

# CWS/ATR/PI/2022/CA

## Annual Technical Report on Patent Information Activities in 2022 submitted by Canadian Intellectual Property Office

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

Information on the following topics is desired:

Outline of main policies and plans aimed at development of patent information activities and expected time frames for their realization

- The [Manual of Office Practice \(MOPOP\)](#) is maintained and available to the public.
- CIPO's Patent Branch is iteratively modernizing all of their online and internal IT systems in 2023. Working under the name Next Generation Patents (NGP), the tentative "Go Live" implementation date is late 2023. NGP is based on end-to-end (E2E) integration between a front-end client-facing system referred to as CDS (CIPO Digital Services), a back-end employee-facing system referred to as (IPRMS) IP Rights Management System, and a new Integrated Financial and Material System (IFMS) with a new API (Application Programming Interface) to create payments and allow clients to pay fees.

New projects launched or resumed this year in the context of the policies and plans mentioned above, short description: aims, partners, tasks

- 26 for [Biological Sequence Listings](#) (BSL) came into force summer 2022.
- CIPO's [Streamlining Patent Examination](#) process came into force October 2022, incorporating Conditional Notice of Allowances (CNOAs), Request For Continuing Examination (RCE), and paying Excess Claim Fees (ECF) for each claim in excess of 20.
- CIPO campaigned clients to use our [Official Feedback Mechanism](#) (OFM) to register compliments, comments and complaints instead of using other methods such as contacting staff directly. Replies via the OFM are responded to within 48 hours.
- CIPO's Patent Branch was recertified ISO 9001:2015
- Legacy web browsers were replaced with Google Chrome and Microsoft Edge.
- Adobe Viewer was replaced with [Foxit](#).

Main areas of patent information activities and related information and communication technology (ICT) practices which were in the focus of attention last year

- Creation of NGP IT system

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

	2022	2021	2020	2019	2018	2017	2016
National Filings	8,928	6,793	7,062	8,100	8,135	8,325	8,485
National Grants	4,738	5,411	5,402	5,584	5,888	6,096	7,065
PCT Filings	30,781	30,427	27,611	28,597	28,404	27,357	27,029
PCT Grants	14,787	17,276	15,882	16,425	17,511	18,003	19,359

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

*Patent Act*

[Patent Act \(justice.gc.ca\)](#)

*Patent Rules*

[Patent Rules \(justice.gc.ca\)](#)

CIPO Mandate

[CIPO mandate - Canadian Intellectual Property Office](#)

CIPO Publications including the annual report

[Publications - Canadian Intellectual Property Office](#)

Statistics

[Patent statistics: 2021 to 2022 - Canadian Intellectual Property Office](#)

IP data and research at CIPO

[IP data and research at CIPO - Canadian Intellectual Property Office](#)

Green Technologies

[Advanced examination for green technologies - Canadian Intellectual Property Office](#)

Patent Prosecution Highway (PPH)

[Expedited examination Patent Prosecution Highway - Canadian Intellectual Property Office](#)

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

Information on the following topics is desired:

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

CIPO Website: File a Canadian patent application  
[File a Canadian patent application: Before you start - Canadian Intellectual Property Office](#)

CIPO Website: File an international patent through the Patent Cooperation Treaty (PCT)  
[File an international patent through the Patent Cooperation Treaty \(PCT\) - Canadian Intellectual Property Office](#)

CIPO Website: National phase entry of a Patent Cooperation Treaty application  
[National phase entry of a Patent Cooperation Treaty application - Canadian Intellectual Property Office](#)

CIPO Website: Patents general correspondence form  
[Patents general correspondence form - Canadian Intellectual Property Office](#)

CIPO Website: Written Communications Procedures  
[Written Communications Procedures - Canadian Intellectual Property Office](#)

**Availability of the application dossier in electronic form**

Patent applications laid open to public inspection and granted patents are available to the public through the Canadian Patent Database (CPD):  
<http://www.ic.gc.ca/opic-cipo/cpd/eng/introduction.html>

**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**

CIPO classifies national and international applications according to the IPC. Currently, CIPO's pre-classification of national and international applications is based on a preliminary classification which is limited to section, class and subclass for the purpose of assigning the file to the appropriate classification examiner's queue. National files are reclassified following the entry into force of a new version of the IPC.

