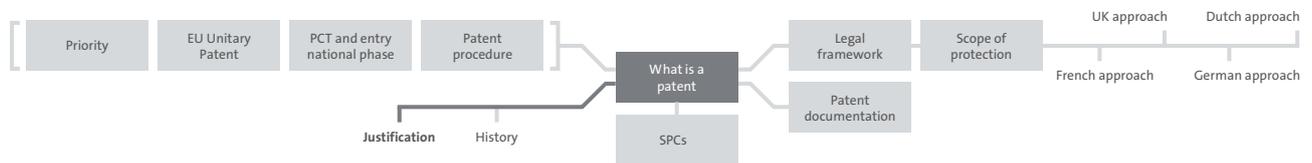


Justification for the patent system (Supplementary reading)

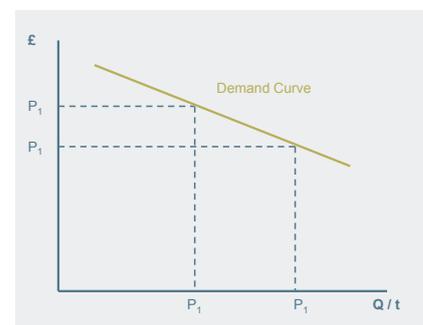


Basic economic considerations

Basically speaking, patents are concerned with information. They contain instructions on how to make, perform or operate a product or process. Information is essentially a free good which cannot be exhausted by use; many people can use the same piece of information at the same time to no ill effect. However, it is also a public good, meaning that, barring some sort of legal intervention, it is not exclusive once disclosed. This causes problems.

In the absence of some sort of protection, once an invention has been disclosed it is freely appropriable and therefore of strictly limited worth to its creator. It is, of course, worth an amount commensurate with its market value. But if copied without recompense to the inventor, this value will drop as competition will push the price down.

By giving patentees an exclusive right over their inventions, patents provide a way of dealing with the problems of the free and public nature of information. However, such exclusive rights are not always seen as beneficial. Like other forms of intellectual property, patents stop people doing things. So there may be a need to provide a justification of the patent system.



Theories of protection

The natural rights thesis is a moral justification based upon the assertion that the individual has a natural property right in his ideas. By extension, creators also have a natural right to the sole exploitation of these ideas, such that unauthorised use by others without compensation must be condemned as theft. This property is exclusive and personal, and therefore society (and also the state) is under a moral obligation to recognise and protect these rights.

The natural rights argument found firm footing in the French Patent Law of 1791, which explicitly recognised the principle in its preamble.

Nevertheless, it is not a theory that finds much support in modern literature. Critics note that if property in ideas is a natural right, there is little logical basis for that right to be limited to a term of years; rather it should be perpetual. In addition, it does not sit comfortably with any requirement of registration or criteria for patentability that the inventor must satisfy before this “property” is acknowledged. Moreover, the natural rights approach would not justify the provision of an exclusive right where both copying and independent creation are similarly prohibited.

More promising, perhaps, as a justification of the patent right is the idea that it is a reward for the efforts of the inventor. Protection is justified in the name of fairness, to secure for the inventor his just reward, proportional to the usefulness of the invention to society. As this reward cannot be guaranteed by reliance upon ordinary market forces, state intervention is justified in the provision of a temporary right.

Nevertheless, despite being based on solid utilitarian thinking, the reward theory is not without its problems. First, if inventors are being rewarded, what are they actually being rewarded for? What is the rationale for being given exclusive privilege? If the patent is granted for their labour, this returns us to the natural rights of the author, which is not a concept that many take too seriously. If the patentee is rewarded for having a good idea, this moves us to ask why it is only the first one to take the invention to the patent office who receives the reward. What is there in the nature of invention that makes independent re-creation less worthy than the initial creation?

More persuasive as a justification of the patent system are the arguments that it provides necessary incentives to invent, to invest in the process of invention and to disclose the fruits thereof. The incentive theories are primarily economic in nature, and are therefore independent of the question of whether justice calls for inventors to be rewarded for their efforts.

The apparent nexus between the patent system and economic development, which paints patents as a lever of industrial progress, has enchanted proponents of the system since the theory was first advanced, and has undoubtedly been a factor in incentive theory becoming probably the most quoted argument in favour of patents.

When used as an explanation of the beneficial effects of patents, the theory balances upon a number of assumptions: First, that growth and industrial progress are socially desirable. Second, that invention is necessary for this progress. Third, that the level of invention/innovation or disclosure will be sub-optimal without incentives. Finally, that patents are the cheapest and most effective way in which these incentives can be provided.

Given the expense of modern research and development, especially in fields such as pharmaceuticals, it is easy to see why the incentive theory is predominant in the justification of patents. Without the sort of protection offered by the patent system, no one would invest in the process of invention, as they would know that the end product could easily be copied by others who had not had to endure the same sunken costs of development. Equally, no one would ever disclose a secret process for the same reason. Without protection, others could use it freely, thereby eroding any advantage the inventor had.

Nevertheless, it is clear that patents can block innovation as well as encourage it. Indeed, the whole point of the patent monopoly is to exclude others during the currency of its term. Therefore a price must be paid and society must be enriched in order for the patent to be justified. In modern patent law, the fundamental price that the patentee pays to society is that of disclosure – making their invention available for use by the relevant public by virtue of their written specification. In return, the patentee gets up to 20 years of exclusivity. After that, the public enjoys its legacy. This is often referred to as the “*quid pro quo*”.

A time-limited monopoly

Evidently, no matter which justification is used, it would be seriously undesirable to allow inventors to monopolise the technology that they have created forever. Giving inventors an exclusivity right allows them to restrict supply. Restricting supply allows the price to be raised. Raising the price means that the social utility of the invention is not maximised – as not all who could benefit from it are able to buy access to it. Accordingly, the patent term is limited to a maximum of 20 years. This is considered to be sufficient time for patentees to make enough profit from their invention to justify their initial investment. Usually it works – a large proportion of patents lapse long before their 20 years are up.

For some, however, 20 years is not enough. Products in certain fields, for example pharmaceuticals and certain agricultural chemicals, require regulatory approval before they can be marketed, and this eats into the 20 years of patent protection that they enjoy. Accordingly, there are **special provisions** covering **Supplementary Protection Certificates (SPCs)** which extend protection for these products for up to five years from the normal date of expiry of the patent.

"No economist, on the basis of present knowledge, could possibly state with certainty that the patent system, as it now operates, confers a net benefit or a net loss upon society. ... If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our current knowledge, to recommend abolishing it."
Machlup, An Economic Review of the Patent System, Study No. 15 of the Sub-Committee on Patents, Trademarks and Copyrights of the Committee on the Judiciary, US Senate 85th Congress, 2nd Session, (1958, Washington) at 80–1

Special provisions

Regulation (EC) No 469/2009 of the European Parliament and of the Council of 6 May 2009 concerning the supplementary protection certificate for medicinal products (Codified version), and Regulation (EC) No 1610/96 of the European Parliament and of the Council of 23 July 1996 concerning the creation of a supplementary protection certificate for plant protection products.