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Report Q180

in the name of the United States Group
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Content and relevance of industrial applicability and/or utility as requirements for patentability

Questions

1. What is the situation in your country?

1.1 Does your country know industrial applicability or utility as an additional requirement for patentability besides novelty and inventive step?

Yes. 35 U.S.C. §101 imposes an additional requirement - beyond that the invention be new and nonobvious - that an invention be "useful" in order for the invention to be patented. Section 101 provides:

> *"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."*

The requirement that the invention be "new" is further clarified by the definition of the novelty requirement and of what constitutes prior art at 35 U.S.C. §102.

Section 101 is frequently referred to as the "utility" requirement. It has the purpose of distinguishing "useful inventions" from subject matter that is not eligible to be patented. As explained further below, the utility requirement stands as an independent requirement for patentability relative to the requirements for novelty, inventive step and adequate disclosure.

1.2 How does this comply with TRIPS?

Article 27.1 of TRIPS permits WTO Members to require a patent applicant to demonstrate that an invention possesses industrial applicability or is useful. Specifically, the first sentence of Article 27.1 provides that "Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application." Footnote 5 of the TRIPS Agreement further clarifies this obligation, noting that "For the purposes of this Article, the terms "inventive step" and "capable of industrial application" may be deemed by a Member to be synonymous with the terms "non-obvious" and "useful" respectively." The structure of Article 27.1 particularly in view of footnote 5, is designed to accommodate either an "industrial application" requirement as used in the European Patent Convention and other systems, or a "utility" or "useful invention" requirement as found in the U.S. system.

2. Industrial applicability

2.1 How is industrial applicability defined?

The United States does not impose a requirement on patent applicants to demonstrate the industrial applicability of their inventions. The U.S. employs a "useful invention" requirement that has a function that is similar but distinct in several respects from "industrial applicability."

2.2 What is the relevance of industrial applicability and how does it affect granting proceedings?

As noted above, the industrial applicability of an invention is not an explicit requirement of the U.S. system. The potential commercial application of a particular invention or an embodiment of an invention may help to clarify the practical utility of an invention, or may influence a conclusion as to whether the invention is nonobvious. However, it is not a free-standing requirement that a patent applicant establish how an invention will be industrially applied in any industry.

2.3 How is industrial applicability treated in proceedings concerning the validity of patents?

The industrial applicability of an invention does not directly influence compliance of the invention with the requirements of patentability in U.S. law. Factors related to the actual industrial application of the invention, such as evidence of commercial success or the role the invention plays in meeting a "long felt" need for the invention, may bear on whether the invention is non-obvious under 35 U.S.C. §103. The demonstration that an invention lacks any application in industry, however, does not affect whether the invention possess utility or otherwise complies with the requirements of the U.S. patent statute.

3. Utility

3.1 How is utility defined?

Section 101 of title 35, United States Code requires as a condition of the grant of a patent, that an invention be "new and useful." There are two discrete requirements of §101.

First, Section 101 of title 35, United States Code, recognizes four categories of such inventions; articles of manufacture, compositions of matter, machines and processes. Something other than one of these four categories is not eligible to be patented. Early questions of patent eligibility for living organisms altered through human intervention and manipulation were presented as questions of whether such modified organisms were eligible to be patented under §101. The case of *Diamond v. Chakrabarty*, 100 S.Ct. 2204 (1980), answered that question, holding that such modified organisms were articles of manufacture or compositions, and as such, could be patented if the organism was new, useful and non-obvious. Similarly, computer programs were held to be statutory subject matter because such programs were either processes (i.e., a series of steps to be performed) or, more recently, articles of manufacture when embedded on a machine-readable tangible medium. See, e.g., *Diamond v. Diehr*, 450 U.S. 175, 182, 67 L. Ed. 2d 155, 101 S. Ct. 1048 (1981).

