

# Non-Obviousness After KSR v. Teleflex

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## Presenter

- Kristy Joi Downing
  - Patent Attorney and Associate at Foley & Lardner LLP



- [www.foley.com](http://www.foley.com)
- PH: 414.297.5576
- [kdowning@foley.com](mailto:kdowning@foley.com)

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## Synopsis

- Background on patents and the non-obviousness requirement
- *KSR v. Teleflex* – facts and procedural history
- *KSR* decision
- *KSR* progeny
- Q&A

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## Background on Patents

- The **U.S. Constitution** authorizes Congress to protect patents (Art. 1, Sec. 8, clause 8):
  - “Congress shall have the power ... to promote the progress of science and useful arts, by securing for limited times to ... Inventors ***the exclusive right to their ... Discoveries.***” ...and Congress has done so thru:
    - Codified in the Patent Act, 35 U.S.C. § 101 et seq.

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## Background on Patents cont.

- **Right to Exclude**

- The right conferred by a patent grant is the right “to **exclude others** from making, using, offering for sale, or selling the invention in the United States or importing the invention into the United States.” 35 U.S.C. § 271(a).
- Not an affirmative right

- **20 Year Term**

- Generally speaking, the term of the patent grant is **20 years from the date on which the application** for patent was filed in the United States, subject to the payment of maintenance fees and patent term adjustment.

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## Background on Patents cont.

- Basic Conditions for patentability include, *inter alia*:
  1. Novelty - 35 U.S.C. § 102
  2. **Non-Obviousness** - **35 U.S.C. § 103**
  3. Written Description 35 U.S.C. § 112



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## Non-Obviousness §103

- “A patent may not be obtained...
  - 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.” 35 U.S.C. § 103(a)
- No “flash of genius” is required for patentability
  - “Patentability shall not be negated by the manner in which the invention was made.” 35 U.S.C. § 103(a).
  - **Not applied in hindsight.**

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## Non-Obviousness §103

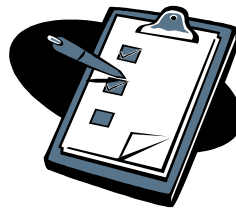
- Obviousness is a question of law dependent upon four factual inquiries:
  1. Scope and contents of the prior art
  2. Level of ordinary skill in the art
  3. Differences between the claimed invention and the prior art
  4. Evaluating evidence of secondary considerations
  - *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

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## Non-Obviousness §103

- Non-obviousness can be established objectively
  - E.g., *Graham* Factors
    - Commercial success
    - Copying
    - Failure of Others
    - Licenses
    - Long Felt Need
    - Skepticism
    - Industry Recognition

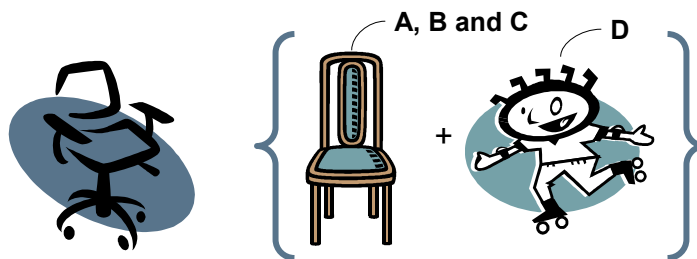


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## Non-Obviousness §103

- An Example



*Invention*

*Prior art*

- A: seat
- B: back
- C: at least one leg
- D: at least one roller

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## Non-Obviousness §103

### ■ Teaching, Suggestion, Motivation Test

- CAFC developed the TSM test to discourage application of hindsight in review of inventions
- The TSM test previously “rigidly applied”
  - “[c]ombining prior art references without evidence of such suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight”). *In re Dembiczak*, 175 F.3d 994 at 999 (Fed. Cir. 1999)

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## *KSR v. Teleflex*

### ■ Core Issue

- Should the TSM test be rigidly applied or may an invention also be rendered obvious even where there is no teaching, suggestion or motivation to combine references provided in the prior art?



