NLO

EUROPEAN PATENT AND TRADEMARK ATTORNEYS

Intellectual Property

Patent Law

Patent law

You are considering filing a patent application for protecting your invention. Perhaps you want to buy a patent from a company or university or you want to know more about protecting your invention and patent law. You may have these or more questions about patents, for example, about strategic decision on what to patent when and where, and about the steps to be followed for a designed strategy. Regardless, below you will find details about the backgrounds of patent law.

QUESTION 1
What is a patent?

A patent is an exclusive right intended to protect a new product, method or technology. A patent allows the inventor (patent owner) to benefit from his invention and prevents it from being copied by competitors. Patents are issued by the government and allow the patent owner to take legal measures against companies trying to copy the patented invention. Competitors can thus be kept at a distance. The government issues patents in order to promote technological developments. When investing in new technology, companies bear a risk, spending time and financial resources. Having a patent means that competitors may not use the patented new technology and benefit for free from the patent holder's investment. In this way, a patent helps to manage the risks and reward the efforts of companies that invest in new technology. The government issues patents for a limited time. The patent expires after a maximum of twenty years (sometimes less), whereafter anyone may apply the technology involved. Under exceptional circumstances, patent lifespan for pharmaceuticals and pesticides may be extended by a maximum of five years.

QUESTION 2
Which inventions are patentable?

Patents are not issued for every invention. Inventions must be of a technical nature. For example, random ideas, discoveries, theories (e.g. mathematical or scientific theories), data presentations, managerial methods or methods for mental labour cannot be patented. Furthermore, inventions must be new, inventive and industrially applicable in order to be patented.

'Novelty': the invention was not known prior to the filing date of the patent application, anywhere in the world, in any form (lecture, article, trade fair presentation, website, brochure). The information revealed by the inventor himself before filing a patent application may also affect the novelty of an invention. Thus patent applications must always be filed before the invention is presented. Once an invention has been disclosed, it can no longer be protected in most countries of the world.

Note: in some countries such as the United States of America, Brazil, South Korea, Japan, Australia and New Zealand, a patent can still be applied for up to one year after a self-publication or any other public disclosure by the inventor (the grace period).

'Inventiveness': the invention is not obvious to experts. This is a subjective concept. In patent granting procedures, the question whether an invention is inventive frequently leads to discussions between the inventor and the patent granting authority. An unexpected or unpredictable result is usually considered an argument for inventiveness.

'Industrially applicable': the invention must have a useful result. In daily practice, this requirement hardly ever presents a problem.

One of the main requirements for filing a patent application is that the invention must be new. On the Internet, there are a number of websites which allow you to search patent databases to find out what inventions already exist.

Several links are available on our website (www.nlo.eu). You may search on keywords in titles or patent abstracts, or on the name of the patent owner, the inventor, the publication number or date. We recommend the following websites:

- nl.espacenet.com and/or www.wipo.int/pctdb/en/ for European and international applications (PCT patent applications).
- www.uspto.gov for US patent applications.

This search could also be carried out for you by an expert of NLO's dedicated search experts team.

Is it possible to protect a concept or idea?

In principle, ideas and concepts cannot be patent protected. The details of the idea or concept, however, can be protected by means of the trademark right, design rights, patent right or copyright. Upon disclosing an idea or concept for example in the context of business relations, upfront signing a confidentiality agreement is recommended before starting for example licensing negotiations. This confidentiality agreement will support ensuring secrecy, for example when introducing an idea or concept to a manufacturer. It aims to secure that such manufacturer may not use that idea or concept without the inventor's permission. NLO can draw up a confidentiality agreement for you, if so desired.

QUESTION 3
What does a patent look like?

A patent is a text describing the invention concerned. In this text, the inventor clearly explains for which invention he requests protection. The text has a front page stating the patent holder's details, the filing date of the patent application and the inventor's full name. This is followed by a description of the invention itself, including the advantages of the invention as compared to then current technological situation.

A patent usually includes drawings and graphs in order to illustrate the invention. The so-called *claims* are at the end of the text. These describe the aspects of the invention for which protection has been requested or ultimately already acquired.

A patent does not need to contain all the details of the invention, but experts should be able to reproduce the invention using the information provided in your patent application. There are two reasons for this.