Second, U.S. law requires that an invention be "useful" to be patented. This requirement operates to ensure that only those inventions with "real world" value receive patent protection. See, e.g., Brenner v. Manson, 383 U.S. 519 (1966); *In re Ziegler*, 992 F.2d 1197 (Fed. Cir. 1993); *Juicy-Whip v. Orange Bang*, 185 F.3d 1364, 51 U.S.P.Q.2d 1700 (Fed. Cir. 1999). "Real world value" or "practical utility" is to be assessed generously, but it does require that the invention have some discernable value that provides an immediate benefit to the public. *See, e.g., Nelson v. Bowler*, 626 F.2d 853; 206 U.S.P.Q. 881 (C.C.P.A. 1980)("'Practical utility' is a shorthand way of attributing "real-world" value to claimed subject matter. In other words, one skilled in the art can use a claimed discovery in a manner which provides some immediate benefit to the public.').

The “useful invention” requirement of §101 also draws a distinction between inherently unpatentable subject matter on the one hand (e.g., abstract ideas, laws of nature) and inventions that utilize and apply such abstractions. *See, e.g., AT&T Corp. v. Excel Communications*, 172 F.3d 1352 (Fed. Cir. 1999); *In re Alappat, 33 F.3d 1526, 31 U.S.P.Q.2D (BNA) 1545 (Fed. Cir. 1994)*. Specifically, certain inventions have been found by U.S. courts not to be capable of having “practical utility” because they constitute nothing more than an abstract idea or a “law of nature.” Examples of abstract ideas include unapplied mathematical algorithms, general unapplied concepts or theories, and the like. Processes, articles of manufacture or machines that represent a practical application of a mathematical algorithm or abstract idea, on the other hand, are eligible to be patented. See, *In re Warmerdam*, 33 F.3d 1354 (Fed. Cir. 1994). In addition, courts have found that inventions that violate laws of nature (e.g., perpetual motion machines) also cannot be useful inventions within the meaning of the statute. See, e.g., *In re Newman*, 782 F.2d 971 (Fed. Cir. 1989).

These generally articulated standards are applied without differentiation in all fields of technology. Issues of compliance of particular inventions with these standards, however, does arise more frequently in certain fields than others; namely, in the fields of software and business process inventions, pharmaceuticals and genomics-related inventions. For example, in the field of software and business process inventions, the critical inquiry is often whether the applicant has claimed as his invention a process representing a practical application of a set of mathematical or other algorithms, or whether the invention as claimed is the abstract idea or algorithms *per se*. In the field of pharmaceutical inventions, the inquiry is often whether the evidence provided establishes that a compound may be reasonably assumed to possess a legitimate pharmaceutical use or application. That inquiry focuses on the evidence provided in the application and whether such evidence “credibly” establishes a practical utility for the invention. In the field of genomics, claims to a particular nucleic acid sequence that corresponds to a predicted gene are assessed under the specific, substantial and credible utility standards. The inquiry is focused on whether the utility of the gene or its expression product is disclosed to be specific to the sequence being claimed, is not insubstantial, and is supported by a credible foundation of evidence in the patent disclosure consistent with scientific understanding and believable.

3.2 What is the relevance of utility?

3.2.1) How is utility examined by the patent authorities?

The application of the “useful invention” requirement has been addressed several times in written examination guidelines issued by the Patent and Trademark Office (PTO). See, e.g., *Examination Guidelines for Computer-Related Inventions*, 61 Fed. Reg. 7478 (February 28, 1996); *Utility Examination Guidelines*, 66 Fed. Reg. 1092 (January 5, 2002). Under current PTO standards, an invention must have a specific, substantial and credible utility to meet the requirements of the “useful invention” provision of §101. Specific utility is described as being a utility that is specific to the claimed invention, rather than a utility that may exist for an invention by virtue of the invention being in a class of technology in which other useful inventions is included. The substantial utility requirement is described as being a utility for the invention that is not arbitrary or insignificant given the nature of the invention. For example, the use of a bioengineered therapeutic protein as animal feed (i.e., a source of amino acids) would be in “insubstantial” utility. Finally, a utility identified for an invention must be “credible”. Credibility is grounded upon a scientific assessment - is the asserted utility supported by sufficient evidence that is consistent with general scientific understanding?

