# CWS/ATR/PI/2019/CZ

Annual Technical Report on Patent Information Activities in 2019 submitted by Industrial Property Office of the Czech Republic

# I. GENERAL OVERVIEW OF RECENT DEVELOPMENTS IN PATENT INFORMATION ACTIVITIES CARRIED OUT BY THE OFFICE

Statistics: changes in terms of application filings and grants with respect to previous year; trends or areas experiencing rapid changes

# Changes experienced in terms of application filings and grants with respect to the previous year

The number of patent applications filed by domestic applicants in 2019 has increased by 11% compared to 2018. Domestic applicants in 2019 filed 765 applications for inventions, with the greatest number in the fields of transport and storage; measuring, optics, photography medical, dental and hygienic preparations.

In comparison with the year 2018, there were changes in patent and utility model activities as follows:

	2019	Compared to 2018
National patent applications	813	+11 % (732)
Utility model applications	1301	+4% (1247)
PCT international applications	18	-25 % (24)
National patents granted	509	-1 % (512)
Utility models registrations	1128	+0 % (1130)
Supplementary protection certificate, applications	53	+2 % (52)
European Patents granted	137787	+8 % (127625)
IPO CZ received EP translations	7576	+7% (7054)
EP patents valid in CZ	43563	+10 % (39612)
National patents valid in CZ	4851	-11 % (5439)
National utility models valid in CZ	7734	+2 % (7564)

# Trends or areas experiencing rapid changes with respect to the previous year

As regards the representation of individual segments, most of patent applications concerned transport and storage (15,87 %); measuring, optics, photography (9,59 %); medical, dental and hygienic preparations (5,90 %); etc.

Regarding utility model applications, most of them came from the sectors of transporting, storing (12,53 %); building (10,45 %); measuring, optics, photography (9,61 %).

Other matters and useful links (URLs): annual report of the Office, news page, statistics, etc.

#### **Statistics**

Since 2000 the Annual Reports and statistics have been available at the Office's website: http://www.upv.cz/en/publications/annual-report/annual-report.html

The Bulletin: http://www.upv.cz/en/publications/ipo-bulletin.html

## The Office website

The helpdesk: mailto: helpdesk@upv.cz

List of news and events: http://www.upv.cz/en/ipo/current-news/actual.html

Electronic filing of applications: http://www.upv.cz/en/client-services/on-line-filing.html

Element of proceedings: https://isdv.upv.cz/webapp/!resdb.rejst.frm

Legislation related to all IP rights: http://www.upv.cz/en/legislation.html

FAQ: http://www.upv.cz/en/information-sources/faq.html

Search service – patent and utility model databases (IPO, EPO, WIPO) (basic search/advanced search): http://www.upv.cz/en/client-services /online-databases/patent-and-utility-model-databases.html

Use of an electronic classification system to check IPC (International Patent Classification): http://www.upv.cz/en/publications/classification-systems/classification-patents.html

# II. SERVICES AND ACTIVITIES RELATED TO PATENT INFORMATION CARRIED OUT BY THE OFFICE

Information and support provided by the Office to applicants regarding filing on paper and/or e-filing (instructions, seminars, etc.) - URLs

IPO CZ carries out patent granting procedure resulting from patent application that can be filed by the inventor or by a person; this right was transferred to by the inventor. Patent applications ordinarily follow a set form which must also include a description of the invention and optionally (if necessary) related drawings and so-called patent claims. The claims precisely define the subject-matter, for which the protection is requested. Application forms are available in the filing room of the IPO CZ and can also be downloaded from the IPO CZ website. Applications can be filed in person, by post or electronically.

The Office website <a href="http://www.upv.cz/en.html">http://www.upv.cz/en.html</a> is a rich source of information.

