

## **USPTO response to WIPO SCP Circular 8403**

### **Inventive step (obviousness)**

The inquiry into whether an invention is non-obvious and thus potentially patentable is codified in section 103 of the U.S. Code.

<http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title35-section103&num=0&edition=prelim>

#### **35 U.S.C. 103 Conditions for patentability; non-obvious subject matter**

*A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.*

This version of 35 U.S.C. 103 is so-called Post-AIA, drafted as part of the comprehensive revision to US patent law brought about by the Leahy–Smith America Invents Act (AIA). The AIA was signed into law by President Barack Obama on September 16, 2011. For a detailed description of the Pre-AIA version of this section, please see the link below.

This statutory provision is the basis for the guidelines on the determination of obviousness promulgated by the USPTO in the **Manual of Patent Examining Procedure (MPEP), chapter 2141**.

<http://www.uspto.gov/web/offices/pac/mpep/s2141.html>

Court cases also shape the interpretation of the statutory framework, and are incorporated in the MPEP direction for determining which inventions are obvious and which are non-obvious. In particular, decisions issued by the Supreme Court of the United States and by the Court of Appeals for the Federal Circuit (CAFC) are incorporated in the guidance.

As described in **MPEP chapter 2141 (II)**, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in the Supreme Court case *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966).

An invention that would have been obvious to a person of ordinary skill at the time of the invention is not patentable. (*See 35 U.S.C. 103 or pre-AIA 35 U.S.C. 103(a)*). As stated by the Supreme Court, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

- (A) Determining the scope and content of the prior art;
- (B) Ascertaining the differences between the claimed invention and the prior art; and
- (C) Resolving the level of ordinary skill in the pertinent art.

The seminal decision by the Supreme Court on obviousness is *KSR International Co. v. Teleflex Inc. (KSR)*, 550 U.S. 398, 82 USPQ2d 1385 (2007), which is discussed in greater detail in **MPEP chapter 2141(I)**. In *KSR*, the Supreme Court set forth a more flexible approach to providing reasons for a finding of obviousness and changed the earlier standard that an express reason to modify the prior art was required to combine multiple prior art references so that they would describe all the elements of a claim. The approach described in *KSR*, instead, does not require a “specific hint or suggestion in a particular reference” to justify combining multiple art references, but instead it only requires a reasoned explanation that avoids conclusory generalizations.

### **Analogous and Nonanalogous Art**

Several issues arise in determining whether a claim is obvious or non-obvious under the *KSR* analysis. One is whether a reference relied on by the examiner is from analogous or nonanalogous art. This is discussed in greater detail in **MPEP chapter 2141.01(a)**.

For a reference to be properly used in an obviousness rejection under 35 U.S.C. 103, the reference must be analogous art to the claimed invention. The examiner must determine what is “analogous prior art” for the purpose of analyzing the obviousness of the subject matter at issue. Under the analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent can provide a reason for combining the elements in the manner claimed. This does not require that the reference be from the same field of endeavor as the claimed invention, in light of the Supreme Court’s instruction in *KSR* that “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one.”

In short, a reference is analogous art to the claimed invention if: (1) the reference is from the same field of endeavor as the claimed invention (even if it addresses a different problem); or (2) the reference is reasonably pertinent to the problem faced by the inventor (even if it is not in the same field of endeavor as the claimed invention).

### **Level of Ordinary Skill in the Art**

Another issue that arises when analyzing obviousness is the determination of the level of ordinary skill in the art. The statute refers to a *person having ordinary skill in the art to which the claimed invention pertains*. The methodology used to determine the level of ordinary skill in the art is described in greater detail in **MPEP chapter 2141.03**.

The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. Factors that may be considered in determining the level of ordinary skill in the art may include: (A) “type of problems encountered in the art;” (B) “prior art solutions to those problems;” (C) “rapidity with which innovations are made;” (D) “sophistication of the technology; and” (E)

“educational level of active workers in the field. In a given case, every factor may not be present, and one or more factors may predominate.”

A person of ordinary skill in the art is also a person of ordinary creativity, not an automaton. In many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle and would, of necessity have the capability of understanding the scientific and engineering principles applicable to the pertinent art.

## **Sufficiency of Disclosure**

### **(i) Enabling disclosure requirement**

The inquiry into whether an invention is enabled is codified in section 112(a) of the U.S. Code.

#### **35 U.S.C. §112(a). Specification**

*The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.*

[http://uscode.house.gov/view.xhtml?req=\(title:35%20section:112%20edition:prelim\)%20OR%20\(granuleid:USC-prelim-title35-section112\)&f=treesort&edition=prelim&num=0&jumpTo=true](http://uscode.house.gov/view.xhtml?req=(title:35%20section:112%20edition:prelim)%20OR%20(granuleid:USC-prelim-title35-section112)&f=treesort&edition=prelim&num=0&jumpTo=true)

This statutory provision is the basis for the guidelines on the determination of enablement laid out by the USPTO in the **Manual of Patent Examining Procedure (MPEP), chapter 2164.**

<http://www.uspto.gov/web/offices/pac/mpep/s2164.html>

The purpose of the enablement requirement is to ensure that the specification sufficiently describes an invention in such terms that one skilled in the art can make and use the claimed invention and such that the invention is communicated to the interested public in a meaningful way. This inquiry is described in greater detail in the **MPEP chapter 2164.05(b).**

As stated in MPEP chapter 2164.01, “(a)ny analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention.” That section further states that the “standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable?”

Thus the central inquiry in determining whether a claim is enabled is whether that experimentation is “undue.” In other words, although some amount of experimentation may be permissible, would one skilled in the pertinent art need to carry out undue experimentation in order to make and use the claimed invention?

Whether the experimentation is “undue” is determined by several factors which are outlined in the case *In Re Wands*, 858 F.2d 731, (Fed. Cir. 1988) and specified in MPEP chapter 2164.01(a). These factors include:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Several examples of the analysis related to enablement issues are discussed in **MPEP chapter 2164.06**.

### **(ii) Support requirement**

Under U.S. patent law, there is not a separate “support” requirement. Support for an application is encompassed in the enablement and written description requirements.

### **(iii) Written description requirement**

The inquiry into whether an invention fulfills the written description requirement is codified in the same U.S. code section listed for enablement, section 112(a) of the U.S. Code. See the link above. However, the written description requirement is a separate and distinct requirement from enablement.

This statutory provision is the basis for the USPTO guidelines on the determination of whether the written description requirement is fulfilled, as is described in the **Manual of Patent Examining Procedure (MPEP), chapter 2163**.

As stated in MPEP chapter 2163(I) the goal of the description of the invention requirement “is to clearly convey the information that an applicant has invented the subject matter which is claimed... Another objective is to put the public in possession of what the applicant claims as the invention.”

When USPTO examiners analyze whether an application fulfills this requirement, the following steps are followed:

1. For each claim, determine the scope of the claim.
2. Review the entire application to understand how applicant provides support for the claimed invention including each element and/or step.
3. Determine whether there is sufficient written description to inform a skilled artisan that applicant was in possession of the claimed invention as a whole at the time the application was filed.

For further information, please see **MPEP chapter 2163**.