

Answers to Patent Questions

1. Why has the patent system been established?

There seem to have been various reasons for the patent system to develop. Basically, it was governments and alike authorities who had good reasons to grant certain monopolies to craftsmen provided they disclosed the invention. E.g., in England, so-called Letter Patents were used as inducement for foreign artisans to introduce continental technologies in England. In the US, the patent system was included in the constitution “to promote the progress of science and the useful arts”.

2. What are the 3 major criteria an invention has to fulfill in order to be patentable?

The invention has to be:

- ➔ New (novelty, no prior art)
- ➔ Useful (industrial applicable)
- ➔ Non-obvious (contain inventive step)

3. Is a patent on a particular invention and the protection it gives the same all over the world or may it vary from country to country?

No, it is a national affair and may vary from country to country, even within the EU (although that is bound to change with the introduction of the Unitary Patent, see e.g. <https://www.epo.org/law-practice/unitary/unitary-patent.html>).

4. What right does a patent grant?

The right to EXCLUDE others from using the invention or more specifically: the right to exclude others from making, using, selling, offering for sale or importing the invention described in the claims (in the territory (country) where the patent has been applied for/granted).

5. What right does a patent not grant?

The right to use the invention. The fact that the government recognizes the invention as patentable does not mean that the practicing of the invention is legal (e.g. applying a new compound as drug or pesticide) nor that this does not infringe existing patent rights.

6. What are the basic steps in filing an “international” patent application (PCT-route)? What are the advantages of the PCT-route?

File (provisional) patent application in one of the countries → priority date

Within 12 months: file PCT-application (note: within this 12-month period the description of the invention may be updated).

After 16-17 months: international search report (to find if there is prior art).

After 18 months: (international) application is published

Option: request preliminary examination report

After 20 months: national phase unless preliminary examination requested, then:

After 30 months: national phase

Important feature of PCT: national applications can be postponed until 30 months after the priority date.

RESEARCH BASED BUSINESS

Advantage: postponement of costs = more time to assess the value of the inventions before high costs are made.

7. What is a “priority date”?

The effective date of filing of the first application at which point in time the invention should be novel and inventive (or non-obvious), applicable also to the subsequent applications claiming the priority of the first application.

8. Who owns the patent (application)?

In principle the inventor(s). However, if the inventor(s) are employed it will usually be the employer that becomes the owner, unless the invention is outside the scope of the job. At the Universities in the Netherlands, by law more or less all inventions made in the course of university research (also by students!) are owned by the University. This varies from country to country.

9. Suppose an invention is made in some sort of collaboration between two researchers from two different Universities, who will then become the owner of the patent (application)?

Both Universities.

10. What in most major territories (USA, Europe) is the usual lifetime of a patent?

20 years

11. Does a patent application give protection against use by third parties?

Yes, to some extent, once the application has been published (which can also be done by the patent owner once the first application has been filed). As long as the patent has not been granted, it will not be possible to stop others from using the invention. But once the patent is granted, the owner can claim compensation for the use in the period from the filing to the granting of the patent.

12. What is freedom to operate (or use), what is patent infringement, what is a blocking patent?

Freedom to operate: there are no patents preventing the company from doing what it wants to do.

Patent infringement: using a method, product, etc. which is protected by a patent of someone else.

13. Suppose a patent for producing a drug has been granted in the USA but not in India, can I then produce the drug in India and export it to the USA?

No

14. Suppose a US or European patent has been granted by the proper authorities, does this by definition mean that the patent will remain valid until its expiration date?

No, also a granted patent can be challenged. For this, one needs to go to court and have grounds to argue that the patent should not have been issued, e.g. because there existed prior art that was overlooked by the patent office.

15. You just found out that one of the scientists made a brilliant invention but that the scientist recently published its basic features in a scientific journal; does that mean all is lost (= it is impossible to get a patent)?

No. It may still be possible to file a patent application in the USA and in some other countries that have the so-called grace period. As the USA is a very important market, especially for drugs, this may still be a potentially very rewarding option.

16. Is it safe to publish the invention once the patent application has been filed?

Often, if not generally, it is argued that this is safe. This is especially argued in the context of university-industry collaborative projects: university should be free to publish once the company has filed a patent application, also to hamper the free dissemination of knowledge as little as possible.

However, there can be numerous reasons it can be unsafe or has disadvantages. E.g. in the first filing something may have been overlooked which normally might be corrected within the first 12 months after filing but for what has been written in the publication. Or within the 12 month period, not enough information can be gathered to substantiate the application, which would be reason to withdraw the application and file it again which becomes impossible due to the publication.

17. How can one exploit a patent?

By:

Practicing the invention;
Selling the patent rights;
Licensing the patent rights.

18. What is patent licensing?

To grant someone else the right to exploit the invention. A license may be exclusive, non-exclusive (the patent holder can provide licenses to others) or sole (the license is exclusive but for the right of the patent holder to also practice the invention), can be limited to a certain timeframe, area and scope of use.

19. What are the most usual compensation mechanisms (this is the compensation the party getting the license will pay to the party receiving the license) in pharmaceutical (drug) licensing?

The compensation for a drug licensed at the start or during the development process usually consists of:

- An up-front payment (to be made when the license agreement is signed)
- Milestone payments (e.g. a payment when a certain phase in clinical development has been concluded successfully)
- Running royalties on net sales, usually a percentage of the money the holder of the license receives from selling products or services conceived with the licensed invention.

20. What are the differences between product and process claims and which will (in general) provide for better protection (of e.g. a new drug)?

Product claims protect the actual product (e.g. the chemical composition) regardless of the way it is prepared. Process claims protect the way the product is being prepared. Product claims generally provide better protection as often there are various different ways (processes) through which a product can be made.

21. What might be reasons to withdraw a patent application within 12 months and file a new application for the same invention?

One reason might be that more work needs to be done to substantiate the patent application. It may also be a way to prolong patents protection (which may substantially increase revenue). Other reason is to want to postpone publication: patent applications not withdrawn are published 18 months after filing. A company may find it undesirable that the competition gets this information at an early stage. Prerequisite, of course, is that one is quite sure that in the mean time not somebody else has made the same invention and filed a patent application.