Electronic filing of patent applications: https://isdv.upv.cz/webapp/EPOD.epweb.home

Element of proceedings: https://isdv.upv.cz/webapp/!resdb.rejst.frm

Search service: http://upv.cz/en/client-services/information-services/search-services.html

Fees and payments: http://www.upv.cz/en/client-services/fees.html

Information on business procedure related to patents: http://upv.cz/en/ip-rights/patents.html

Information on Services: http://www.upv.cz/en/client-services/information-services.html

Publications: http://www.upv.cz/en/publications.html

Patent and utility model databases: http://www.upv.cz/en/client-services/online-databases/patent-and-utility-model-databases.html

Patent classification system: http://www.upv.cz/en/publications/classification-systems/classification-patents.html

## Availability of the application dossier in electronic form

The content of the file (element of proceedings) is available at: https://isdv.upv.cz/webapp/!resdb.rejst.frm

Classification<sup>1</sup>, preclassification<sup>2</sup> (if applicable), reclassification<sup>3</sup> activities; classification systems used (e.g., International Patent Classification (IPC)); matters concerning indexing of patent information

IPC classification, Advanced Level, has been used since January 1, 2006.

All patent documents published since 1970 were reclassified to this edition of IPC classification.

CPC classification has been implemented in May the 1st 2016.

### Abstracting, reviewing, and translation of the information contained in patent documents

Published patent applications, granted patents, and registered utility models are searchable by date of filing, publication, grant and registration, by priority date, by number of application, patent and registration, by name of inventor, applicant and proprietor, by IPC classification and CPC classification, by title and abstract, description and claims (for documents published after 1973) and by document status.

Search system in bibliographic data on the web site allows full-text processing.

# III. SOURCES OF PATENT INFORMATION PROVIDED BY THE OFFICE

Main types of publications of the Office (patent applications, full text, first pages, abstracts, bibliographic data, granted patents, etc.), medium (on paper, on CDs, online - URLs)

Office notices are published weekly in the electronic Official Bulletin of the Industrial Property Office of the Czech Republic. Notices are also published at the Office's website.

Mass storage media used are hard discs, magnetic tapes for backup and paper.

Official Gazettes: main types of announcements, frequency of publication, medium (on paper, on CDs, online - URL), etc.

### The Bulletin contains the following types of announcements:

Lists of patent documents are published in the Official Bulletin of the Industrial Property Office of the Czech Republic. Starting from 2007 the Bulletin is published weekly in an electronic form only (updated on Wednesdays) and placed on the Office's website (http://www.upv.cz/en.html). The standard content of the chapters regarding published patent applications, granted patents and registered utility models is:

- published patent applications arranged according to the number of applications and according to IPC symbols including list of applicants;
- granted patents arranged according to the number of patents and according to IPC symbols including list of owners;
- registered utility models arranged according to the number of registrations of utility models and according to the IPC symbols including list of proprietors;
- · official decisions, legal status and announcements;
- · corrections and alterations.

No prior registration or subscription to view the Bulletin is needed. The information as published should be the authentic one for legal purposes. As from No. 1/2000, the Official Bulletin has been available on the web site of the IPO CZ as an electronic book in PDF format.

## Mass storage media used (paper, microforms, optical storage, etc.)

Mass storage media used are hard discs, magnetic tapes for backup and paper.

Information products and patent document collections (coverage, medium, etc.) available to examiners, including external collections and databases

- Internal SyPP2 database contains all pending as well as decided applications
- Internal database of patent and utility model applications since 1991
- EPO search tool EPOQUEnet moreover within this tool: external databases BIOSIS, EMBASE, MEDLINE, PUBCHEM, Non-Patent Literature)
- STN International
- Science Direct database
- · Freely accessible databases on Internet: Esp@cenet, Google Patents, National Office databases, for example

Information products and patent document collections (coverage, medium, etc.) available to external users, conditions of access (e.g., free of charge, subscription, etc.)

National and international patent (paper) documentation (EP, WO, US, DE (including DD), GB, FR, RU, CH)

Paid databases: STN International, DIALOG, QUESTEL and Science Direct database.

Legal status information (kind of information, coverage, medium, etc.)

Internal and public Patent and utility model databases.