1. you need to comply with the patent system. You will obtain the right to forbid others from doing something for a long period (20 or 25 years in some cases), but you will be obliged to share your knowledge with society. This knowledge is used as a source of inspiration for further technological innovation.
2. the patent right is an exclusive right against third parties (e.g. competitors), so they must know what they are not allowed to do. This is only possible if the patent clearly describes what is protected. If the invention is not described in a way that others can understand and copy it, a patent may even be nullified.

QUESTION 4
Why should I patent my invention?

Filing a patent application and following the patent granting procedure is an investment in time and financial resources. Upon filing the patent application, it is important to develop a strategy with scenarios that optimise the chance you will be able to recover these investments one way or another.

Strengthening your market and competitive position: holding a patent means you are an innovative party. Buyers and competitors know you are developing new technology. Holding a patent means that you have the exclusive right to your invention for a certain period of time and in a particular country or countries. Nobody else may manufacture, sell or use the patented product without your permission and you can stop imports and exports. Furthermore, no one may use the patented method without your permission. You can therefore use your patent to improve your market position.

Strengthening your negotiating position: applying for a patent may strengthen your negotiating position. This can for example be helpful if, as a small(er) party or big company, you need to bargain with a(nother) large company. For example, by agreeing a cross licence you may also access the counterparty's technology.

Strengthening your financial position: you can license your patent right. This allows others to manufacture, sell and/or use the patented products, or apply the patented method in exchange for a license fee. If you do not wish to avail of the patent yourself, you can also sell it in its entirety.

For each invention you wish to use and/or sell, you should verify in advance whether any third party patents exist that might get in the way. In consultation with you, our advisors can perform a *Freedom to Operate* analysis to identify the risks.

Good reasons for applying for a patent:

- improve your competitive position
- improve your negotiating position (through a cross licence)
- generate income: licence, sale
- positive image to the outside world, for investors
- recoup the investments in technology: use the invention yourself

QUESTION 5
Is a patent application the best way to achieve my goal?

I want to use the invention myself.

If your primary goal is to use the invention yourself and you are not interested in stopping third parties from using it, then perhaps there is no real need to file a patent application. In consultation with you, one of our advisors can conduct the Freedom to Operate investigation to determine whether you can use your invention without infringing third parties' patents. This investigation must be conducted on a regular basis in order to identify the relevance of recently published patent applications. In this situation, we recommend assessing whether publishing your invention as a defensive measure could be beneficial, to create *prior art* and therewith keep others from applying for a patent relating to your technology and invention.

I want to protect an invention from copying, or I want to sell an invention.

If you are planning on achieving at least one of the above goals, then filing a patent application is probably one of your best options. And don't forget that your invention can be given additional protection by applying for a trademark, design or other IP rights. NLO's advisors will help you determine the most efficient protection strategy. If the patent attorney decides that your invention is not (yet) sufficiently developed to qualify for a patent, we advise you to keep your invention secret for the time being.

QUESTION 6
How does the patent granting procedure proceed in practice?

A patent attorney will help you with the administrative and legal steps for obtaining a patent. All you have to do is provide the invention! Most patent granting procedures in which NLO is involved start after filing a Dutch, European or PCT (priority) patent application. Within a period of twelve months after the first patent application, the *priority year*, a new European or PCT application can be filed based on the first patent application. The filing strategy you choose to follow and the countries in which you apply for a patent also depend on the commercial value of your invention and where your clients and/or competitors are located. For example, a Dutch inventor might proceed as follows:

a. Protect the product by filing a Dutch patent application.
b. Protect the product outside the Netherlands as well. The invention seems to have market potential in many countries. Therefore, an international patent application (PCT) is filed within 12 months of submitting the Dutch patent application.
c. If, within thirty months following commencement in the Netherlands, the product (for example) proves interesting for the European and US markets, procedures can be started in Europe and the United States based on the international patent application. The diagram on page 22 shows some of the possible routes. The diagram also gives an indication of the costs for the various procedure components. Costs for submitting a patent application are specified hereafter.
d. If the patent application is granted in Europe, it is possible to obtain a single patent for 17 EU countries together (status as of 1 June 2023) of the total of 39 countries that are members of the European Patent Convention, which can be enforced in all 17 countries together: European patent with *unitary effect* (*Unitary Patent*). In the other countries, after granting, a procedure must be followed individually per selected country in order for the granted patent to take effect.

Throughout the patent filing and granting procedures, the patent attorney will be happy to advise you on the best strategy, depending on your situation.