CIPO also classifies international applications with the Cooperative Patent Classification (CPC).

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

The Office translates the titles into French or English depending on the language of the application. Some translations are retrieved from the PCT import process which uses an XML file received from WIPO. The Office provides abstracts in both French and English on patents in Good Standing. A contracted third party currently provides the translation services to CIPO, these are then quality checked internally.

## III. SOURCES OF PATENT INFORMATION PROVIDED BY THE OFFICE

Information on the following topics is desired:

**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)**

[Canadian Patent Office Record \(Gazette\)](#) is published weekly and available on CIPO's website.  
<http://patents.ic.gc.ca/opic-cipo/cpor/eng/home.html>

The following bulk patent data is available and is updated weekly: Researcher datasets (bibliographic, full text and administrative status (CVS and text)); patent ST36 (XML); biological sequence listings (TXT); patent application images (MIMOSA); and, granted patent images (MIMOSA).

[IP Horizons: download intellectual property data - Canadian Intellectual Property Office](#)

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

Office notices and changes to office procedures are published on CIPO's website and incorporated into MOPOP if required.

These notices, and many other patent related notices, are published directly on the CIPO Website under the Patent Notices section at the following link:

[http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr00292.html?Open&wt\\_src=cipo-patent-main](http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00292.html?Open&wt_src=cipo-patent-main)

CIPO also publishes the Canadian Patent Office Record (CPOR) on a weekly basis

<https://www.ic.gc.ca/opic-cipo/cpor/eng/home.html>

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

CIPO's internal office TechSource system includes bibliographic data (from 1869-present), text (abstract, claim and description of laid open patent documents from late 1978-present) and images of patent documents (from 1869-present). All these documents are available stored on hard disk technology.

Externally, examiners have access to many publicly available and subscription based databases such as the following list of databases ;

<a href="#">Academic Search Complete</a>	<a href="#">Nature Biotechnology</a>
<a href="#">American Chemical Society (ACS) Journals</a>	<a href="#">NewsDesk</a>
<a href="#">Association for Computing Machinery (ACM) Digital Library</a>	<a href="#">North American Industry Classification System (NAICS)</a>
<a href="#">Australian Intellectual Property Thesaurus</a>	<a href="#">The Official Journal of the EPO</a>
<a href="#">Business Book Summaries</a>	<a href="#">OLISnet</a>
<a href="#">Business Source Complete</a>	<a href="#">Orthonet</a>
<a href="#">Canadian Patent Office Record (CPOR)</a>	<a href="#">PatentPak</a>
<a href="#">Canadian Patent Reporter (CPR)</a>	<a href="#">PB Terminology Database</a>
<a href="#">DAMA Dictionary of Data Management</a>	<a href="#">Pharmaview</a>
<a href="#">DAMA Guide to the Data Management Body of Knowledge (DMBOK)</a>	<a href="#">PubAg</a>
<a href="#">Decisions of the Commissioner of Patents</a>	<a href="#">PubMed</a>
<a href="#">Decisions of the Copyright Board of Canada</a>	<a href="#">Questel Orbit Intelligence</a>
<a href="#">Decisions of the Federal Court of Canada</a>	<a href="#">Reports of Patent, Design and Trade Mark Cases (RPC)</a>
<a href="#">EBSCO eBook Collection</a>	<a href="#">Research Disclosure</a>
<a href="#">Econlit</a>	<a href="#">Science.gov</a>
<a href="#">EDGAR</a>	<a href="#">Science Online</a>
<a href="#">FP Advisor</a>	<a href="#">Scientific American</a>
<a href="#">Frost &amp; Sullivan</a>	<a href="#">SciFinder</a>
<a href="#">Government and Legislative Libraries Online Publications Portal (GALLOP)</a>	<a href="#">SCOPUS</a>
<a href="#">GreenFILE</a>	<a href="#">Standard Industry Classifications (SIC)</a>
<a href="#">Le guide du rédacteur</a>	<a href="#">STM Source</a>
<a href="#">A Guide to Countries of the World</a>	<a href="#">STN (Scientific and Technical Information Network)</a>
<a href="#">IEEE (Institute of Electrical and Electronics Engineers)</a>	<a href="#">Termium Plus</a>
<a href="#">International Journal of Design</a>	<a href="#">USPTO WEST</a>
<a href="#">IP.com</a>	<a href="#">WIPO Lex</a>
<a href="#">IP Source</a>	<a href="#">WIPO (World Intellectual Property Organization) Magazine</a>
<a href="#">Merck Manual</a>	<a href="#">World Competitiveness Online</a>
<a href="#">National Research Council Canada (NRC) — Publications Archive</a>	<a href="#">World Intellectual Property Organization (WIPO)</a>
<a href="#">National Research Council Canada (NRC) — Research Press Journals</a>	<a href="#">World Intellectual Property Report</a>
<a href="#">Nature</a>	<a href="#">World Patent Information</a>
<a href="#">NBER (National Bureau of Economic Research)</a>	<a href="#">Other IPO websites</a>

