Možnosti ochrany technických řešení v České republice

Engelová - Pavková, Jana
2013

Seminar on Providing Access to Grey Literature 2013: The 6th year of the seminar focused on storage and providing access to the grey literature, 23th October 2013 [online]. Praha: National Library of Technology, 2013. Available at WWW: http://nusl.techlib.cz/Sborniky. ISSN 1803-6015.

POSSIBILITIES FOR PROTECTION OF TECHNICAL SOLUTIONS IN THE CZECH REPUBLIC

JANA ENGELOVÁ PAVKOVÁ

jpavkova@upv.cz

Industrial Property Office, Czech republic

Abstract
The presentation focuses on protection of inventions by patents and utility models in the Czech Republic. Proceedings before the Industrial Property Office will be introduced for both above mentioned industrial rights as well as the information about financial and time aspects and possibilities they provide. European patent and current development in unitary patent will be presented. Protection of inventions under Patent Cooperation Treaty will be described. Freely accessible patent databases will be mentioned together with patent classification systems.

Keyword
Industrial property, industrial rights, inventions, patents, utility models

Protection of industrial property generally, and patents in particular, play an important role in today's knowledge-based world. Large companies, small and medium enterprises, as well as startup firms from all over the world use them in order to protect their own solutions against copying and to maintain their competitive advantage. The patent system is also used by universities and research institutions as a tool enabling them to commercialize results of their research and development activities, thus facilitating transfer of technologies to their industrial partners.

In the Czech Republic, technical solutions can be protected by patents or utility models, based on an application for an invention or on a utility model application filed with the Industrial Property Office (IPO CZ). Here, applications for an invention are subject to a thorough formal and substantive examination which results in the grant or refusal of patent protection. A patent maintains validity, depending on the will of its owner, for a maximum period of 20 years after filing the application. Utility models represent an ideal tool for protection of less complicated solutions. The utility model application procedure consists only of a formal examination and is, therefore, significantly quicker. A utility model registration certificate can be maintained in validity by its owner for the maximum of 10 years. Patents and utility models are subject to the strict territoriality principle which means that they are valid only in the country or region where the given right was granted.

1. WHAT CAN BE PROTECTED BY PATENT

A patent can be granted for a technical solution meeting three basic criteria of patentability. The invention in question has to be new, susceptible of industrial application and involve an

inventive step. Novelty is considered globally; as of the day of filing the patent application, its subject-matter must not have been published in any manner. A prototype displayed at an exhibition, a speech delivered at a conference, an article published in a journal, dissertation work, etc. – these are all steps that may prevent later filing of an application for patent protection in respect of the given solution. Anything that was made available to the public in any manner at the time of filing the application, is considered as the prior art and can be prejudicial to novelty. The solution is industrially applicable if it can be repeatedly produced. The invention must not be just a theoretical phenomenon, it has to be applicable in industry, agriculture, or other fields of human activity, and it has to provide practical benefits. In order for a particular technical solution to involve inventive step, such solution must not be obvious to a person skilled in the art. Therefore, patents can only be granted for results of creative intellectual work, not for improvements that can be achieved virtually by anybody based on the knowledge of the prior art.

Discoveries, scientific theories and mathematical methods, aesthetic creations, schemes, rules and methods for performing mental acts, playing games or doing business, computer programs and presentation of information are not regarded as inventions. A patent cannot be granted for plant and animal varieties, surgical, diagnostic and therapeutic methods for treating humans and animals, or for inventions that are contrary to public order or morality.

2. ALTERNATIVES TO IPR PROTECTION

Protection by means of a patent or utility model is not necessarily the most suitable solution in all situations. It is necessary to realize, inter alia, that by filing an application concerning an invention or a utility model application, the applicant gives their consent to subsequent publication of the technical solution description which has to be explained clearly and fully enough so that a person skilled in the art is able to perform it. In many cases, e.g. in case of formulas, technical processes, etc., it is necessary to consider the use of other possibilities for protection, particularly secrecy (trade secret) or qualified publication of the invention (by publishing your invention, you make it impossible for other persons to protect the same solution and to prevent you from its use).

The fact that the given technical solution meets all patentability criteria does not mean that the solution will be commercially feasible and successful. Therefore, everybody should responsibly consider, prior to filing the application, which is the right path they should take. It is an important business decision that should be taken based on careful consideration of all pros and cons. In particular, it is necessary to ask the question whether the given invention shows a satisfactory commercial potential, whether there is a sufficient market for it, what similar products already exist, how great is the improvement brought by the new solution when compared with such products, whether there are potential licensees, who could help with introduction of the product to the market, how big is the probability that somebody else will come forward with my solution, how difficult it will be to protect my rights against possible infringers, etc.