QUESTION 7
How do I apply for a patent in the Netherlands?

A Dutch patent application is filed at the NL Patent Office, part of the Netherlands Enterprise Agency in The Hague. The government imposes stringent demands on the contents of patent applications. Patent applications must clearly explain to the reader of the patent (the skilled person) how the invention can be used. The text used must be clear. NLO's patent attorneys will help you prepare the patent application.

After submitting the patent application, the government will initiate a novelty search. Your invention will be compared to similar inventions described in earlier filed patents and (scientific) literature. The results of this novelty search will be collected in the *search report*. You will be sent this report, including an initial opinion on the patentability of the invention, approximately nine months after submitting the patent application. The patent attorney will analyse this report for you.

The patent application may be amended after receipt of the search report. The text may be changed, but no new information may be added. The Dutch government will not interfere with the contents of the patent text. Together with your patent attorney, it is your responsibility to formulate the application appropriately. The Dutch procedure will end - providing that all requirements have been met - after the patent has been granted. Dutch patents are granted eighteen months after the filing date. A regular Dutch grant procedure will grant you a patent that will remain valid for a maximum of twenty years.

QUESTION 8
How do I apply for a patent outside the Netherlands?

Holding a Dutch patent means your invention is protected in the Netherlands. In order to apply for a patent in other countries, you will need to submit your application in the countries concerned. After filing a first application (*priority application*) in the Netherlands (or elsewhere), you will have twelve months to decide in which other countries you would like to apply for patent protection. All subsequent patent applications submitted within this year will have the same filing date as the original priority application. This is called the 'priority year'. As you have a whole year to consider matters, you will be able to continue investigating the commercial value of your invention before spending further financial resources on subsequent patent applications. The search report and opinion on patentability which you receive in the priority year should give you a first idea of the chance that the patent will be granted. Taking the time to analyse this report in detail with your patent attorney is therefore vitally important. Besides the different procedures in each country, patent granting procedures based on international patent treaties have been developed whereby a single application might entitle you to rights in several countries. A well-known example is the European patent application.

European patent application

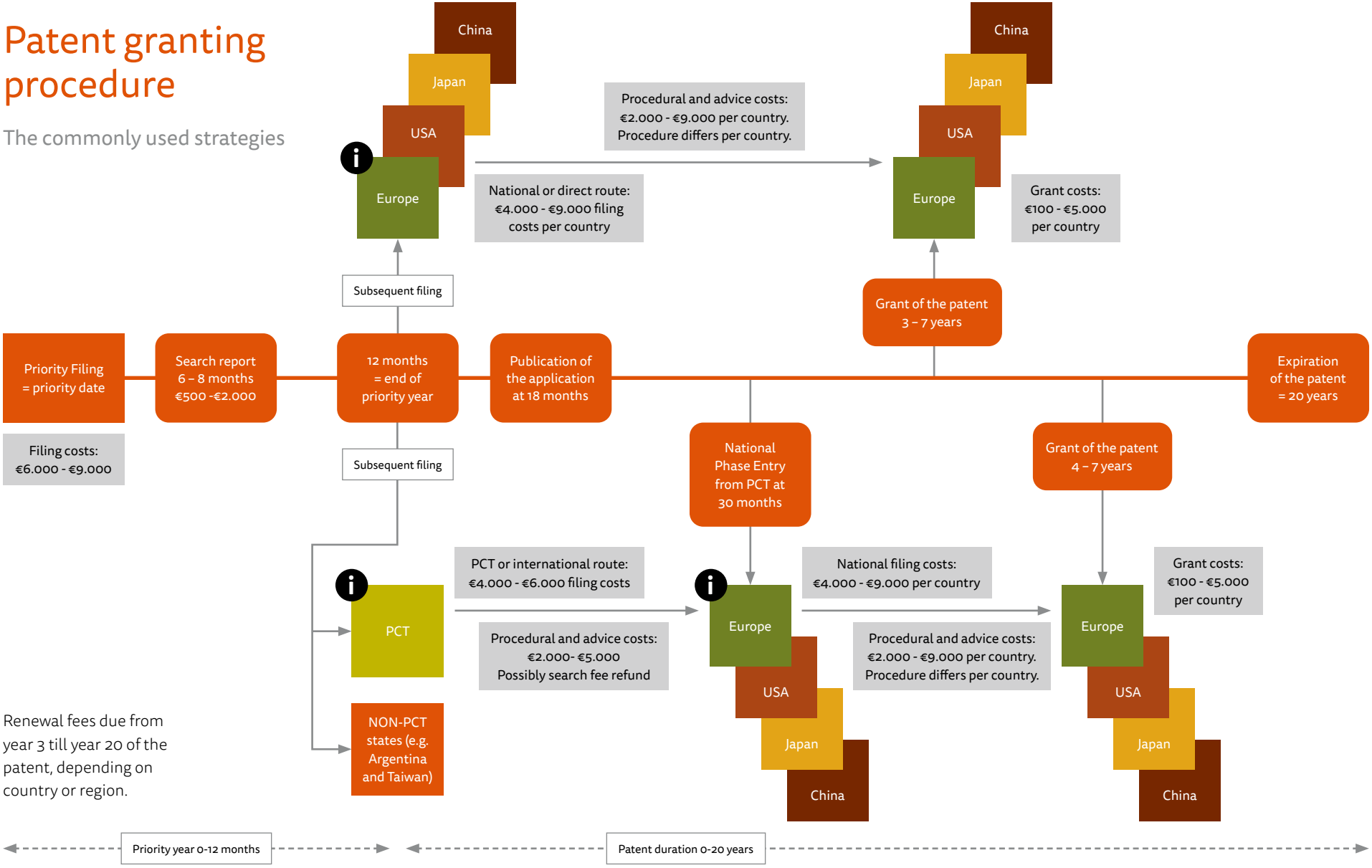
With a European patent application, you can apply for a patent in over 37 European countries. This includes all countries of the European Union and also, for example, Great Britain, Switzerland and Turkey. European patent applications are filed at the European Patent Office (EPO) in Rijswijk the Netherlands, Munich or Berlin (Germany).

