A Utility

Useful technology in the public domain is a desired result of the patent system, but the utility threshold is not a qualitative evaluation; why is the threshold low, and why not require a better, or a best, utility rather than mere utility?

The utility requirement comes from variants of the word "use" in two locations in the statute. Section 101 authorizes the issuance of patents for "useful" products and processes otherwise meeting patent law's requirements. The enablement requirement in § 112 ¶ 1 requires sufficient disclosure about "making and using" so that a POSITA can "make and use" the invention. The patent applicant must be able to show a utility at the time of filing. This is typically proven through some combination of disclosure in the application coupled with proving what a typical POSITA would know at the time of filing. In other words, the state of knowledge in the field at the time of filing is relevant to the utility inquiry in close cases, of which there are very few.

Inherent in the notion of "making and using" is that the invention has a use and can be used. This straightforward proposition, however, breaks down when one considers possible uses in isolation from the disclosed purpose of the invention.

For example, consider a hypothetical invention about the size and shape of a twelve ounce soda can. The hypothetical disclosure in the patent describes the invention as a scale that can weigh objects to a very high precision, in units as small as one-millionth of an ounce.

Assume that a POSITA constructs the claimed scale.

If the scale will not weigh objects at all, we might say that it is inoperable. It doesn't actually do what the disclosure says it will do in any way. This invention does not meet the utility requirement because it cannot be used in a way related to its purpose. Sometimes the PTO receives applications for fantastic inventions, such as perpetual motion machines, for which it is a scientific impossibility that they are operable, and these applications are therefore rejected for lacking utility because they are inoperable.

Assume further that the inventor placed the following line in the specification: "In addition to its uses and purposes disclosed herein, the scale makes a very attractive desktop paper weight." None of the claims relate to this functionality. If the device did not work at all as a scale, it would seem a cheap loophole to allow the invention to pass the utility requirement based on this statement. This is called a "throw-away" utility: the device is only good for uses that anything with weight or mass can provide. Another example is using millions of units of the device as "landfill" – to fill up a big hole in the ground in order to perhaps construct a building on the site. These examples may seem silly, but the "throw-away" utility concept is in documents provided by the PTO to its examiners about when to issue utility rejections.

Change the hypothetical so that the scale is specifically envisioned by its disclosure to weigh illegal narcotics to very precise amounts. Assume that it does this very well, and won't weigh anything else with precision. Should the PTO issue such a patent? Should the courts deem that such a use meets the utility requirement? This issue is often referred to as beneficial or moral utility, a waning doctrine that is the subject of the case below.

Change the hypothetical so that the claims, in addition to the disclosure, specify the ability to weigh objects in a precision of up to one-millionth of an ounce. Further, assume that once constructed the scale will only weigh objects to a precision of one-tenth of an ounce (please note

the enablement problem facing the invention). First, we might say that the constructed scale has general utility. It does *some* weighing. Even an invention that is a toy device for amusement that merely twirls and twitches does *something*, and in that sense has what is sometimes called general utility. We might also say that the constructed scale provides an immediate, real-world benefit: it has a practical use.

This notion, of real-world, practical benefit at the time of filing, is typically called substantial utility. And while the constructed scale provides a substantial benefit (weighting to a tenth of an ounce is useful), the invention has a problem meeting the utility requirement when evaluated against the claims. The invention can't meet the notion of specific utility because the constructed scale won't weigh objects to the claimed precision. A separate example is from the PTO's utility guidelines: "a claim to a polynucleotide whose use is disclosed simply as a "gene probe" or "chromosome marker" would not be considered to be specific in the absence of a disclosure of a specific DNA target." U.S. PTO, REVISED INTERIM UTILITY GUIDELINES TRAINING MATERIALS, at 5, http://www.uspto.gov/web/menu/utility.pdf. A further contour for specific utility is that it is not met when an application discloses a use that is "so vague as to be meaningless." *In re Fisher*, 421 F.3d 1365, 1371 (Fed. Cir. 2005). There must be a "well-defined and particular benefit to the public." *Id*.

Another concept used in relation to the utility requirement is "credible" utility. This is whether assertions of utility are believable to a POSITA. *Id*.

So, there is an adjective soup of modifiers used in relation to the utility requirement. Such is the list: throw-away, inoperable; beneficial, moral; general, practical, real-world, substantial; specific; credible; well-established. The last, "well-established" is defined by the PTO to mean a utility that is "a specific, substantial, and credible utility which is well known, immediately apparent, or implied by the specification's disclosure of the properties of a material, alone or taken with the knowledge of one skilled in the art." *Id.* at 7.

The alphabet soup, however, breaks down into these conceptual areas: (i) operability; (ii) beneficial/moral utility; (iii) immediate benefit to the public, i.e., substantial utility, with its synonyms of practical and real-world utility; (iv) specific utility, seeking to tie the utility to the claimed subject matter; and (v) credible utility, so that the utility is provable to a POSITA.

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