### CWS/ATR/PI/2021/GB

# Annual Technical Report on Patent Information Activities in 2021 submitted by UK Intellectual Property Office.

Please provide links to your website where the requested information can be found in English, French, or Spanish. Alternately, you may provide text responses instead of URLs if desired. If the information is not available on your website in an ATR language, then please provide text.

URLs in responses should meet the following requirements:

- · Link to pages with information in English, Spanish, or French
- The URL will remain stable over time (at least three years, preferably more)
- Goes to the specific information requested, not to a general homepage
- If the URL goes to a long PDF document such as an annual report, please indicate which sections or pages contain relevant information.
- Provide additional instructions for using the URL if needed. For instance, if the page requires the user to login first, or if the requested
  information requires selecting certain options or filters on the page that can not be included in the URL.

## 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 Intellectual Property Office (IPO) is undertaking a five-year programme to transform our services and provide a single, integrated system for all IP rights. Further information can be found at https://www.gov.uk/government/news/ipo-launches-one-ipo-transformation-programme

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

See entry above in relation to the transformation of our IP services.

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

See entry above in relation to the transformation of our IP services.

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

Applications for national UK patents increased by 7% between 2019 and 2020, with 20,652 applications in 2020, compared with 2019's 19,245. Of these, the proportion of applications from UK residents decreased slightly, from 63% in 2019 to 58% in 2020. The number of patents granted in 2020 was 64% higher than in 2019, rising from 5948 to 9772, and this is reflective our commitment to reduce our examination backlogs through increased processing of our oldest examination requests.

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

Research and statistics, this includes information on statistics: https://www.gov.uk/government/statistics?departments%5B%5D=intellectual-property-office&parent=intellectual-property-office

Transparency and freedom of information of information, this includes information on annual reports, annual reviews and figures: https://www.gov.uk/search/transparency-and-freedom-of-information-releases?organisations%5B%5D=intellectual-property-office&parent=intellectual-property-office

Information on filing, including Patents application guide and other materials, is available from the following web page: https://www.gov.uk/patent-your-invention

The procedure after filing, including publication, examination and grant is described at: https://www.gov.uk/patent-your-invention

Information regarding dispute resolution, including hearings, mediation and opinions may be found here: https://www.gov.uk/intellectual-property-mediationhttps://www.gov.uk/opinions-resolving-patent-disputes

Results of past patent decisions are available at: https://www.ipo.gov.uk/p-challenge-decision-results.htm

Information on how applicants may appeal is provided at: https://www.gov.uk/patent-disputes-resolution-hearings

Other business procedures such as the Patents Act, finding patents, how we classify and renewals are covered by web pages accessible from the main Patents portal: https://www.gov.uk/topic/intellectual-property/patents

A link to the EPO search dataset Espacenet is provided from the online patent services portal: https://www.gov.uk/search-for-patent

The UK patent register may be searched by publication or application number at: https://www.ipo.gov.uk/p-ipsum.htm

The UK patent register may also be searched by publication date at: https://www.ipo.gov.uk/p-find-publication.htm

## 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.) - IIRI s

Information on filing, including Patents application guide and other materials, is available from the following web page: https://www.gov.uk/topic/intellectual-property/patents

Availability of the application dossier in electronic form

The UK patent register and some of the documents from may be searched by publication or application number at: https://www.ipo.gov.uk/p-ipsum.htm

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

All UK patent applications are classified in the IPC and CPC. Pre-classification (i.e. allocation of applications to examining groups) is done manually at subclass level using the CPC. Clusters of subclasses provide the basis for the structure of examining divisions and groups. Where necessary, IPC and CPC reclassification is performed prior to publication to ensure the validity of symbols upon A publication and B publication (grant). The UK IPO does not reclassify documentation after publication.

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

Our staff can translate any document into English using translation software made available by the European Patent Office and other national patent offices. Patent examiners check all patent abstracts provided by the applicant and amend them where necessary to ensure they form a useful search tool.

#### Other activities

The IPO is an active participant in the work of the IPC Union Committee of Experts and the IPC revision working group, and regularly participates in revision discussions with other offices to contribute to the ongoing revision of the IPC.

In 2020, this work was carried out electronically via the WIPO-hosted IPC e-forum.

### 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)

(1) PDF

A-documents

These are prepared in-house in a 5 week publication cycle using a bespoke IT system linked to PDAX (the IPO's electronic case management system).