The contents of a European patent application may be the same as that of a Dutch patent application (which can be filed in English). The requirements that the application should meet are similar to those in the Netherlands. European patent applications may be filed in Dutch but must also be translated into French, German or English.

After submitting the European patent application, the European Patent Office will initiate a novelty search, similar to that in the Netherlands. The applicant and the European Patent Office will then liaise in order to reach an agreement on the final patent text. Your patent attorney will advise you at each step, depending on your strategy. For example, do you wish to obtain the patent fast or do you need to save time given your R&D- and/or business strategy? After a European patent has been granted, there are two options.

Patent granting procedure

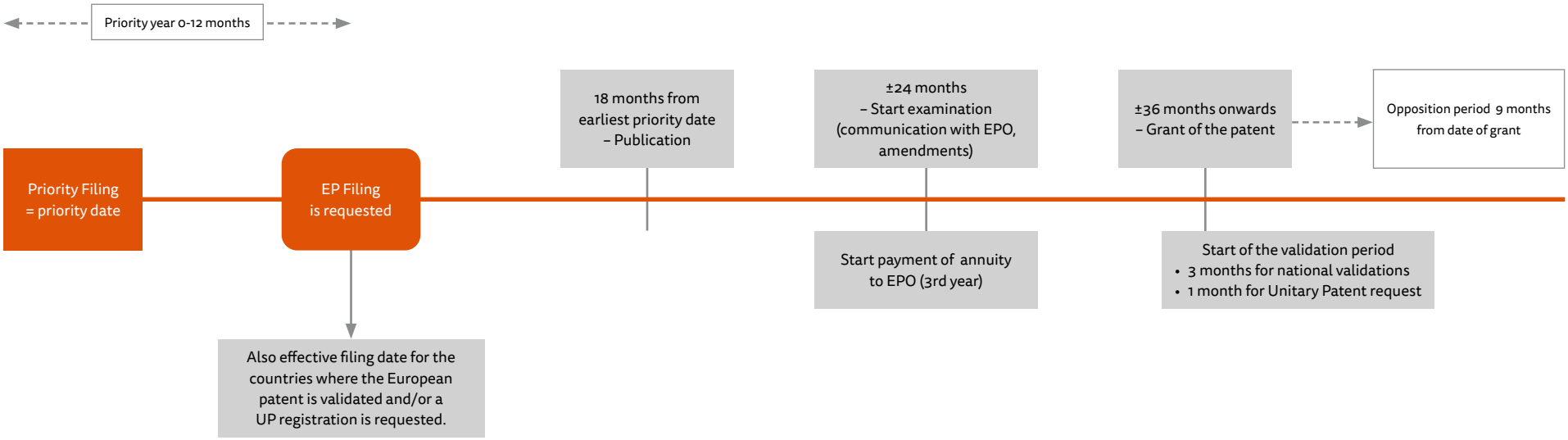
The commonly used strategies



Renewal fees due from year 3 till year 20 of the patent, depending on country or region.