3.2.2) How does the lack of utility affect granting proceedings?

The absence of information in a patent application establishing a practical utility for an invention will result in rejections by the PTO of the associated claims corresponding to that “invention” under §101 and/or §112, first paragraph (“[o]bviously, if a claimed invention does

not have utility, the specification cannot enable one to use it.)[1] In the vast majority of applications, however, no questions concerning compliance with §101 will arise. This is because either the invention that is described in the patent application has a clear and well-established utility and there is no reason to question the asserted or obvious utility of the invention, or that the claims have clearly defined subject matter that is not prohibited by §101.

Where a rejection is imposed by the PTO, it may be grounded on one of several conceptual footings:

i) The inventor has not identified a practical utility in the specification, and none is apparent. The PTO will reject such an application as not identifying a practical utility for the invention under §101 and/or §112, first paragraph.

ii) The invention is asserted to have a practical utility, but the evidence presented in the application does not credibly support that asserted utility. The PTO will reject such an application as not establishing a practical utility for the invention, and must cite reasons and/or evidence to contest the assertions of the patent applicant.

iii) The invention is asserted to have a practical utility but the asserted utility is not specifically related to the claimed invention. The PTO will reject the application as not establishing a utility that is specific to what the applicant asserts to be the invention.

iv) The invention is disclosed to have a practical utility, but the claims define an invention that fails to distinguish the invention from an abstract idea or a law of nature. The PTO will reject the application as not defining an invention that has practical utility, or that the invention as defined in the claims, does not define an article of manufacture, a machine, a composition of matter or a process and thus is ineligible to be patented.

3.2.3) Does this requirement play a significant role in the number of rejected patent applications?

In most technical fields, rejections are rarely imposed on the grounds of lack of utility. Fields in which rejections are more prevalent include genomics-related inventions (e.g., nucleic acids or polypeptides for which insufficient information regarding the function/role of the nucleic acid or polypeptide has been provided), bioactive compounds or compositions, software or business process intentions, and areas where scientific principles have not been well established or the invention seems to be contrary to established scientific principles (e.g., fusion technology, perpetual motion machines).

3.2.4) What are examples and how is this requirement combined with other requirements, in particular with the inventive step/non-obviousness of the invention?

The utility requirement, and an applicant's statements regarding compliance with it, can influence prosecution of patent applications, even if no rejection is imposed or maintained in the application under §101. Specifically, where an applicant has portrayed the invention has being of a particular nature regarding its proposed use, that representation can influence how the patent examiner will view the invention, including what prior art might be pertinent

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[1] A rejection based on 35 U.S.C. §101 for "lack of utility" is often accompanied by a rejection under 35 U.S.C.§112, first paragraph (enablement). The premise for this type of rejection is that an invention lacking in utility cannot be described in a manner that will enable a person of skill to "use" the invention. See, e.g., *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Jolles*, 628 F.2d 1322, 1326 n.10, 206 USPQ 885, 889 n.11 (CCPA 1980); *In re Fouche*, 439 F.2d 1237, 1243, 169 USPQ 429, 434 (CCPA 1971)("[I]f such compositions are in fact useless, appellant's specification cannot have taught how to use them."). Courts have also cast the §101-§112 relationship such that § 112 presupposes compliance with § 101 compliance; *In re Ziegler*, 992 F.2d at 1200-01, 26 USPQ2d at 1603 ("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. § 101 that the specification disclose as a matter of fact a practical utility for the invention. ... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); *In re Kirk*, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967)("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention.").

and how it might be viewed by a person of ordinary skill. The characterization of the utility of the invention thus may play a role in influencing examination of the application for compliance with patentability requirements other than §101.