The front page is compiled by downloading bibliographic data (XML format) from the corporate database COPS and is married with the abstract text from our internal examiner database (PROSE). The abstract drawing is extracted from PDAX and merged to finalise the front page. The finished front page is added to the rest of the specification pages from PDAX and reproduced in a single PDF image. The PDF image is then loaded onto the IPO's publication server on our external website for customer download.

The IPO no longer publishes "A" documents in paper format, the official publication means being electronic (please see the following link): https://www.ipo.gov.uk/types/patent/p-os/p-find/p-find-publication.htm).

The PDF A documents are then transferred via Secure File Transfer Protocol (SFTP) to the EPO. This is done on a weekly basis and includes a separate ST.36 XML file for the bibliographical and full text abstract data.

#### **B-Documents**

These are prepared in-house in a 5 week publication cycle using a bespoke IT system linked to PDAX (the IPO's electronic case management system).

The front page is compiled by downloading bibliographic data (XML format) from the corporate database COPS and merged with the rest of the specification pages from PDAX and reproduced in a single PDF image.

The PDF image is then loaded onto the IPO's publication server on our external website for customer download. The IPO no longer publishes "B" documents in paper format; the official publication means being electronic (see the following link): https://www.ipo.gov.uk/types/patent/p-os/p-find/p-find-publication.htm).

The PDF B documents are then transferred via Secure File Transfer Protocol (SFTP) to the EPO. This is done on a weekly basis and includes a separate ST.36 XML file for the bibliographical data.

Corrected 'Errata'-Documents (A8, A9, B8 & C)

These are prepared in-house in a 2 week publication cycle using a bespoke IT system linked to PDAX (the IPO's electronic case management system).

The front page is compiled by downloading bibliographic data (XML format) from the corporate database COPS and merged with the rest of the specification pages from PDAX and reproduced in a single PDF image. The PDF image is then loaded onto the IPO's publication server on our external website for customer download. The IPO no longer publishes "errata" documents in paper format, the official publication means being electronic (please see the following link: https://www.ipo.gov.uk/types/patent/p-os/p-find/p-find-publication.htm).

The PDF Errata documents are then transferred via Secure File Transfer Protocol (SFTP) to the EPO. This is done on a weekly basis and includes a separate ST.36 XML file for the bibliographical data.

(2) Patents and Designs Journal (PDJ) and the on-line e-Patents Journal.

Up until 26th March 2008, the official notices and selected bibliographic data relating to UK patent applications and granted patents were published in the official weekly electronic newspaper called the Patents and Designs Journal (PDJ) on the date of publication, and are available on our website in PDF format.

From 5 March 2008 the e-Patents Journal became searchable online, and may be downloaded in PDF or XML formats. It also includes a back-file of the UK applications filed section from 26th July 2006. The Patents Journal and archived PDJs may be accessed from: https://www.gov.uk/check-the-patents-journal

(3) ESPACENET, EPOQUE etc.

The full text, drawings and bibliographic data of all newly published UK patent applications and granted patents is published on the EPOQUE system soon after the domestic publication date.

Espacenet is a free internet service which contains a number of different patent collections. GB patents published from 1895 and Granted from 2002 are available through the worldwide database, please see: <a href="https://worldwide.espacenet.com/">https://worldwide.espacenet.com/</a>

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

Up until 26<sup>th</sup> March 2008 the official notices and selected bibliographic data relating to UK patent applications and granted patents were published in the official weekly electronic newspaper called the Patents and Designs Journal (PDJ) on the date of publication, and are available on our website in PDF format.

From 5 March 2008 the e-Patents Journal became searchable online and may be downloaded in PDF or XML formats. It also includes a back-file of the UK applications filed section from 26 July 2006. The Patents Journal and archived PDJs may be accessed from: https://www.gov.uk/check-the-patents-journal

In relation to the dissemination of more general notices regarding patents and other IPR, our website: (https://www.gov.uk/government/organisations/intellectual-property-office) plays an important role. In particular, we frequently hold consultations with our community of users. However, we continue to place such announcements in our on-line e-Patents Journal, which is available without charge on our website.

Website statistics are available here: https://www.gov.uk/performance/site-activity-intellectual-property-office

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

We have a long list of external databases that we use regularly, including EPODOC, Derwent's World Patent Index and CAS ONLINE, as well as other specialised chemical, biotech, electrical and other databases, such as defensive publications. We interrogate these databases using a number of online hosts that we subscribe to, including EPOQUEnet, STN and others.

Our official policy is that a worldwide search should be carried out as part of every patent search done in this office.