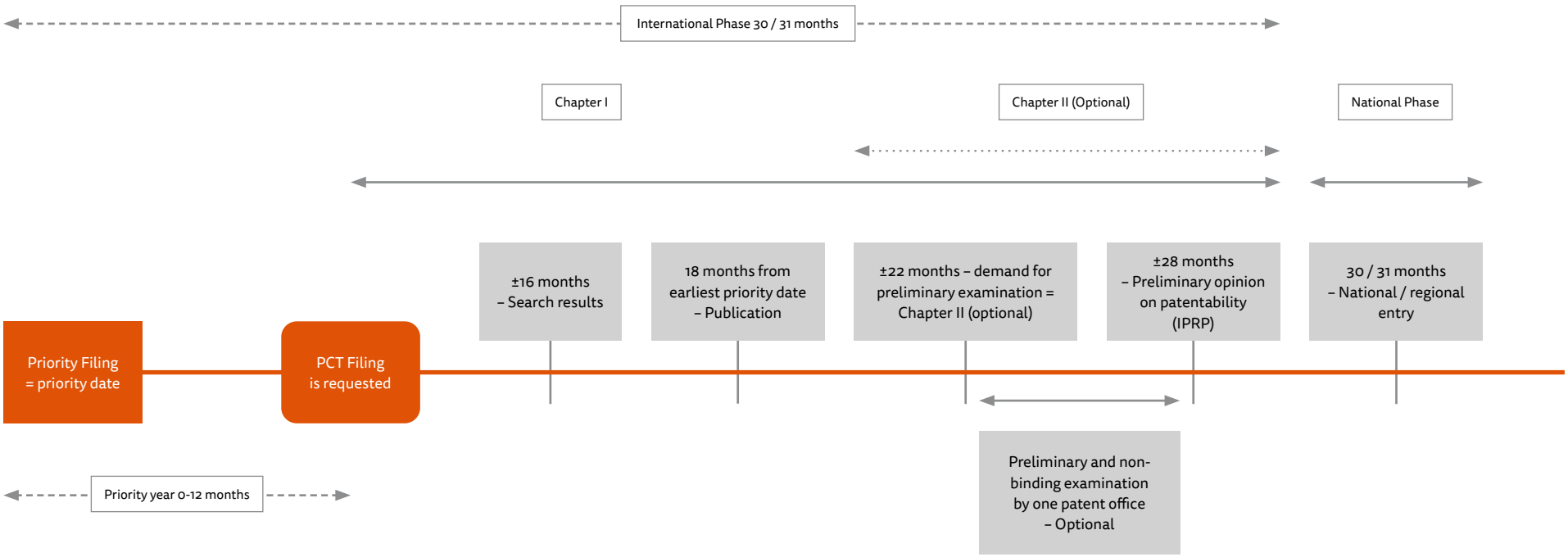
EP

The regional and national phase



PCT

The international phase



1. The European patent is divided into a bundle of national patents ("European bundle patent"). For each national patent, the national patent law of the selected country will prevail. If the European Patent Office grants you a patent, you will need to decide in which countries you actually want your patent to be in force. Depending on your chosen countries, the patent text may have to be translated into the languages of these countries. Costs for such translations can be substantive, dependent on the specific country. It is therefore advisable to bear in mind the translation costs that will be incurred at the end of the European patent application procedure. Fortunately, the obligation to translate the text no longer applies in all European countries. If you need to choose between individual patent applications in a number of European countries and one European patent application, the rule of thumb is that costs for the European patent application will be lower if you are interested in protecting your patent in at least three countries.
2. Since 1 June 2023, as an alternative or in addition to the European bundle patent, it is possible to apply for a single patent with unitary effect for your granted European patent for most countries of the European Union together, which will be effective in the countries of the European Union that have signed up to the Unitary Patent Convention. This is also known as the Unitary Patent.