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

CIPO's Website makes available documentation pertaining to applications open to public inspection and granted patents from 1869-present.

The listing of available information products and subscriptions to bulk data, free of charge, is available at the following link:

[IP Horizons: download intellectual property data - Canadian Intellectual Property Office](#)

CIPO also offers a publicly accessible Client Search Room available at its headquarters in Gatineau, Quebec, Canada where one on one personal assistance is available.

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

CIPO provides Patent/application information and important dates such as filing and issue dates on the Canadian Patent Database. In March 2022 status information was added to each file as part of the database enhancement project.

<https://www.ic.gc.ca/opic-cipo/cpd/eng/introduction.html>

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

Information on the following topics is desired:

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

Tool	Internal /External	Technology	Purpose
TechSource	Internal Office Tool	In-house custom DB2  database	Mainframe application to handle National cases. Supports workflow and storing of patent data. Includes bibliographic data (from 1869-present), text (abstract, claim and description of laid open patent documents from 1978-present) and images of patent documents (from 1920-present). All these documents are available stored on hard disk technology.
InterApp	Internal Office Tool	C++	An application to process International PCT applications including all RO, ISA and IPEA functionality. The application also imports and exports documents and data directly to and from WIPO via sFTP
AppEntry	Internal Office Tool	C++	An application that electronically retrieves national entry applications from WIPO for processing in Canada
MS Word	Internal Office Tool	Microsoft	Word along with VBA coding gives Patent Branch users the ability to create reports with complex automated paragraphs
IBM Content Manager 8 (CM8)	Internal Office Tool	IBM DB2	A content management solution allowing Patent Branch employees to view incoming and outgoing correspondence from applicants such as amendments to patent applications and then save/markup as PDFs (paperless).
Intellect	Internal Office Tool	JAVA	The Internal Canadian Patent database search engine is updated electronically daily for our internal search tool. The search application is named Intellect and it has been in use since 2008.
Canadian Patent Database	External Office Tool	JAVA	The External Canadian Patent database search engine is updated electronically daily and is available on our Web site.

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

Patents main IT systems are hosted on a mainframe solution. This is a common government wide infrastructure that is maintained by the government department, Shared Services Canada. We are moving to cloud technology with our NGP IT Modernization project.