It is important to note, however, that there is no formal or defined linkage between the utility requirement and the nonobviousness requirement of 35 U.S.C. §103. Moreover, an applicant is not required to make affirmative statements to establish utility of an invention that is well accepted. The absence of any formal obligation to specifically recite the proposed application of the invention makes it clear that such a factor is not a prerequisite to application of the test for non-obviousness under §103. In addition, compliance with the utility requirement of §101 is an "either/or" inquiry - either the claimed invention has utility or it does not. In contrast, the inquiry undertaken to assess nonobviousness is grounded on the perspective of a person of skill in the art, and a *prima facie* determination by the PTO may ultimately be overcome by a showing of relevant secondary considerations of non-obviousness.

Examples of situations where courts have found an invention to not comply with §101 are relatively rare. Some of the cases discussed, supra, provide useful examples.

i) Brenner v. Manson

In Brenner v. Manson, the applicant sought to patent a new process that could be employed to produce a class of steroidal chemical compounds. The PTO rejected the applicant on the basis that the compounds resulting from the claimed process had no known use or application, and as such, the application was deficient under §101. The compounds in question were structurally similar to previously disclosed steroidal compounds, one of which had shown some activity that could be exploited in a pharmaceutical application. The applicant did not, however, ascribe a specific utility to the compounds produced by the claimed process. The Court ultimately held that the application did not disclose a practical utility for the claimed process. The Court reached its conclusions by characterizing the invention as being a method for producing a product which itself was only the object of future investigation. Being such, the Court held that the applicant had not disclosed an actual utility for the process, and as such, did not meet the requirements of §101. Its concluding observations were:

> *"This is not to say that we mean to disparage the importance of contributions to the fund of scientific information short of the invention of something "useful," or that we are blind to the prospect that what now seems without "use" may tomorrow command the grateful attention of the public. But a patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion. "[A] patent system must be related to the world of commerce rather than to the realm of philosophy. ..." (citing Application of Ruschig, 52 C. C. P. A. (Pat.) 1238, 1245, 343 F.2d 965, 970 (Rich, J.). See also, Katz v. Horni Signal Mfg. Corp., 145 F.2d 961 (C. A. 2d Cir.)."*

This passage from Brenner v. Manson has been frequently cited to illustrate the distinction between an existing and recognized practical utility, and the situation where a researcher faces significant additional work to arrive at an invention having practical utility.

ii) In re Warmerdam

Warmerdam had invented and previously received a patent on a method of controlling the movement of a robot. The method of controlling the robot used a conceptual model whereby mathematically calculated spheres were placed around detected objects, and the interactions between those spheres was used to guide the robot's movements. In the patent application in question, however, Warmerdam sought to claim the unapplied concept of manipulating hypothetical spheres, without a specific application of using that conceptual model to control movement of a robot. The court held that the applica-

tion did not define a “useful invention” because the claims defined merely an unapplied abstract idea.

3.3 How is utility treated in proceedings concerning the validity of patents?

Lack of utility is a basis that may be relied upon to invalidate a United States patent. The utility requirement is a statutory requirement under 35 U.S.C. 101, like the other statutory requirements of patentability specified in §§102, 103 and 112 of title 35, United States Code. Thus, like non-compliance with the novelty, non-obviousness or disclosure requirements, non-compliance with the utility requirement of §101 can be a basis for holding an issued United States patent invalid.

3.3.1) What are the requirements for the opposing party to establish such a ground?

At least conceptually, any of the theories identified above in section 3.2.2, above, may be relied upon by the challenger to invalidate the patent. The party seeking to invalidate the patent must establish by clear and convincing evidence that the invention lacks utility. In general terms, it may do so either by showing that the evidence in the application does not establish a practical utility for the invention, or that the claims define an invention that is lacking in or cannot possess a practical utility (e.g., by showing that it defines only an abstract idea, rather than an invention representing an application of the abstract idea).

