

# CWS/ATR/PI/2018/GB

## Annual Technical Report on Patent Information Activities in 2018 submitted by UK Intellectual Property Office

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

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

The Office is looking to transform our business processes and technology we use so that we can deliver new fully end-to-end digital services for our customers across Patents, Trade Marks and Designs over the next few years.

#### 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. The first new digital service to be delivered will be a new IP Renewals Service.

#### 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 dropped by 5% between 2017 and 2018, with 20,940 applications in 2018, compared with 2017's 22,072. Of these, the proportion of applications from UK residents increased slightly, from 60% in 2017 to 61% in 2018. The number of Patents granted decreased from 6311 to 5982 between 2017 and 2018, equating to a 5% drop.

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

Our website [www.ipo.gov.uk](http://www.ipo.gov.uk) moved in October 2014 to a new Government website GOV.UK and the new web address is now: <https://www.gov.uk/government/organisations/intellectual-property-office>

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

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 meets regularly with other participating offices at WIPO to discuss ongoing revision of the IPC.

### **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)**

(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) CD-ROM

Up to 31 December 2016, in association with the EPO, we published GB "A" documents on CD-ROM on a fortnightly basis, ESPACE-UK. The CD-ROM collection covered the years 1979 to 2016, i.e. for GB serial numbers in excess of 2,000,000. This service ceased as from 1 January 2017.

(3) 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>

(4) 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: <https://worldwide.espacenet.com/>

**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. 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-ipsu.htm>

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

**Other sources**

Nothing to report.

## **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**

We use Microsoft Windows 10 which provides an integrated and extensive network of applications that are available to all staff. Office 365 provides access 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.

Copies of documents cited in search reports are produced by the in-house Computerised Image Management System (CIMS) for supply to applicants, and in addition this system has been extended to enable the ad hoc ordering by technical staff of any types of patent documentation, direct from their desktop. All staff have access to the Internet and to the Office Intranet and have their own e-mail (via Microsoft Outlook) and official e-mail address.

**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**

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

The Patlib Network was founded by the European Patent Office but PATLIB UK is autonomous and driven by its members and the UK Intellectual Property Office (IPO).

PATLIB UK is a network of 16 libraries around the UK that offer help and support on intellectual property as well as other business topics. They are based in local libraries and therefore open to any member of public that wishes to attend.

One of the key offerings 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 Master Class programme as well as ongoing individual training sessions as needed.

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 Belfast and 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. In addition, we also have a front office in London where customers can file applications.

#### **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 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 toolkit provides guidance and model agreements to facilitate negotiations between universities and businesses undertaking collaborative research projects.

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.

This is primarily done through interaction with our IP for Universities and Colleges (IPUC) stakeholder group, which includes patent and trade mark attorneys, lecturers and industry professionals.

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 IP <https://www.gov.uk/government/publications/intellectual-property-for-business>

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

We continue to communicate IP awareness to young people from primary through to secondary school. We have developed a range of curriculum linked education resources to raise awareness of innovation, creativity and intellectual property in partnership with UK Music, Aardman Animations and the Industry Trust. Campaigns are supported through [crackingideas.com](http://crackingideas.com) an online hub to support UK and devolved Governments' curriculums plus advice and guidance for schools on intellectual property.

We have introduced a new online tool for Universities (IP Tutor) helping students and lecturers understand intellectual property rights. <https://www.gov.uk/government/publications/intellectual-property-for-universities/ip-tools-for-universities>

For schools, we have developed a range of curriculum linked education resources to raise awareness of innovation, creativity and intellectual property in partnership with UK Music, Aardman Animations and the Industry Trust. Campaigns are supported through [crackingideas.com](http://crackingideas.com) an online hub to support UK and devolved Governments' curriculums plus advice and guidance for schools on intellectual property.

For colleges, we developed the Future Innovators Toolkit (FIT), a comprehensive resource pack on intellectual property (IP), 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, we developed IP Tutor, an online resource 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.

Our IP for Research programme helps PhD students and researchers understand how IP fits into their research and the commercialisation process. In addition to six online guides on IP, we offer a half day workshop to universities.

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. We will be drawing upon the findings of this review to develop an IP Education Policy to ensure our resources and activities are most effectively targeted.

#### **Other activities**

All marketing and PR is carried out within the External Communications team and we are achieving great coverage particularly on our social networking platforms. We have recently launched an Instagram account with a focus on cultivating a following and specifically targeting entrepreneurs and designers: [instagram.com/ipforbusiness](https://www.instagram.com/ipforbusiness)

## **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**

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**

Nothing further to report.

#### **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**

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.**