3. OWNERS' RIGHTS

Upon the grant of a patent or utility model, or upon registration in the register, the owner of such patent or utility model acquires the right to use the technical solution or to give consent to such use to other persons (grant a licence, the right to transfer, sell or donate). Nobody is allowed to infringe this right without consent, i.e. to manufacture, offer, import, store the subject-matter of protection or to launch it in the market.

4. PROCEDURES BEFORE THE INDUSTRIAL PROPERTY OFFICE

The Industrial Property Office is the authority that conducts patent and utility model application procedures in the Czech Republic. Therefore, the respective application has to be filed with this Office. The application can be filed electronically (in which case guaranteed electronic signature is required) or by means of paper forms. By filing the application, the applicant acquires the right of priority. The application has to include description of the technical solution, completed with drawings, if appropriate, patent claims (clear, legally binding definition of the subject-matter of protection), and, in case of inventions, also abstract.

4.1 PATENTS

The purpose of the preliminary examination is to establish whether the application meets all formal requirements and whether the subject-matter of the invention is not obviously unpatentable. In case all necessary criteria are met, the application will be published in the IPO Bulletin 18 months after the priority date.

No later than 36 months after filing the application, the applicant has to file the request for a full examination, which considers whether the given technical solution is new, industrially applicable and whether it includes an inventive step. If all these requirements are met, the patent is granted in respect of the invention. The information about granting or refusal to grant the patent is again published in the IPO Bulletin.

The average length of the patent application procedure before IPO CZ amounts to 3-4 years. There are certain administrative fees associated with the application procedure and with maintaing validity of the patent. Some of these fees:

- Filing of an application 1,200 CZK
- Request for full examination 3,000 CZK
- Maintenance fees
- 1st-4th year (per year) 1,000 CZK
- 5th-8th year (per year) 2,000 CZK

- 9th year 3,000 CZK
- 10th year 4,000 CZK
- For the 11th and each subsequent year, the fee is always increased by 2,000 CZK.

4.2 UTILITY MODELS

Utility models are registered in the respective register on the basis of the so-called registration principle, which means that only a formal examination of registrability is carried out. If the application meets the necessary requirements and the subject-matter of the invention is not obviously unpatentable, the utility model will be registered. Information about such registration is published in the IPO Bulletin.

The average length of the utility model application procedure before IPO CZ amounts to 3 months. A registered utility model is valid for the period of 4 years after filing the application. The period of validity can be extended twice at the owner's request, always by 3 years. The basic administrative fees associated with the utility model application procedure and with maintaining validity of the utility model:

- Filing of an application 1,000 CZK
- Extension of the term of validity 6,000 CZK

5. PROCEDURES BEFORE THE EUROPEAN PATENT OFFICE

The European Patent Organization is an intergovernmental organization established in 1977. It has two bodies: European Patent Office (EPO) and the Administrative Council, which supervises the Office's activities. EPO is not integrated in the structure of EU institutions, currently it comprises 38 member states and 2 associated states. The Czech Republic is the member state since 2002.

The European patent application can be filed by any person; citizens of any member country do not have to be represented before EPO. The application can be filed electronically or traditionally. In case of filing a paper application, it can be delivered directly to EPO, or through the respective national office (IPO CZ). The application has to be filed in one of EPO's official languages, i.e. in English, German or French.

The following fees have to be paid within one month after filing the European patent application:

- Filing fee 200 EUR
- Search fee 1,165 EUR

Applicants from countries where the official language is not one of the three official languages of EPO (including applicants from the Czech Republic), are entitled to 20% discount on certain fees. EPO also privileges electronic filings by discounted rate of certain fees.

The European patent application procedure consists of the following steps:

- Formal examination – this examination establishes whether the application includes all necessary information.
- Processing search report – search report contains information about documents that are non-prejudicial in relation to novelty and inventive step of the technical solution for which the application is filed.
- Publication of the application and the search report – published in the European Patent Bulletin 18 months after the priority date.
- Substantive examination – is carried out upon written request filed by the applicant. All patentability criteria are considered.
- Granting or refusal to grant a patent – which is based on conclusions of the substantive examination, the final decision is published in the European Patent Bulletin.
- Patent validation – after the European patent is granted, it has to be validated in the member countries where the applicant wants to have it protected. For the purposes of validation, the patent has to be translated into all languages of the countries where it is to be valid.

Within the period of 9 months from the grant of the patent, any person may file an objection against it that will be dealt with by EPO's independent Board of Appeal.

Other selected fees associated with the European patent application procedures:

- Fee for designation of one or more contracting states 555 EUR
- Request for substantive examination 1,555 EUR
- Maintenance fees
- For the 3rd year 445 EUR
- For the 4th year 555 EUR
- For the 5th year 775 EUR

It has to be emphasized that the European patent does not represent a unitary all-European solution for the applicants. Ultimately, it is always a sort of a bundle of national patents governed by the legal regulations of the individual states. Possible court disputes fall under the jurisdiction of the courts from the respective countries. However, the existing European patent system certainly offers simplification and greater availability of patent protection in European countries to the applicants.