## Other sources

URLs of web pages of the Office's website that provide access to online publications of patent documents and gazettes, and to other primary and secondary sources of patent information, including patent publication servers and download of bulk patent data:

The Official Bulletin

http://www.upv.cz/cs/publikace/vestnik-upv.html (Czech version - since 2000)

http://www.upv.cz/en/publications/ipo-bulletin.html (English version - since 2007)

The public Czech patents and utility models database

https://isdv.upv.cz/webapp/!resdb.pta.frm

# IV. ICT SUPPORT TO SERVICES AND ACTIVITIES RELATED TO PATENT INFORMATION CARRIED OUT BY THE OFFICE

Specific software tools supporting business procedures within the Office: general description, characteristics, advantages, possible improvements

Within the Office, there are several obeyed, maintained and improved business management systems:

- ISO 9001 QMS (Quality Management System) helps to assure a constant level of quality of services provided by the Office
- ISO14001 EMS (Environmental Management System) is used to help organizations to minimize how their operations (processes, etc.) negatively affect the environment (i.e., cause adverse changes to air, water, or land); (b) comply with applicable laws, regulations, and other environmentally oriented requirements, and (c) continually improve in the above.
- ISO 27001 ISMS (Information Security Management System) specifies a management system that is intended to bring information security under explicit management control. Fields of concerns are Security policy, Asset management, human resources security, access control, incident management system etc.
- OHSAS 18001 (Occupational Health and Safety Advisory System) helps companies to propose and implement precautions that, wherever possible, remove, reduce risks or isolate employees from them in a workplace. In case this is not possible, working activities have to be planned and managed through organizational precautions so that employees' performance is safe and healthy.

The business process management system (BPMS) internally named ADONIS that describes the office's processes flow structure is also deployed, maintained and improved. Each employee can find information on organizational structure, valid laws, rules and other documents, available applications, databases and information systems.

#### Hardware used to supporting business processes of the Office

Workstations - HP, processor Core I3 and Core I5, RAM 4- 16 GB, HDD 160 - 500 GB. 300 workstations (aprox. 60 laptops, 240 desktops) connected in the Office network are of the Office staff direct service. Thereof 50 computers connected in the Office network are intended for the clients of the Office and staff training. MS OFFICE – 2013/2016 and Office 365 software. The Office uses CD, DVD and magnetic tapes as data mediums.

Internal databases: coverage, updates, interlinks with external sources

## In-house systems (online/offline)

The Office maintains an in-house search database of national applications of inventions and utility models, granted patents and registered utility models. The database is not accessible to the public, but its structure corresponds to the public database. The following CD-ROM search systems are also available: ESPACE collections, Korean Patent Abstracts, Patents of Russia and other national documents collections.

## **External databases**

The Office provides free access to the database comprising the data concerning the published patent applications since 1991, granted patents, European patents valid in the territory of the Czech Republic and the registered utility models at the IPO CZ website <a href="http://www.upv.cz/en/client-services/online-databases/patent-and-utility-model-databases.html">http://www.upv.cz/en/client-services/online-databases/patent-and-utility-model-databases.html</a>.

The Office regularly uses the Espacenet database that offers free access to more than 120 million patent documents all over the world (from 1782 to today). The database is maintained by EPO. The following CD-ROM search systems are also available in the public reading room: ESPACE collections, Korean Patent Abstracts, Patents of Russia and other national documents collections.

The Office also performs searches on the EPOQUEnet, the commercial database ScienceDirect (non-patent literature) and in databases of the STN International databases centre (incl. Derwent), national databases freely accessible on the Internet are used as well (the links to these databases are provided at the Office's web site (http://www.upv.cz/en.html).

Establishment and maintenance of electronic search file: file building, updating, storage, documents from other offices included in the search file

# File building

Patent library stores more than 40 million patent documents from more than 20 countries including EPO and PCT documents. The collections of paper documents are arranged according to the IPC classification, the collections of national documents are arranged according to the IPC classification and by numbers. Due to electronic availability of documents, paper collections are no longer built. All the national documents are also available in electronic version (Internet). The CDs and DVDs with full text and searchable collections are also available.

## Updating and Storage, including mass storage media

The data is updated daily and stored electronically (official databases, hard discs, magnetic tapes for backup) and in a paper version.