Examiners are encouraged to access National Patent Office Organisation websites as necessary to search collections of patent documents, or to retrieve family member search and examination reports (e.g. EPO, USPTO, WIPO).

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

Our main office is located in Newport, Wales, where the public can file applications and discuss possible IP protection with an IPO Advisor over the phone or in person via appointment. In addition, we also have a front office in London where customers can file any correspondence for the attention of the Office.

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

Legal status information is contained on the UK patent register and may be searched by publication or application number at: https://www.ipo.gov.uk/p-ipsum.htm

This data is complete for all UK national applications in force in the UK and granted EP (UK) applications which are in force.

The Patent Journal, available at https://www.ipo.gov.uk/types/patent/p-os/p-journal/p-pj, also includes details of UK and EP(UK) patent applications, as well as other information such as other proceedings before the IPO, SPCs and corrections.

#### Other sources

Nothing to report.

# 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

Microsoft Windows 10 provides an integrated and extensive network of applications that are available to all staff. Office 365 providesaccess to a suite of applications including Outlook, Word, Excel and PowerPoint; all major classification keys that are used by the examiners are accessible, as are office notices, manuals, search tools including access to online databases, translation software, management and administration information etc.

There is also a bibliographical register (COPS) which runs on a Windows based platform and is written in Microfocus Cobol, a VB.NET database (PAFS) for recording file movement data and examining group statistics, and automated production of search and examination reports using the PROSE system. We also have a PDAX electronic case file system whereby all the documents relating to patent applications are available electronically to examiners at their desktop.

The Office intranet contains a very large collection of essential information for staff, including search and classification tools.

The ability for the automated printing of patent documents cited in search reports was removed in March 2020 as part of a review of our legacy IT estate. Staff can still request copies of non-patent literature to support their search and examinations.

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

Staff access their Windows 10 desktop using a Microsoft Surface Pro device which connects to 24 inch wide screen monitors via a dock.

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

Register and legal status information is stored on our bibliographical register (COPS), as are a number of types of statistics. Examining group statistics, file movements etc., are recorded using a VB.NET system called PAFS (see previous entry above). In addition, we use an in-house system called PDAX to electronically store and access our patent application case files. The databases referred to are updated continuously and views of the data contained on COPS and PDAX are made externally available via our website.

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

GB patent bibliographic data is available electronically and may be searched on our COPS database. Published GB patent specifications may be accessed and searched via EPOQUE and from our on-line publication server, see "Main types of publication" above.

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

See entry in relation to internal databases.

#### Other matters

Nothing to report.

#### 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

PatLib UK forms part of a 340 strong European Network of Patent Information Centres administered by the European Patent Office, with the IPO Uk holding autonomy over the UK network.

The UK Network comprises 19 regional centres (Birmingham, Exeter, Glasgow, Aberdeen, Hull, Leeds, Liverpool, London, Cambridge, Manchester, Newcastle, Northampton, Portsmouth, Plymouth, Norwich, Sheffield, Gloucester, Worcestershire and Brighton and Hove. The majority based in city centre libraries. They have experienced staff offering practical assistance on the main IP rights, including Patents. Further centres (Oxfordshire, Tees Valley and Bristol) are due to join over the course of 2021/22.

A key offering of the network is access to patent databases and support in searching. All centres have a minimum requirement to supply assisted searches to businesses. Many take this further however by providing classes to guide businesses on completing basic initial searches.

Training to deliver these services has been supplied by the IPO through the IP Masterclass programme as well as ongoing individual training sessions as needed. Larger centres have had in-depth patent searching covering, Prior Art and freedom to operate searches.

In addition to the guided searches some PatLib centres also offer a commercial patent searching service. This is at a low cost and is available to anyone; it is regularly used by businesses and individuals as well as IP Professionals.

As the centres are located within local libraries, they make the most of free databases such as Espacenet and PatentScope and due to lack of funding do not pay for any additional databases or tools.

The largest and most used PatLib centre, The British Library, located in St. Pancras, London, houses the national collection of patents, science and technology. The other libraries also have collections of patent journals and other relevant publications of varying size, but there are also substantial deposits in Glasgow.

Our office, through the British Library, takes part in numerous exchange and grant programmes with other patent offices around the world as in previous years.

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

Our main office is located in Newport, Wales, where the public can file applications and discuss possible IP protection with an IPO Advisor over the phone or in person via appointment. In addition, we also have a front office in London where customers can file any correspondence for the attention of the Office.

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

Nothing to report.