6. UNITARY PATENT

As described in the previous chapter, there is currently no instrument in the field of patents that would secure unitary protection in all states of the European Union. This makes the European patent relatively complicated and expensive, particularly when compared with US or Japanese patents. A relatively essential step on the path to the so-called unitary patent was taken in December 2012, when the Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection was adopted. In the course of 2013, the Agreement on a Unified Patent Court is expected to be signed by the member countries. Currently there are two expert committees working that consist of representatives from the member states and the European Commission. These committees are encharged with resolving the disputed issues. The institute of the Unitary patent can be probably expected to start functioning as from 2015.

In any case, the Unitary patent system will not replace the existing European patent, these two institutes will be functioning parallelly. The Unified patent procedure will be conducted before EPO, possible court disputes in respect of such patents will be settled by the Unified Patent Court.

7. PROCEDURE UNDER PATENT COOPERATION TREATY (PCT)

In addition to the national and regional (European) patent route described above, Czech applicants have also the possibility to protect their technical solutions through the so-called international route on the basis of PCT. So far, 148 countries have joined this international treaty. Its administration falls under the competence of the World Intellectual Property Organization (WIPO) attached to the United Nations, based in Geneva.

The international application can be filed by any citizen of the PCT contracting state, either in English, German, or French. The application can be filed through the national office, EPO or directly with WIPO. If the applicant intends to derive their PCT application from a previous national application, the PCT application has to be filed within 12 months from the priority established by the national application.

The PCT application procedure can be divided into two phases: international and national. In the international phase, search is carried out within 18 months after the priority date and is published together with the application. Based on the search report, the applicants may decide whether and in which countries they will seek protection for their invention. There is a limit of 30 months from the priority date for entry into the national phase. Afterwards, this phase proceeds in accordance with the national legislation of the respective country. PCT

applications are dealt with in the same manner as national applications. Similar to the European patent, PCT also leads to a bundle of national patents that continue to be governed by the legal standards of the countries in which they were granted. There is no such thing as "international patent".

Therefore, the main advantage of the PCT procedure is the fact that the applicants obtain additional 18 months during which they can consider their strategy, research possibilities in the markets of the individual countries, etc. Also the time when the applicant has to start paying fees associated with patent protection in the individual countries is thus postponed. Decrease in the initial costs related to translations and the possible legal representation in the individual countries where the applicants want to have their solutions protected is also important.

Some fees associated with filing PCT applications:

- Priority right proof (from IPO CZ) fee 600 CZK
- International filing fee 1,100 EUR
- International search 1,875 EUR

WIPO offers certain discounts on some of its administrative fees, e.g. online filing.

8. PATENT CLASSIFICATION SYSTEMS

There are millions of new patent documents in many languages every year in the world. In order to facilitate work with them, classification stems have to be used. In our circumstances, the most often used are International Patent Classification (IPC), European Classification (ECLA) and Cooperative Patent Classification (CPC).

IPC administration falls under the competence of WIPO. It is a hierarchy classification system with alphanumeric notation. At the first level, the areas of technology are divided into 8 sections designated with letters A-H. Currently, IPC consists of approximately 70,000 classes; it is continuously updated. This classification system is used by IPO CZ.

ECLA is a classification system based on IPC, it is, however, much more detailed (altogether approximately 134,000 classes). It was developed, and used until 2012, by EPO for its needs. Since 2013, EPO uses CPC which is a result of cooperation with the US Patent and Trademark Office (USPTO). This classification was created by merging ECLA and US Patent Classification. The basic structure corresponds with IPC; CPC contains altogether approximately 250,000 classes.

9. FREELY ACCESSIBLE PATENT DATABASES

The overwhelming majority of patent offices publish their databases freely in the Internet. IPO CZ is not an exception. Its database offers to the public Czech invention applications

published since 1991, granted patents as from the number 1, European patents valid in the Czech Republic and the registered utility models. Full texts of all documents are available in PDF, the database also offers the possibility to follow the progress of the procedure in respect of a particular application.

The Espacenet database built by EPO is a significant source of information. The database currently contains information from more than 90 countries all over the world, altogether more than 70 million documents. Most documents are available in full text, there is information about the legal status and it is possible to follow the progress of procedures. A machine translator, a result of cooperation between EPO and Google, is widely used. Currently, a possibility is offered for translation from/into English into/from other 21 languages (including Czech). By the end of this year, it should be possible to obtain a machine translation from/into a total of 24 languages – all languages used in the EPO member states + Japanese, Chinese, Korean and Russian.