

divide their application, but one is to obtain a rapid grant of those claims that the patent office readily accepts, and so have a patent that can be enforced. The applicant can then take the time to pursue the other claims in the divisional application.

In some countries people have the opportunity to submit observations on the patentability of your invention during the examination phase, and they may be able to present arguments about why your patent should not have been granted. For example, in Europe, an opposition can be filed against a patent, but this must be done within nine months of the publication of the grant. If your patent is opposed it may take several years before the opposition procedure is complete. The United States has a similar system called “Post Grant Review”, although the fees for this are much higher than for an opposition at the European Patent Office.

29.2.4 The cost of a patent

How much a patent family will cost depends on a number of factors, the most important being how many countries you file the patent in and for how many years you maintain the patent. The costs can be split into the official fees paid to patent offices, the fees paid to patent professionals and other fees such as translations. The official fees continue through the life of the patent; starting with filing and search fees, then examination fees, grant fees, fees for publication and renewal fees. If you follow a sequence such as shown in Figure 29.1 and file at just one patent office initially, the majority of the cost in the first year will be the professional fee paid to a patent attorney for writing the patent. It is not strictly necessary to employ a patent attorney to write the patent, you could write the patent yourself, but a mistake in the patent text could render your patent useless, so it is generally money well spent. The patent attorney’s fees will depend on the length and complexity of the patent so it is difficult to generalise. However, the preparation and initial filing of a straightforward patent application might cost € 4000–8000. Filing the patent on an international basis 12 months after the first filing may cost a further € 4000–6000 depending on how much additional material needs to be included in the application.

By filing a PCT international application you can delay the moment when you need to choose the full list of countries for your patent family until about two and a half years after your first filing. This is a significant moment in terms of setting current and future levels of expenditure. The costs mount up significantly thereafter, depending on the number of countries in which you wish to protect the patent. Costs can easily reach € 80 000 over the first five years. Some countries will require the text to be translated which adds cost. Once a patent is granted you need to pay renewal fees in each country to maintain the patent. These fees generally increase with the age of the patent, the logic being that if you are continuing to maintain a patent it must be generating commercial revenue and so the various governments want their share. If you are a private inventor, or work for a very small “start-up” company, you will probably need to

obtain external funding within the first few years to finance your patent. Be sure to at least have a Confidential Disclosure Agreement with the other party (see Section 29.6), but preferably file your patent before approaching potential industrial partners with your invention.

29.2.5 Where to find patents

Patents are an important source of technical information along with reference books and journals. In recent years it has become much easier to access patents from the major countries of the world as they are available on the internet free of charge. The European Patent Office has a searchable database called *esp@cenet*[®] which gives free access to around 80 million patent documents from around the world. The *Espacenet*[®] database has patent family information, telling you if similar patents have been claimed in other countries, and legal status information about published patents from over 72 countries and regions of the world. In most cases it is possible to view the actual patent text, or at least text from an equivalent patent from the same family.

There are also commercial databases and search engines for which you have to pay a fee. These can provide extra information and more advanced search and analysis tools. Examples include *Derwent World Patents Index*[®], *Thomson Innovation*[®], *Innography*[®], *PatBase*[®] and *ORBIT* but a web search will find other competing options. There are also companies and organisations you can pay to perform searches for you, an example being the Swiss Federal Institute of Intellectual Property. A professional search is certainly recommended if you are making a critical decision based on the search. If you are concerned about whether your new product launch might infringe someone else's patent then you should consult a patent professional such as a patent attorney for advice.

29.2.6 How to read a patent

When you first look at a patent it can seem unintelligible, almost as if it were deliberately written to be unreasonably repetitive and awkward. However, once you understand how a patent is structured and what information is found in the different sections it all becomes clearer. The language used can also be confusing, with some words in patents having a very particular meaning, which can be different from the way the word is used in everyday conversation. I will attempt to give some pointers to help you if you are new to reading patents.

The way a patent is structured is broadly similar between different countries, although the order of the different sections and the terms used may vary.

When you first see a patent, do not try and read all of it from beginning to end. Start by looking at the front page, then read the claims and look at the drawings (if there are any). That will give you an overview of what the patent is about before you start to read it in more detail. You may already be able to decide that it is not relevant.