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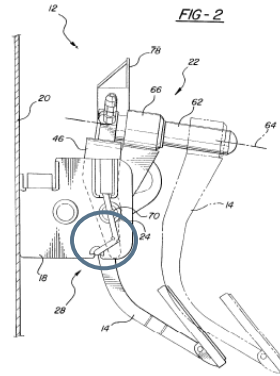
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## KSR v. Teleflex

### ■ Facts

- Teleflex owns a patent regarding an adjustable pedal assembly with electronic throttle control.
- Claim 4 of the '565 patent requires that the electronic [throttle] control, responsive to a pivot (e.g., 24 as shown in FIG. 2) attached to a vehicle gas pedal, mounted to the pedal support.



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## KSR v. Teleflex

### ■ Procedural History

- **E.D. Mich.**
  - Found the Teleflex patent to be obvious in light of the offered prior art
- **CAFC**
  - Vacated the district courts decision on invalidity and remanded the case for further proceedings
  - In large part the CAFC highlighted the important role the TSM test plays in resisting the temptation to engage in impermissible hindsight while reviewing inventions for obviousness. *citing In re Dembiczak, supra.*

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## *KSR v. Teleflex*

### ■ Holding

- Should the TSM test be rigidly applied ...?
- No, obviousness analysis should not be confined to a rigidly applied test
- **Better Question:** whether the resulting combination provides a “predicable benefit”?

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## *KSR v. Teleflex*

### ■ Rationale

- The Court found two major faults in the TSM test centered on understanding that encouragement in prior art need be synonymous with the patentee’s motivation to combine:
  1. Focused on “the problem the patentee was attempting to solve”
  2. Assumes that “a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.”

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## *KSR v. Teleflex*

- **Rationale cont.**

- Other legitimate motivators
  - Ordinary “common sense” and “creativity”
    - J. Kennedy provides as an example “market demand”



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## *KSR v. Teleflex*

- **Rationale cont.**

- Hindsight
  - “The Court of Appeals, finally, drew the wrong conclusion from the risk of courts and patent examiners falling prey to hindsight bias. A factfinder should be aware, of course, of the distortion caused by hindsight bias... [r]igid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it.”

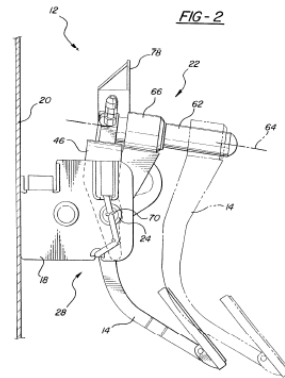
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## *KSR v. Teleflex*

### ■ Conclusion

- Claim 4 is invalid
- Predictable benefit:
  - Making “pre-existing pedals work with new engines” and “tak[ing] an adjustable electronic pedal... and seek[ing] an improvement that would avoid the wire-chafing problem.”



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## *KSR v. Teleflex*

### ■ Practical Implications?

- “Predictable results” test
- TSM test
- Influence technical field
- Dicta?
  - Ordinary common sense and creativity
  - Problem defined in prior art not limiting
  - Hindsight risk a misnomer

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## KSR progeny

- **Study conducted**

- cases citing KSR from April 30, 2007 to September 12, 2007
  - Court of Appeals for the Federal Circuit
  - Board of Patent Appeals and Interferences
  - District court decisions
- Total number of cases = 60
- **19 cases** substantively relied on KSR in their analysis
  - CAFC = 9
  - BPAI = 3
  - District court decisions = 7

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## KSR progeny

- **Study cont.**

- Cases by technical field
  - Chem. / Biotech / Pharm = 10
  - Mechanical = 4
  - Software / Electronics = 4
  - Material Science = 1

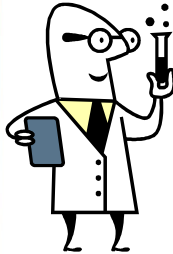
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## KSR progeny

### ■ Results

- Corrosion of patents?
  - Overall rate of validity/allowance = **21%**
    - Chem / Biotech / Pharm = **30%**
    - **Mechanical = 0%**
      - TSM test addressed
    - Software / Electronics = **25%**
      - TSM test addressed
    - Material Science = **0%**



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## KSR progeny

### ■ Results cont.

- “Predictable results” = 79%
- TSM test considered = 47%
- Ordinary common sense = 32%
- Hindsight addressed = 11%
- Secondary factors considered = 37%
- Problem solved by prior art not limiting = 26%