Lack of utility under §101 is infrequently raised in litigation to invalidate a patent. Several factors contribute to this result.

First, the burden of proof on a party seeking to invalidate a United States patent (i.e., to show that it does not meet one or more of the statutory requirements of patentability) is very high. Such a party must establish by “clear and convincing evidence” that the claimed invention does not comply with the identified patentability requirement. See, 35 U.S.C. 282. Since compliance with utility is a “yes or no” question, an initial determination by the PTO finding compliance with the utility requirement can be very difficult to overcome. If the PTO did not address the question of compliance with the utility requirement during original examination of the application, it may be less difficult to establish a clear and convincing showing of lack of utility. But the difficulty of this burden should not be understated.

Second, in most instances, patents that are alleged to define inventions that lack practical utility are not commercially exploited. Or, correspondingly, inventions that enjoy widespread and significant commercial success often present significant challenges to a third party seeking to establish that the invention does not possess a practical application. Certainly, the patent disclosure can be shown to not disclose information that establishes a practical utility, and such a finding, in conjunction with other evidence, may establish by a clear and convincing showing, that the patented invention does not meet the requirements of §101.

Third, patents claims susceptible to challenge under §101 are also likely to have deficiencies under §112 or §103. A challenge to the patent on the basis that the evidence shows that a person of skill would have to resort to undue experimentation in order to practice the claimed invention, in many cases, will present a more viable target for challenge, even if there is substantial overlap with the issue of utility. *See, e;g., In re Brana, supra.*

3.3.2) What is the practical relevance of this ground for invalidation?

Compliance with §101, despite being raised infrequently, does come into play in a discernable number of cases. See, e.g., *AT&T v. Excel Communications*, 172 F.3d 1352 (Fed. Cir. 1999); *Paine, Webber, Jackson & Curtis, Inc. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.,* 564 F. Supp. 1358; 218 U.S.P.Q. 212 (D. Del. 1983); *Juicy-Whip v. Orange Bang*, 185 F.3d 1364, 51 U.S.P.Q.2d 1700 (Fed. Cir. 1999). The lack of frequency does not suggest it has no practical relevance for invalidation of patents in judicial proceedings (as contrasted to rejections imposed during examination of the application).

4. Conclusions

The utility requirement has been part of the United States patent system almost from its inception. As the Supreme Court noted in *Brenner v. Manson*, "Suffice it to say that the concept of utility has maintained a central place in all of our patent legislation, beginning with the first patent law in 1790 …". The utility requirement clearly has played a significant role in shaping the U.S. patent system, and is interrelated with the other statutory requirements of patentability.

In the U.S., the utility requirement rarely comes into play, but when it does, it tends to arise in emerging and important fields of technology. For example, as noted above, the issue of utility arises commonly in the examination of applications directed to inventions made using genomics research. In many of these applications, the issue of compliance with utility (specific, substantial and credible) is the dominant issue in examination. As such, while it infrequently results in rejections of patent applicants and even more infrequently results in invalidation of an issued U.S. patent, this requirement does play a significant and important role in the U.S. patent system.

Summary

In the U.S. patent system, an invention may be patented only if it is "new and useful." The statutory requirements of patentability of section 101 of title 35, United States Code, thus include a requirement that the invention sought to be patented be "useful" or possess "utility."

Much of the refinement of the requirements imposed by the statutory language setting forth the utility requirement comes through statutory interpretation by U.S. courts. The jurisprudence governing the utility requirement establishes several principles. First, an invention must possess a "practical utility", which has been defined to mean that the invention has "some discernable value that provides an immediate benefit to the public." Inventions that are purely objects of future research may face significant challenges in establishing compliance with the utility requirement. Second, the courts have distinguished "useful inventions" from ineligible subject matter such as an abstract ideas or an unapplied law of nature. Finally, courts have construed the utility requirement to disqualify from protection inventions that conflict with laws of nature (e.g., perpetual motion machines), portraying such inventions as being inherently incapable of being "useful."

