

## **KSR International Co. v. Teleflex Inc. et al., 550 U.S. 398 (2007)**

Prepared by UNCTAD's Intellectual Property Unit

### **Summary**

This case concerned the condition of non-obviousness as a prerequisite for patentability. The Supreme Court of the United States (hereinafter: the Court) reinforced the objective analysis approach for applying 35 U.S.C. §103 (i.e. the domestic provision on non-obviousness) as it was established with the three determining factors in *Graham v. John Deere*.<sup>1</sup> It found that the Court of Appeals for the Federal Circuit (hereinafter: the Federal Circuit) had erred in rigidly applying the narrow teaching, suggestion and motivation test (1) for obviousness under § 103, (2) for the narrow understanding of the use of hindsight and (3) for not considering whether the invention was obvious to try. They found the above to be in conflict with the broader understanding of obviousness established in *Graham*.

### **The facts**

In order to accommodate smaller drivers of automobiles, inventors designed and patented gas pedals whose locations could be adjusted. Two different patents, called the Asano and the Redding patent existed and both addressed the problem in a mechanical way.<sup>2</sup> When newer cars with computer-controlled throttles reacting to electronic instead of mechanical signals emerged, inventors found and patented various solutions on how to translate the mechanical operation of adjusting the location of the gas pedal into digital data. Petitioner KSR International Co. (hereinafter: KSR) had developed an adjustable pedal system for cars with cable-actuated throttles. It was protected by patent '976. KSR supplied the above invention to General Motors Corporation (hereinafter: GMC) for trucks using computer-controlled throttles. KSR adjusted its invention to the use in trucks by adding a modular sensor to the design. Respondents Teleflex Inc. et al. (hereinafter: Teleflex) held the exclusive license for the Engalgau patent that included in claim No. 4 a position-adjustable pedal assembly with an electric pedal position sensor attached to a fixed pivot point. The U.S. Patent and Trademark Office (PTO) only granted this patent because of the claim's limitation to devices "attached to a fixed pivot point", which distinguished it from Redding's patent. Following KSR's design for GMC, Teleflex sued KSR for infringement on its Engalgau patent and the described claim No. 4. KSR argued that claim No. 4 was invalid pursuant to the rules on non-obviousness set out in § 103 of the Patent Act. They argued that §103 forbade the issuance of a patent in case "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

---

<sup>1</sup> In *Graham v. John Deere* the Court established that the element of non-obviousness as set out in §103 must be assessed with the help of the following factors: (1) the scope and content of prior art, (2) the differences between the prior art and the claims at issue and (3) the level of ordinary skill in the concerned art. Furthermore, secondary considerations may be commercial success, long felt but unresolved needs or the failure of others to find a solution. See the summary in this database.

<sup>2</sup> The Asano patent includes a support structure whereby, when the pedal's location is adjusted, one of the pedal's pivot points stays fixed. The Redding patent reveals a sliding mechanism where both the pedal and pivot point are adjusted.

obvious at the time the invention was made to a person having ordinary skill in the art".<sup>3</sup> The District Court agreed with KSR, but the Federal Circuit reversed in January 2005. The Court reversed the judgment of the Federal Circuit and declared the patent invalid due to the obviousness of the invention, §103 of the Patent Act.

### **The legal issues:**

#### Teaching, Suggestion, or Motivation Test (TSM) and *Graham* factors

The Court reinforced the objective analysis for applying §103 as it was established with the three determining factors in *Graham v. John Deere*.<sup>4</sup> It found that the Federal Circuit, in an effort to reach a more uniform and consistent test of obviousness than the one established in *Graham v. John Deere*, had applied a "teaching, suggestion, or motivation" (TSM) test. According to this test, a "patent claim is only proved obvious if the prior art, the problem's nature, or the knowledge of a person having ordinary skill in the art reveals some motivation or suggestion to combine the prior art teachings". This test attempts to meet the problem that almost all inventions essentially are new combinations of known elements by requiring proof that a certain motivation or suggestion to combine those known elements to form the new invention existed. It intends to prevent hindsight bias. For obviousness to be established, it is therefore in general not sufficient to demonstrate that each element has formed a part of the prior art before. In addition, according to the Federal Circuit, there needs to be a clear TSM to combine prior art elements to the invention at issue. The District Court and the Federal Circuit both applied the TSM test, but with different outcomes. The District Court held that KSR satisfied it and invalidated the claim, whereas the Federal Circuit chose a stricter application of the TSM test and found the invention to be non-obvious and thus the patent to be valid. The Court, in turn, ruled that the Federal Circuit had "addressed the obviousness question in a narrow, rigid manner that is inconsistent with §103" and the Court's precedents.<sup>5</sup> It agreed with KSR and found that on the basis of the pedal as registered in the Asano patent "mounting an available sensor on a fixed point" of that pedal was an obvious step.<sup>6</sup> It stressed that the *Graham* factors and the TSM test need not be inconsistent. For consistency of both approaches, general principles as formulated in the TSM test must not be transformed into rigid rules. However, the main test to non-obviousness seems to remain the *Graham* test.

#### Obviousness according to the *Graham* factors

The Court established that the *Graham* ruling provided an expansive and flexible approach to the question of obviousness. Once more, it restated the need for caution when granting a patent based on the combination of elements existing in prior art. The improvement must be more than just a predictable use of prior-art elements according to their established functions. In order to determine whether the combination was predictable and whether there was an apparent reason for it, the Court explained that "it will often be necessary to look to interrelated teachings of multiple patents; to the effects of demands known to the design community or present in the marketplace; and

---

<sup>3</sup> See syllabus of the decision, p.2.

<sup>4</sup> See footnote nr. 1.

<sup>5</sup> See syllabus of the decision, p. 3 at the bottom.

<sup>6</sup> See pp.11-24 of the judgment.

to the background knowledge possessed by a person having ordinary skill in the art."<sup>7</sup> The teachings need not be precise and explicit, but lead a person of ordinary skill in the direction of the new combination.

**Points of significance:**

- The Court restated the need for caution when granting a patent based on a combination of elements existing in prior art: "Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, for patents combining previously known elements, deprive prior inventions of their value or utility."<sup>8</sup>
- A claimed invention may be obvious despite the absence of a clear teaching, suggestion or motivation to combine various prior art references.
- The patent examiner should not overestimate the importance of published articles and express prior art. The person skilled in the art is not to be considered as a technical dumbbell with little initiative on its own, but as a person that is capable of using common sense and taking into account the particularities of the individual case (e.g. design needs and the demand in a specific market).

**Key words:**

Patentability, non-obviousness, inventive step, ordinary skilled person, pre-grant flexibilities, TSM test, "teaching, suggestion, or motivation test", mechanical skill.

**Available at** <http://www.supremecourt.gov/opinions/06pdf/04-1350.pdf>

---

<sup>7</sup> See pp. 11-14 of the decision.

<sup>8</sup> KSR Syllabus, p. 5.