International patent applications (PCT)

When filing a patent application, it is often difficult to establish the commercial value of an invention in the different countries. Even during the priority year, it may still be difficult to choose the countries where you would like to apply for patent protection. A patent granting procedure may involve relatively high costs. But, if patent applications are not filed, you could miss out on substantial income. In these cases, a PCT patent application provides a solution. Filing one PCT application is equivalent to submitting a patent application in all the countries that have signed the Patent Cooperation Treaty. Currently, these are over 150 countries including most of the industrialised countries including the European countries, the United States, India, Japan, Canada, Australia, Brazil, China, Indonesia and South Korea.

There are a number of PCT authorities in the world where PCT applications can be filed, including the NL Patent Office and the European Patent Office (EPO). The PCT authority conducts a novelty search and draws up a novelty report. It then gives its opinion about the novelty and inventive character of the invention. You will have the opportunity to change the claims and/or send your arguments to the PCT authority to attempt to ensure that your invention is deemed to meet the criteria of novelty and inventiveness. Unlike the European patent granting procedure, the PCT procedure does not end by granting the patent, but rather by publishing a report about the patentability of the invention, the International Preliminary Report on Patentability (IPRP).

However, you only need to select the countries where you wish to apply for patent protecting your invention within 30 months of the start of the procedure. By the time you start selecting those countries, the IPRP will have provided you with a clear indication whether it is sensible to continue with the procedure. One significant advantage of a PCT application is that initially, i.e. during the first 30 months, you can keep costs low. After that, costs can increase considerably, depending, among other things, on the number of selected countries in which you want to apply for patent protection, but by then the commercial value of the invention is usually much more apparent than at the beginning of the procedure.

QUESTION 9
What is a Unitary Patent?

As indicated under question 8, a European bundle patent is a bundle of national patents. A Unitary Patent is one exclusive right to an invention in the participating EU member states. With the Unitary Patent, thanks to the central granting as a single patent, it applies that:

- After this is granted, there will be one right that is valid in the majority of EU member states.
- When it is granted, a single translation will suffice, and such that an English version is always available.
- The maintenance fees are paid centrally. Unitary patent disputes (infringement, validity, ownership) can be settled before one specialist Court of Justice (*Unified Patent Court*) across the European Union. The patent granting procedure, by the European Patent Office, will not change, but after the patent has been granted, matters will be much clearer for the patent holder and also for the public.

To keep up to date on the latest developments concerning the Unitary patent, please visit The UP and the UPC | NLO.

QUESTION 10
How much does a patent application cost?

Drafting a patent application requires customization. The complexity of the invention and the scope of the application determine the costs involved. The costs of the patent granting procedure very much depend on whether the patent granting authority has any objections to the patent application. In addition, costs are strongly related to the number of countries in which patent protection is desired. Despite these uncertainties, it is possible to give a number of indications. Distinguishing the following cost items is useful:

- **Drafting and filing the patent application, including the cost of having the responsible authority prepare a novelty report:** this can cost anywhere between € 7.000 and € 16.000. Preparing a patent application for complicated subjects (e.g. pharma, biotechnological and software inventions) can well be several thousands of Euros higher.
- **Granting procedure:** at the end of the priority period, if protection is required in other countries as well, one or several follow-up applications must be filed. This can be done using the PCT application (filing and procedural costs are approximately € 6.000 - € 12.000) or directly through national and/ or regional patent applications (costs are approximately € 5.000 - € 10.000 per country/region). In the patent granting phase, matters are usually discussed with the Examiner to decide on whether the patent application can be granted. The advisory costs involved very much depend on the scope of the discussion, but are estimated at € 2.000 to € 8.000 per country/region.
- **Translations:** while following the different international procedures, the patent application will have to be translated for some countries. The average translation costs are approximately € 1.500 - € 20,000 (depending on the number of pages).
- **Maintenance fees:** after a number of years, maintenance fees will be charged annually. The average annual costs for such *renewal fees* are between € 100 and € 1.500 per country. Costs will usually rise during the patent lifespan.

Or perhaps you have invented something but before you apply for a patent, you wish to explore the market and present your invention to third parties. Given the novelty requirement set by patent law, disclosing the invention under the strictest confidentiality is vital. This means a good confidentiality agreement is required. A customised confidentiality agreement is also indispensable for transferring your intellectual property rights. In short, you need a better picture of the possible options for preparing and assessing agreements.

NLO patent attorneys are regulated by Netherlands Institute of Patent Attorneys, EPI and IPReg. **www.nlo.eu**

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