The United States does not impose a requirement that an invention have an industrial application as part of the utility requirement or otherwise. However, a disclosed industrial application for an invention can influence the patentability of an invention. It can do so by portraying the invention in a manner that either enhances or diminishes distinctions that may affect determinations of nonobviousness or adequacy of disclosure of the invention. Such disclosures may also influence the determination of compliance of the invention with the utility requirement (e.g., by identifying a "substantial" utility for the invention).

The utility requirement plays a practical role in both the examination of patent applications and in judicial proceedings to review patentability of the invention. Few rejections based on lack of utility are imposed outside of certain technological areas, such as biotechnology inventions (particularly those in the field of genomics), software and business process inventions and pharmaceutical inventions. Fewer instances are observed where a patent is held invalid due to a judicial finding of lack of utility. It should be noted that a finding that an invention lacks practical utility also often gives rise to a corresponding finding of lack of compliance with the enablement requirement under 35 U.S.C. §112, first paragraph, as one cannot teach "how to use" an invention not having utility.

In applying the practical utility requirement, the Patent and Trademark Office will evaluate whether the claimed invention has a specific, substantial and credible utility. Such a utility may be apparent from the nature of the invention. In many cases, however, the patent disclosure must identify

the practical utility. The manner in which the practical utility is set forth in the disclosure may be the focus of careful review by the PTO, particularly in unpredictable fields of technology (e.g., biotechnology). A “specific” utility is one that is specifically related to the claimed invention, as contrasted to a utility that is established only for other inventions in the field of the claimed invention. A “substantial” utility is one that relates to the claimed invention, rather than being a “throw-away” or misleading putative utility. Finally, a “credible” utility is one that is supported by a reasonable foundation of scientific or other evidence.

Despite the relatively low frequency of rejections and findings of invalidity, the utility requirement plays a practical and significant role in the U.S. patent system. It does so not only by imposing a specific obligation on the existence of a practical utility for an invention, but also by influencing how other statutory requirements of patentability are evaluated for the invention.

Résumé

Dans le système de brevets U.S., une invention peut être brevetée seulement si elle est “nouvelle et utile.” Les conditions légales de brevetabilité de la section 101 du titre 35 du “United States Code”, comprennent dès lors une condition que l’invention que l’on cherche à breveter soit “utile” ou possède une “utilité.”

La plus grande partie des détails des obligations imposées par le langage de la loi concernant les obligations d’utilité proviennent de l’interprétation de la loi par les cours américaines. La jurisprudence sur le critère d’utilité établit plusieurs principes. Tout d’abord, une invention doit posséder une “utilité pratique”, ce qui a été défini comme signifiant que l’invention a “une certaine valeur discernable qui fournit un bénéfice immédiat au public.” Des inventions qui sont purement l’objet de recherche future peuvent rencontrer des difficultés importantes pour montrer qu’elles obéissent au critère d’utilité. De plus, les cours ont distingué les “inventions utiles” des inventions inéligibles, telles que des idées abstraites ou une loi de la nature non appliquée. Finalement, les cours ont analysé le critère d’utilité pour que les inventions en conflit avec les lois de la nature (e.g., des machines à mouvement perpétuel) ne puissent obtenir de protection, en qualifiant ces inventions comme étant incapable d’être “utile” de façon inhérente.

Les Etats-Unis n’ imposent pas comme condition pour remplir l’exigence d’utilité qu’une invention possède une application industrielle. Cependant, une application industrielle dévoilée pour une invention peut influencer la brevetabilité de cette invention. Celle-ci peut illustrer l’invention d’une manière qui soit augmente ou diminue les distinctions qui peuvent affecter l’examen du caractère non évident ou du caractère adéquat de la révélation de l’invention. Ces révélations peuvent également influencer la détermination de l’existence de l’obligation d’utilité de l’invention (e.g., en identifiant une “substantielle” utilité pour l’invention).