### Documentation from other offices maintained and/or considered part of the available search file

The older foreign patent documents are stored both in a paper and a digital form (CDs/DVDs, Internet), new collections are available via Internet only.

Official bulletins of foreign offices are available in an electronic via Internet.

Administrative management electronic systems (register, legal status, statistics, and administrative support)

The Office uses the internal information system SYPP2 (starting from January 2014) to proceed the applications of patents, supplementary patent certificates, utility models, industrial designs, trademarks and geographical indications. The system has been developed since 2011 as a major upgrade of previous version SYPP which was used from 2004 until 2013. The new application is more flexible, based on Oracle Forms with easier maintaining and more flexible data structure. Data are stored in xml format including the history. The system is also more user-friendly. System is connected with central registers of the Czech Republic (ISZR). The project was co-financed by the European fund for regional development within the EU project Enforcement of Industrial Property Rights. The system enables to maintain official registers of all the industrial property rights. Furthermore, it archives all incoming and outgoing communications of the Office, provides the information on the state of proceeding, legal status of registrations and statistical data. The Document Management System (DMS) is integrated as well. The system also processes foreign applications within PCT and the European patents valid in the territory of the Czech Republic. The data is transferred to the electronic Office's Bulletin and to the public search database. The system is compatible with electronic filing recognizing authorized electronic certificates. The current version of on-line filing system was launched in 2017 and is based on a web application. This system has replaced the previous application which was based on pdf forms. Starting from January 2008, the system produces automatic electronic extracts from registers upon online request.

# Information services available to the public

The information centre and the helpdesk operate during the working days. They provide the general information concerning the industrial property rights.

Patent information services for the public are provided within the information centre and the public reading room, common questions can be addressed to the helpdesk (helpdesk@upv.cz) and search requests and orders to the search section (objednavky@upv.cz). The Office received a total of 52 patent search requests in 2019 and a total of 2985 searches (for patents, designs, trademarks) was provided for the State administrative bodies.

The Office provides a full range of brochures and flyers free of charge. They can be downloaded in PDF format from the Office's web site, taken in the office headquarters or sent upon request. The Office publishes its own books and the Industrial Property Journal (6 issues per year) reflecting the current issues of IP rights.

# V. PROMOTION ACTIVITIES AIMED TO SUPPORT USERS IN ACCESS AND EFFICIENT USE OF PATENT INFORMATION

Patent library: equipment, collection management, network of patent libraries in the country, cooperation with foreign patent libraries

Patent library stores more than 40 million patent documents from more than 20 countries including EPO and PCT documents. The collections of paper documents are arranged according to the IPC classification, the collections of national documents are arranged according to the IPC classification and by numbers. Due to electronic availability of documents, paper collections are no longer built. All the national documents are also available in electronic version (Internet) in the national Patent and Utility Model Database (patent applications published since 1991, European patents valid in the Czech Republic, granted patents from No. 1 and registered utility models). New patent documents are available in electronic form only. The CDs and DVDs with full text and searchable collections are also available. The documents can be studied in the public reading room equipped with PC workstations available for visitors.

The Office cooperates with Regional Patent Information Centres (PATLIBs) on IP information dissemination.

Publications related to different business procedures and patent information sources available to users, for example, books, brochures, Internet publications, etc.

The Office provides a full range of all IP rights dedicated brochures, leaflets and guides free of charge. They can be downloaded in PDF format from the Office's web site <a href="https://www.upv.cz/en/publications/information-brochures/information-brochures.html">https://www.upv.cz/en/publications/information-brochures/information-brochures.html</a>, picked up in the office headquarters or sent upon request. All the materials are distributed to visitors during fairs or exhibitions all year long. The Office publishes its own professional literature as well.

The Industrial Property Journal reflecting the current issues of IP rights is published six times per year (both in paper and electronic versions).

Office's initiatives on providing foreign patent information in the local language(s) (e.g., machine translation tools, translation of abstracts)

"Patent Translate", a machine translator of patent documents, is available (via Espacenet) - the possibility to translate from English to Czech and from Czech to English.