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## KSR progeny

- **Predictability of results considered in 79% of cases**
  - **Chem / Biotech / Pharm = 80%**
  - **Mechanical = 50%**
  - **Software / Electronics = 25%**
- In cases where claims were valid
  - **75% considered predictability**

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## KSR progeny

- **TSM test considered in 47% of cases**
  - **Chem / Biotech / Pharm = 40%**
  - **Mechanical = 50%**
  - **Software / Electronics = 50%**

While KSR “counsels against applying the [TSM test] as a rigid and mandatory formula... it remains necessary to show ‘some articulated reasoning with some rational underpinning to support the legal conclusion on obviousness.’ *Aventis Pharma v. Lupin*, 2007 U.S. App. LEXIS 21753 at \*19-\*20 (Fed. Cir. Sept. 11, 2007)(emphasis added)

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## KSR progeny

- **“Ordinary common sense” and/or “ordinary creativity” considered in 32% of cases**
  - Chem / Biotech / Pharm = 40%
  - Mechanical = 25%
  - Software / Electronics = 25%
  
- **In cases where claims were valid**
  - 0% considered ordinary common sense/creativity
    - 3 of 4 valid cases = Chem / Biotech/ Pharm

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## KSR progeny

- **Hindsight considered in 11% of cases**
  - Chem / Biotech / Pharm = 10% (one of 10)
  - Mechanical = 25% (one of 4)
  - Software / Electronics = 0%
  
- **In cases where claims were valid**
  - One case considered hindsight

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## KSR progeny

### ■ Hindsight cont.

- “It is difficult but necessary that the decisionmaker forget what he or she has been taught... about the claimed invention and cast the mind back to the time the invention was made...” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983, *cert. denied*, 469 U.S. 851 (1984)).

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## KSR progeny

### ■ Valid / Allowed Cases = 21%

- **Technical field**
  - 3 Chem / Pharm / Biotech cases
  - 1 Software/Electronics case
- **Factors in analysis**
  - Predictability of results = 75%
  - Secondary factors = 50%

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# Conclusion

## ■ Results Summary

- Invalidity rate = 79 %
  - Technical field
    - Chem / Biotech / Pharm
    - Software / Electronics
  - Predictable results = 79%
  - TSM test considered = 47%
  - Hindsight addressed = 11%

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# Questions?



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## Cases

	Case Name	Citation
1	McNeil-PPC v. Perrigo Co.	2007 U.S. Dist. LEXIS 50255
2	In re Omeprazole Patent Litigation	2007 U.S. Dist. 39670
3	Abbott Labs v. Sandoz, Inc.	2007 U.S. Dist. LEXIS 38216
4	Semiconductor Energy Lab v. Chi Mei Optoelectronics, Corp.	2007 U.S. Dist. LEXIS 44288
5	Single Chip Systems Corp. v. Intermec IP	2007 U.S. Dist. LEXIS 50622
6	Andersen Manufacturing v. Diversi-Tech, Corp.	2007 U.S. Dist. LEXIS 47925
7	Ex parte Kubin	BPAI - 2007-0819
8	In re Metoprolol v. KV Pharm	2007 U.S. App. LEXIS 17463
9	Pharmastem Therapeutics v. Viacell, Inc.	2007 U.S. App. LEXIS 16245

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## Cases cont.

	Case Name	Citation
10	Takeda Chemical Industries v. Alphapharm	2007 U.S. App. LEXIS 15349
11	Ex Parte Smith	BPAI - 2007-1925
12	Omegaflex, Inc. v. Parker-Hannifin Corp.	2007 U.S. App. LEXIS 14308
13	Ex Parte Catan	BPAI - 2007-0820
14	Leapfrog Ent. v. Fisher-Price, Inc.	485 F.3d 1157
15	Aventis Parma and King Pharm. v. Lupin	2007 U.S. App. LEXIS 21753
16	In re Sullivan and Russell	2007 U.S. App. LEXIS 20600
17	In re Trans Texas Holdings Corp.	2007 U.S. App. LEXIS 19909
18	In re Icon Health and Fitness, Inc.	2007 U.S. App. LEXIS 18244

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