Telework support for patent activities are provided using a laptop VPN solution through which staff remotely connect to the office's network. Post COVID-19 pandemic, Patent Branch employees have been working remotely full time with a few people in essential positions entering on an as-needed basis. Teams considered to be "collaborative" work 2 days-per-week in the office in a hybrid format. Universal docking stations with USB-C connections are available in the office for Patent Branch employees to connect laptops to the internal network while in the office.

### Internal databases: coverage, updates, interlinks with external sources

CIPO's internal office TechSource system includes bibliographic data (from 1869-present), text (abstract, claim and description of laid open patent documents from 1978-present) and images of patent documents (from 1869-present). All these documents are available stored on hard disk technology. Data for applications open to public inspection and granted patents is extracted from the TechSource database and published onto CIPO's searchable online Canadian Patent Database (CPD) and made available for bulk data downloads. TechSource will be replaced with NGP in late 2023.

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

Patent Branch examiners continue to populate a database of 'search records' for every office action. The tools developed allow the examiners to create, update, store and retrieve information on the search activities. This information includes data on family members, applicant submissions, databases and search queries used. The database is populated via an interface built into MS Excel. The examiner can add new tabs to each record with subsequent office actions, eventually building a complete history of the search over the prosecution life of the application. The files are stored in the database, but are also exported into the Notations field of the Line of Business (LOB) application within TechSource, written to a MS Word document and added as an annex to any examiner's report. A similar system exists for International applications. The search record is a benefit to internal and external stakeholders and serves as a foundational tool for quality assessment

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

All Canadian Patents/applications are managed within our custom built TechSource system.

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

Information on the following topics is desired:

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

- CIPO provides prosecution documentation in the WIPO CASE system as a full participating member
- Canada shares weekly patent data with patent offices and commercial clients for integration in various search databases through IP Horizons.

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

The CIPO Resource Centre provides non-patent literature research and reference services. It enables employees to access world-class external information sources via its many e-resources. The centre continues to enhance its virtual collection and provide training to ensure employees effectively access the electronic information sources from their desktops. The centre serves as the central point for information procurement within CIPO. Its services also include webinars, specialized wikis and e-books.

The CIPO Client Service Centre and the CIPO web site provide information and a guide to patents to assist users. CIPO also has an outreach program.

CIPO Website: Intellectual Property (IP) Case Studies

<http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr01946.html>

CIPO Website: What is a patent

[What is a patent? - Canadian Intellectual Property Office](#)

CIPO Website: Clean technology and intellectual property

[Clean technology and intellectual property - Canadian Intellectual Property Office](#)

CIPO Website: IP roadmaps

[IP Toolbox - Canadian Intellectual Property Office](#)

CIPO Website : Manage your IP

[Manage your intellectual property - Canadian Intellectual Property Office](#)

CIPO Website: Canadian IP Voices Podcast

<https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr04967.html>

CIPO Website: IP Hub

[https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr04406.html](https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04406.html)

CIPO Website: Events, seminars and webinars

<https://www.ic.gc.ca/app/scr/crmsri/cipo/events/?lang=eng>

CIPO Website: Plan your IP strategy

[https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr04622.html](https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04622.html)

CIPO Website: IP Foundations online learning:

[https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr04590.html](https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04590.html)

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

CIPO receives and prosecutes patents in either official language (French or English). The Office translates all of the patent titles and abstracts so that they are available in both official languages (English and French). The Office does not translate the other sections of a patent (claims, description, drawings, Sequence Listings).

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

CIPO patent office has forged several partnerships with industry, universities and other IPOs.

- The College of Patent Agents and Trademark Agents

<https://cpata-cabamc.ca/en/>

<https://ised-isde.canada.ca/site/canadian-intellectual-property-office/en/college-patent-agents-and-trademark-agents>

- The Industry Training Visit (ITV) program: Examiners can update their knowledge in the relevant field by visiting leading-edge companies that are active in research and development within Canada. The companies voluntarily host visits, and their inventors, scientists, engineers and other experts share the knowledge related to their research and development to the examiners.