Les obligations d’utilité jouent un rôle pratique à la fois pour l’examen des demandes de brevets ainsi que lors de procédures judiciaires pour examiner la brevetabilité de l’invention. Peu de refus basés sur le manque d’utilité sont imposés en dehors de certains secteurs technologiques, tels que les inventions biotechnologiques (en particulier celles dans le domaine des génomes), les inventions de programmes d’ordinateurs et les méthodes économiques ainsi que les inventions pharmaceutiques. Il est encore plus rare qu’un brevet soit jugé non valable par une cour pour manque d’utilité. Il faut noter que la décision qu’une invention manque d’utilisation pratique entraîne également souvent une décision similaire en ce qui concerne la violation de l’obligation de “potentiel” selon 35 U.S.C. §112, premier paragraphe, puisqu’il n’est pas possible d’apprendre comment utiliser une invention qui n’a pas d’utilité.

En appliquant la condition d’utilité pratique, le Bureau des Brevets et Marques (Patent and Trademark Office) évaluera si l’ invention en question a une utilité spécifique, substantielle et crédible. Cette utilité peut apparaître de par la nature de l’invention. Dans de nombreux cas, cependant, la présentation du brevet doit identifier une utilité pratique. La façon par laquelle l’utilité pratique est

désignée dans la présentation peut être le sujet d'une étude attentive par le PTO, particulièrement dans des domaines de la technologie imprévisibles (e.g. biotechnologie). Une utilité est "spécifique" si elle est spécifiquement liée a l'invention revendiquée. Une utilité est "substantielle" si elle est liée l'invention revendiquée, et non pas une utilité accessoire ou éventuelle. Finalement, une utilité est "crédible" si elle est supportée par un nombre raisonnable de preuves scientifiques ou autres.

Malgré la relative rareté des rejets et des décisions d'invalidation, les obligations d'utilité jouent un rôle pratique important dans le système américain de brevets. Ces obligations ont un rôle non seulement en imposant une obligation spécifique quant à l'existence d'une utilité pratique pour une invention, mais également en influençant comment d'autres obligations légales de brevetabilité sont évalués pour une invention.

Zusammenfassung

Unter dem US-amerikanischen Patentwesen wird eine Erfindung nur dann patentiert, wenn sie "neu" und "nützlich" ist. Die gesetzlichen Anforderungen für Patentierbarkeit unter Paragraph 101 des 35. Kapitels des United States Code beinhaltet die Anforderung, in das die zu patentierende Erfindung "nützlich" ist oder "Nützlichkeit" besitzt.

Viele Einzelheiten der durch den Wortlaut des Gesetzes vorgeschriebenen Nützlichkeitsvoraussetzung beruhen auf einer Interpretation der Gesetze durch die US-Gerichte. Die Jurisprudenz zur Nützlichkeitsvoraussetzung hat mehrere Grundsätze geschaffen. Erstens, eine Erfindung muss eine "praktische Nützlichkeit" besitzen. Dies bedeutet, dass die Erfindung erkennbar einen Wert hat, der einen direkten Vorteil für die Allgemeinheit beinhaltet. Erfindungen, die ausschliesslich Gegenstand zukünftiger Forschung sind, können erhebliche Schwierigkeiten bei dem Nachweis der Erfüllung der Nützlichkeitsvoraussetzung mit sich bringen. Zweitens, die Gerichte haben nützliche Erfindungen von ungeeigneten Gegenständen wie abstrakte Ideen oder ein nicht angewandtes Naturgesetz unterschieden. Schliesslich haben Gerichte die Nützlichkeitsvoraussetzung angewandt, um Erfindungen, die im Widerspruch mit Naturgesetzen (z.B. Perpetuum Mobile) stehen, vom Patentschutz auszuschliessen. Solche Erfindungen seien von ihrer Natur aus ungeeignet "nützlich" zu sein.

