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Inventing the Future

An Introduction to Patents for Small and
Medium-sized Enterprises



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| SUMMARY | | | |
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| Document Title | Lien Verbauwheide Koglin, Esteban Burrone, Marco Marzano de Marinis, Nicole J.S. Sudhindra and Guriqbal Singh Jaiya, <i>Inventing the Future: An Introduction to Patents for Small and Medium Enterprises</i> (WIPO, 2018). | | |
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Abstract

In the WIPO publication ‘Inventing the Future: An Introduction to Patents for Small and Medium Enterprises’ the authors introduce entrepreneurs and SMEs to the fundamental concepts of the international patent system. The publication explains basic issues in patent law, including what patents actually are, the legal requirements for an invention to merit patent protection, practical issues such as where to file for a patent and how much does it cost, as well as issues of commercialisation of patented inventions and enforcement against unlicensed third-party users.

Summary

A patent is a form of intellectual property, along with trademarks, copyright, designs and trade secrets. It is an exclusive right granted by a national or regional — for example European — patent office to the inventor of an invention that is patentable, new, inventive and industrially applicable. In return of the grant of an exclusive right, the inventor is obliged to fully disclose the invention in his application by means of a complete and accurate written description in the patent application.

Owning a patent entails a wide range of benefits for a company: patent exclusivity can strengthen the market position of a firm by preventing free-riding by third parties; it can enable an increasing return-on-investment in innovation; it can be a source of additional revenue from patent licensing to third-party users; it can enable access to third-party technology with cross-licence arrangements; it can enhance the ability of an SME to raise capital; and it can enhance the image of a firm by demonstrating its capacity to innovate.

Not every patentable invention may worth the cost of obtaining and maintaining a patent. Potential applicants have to consider, among other factors, whether there is a market for the invention, whether there are competing alternatives to the invention, are there potential business partners that could help in commercialising the invention, and whether it is possible for third parties to reverse engineer and copy the invention at reasonable cost.

For an invention to be entitled to patent protection it must first be patentable. Discoveries of abstract ideas and scientific schemes, aesthetic creations, computer programs and algorithms, and plants, animals and other microorganisms are not patentable 'as such.'

Moreover, the invention must be novel, it must entail an inventive step, and must be capable of industrial application. The requirement of novelty means that the claimed invention must not be disclosed in the prior art. Inventive step, or non-obviousness, means that taking into account the prior art, the invention would not have been obvious to a person skilled in that particular field of technology. Finally, the requirement of industrial applicability or utility means that the invention must be capable of use for an industrial and business purpose.

Once the patent is granted, the inventor holds the right to exclude others from the use of the invention, including the right to prevent products that embody the invention without prior licence from entering or remaining in the market.

With regard to the practical steps to obtain a patent, an inventor must first undertake a search of the prior art to determine whether the invention is indeed novel. A good starting point for prior art search are previously granted patents and published pending patent applications which disclose a substantial body of technical knowledge.¹ A prior art search can be done based on keywords, patent classification or other search criteria. Other sources of prior art can be scientific literature, conference proceedings, theses, websites, company brochures, trade publications and newspaper articles.

The next step is filing an application for a patent to the relevant national or regional patent office. The application will include a full description of the invention, the patent claims that determine the scope of protection, drawings and an abstract. Some patent offices make it possible to submit applications through the Internet. Patent applications are typically drafted by accredited patent attorneys.

Patenting entails substantial costs. These include the costs of prior art search, the application fees, the patent attorney's fees, post-grant renewal and maintenance fees, and, in case protection is sought for multiple jurisdictions, overseas patent application costs.

The processing of a patent application lasts from two to five years, depending on the jurisdiction. Some patent offices have established fast-track examination procedures. The term of patent protection is typically twenty years from the date of the grant of the patent. In some jurisdictions, patent protection may be further extended for certain sectors, as is the case for instance with the Supplementary Protection Certificate (SPC) for pharmaceuticals.

The scope of patent protection has also a territorial dimension. Patent rights are territorial rights. To obtain protection in more than one jurisdictions, the applicant must file applications to overseas patent offices. The hurdles of obtaining international patent protection are substantially reduced with the international filing system established under the Patent Cooperation Treaty (PCT). PCT applications are submitted to national patent offices or to the PCT Office in WIPO in Geneva, designating additional foreign jurisdictions for which protection is sought.

¹ WIPO offers a free online patent and patent application search service, Patentscope, available at www.wipo.int/patent-scope.

Although holding a patent is not a guarantee of commercial success, it nonetheless opens various business opportunities. The patent holder can commercialise the patented technology directly by embodying it into products, whilst excluding imitators. Patents can also be a valuable source of revenue by either assigning to third parties or by licensing the use of the protected invention. Moreover, a patent might be combined with third-party complementary patent assets in a productive joint venture.

In licensing agreements, the patent holder agrees with a third party to allow the use of the patented invention in return of an agreed upon — usually — monetary compensation. Licensing revenue may take the form of a one-off lump-sum payment, running royalties based on the sales volume of the embodying product, or both.

An important aspect of the patent system is the enforcement of patent rights. Commercialisation of products with technical features disclosed in a patent without prior licence amounts to a patent infringement. Patents enable patent holders to prosecute infringement by unlicensed third parties in court, and obtain relief in the form of compensatory damages and injunctions ordering the infringer to cease and desist from all infringing activities. Patent enforcement may start with a warning letter to the infringer, notifying the infringement and asking the third party to 'cease and desist.' Warning letters and filings of patent infringement lawsuits may sometimes be the first steps towards a negotiated settlement and a patent licence.