- Free university training program provides examiners with the opportunity to attend technical learning activities organized by local universities, information and technology hubs, professional organizations and other government departments.
- USPTO seminars by WEBEX: Examiners attend technical seminars organized by the USPTO for their examiners via live streamed WEBEX. In exchange, CIPO also invites USPTO examiners to attend their webinars via WEBEX.
- CPC online training from the European Patent Office (EPO).
- Webinars by third parties: Examiners attend webinars organized by professional organizations. These webinars are technically relevant, from reputable organizations and typically free of charge.

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

CIPO recently launched a new IP Academy: A collection of online learning resources, seminars and training about intellectual property (IP), such as patents, trademarks, industrial designs and copyright.

[https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr04234.html](https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04234.html)

CIPO provides a robust training program to new employees:

- Examiner qualification program: a 2-year program aimed at teaching new examiners the knowledge and skills required to examine patent applications.
- Operations basic training: an introductory course offered to new employees within the operations sector. This class is offered over the course of two weeks, teaching the basics of IP, office tools, tasks and procedures.

For senior employees:

- Retention training: aimed at keeping employees abreast of changes in the law, practice and tools, this training is specific to different employees: examiners, operations analysts, etc. and enables them to continue doing their job to the best of their abilities. Offered as webinars, self-paced e-learning, Q&A sessions, pre-recorded videos and live virtual training sessions.
- Engagement training: Aimed at keeping employees engaged in their work, we offer training of a more general nature, covering scientific topics, internships, university/college courses, MS Office, etc.
- Development training: We also provide training to further develop our employee's skills with respect to second language training, leadership and management, and offer them opportunities to further develop those skills in developmental and acting opportunities.

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

#### **Information on the following topics is desired:**

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

CIPO provides data and documents for applications that are open to public inspection and for granted patents.

The following is a link to CIPO's electronic data products, all of CIPO's data products are available free of charge:

[IP Horizons: download intellectual property data - Canadian Intellectual Property Office](#)

CIPO offers online eServices for all Patent transactions.

<https://ised-isde.canada.ca/site/canadian-intellectual-property-office/en/faq/frequently-asked-questions-about-cipos-new-login-procedures#access>

CIPO has [PPH agreements](#) with several countries and retrieves files from their respective public dossier access systems, where available. Our partner offices can now retrieve most Canadian files directly from the Canadian Patents Database while the rest must be obtained from the applicant.

CIPO provides prosecution documentation in the WIPO CASE system as a full participating member.

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

The Canadian Patent Office participates in the Vancouver Group Searching Working Group (VG-SWG) launched in early 2018. The purpose of the VG-SWG is to compare and contrast all elements of patent searching (i.e. practice, tools, training, quality review), develop best practices and enhance the quality of searching for all offices.

In addition to the initiatives previously completed (Search Tools and Databases and Search Quality Review), the VG-SWG has completed its fourth initiative (Search Manual Comparison) in April 2022. This group also developed a hands-on benchmarking exercise (VG Search collaboration workshop (SCW)), where examiners in the VG Offices (VGO) independently search an application and then convene to discuss and compare strategies and results. Examiners welcomed the opportunity to have a "live" discussion on search strategy with their VGO colleagues. Discussions have taken place on further initiatives to explore once all the VG-SWG initiatives have been completed.

CIPO also participates in the annual Meeting of International Authorities (MIA) and Quality Subgroup (QSG).

#### **Assistance to developing countries**

CIPO has provided, in cooperation with WIPO, the following free patent services to developing countries:

- Patent search and examination reports for developing countries, upon request from WIPO, under the WIPO program of International Cooperation in the Search and Examination of Inventions (ICE)
- State-of-the-art patent searches under the WIPO Patent Information Searches (WPIS) for developing countries Paper copies of relevant Canadian patent documents identified by WIPO patent searches

## **VII. OTHER RELATED MATTERS**

**Please include any other relevant information here.**

**N/A**

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.