Die Vereinigten Staaten verlangen nicht, dass eine Erfindung eine industrielle Anwendung als Teil der Nützlichkeitsvoraussetzung oder anderweitig haben muss. Jedoch kann eine industrielle Anwendung die Patentierbarkeit einer Erfindung beeinflussen. Das könnte durch eine die Unterschiede vergrössernde oder verringernde Beschreibung geschehen, welche die Bestimmung der Erfindungshöhe der Erfindung beeinflusst. Solche Offenlegungen können auch die Feststellung der Erfüllung der Nützlichkeitsvoraussetzung beeinflussen (z.B. durch die Bestimmung der Erheblichkeit der Nützlichkeit).

Die Nützlichkeitsvoraussetzung spielt eine praktische Rolle bei der Prüfung der Patentanmeldung als auch in gerichtlichen Verfahren zur Überprüfung der Patentierbarkeit der Erfindung. Ausserhalb von bestimmten Technologie Bereichen wie biotechnologische Erfindungen (insbesondere in der Gentechnologie), Software und auf Geschäftsprozesse bezogene Erfindungen und pharmazeutische Erfindungen, werden wenige ablehnende Bescheide aus Mangel einer Nützlichkeit erlassen. Noch weniger kommen die Fälle vor, in welchen ein Patent im Rahmen eines gerichtlichen Verfahrens aufgrund eines Mangels einer Nützlichkeit für unwirksam erklärt wird. Es ist auch zu beachten, dass eine Feststellung, nach welcher eine Erfindung keine Nützlichkeit besitzt auch i.d.R. zu einer entsprechenden Feststellung der Nichterfüllung des Befähigungsnachweises unter 35 U.S.C. §112, 1. Absatz, führt, da die Unterweisung wie eine Erfindung zu nutzen ist, ist nicht möglich bei einer Erfindung, die keine Nützlichkeit hat.

Bei der Prüfung der Nützlichkeitsvoraussetzung bewertet das Patent- und Markenamt, ob die Erfindung eine "glaubhafte", "erhebliche" und "besondere" Nützlichkeit besitzt. Eine solche Nützlichkeit kann von ihrer Natur aus her offensichtlich sein. In vielen Fällen muss jedoch die Offenle-

gung des Patents die praktische Nützlichkeit der Erfindung aufzeigen. Die Art, in welcher die Nützlichkeit in der Offenlegungsschrift dargestellt ist, kann der Schwerpunkt der sorgfältigen Prüfung durch das PTO, insbesondere in unbestimmbaren Feldern der Technologie (z.B. Biotechnologie), sein. Eine “besondere” Nützlichkeit ist z.B. eine Nützlichkeit, die besonders zu der angemeldeten Erfindung in Beziehung steht, im Gegensatz zu einer Nützlichkeit, welche nur für andere Erfindungen in der Klasse der angemeldeten Erfindungen nachgewiesen worden ist. Eine “erhebliche” Nützlichkeit ist eine Nützlichkeit, die einen konkreten Bezug zu der angemeldeten Erfindung hat und kein Nebenprodukt oder keine vermeintliche, irreführende Nützlichkeit ist. Eine “glaubwürdige” Nützlichkeit ist eine Nützlichkeit, die durch angemessene wissenschaftliche Begründung oder anderen Nachweis unterstützt wird.

Trotz der relativ niedrigen Anzahl von Ablehnungen und Feststellungen einer Unwirksamkeit, spielt die Nützlichkeitsvoraussetzung eine praktische und wichtige Rolle im US-amerikanischen Patentwesen, da es nicht nur ein besonders Erfordernis einer praktischen Nützlichkeit einer Erfindung aufstellt, sondern da es auch Anwendung anderer gesetzlichen Voraussetzungen der Patentierbarkeit einer Erfindung beeinflusst.