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

We continue to raise awareness of the resources we have developed for universities and research institutions to help them think more strategically about their IP, ensuring they can make informed decisions on IP issues -https://www.gov.uk/government/publications/ip-in-education/ip-in-education

The Lambert toolkitprovidesguidance and model agreements to facilitatenegotiations between universities and businesses undertaking collaborative research projects. An updated toolkit will be launched in the summer 2021.

The Intellectual Asset Management for Universities guidance helps senior university leaders set strategies to optimise the benefits from the intellectual assets created by their staff and students. The guide is currently being reviewed and will be relaunched later in 2021.

We work closely with our IP for Universities and Colleges (IPUC) stakeholder group, which includes patent and trademark attorneys, lecturers and industry professionals, to support our work with universities.

Our Business Outreach continues to raise awareness of IP, helping businesses reach an informed decision on how to use, manage, and enforce their IP to its full potential. This is done via a portfolio of business tools including mobile and online resources, seminars, workshops/training and working with partners to deliver broader dissemination and understanding of IPhttps://www.gov.uk/government/publications/intellectual-property-for-business

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

As part of our commitment to increase IP's impact through awareness and education, in 2018 we commissioned a comprehensive review of our education resources. The findings of the review provided opportunities for us to increase the impact of our education resources. This has led to the development of an IP Education Policy which sets out how we will take a long term, strategic approach to educating young people so that understanding is developed systematically, and incrementally, from a young age.

We continue to communicate IP awareness to young people from primary through to secondary school. For schools wehave developed a range of curriculum linked education resources to raise awareness of innovation, creativityand intellectual property. We have refreshed our successful relationship with Aardman Animations to front our primary education resource Wallace & Gromit's Cracking Ideas. Despite the restrictions in schools in the UK, the competition which relaunched in 2020 has routinely over reached on its target entries with entrants demonstrating their understanding of intellectual property. In 2021 the IPO partnered with TES (Times Education Supplement) to move their education resources under their site. There is an aspiration that this will introduce our resources to a new audience of teachers beyond the traditional curriculums.

We have furthered our relationship with the Big Bang – the largest STEM youth movement in the UK. In 2021 we sponsored the inaugural IPO Outstanding Innovator Award which recognises and rewards achievements of young people (11-19) in science, technology, engineering and maths (STEM). We will also be contributing to their Digital Fair talking about patent examining as a STEM career and presenting a session on predicting the future.

For colleges, we developed the Future Innovators Toolkit (FIT), a comprehensive resource pack on intellectual property, how to protect it and where it fits into future careers, for teachers of Level 3 Science, Technology, Engineering and Maths (STEM) students.

For universities, wehave developed an interactive e-learning tool (IP Tutor), for university students and lecturers to provide them with a basic understanding of IP and IP rights. We also offer a set of teaching resources for lecturers (IP Tutor Plus) to help them teach university students about IP and how it is useful to their future careers.https://www.gov.uk/government/publications/intellectual-property-for-universities/ip-tools-for-universities

Our IP for Research programme helps PhD students and researchers understand how IP fits into their research and the commercialisation process. We have recently launched an IP for Research online toolkit. Based on the original programme, which provides workshops, webinars and live lectures, the new toolkit offers additional resources that enable staff at institutions to deliver their own IP for Research training as part of their researcher development programme or through their technology transfer offices.

#### Other activities

All marketing and PR carried out within the External Communications team is achieving great coverage particularly on our social networking platforms.

## 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

We apply all relevant WIPO standards including ST.8 for machine-readable records and ST.36 for xml transfer of bibliographic data.

In October 2009 we launched a Patents Digital Access Service for the digital preparation and transfer of patent priority documents to WIPO. The service is free to electronic filers and will benefit both UK business and the IP community.

The service automatically prepares digital patent priority documents and securely stores them at WIPO for future use. This service removes the financial burden on our customers who currently pay National IP Offices to prepare priority documents for filing at other IP offices. Please see the following link for further information https://www.ipo.gov.uk/pro-types/pro-patent/pro-p-os/pro-p-apply-online-pdas.htm.

It is also possible to exchange priority documents in paper and on CD provided the appropriate electronic signature is provided.

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

#### Assistance to developing countries

Nothing to report.

#### Other activities

The IPO provide reports to World Trade Organisation on TRIPS Agreement, TRIPS responses details work done with other offices and relate to all areas of IP, reporting on activities around technology transfer and technical cooperation.

#### VII. OTHER RELATED MATTERS

Please include any other relevant information here.

Nothing to report.

- 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.