Patenting Chemical and Pharmaceutical Inventions

Inventions in the chemical arts can encompass medicines and diagnostic materials, agrochemicals, petrochemicals, polymers, paints, inks and pigments, novel materials, photochemistry, food technology, chemical engineering and many other fields. In many respects, patent practice in these areas is no different from that in other technical fields; however, there some special factors that may need to be considered.

What is a Patent?

Patents may be granted for inventions and give the owner the right to prevent others from using the invention. For more details, see our briefing note "What is a Patent?"

What can be patented?

In general, the patent system allows patent protection to be obtained for products, apparatus, processes and methods of use. Thus, chemical inventions may include physical entities such as new chemical compounds or compositions, and physical acts such as processes for making materials, or methods for using them. It is often appropriate to claim more than one of these aspects in the context of a single patent application; your patent attorney can advise you about this in more detail.

For reasons of public policy and history, in some territories there are restrictions on the subject-matter that can be patented. For example, in Europe it is not possible to obtain a patent for a method of treatment of the human or animal body by surgery or therapy, or for a diagnostic method practised on the human or animal body. This provision was implemented with the aim of protecting medical practitioners from the risk of legal action for patent infringement. However, the exclusion has generally been construed narrowly, and furthermore the European Patent Convention incorporates special rules allowing for the patenting of known substances or compositions "for use in" an excluded method, provided that its use for such a method is not already known. In other countries, methods of treatment may be patentable (e.g. in the USA) and/or the manner of claiming pharmaceutical inventions may require certain claim formats. For this reason, it is essential for anyone wishing to protect an invention in this field to consult a patent attorney with relevant experience.

For inventions in the fields of biology and biotechnology, specific exceptions to patentability and/or special filing requirements may apply. For details, see our other information sheets including "Patenting Biotechnological Inventions" and "Patentability of Micro-Organisms".
How long does patent protection last?

In Europe and most other jurisdictions, the maximum term of a patent is 20 years, counting from the date of filing of the application, and subject to the payment of (usually annual) maintenance fees to the relevant authorities. However, before a patent is granted the patent application is usually subjected to a more or less rigorous examination procedure in order to ensure that it meets the relevant legal requirements. For details, see our information sheets "Overview of European Patent Prosecution" or "Overview of US Patent Prosecution".

Examination may take several years, although in some fields, e.g. pharmaceuticals and agrochemicals, such delays may not necessarily disadvantage the applicant, who may often need to carry out clinical or field trials in order to establish the efficacy and safety of the materials covered by the patent application. A measure of delay thus affords applicants welcome flexibility when lead candidates are still being identified, as well as allowing them to respond to changing business priorities.

Additionally, some countries provide for Supplementary Protection Certificates or the like, by which the term of patent protection for products in certain fields such as pharmaceuticals and agrochemicals can be extended beyond the usual 20-year term when there has been delay in obtaining regulatory approval for the patented product. Our team of patent attorneys has obtained numerous SPCs for our clients in these industry sectors, and is well placed to advise on this aspect.

How we can help

Dehns has a large team of experienced patent attorneys specialising in chemistry-related inventions. Please contact us using the details below if you wish to receive further advice, or if we can assist you in any way.