Cooperation with universities, research centers, technology and innovation support centers, etc.

The IPO CZ cooperates with several universities. There are seminars and educational activities (various topics) for students and academic staff organized in Office's premises or in university headquarters. University students are also regularly invited for excursions and guided tours in the Office's premises

Lectures were held at a number of innovation, technology and PATLIB centres.

Education and training: training courses, e-learning modules (URLs), seminars, exhibitions, etc.

The IPO CZ regularly organizes a wide range of training courses and seminars - such as IP Protection and National (CZ) and International Systems of IP Protection in particular PCT, Intellectual Property Protection in Business (SMEs), Technology Transfer, Enforcement of Intellectual Rights, IP Jurisdiction (administrative and judicial issues), Trademarks and Designs - National and International Legal Protection, Searches in the National and Foreign Patent Databases. All the educational activities are organized for the public, mainly for students, academic staff of universities, representatives of SMEs or research institutions and IP professionals. Lectures were also held at a number of innovation, technology and PATLIB centres and in companies.

The IPO CZ also participated in the preparation of 5 seminars organized by the Czech Union of Inventors and Rationalizers (http://www.csvz.cz/) in an organizational and professional manner. In cooperation with the Police of the Czech Republic, two seminars were organized, which were devoted especially to industrial property rights databases, and other tailored seminars were held for the Czech Trade Inspection Authority and the Customs Administration of the Czech Republic.

The Office held also training events in cooperation with international institutions.

The first of these was a seminar "Ruling Practice of the European Court of Justice" in cooperation with the EUIPO. In cooperation with the EPO, the Office held three seminars "How to Understand and Draft Search Reports and Written Opinions", "EPO Round Table – Practice and Approaches in Patenting Inventions from Pharmaceuticals and Biotechnology", "The PCT at the EPO". The first WIPO Summer School was held in Prague in September 2019. The main organizer was Anglo-American University in Prague.

Every year, a two-year distance learning study of industrial property rights begins within the Industrial Property Training Institute – Office's own educational facility.

The Office presented its information activities, information and educational products at the following exhibitions and trade fairs:

- 61st International Engineering Fair (Brno, CZ, as part of a joint exhibition organized by the Ministry of Industry and Trade as part of the Innovation Strategy of the Czech Republic 20192030)
- One-day Fair of Grant and Innovation Opportunities (eské Budjovice, CZ)
- Science Fair (Prague, CZ)
- Science Festival (Prague, CZ)
- For Interior 2019 (Prague, CZ)
- 22nd Moscow International Inventions and Innovative Technology Salon (Moscow, RU)
- Intarg (Katowice, PL)
- ARCA (Zagreb, HR)
- TESLAFEST 2019 (Novi Sad, SR)
- iENA (Nuremberg, DE)

#### Other activities

The IPO CZ continued its activities for children and youth (elementary school pupils and secondary school students). The Office offers to them short training sessions on industrial property rights, guided tours to the Office's headquarters and an example search in patent databases, as well as courses for teachers interested in adding the topic of industrial rights to their curricula. A special section for youth which is maintained on the IPO CZ website. The leaflets and comics books on the topics of patents, trademarks and copyright can be downloaded in this section. All the materials mentioned are also available for children and youth during their excursions to the IPO or during the fairs and exhibitions. The e-learning course on industrial property for elementary and secondary school students was maintained. The course acquaints young people with the principles or individual institutes of industrial property rights protection in an entertaining way. The IPO also kept on cooperating with the RVP.CZ Methodological Portal, operated by the National Institute for Education to support of teachers.

The Office launched activities aimed at educating primary and secondary school teachers in the field of industrial property protection. Meetings were held with the Ministry of Education, Youth and Sports, and with the National Institute for Education. The President of the Office spoke at the international conference "Trends in Education 2019: Innovation in Education – Teachers as Agents of Change".

In cooperation with the Educational Institute of the Central Bohemia Region, materials for an accreditation course titled Industrial Property and How to Teach It were prepared.

The IPO CZ worked with other partners on projects which popularize technical fields and motivates students of elementary schools toward technical education. It carried out searches on students' ideas and issued them search reports.

