefing on the question of obviousness

Andersen Corp. v. Pella Corp.

(Decided July 31, 2007)

- Claims found to be invalid
 - Court applied “common sense” approach
- “So the Court considers an insect screen designer, ordinarily skilled in the art, looking for reduced visibility screening. He or she types “screen” into a search engine and is directed to a website. Clicking on the website, the ordinarily skilled insect screen designer reads of, and sees, TWP--a commercially available highly transparent screening material. At this point, the Court is constrained to find it obvious that our ordinarily skilled screen designer would attempt to incorporate this material into a window frame. “

MercExchange, L.L.C. v. eBay, Inc.

(Decided July 27, 2007)

- “the KSR opinion reduces the likelihood that the '265 patent will survive reexamination as the PTO's prior non-final actions were issued prior to KSR, which plainly raised the bar as to what qualifies as non-obvious.”

Looking Forward

- Combination patents harder to obtain
- “Common sense” and “predictability” now central considerations
- Non-analogous art hard to show
- TSM test still available, but not sole test
- Examiners may be held to higher standard of explanation of support for rejection

Examination Guidelines (MPEP § 2141)

- MPEP § 2141 provides examination guidelines for determining obviousness in light of KSR.
- Examiners will use these guidelines to make a determination of obviousness.

Examination Guidelines (MPEP § 2141)

- The controlling framework for the objective analysis is still the *Graham* factual inquiries, including secondary considerations if applicable.
- Examiners must articulate the findings of fact *and* provide an explanation to establish obviousness.
 - You must contest if the examiner fails to do so.

Examination Guidelines

(MPEP § 2141)

- Factual findings made by the examiner are the groundwork to establish obviousness.
- If you do not challenge the truth of the examiner's factual assertions, then the assertions are accepted as true.
 - *In re Sun*, 31 U.S.P.Q.2d 1451, 1454 (Fed. Cir. 1993).
- Hence, if you question the accuracy of the examiner's findings, you must present contradicting evidence or a reasoned statement explaining why the applicant believes the examiner has erred substantively as to the factual findings.

Examination Guidelines (MPEP § 2141)

- Once the *Graham* factual inquiries (objective analysis) are resolved, the examiner will determine whether the invention would have been obvious to one of ordinary skill in the art (subjective analysis).

A change in the *prima facie* standard

- Before *KSR*, the TSM test was the primary criteria for establishing a *prima facie* case of obviousness.
- *Pre-KSR* MPEP § 2143 stated: “To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. ”
- This is no longer the case (see next slides).

Prima Facie Case of Obviousness (MPEP § 2143)

- The current version of MPEP § 2143 now lists 7 rationales (not exclusive) that could be used to establish a prima facie case of obviousness. See *also* MPEP § 2141.
- (1) Combining prior art elements according to known methods to yield predictable results;
- (2) Simple substitution of one known element for another to obtain predictable results;
- (3) Use of known technique to improve similar devices;
- (4) Applying a known technique to a known device ready for improvement to yield predictable results;

Examination Guidelines

(MPEP § 2141)

- (5) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (6) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and
- (7) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Examination Guidelines

(MPEP § 2141)

- Note that the prior art references need not teach or suggest all the claim limitations, so long as the examiner shows that the differences between the prior art and the invention would have been obvious to one of ordinary skill in the art.
 - To overcome this argument, you must demonstrate that, after consideration of all the facts, the gap between the prior art and the claimed invention is too great to render the invention obvious.

Prima Facie Obviousness

- The initial burden is on the examiner to present a *prima facie* case of obviousness—i.e., the examiner must establish the *Graham* factual findings *and* provide a reasoned argument as to why the claimed invention would have been obvious.
- The burden shifts to the applicant only when the examiner successfully presents a *prima facie* case.
- Still, a mere statement that the examiner has not established a *prima facie* case is not met will not be adequate to rebut the rejection. MPEP § 2141.
 - You must explain *why* you believe a *prima facie* case is not met.

Effective Response Tactics

- (1) Combining prior art elements according to known methods to yield predictable results
 - One or more element not in prior art
 - Combination not according to known methods
 - Results not predictable

Effective Response Tactics

- (2) Simple substitution of one known element for another to obtain predictable results
 - One or more element not in prior art
 - Substitution not “simple”
 - Requires inventive activity; modification of other elements
 - Contrary to common sense
 - Destroys intended purpose of one or both references
 - Results not predictable

Effective Response Tactics

- (3) Use of known technique to improve similar devices
 - Technique is not known
 - Devices not similar
 - Technique not applicable to this device
 - Requires inventive activity; modification of other elements
 - Contrary to common sense
 - Destroys intended purpose of reference

Effective Response Tactics

(4) Applying a known technique to a known device ready for improvement to yield predictable result

- Device is not known
 - At least one element missing
- Technique is not known, or
- Application of known technique to this device contravenes common sense
- Result not predictable

Effective Response Tactics

- (5) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success
 - Number of solutions not finite
 - Solution not identified
 - No reasonable expectation of success
 - Solution contravenes common sense in the context of the proposed combination/modification of prior art

Effective Response Tactics

- (6) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art
 - Work not actually known
 - No recognition of problem to prompt variation
 - Application of known work to different field contravenes common sense in context of proposed combination / modification of prior art
 - Variations not predictable

Effective Response Tactics

- (7) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention (similar to old test)
 - Modification / combination contravenes common sense
 - Modification / combination destroys intended purpose of prior art
 - No TSM shown in prior art, and examiner provides no convincing line of reasoning to support

Strategies and Recommendations

- *Prima facie* obviousness still requires showing apparent reason for combination
 - Contest this if not shown by examiner
 - Do not accept conclusory statements of obviousness
- Unexpected results more important
 - Stress this in specification
 - Describe how invention surpasses ordinary innovation / common sense
- Avoid discussing “the problem” in the background

Strategies and Recommendations

- Emphasize in specification the new functionality that is not achieved by prior art
- Capture new functionality in claims
 - Avoid list of elements that may be considered old individually
- Submit objective evidence of nonobviousness in a declaration under 37 CFR § 1.132 by an inventor or other witness
 - Show evidence of unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts.

Strategies and Recommendations

- Dispute all un-supported assertions by examiner
 - Legal conclusions
 - Existence of TSM
 - Common sense
 - Level of skill in the art
 - Factual conclusions
 - Finite number of known solutions
 - Known work in field
 - Predictability of results
- Rule 1.104(d)(2)
 - Allows applicant to request affidavit from Examiner in support of statements made based on personal knowledge
 - Often forces Examiner to find additional prior art and issue new, non-final office action

Houston

Paris

Silicon Valley

Tokyo

Austin

Thank you.

Any Questions?