The IPO CZ presented itself at several events for students at elementary and secondary schools:

The President of the IPO CZ was invited as a lecturer on Personalities' Day at the Mozart secondary school in Pardubice.

At the "Science Fair" organized by Czech Academy of Sciences in June 2019, the Office offered information on the industrial rights protection system and educational materials especially to the children and young people for whom the fair was designed. The fair was attended by 30,150 visitors

The event "Good Heart of Krnov" dedicated to science, technology was held in August 2019.

The IPO CZ took part in the "Science Festival" held in Prague in September 2019, where universities, scientific institutions and industrial companies were exhibiting. At the stand informational materials, quizzes and memory games, examples of database searches were also offered and presented. Panels with examples of inventions in various fields were prepared. The event was attended by 17,000 visitors.

In cooperation with the US Embassy, was prepared an event "Amazing Theatre of Physics at IPO CZ" as part of celebrations of World Intellectual Property Day. During the event, children learned how intellectual property is protected in the Czech Republic as well as in the United States, and how important it is to protect these rights. Another part of the programme was the performance by the Amazing Theatre of Physics, which imaginatively and professionally explained the essence and importance of the system of intellectual property protection using examples of the practical use of physical phenomena in inventions children may encounter in everyday life. A total of 150 students visited the Office on this occasion.

# VI. INTERNATIONAL COOPERATION ACTIVITIES IN THE FIELD OF PATENT INFORMATION

International exchange and sharing of patent information in machine-readable form, e.g., priority documents, bibliographic data, abstracts, search reports, full text information

International and regional cooperation in the exchange of machine-readable patent information is realized on the Internet. Czech patent documents in paper form were distributed to patent offices of two countries.

The Official Bulletin of the Industrial Property Office of the Czech Republic is published exclusively electronically as of the beginning 2007. The Official Bulletin is published on a weekly basis (updated every Wednesday) instead of the monthly basis as it was before. The paper version has been discontinued. Electronic version of the Official Bulletin has been available since 2000 (Czech version, English version has been available since 2007) and accessible at the Office's web site:

http://www.upv.cz/cs/publikace/vestnik-upv.html (Czech version)

http://www.upv.cz/en/publications/ipo-bulletin.html (English version)

The IPO CZ participated in the UIP project to use the results of search work of National Patent Offices of the EPO Member States by the European Patent Office. The UIP project saves work and resources by making available to the EPO national search reports, information on classification and preliminary opinions on the fulfilment of requirements of patentability.

Various courses and seminars were organized for students and representatives of SMEs or research institutions; Groups of university students were accepted for excursions and guided tours in the Office's premises.

#### Participation in international or regional activities and projects related to patent information

Employees of the Office represented the interests of the Czech Republic in bodies of the European Patent Organisation in 2019, especially the Administrative Council and its committees. In 2019, the Administrative Council adopted the EPO Strategic Plan 2023, which contains five priority areas. In the area of Areas that the Office considers as a priority are the quality and completeness of shared patent documents, including quality management, search tools improvement, expanding of the Cooperative Patent Classification and the unification of IT tools into single access portal.

#### Assistance to developing countries

At the request of foreign IPOs (or WIPO) the Office offers study visits for their staff members.

### Other activities

The IPO CZ continued to fulfil responsibilities resulting from the Czech Republic's membership in the European Union especially related to the area of industrial property protection. It participated in the meetings of the EU Council Working Group on Intellectual Property.

- 1. Classification is allotting one or more classification symbols (e.g., IPC symbols) to a patent application, either before or during search and examination, which symbols are then published with the patent application.
- 2. Preclassification is allotting an initial broad classification symbol (e.g., IPC class or subclass, or administrative unit) to a patent application, using human or automated means for internal administrative purposes (e.g., routing an application to the appropriate examiner). Usually preclassification is applied by the administration of an office.
- 3. Reclassification is the reconsideration and usually the replacement of one or more previously allotted classification symbols to a patent document, following a revision and the entry into force of a new version of the Classification system (e.g., the IPC). The new symbols are available on patent databases.