The future of patent searching

Sometimes it is good simply to pause for a moment and reflect on the purpose of what you do and why it is all worth the effort.

EPO President António Campinos opened this year’s EPO Patent Information Conference – which took place in Bucharest at the end of October – highlighting the value of patent information and the Office’s commitment to providing the highest quality services to innovators: “Patent knowledge – understanding the information in patents and deriving knowledge from it – is enormously important for business and researchers in today’s globalised knowledge economy,” he said, “That is why we will continue to enrich the content of our databases and ensure their accuracy, while providing the best possible ways of searching them; we will strive to offer statistical data tools that provide a meaningful picture of technology trends; and we will continue to support users with training and services to help them exploit the wealth of information found in patents.”

The remarkable address given by Andrei Iancu (Director of the United States Patent and Trademark Office) took the 340 participants on a thought tour. He reminded them that we all have immeasurably better lives than our forefathers of the intervening two hundred years than in all the millennia before that combined. He stressed how inventions have improved more or less everything around us and how giving inventors recognition and reward for their work was an incentive for them to invent more. Patents, he said, were one of the factors that had led to a new, rapid pace of innovation. Accepting that there are arguments for and against patents, he pointed out that there are no successful countries without a strong patent system and no poor countries with one.
Without patents, Mr Iancu concluded, we would not have the inventions we enjoy today. Patents and – by association – the work of all those contributing to the patent system are vital. They make our lives and the lives of those who will come after us better. All too often, those working in patents see their work as something administrative, but this is undervaluing it. If you work in patents, you are playing your part in making the world better, ensuring that those who innovate are rewarded and that others have information on all the world’s innovations and can take informed decisions, often with huge impact.

But as we move forward there will be new challenges. What will be the effect of AI? IP offices and IP policies need to adapt to support these emerging technologies.

Direct impact of AI on patent searching
AI will also have an impact on patent searching, which is why it was a major topic at the event, together with the question of the future of patent searching itself.

Speaking at the Patent Information Conference last year, Andrea Davis of Bodkin IP presented a study she had carried out to compare automated patent tools. Her conclusion was that the “accuracy of automated tools can be as good as 67% or as low as 0% of a manual search.”

The work of Andrea Davis and others is revealing there is still a wide variation in the accuracy of the search results that automated tools produce. This year, Burkhard Schlechter of the Austrian Patent Office presented his analysis in this area, comparing searches he had done manually with those done by a variety of automated search tools.

The automated tools sometimes found important documents he had missed, but more often than not it was the other way round, with the automated tools missing very important documents. His conclusion was thus that the tools can complement but not replace a manual search.

Also speaking the Patent Information Conference this year, Tony Trippe of Patinformatics discussed the creation of “gold standard collections” for addressing this issue. These collections, he said, “will help patent searchers compare the results of different systems and determine if the precision and recall the systems provide will be sufficient”.

The future of patent searching
There is broad consensus, it seems, that – for the moment at least – AI will help rather than harm patent searchers. Its presence will, however, put pressure on the patent searching profession to keep ahead of the game, and to demonstrate the value it provides. Some speakers at the Patent Information Conference picked up on the topic of patent searching as a profession, including Eric de Cock of Tata Steel, who talked about his career as both a patent searcher and patent attorney. These were not two people, he said, with two jobs, but two people with one job, where the best results could only come by mutual respect and understanding of the role both had to play.

In this context, the short presentation by Frederic Baudour on the project to certify patent searchers was particularly significant. According to the speaker, a total of 262 people had already been granted qualified patent information professional (QPIP) status under the new certification scheme.

Conclusions
AI, semantic searching and deep learning have been generating discussion, concern, enthusiasm and the material for journalists to write headlines for a number of years. New search tools are emerging fast and in considerable numbers. Users are fighting to keep up with the rate of change. At the same time, they don’t yet know the extent to which they can trust these new tools, or which ones to invest in, and the impact they will have on their work. The fog will certainly clear, the question is when. In the meantime, events such as the EPO Patent Information Conference are one way to stay informed.

More: epo.org/pi-conference

The EPO’s webpage on artificial intelligence: epo.org/ai

1) epo.org/learning-events/events/conferences/2018/pi-conference/programme.html
2) qpip.org
The impact of change

We are in a period of rapid change. This seems to be true of society in general – you only have to think of the impact that artificial intelligence is having on us all – and it is true of the European Patent Office.

In Patent Information News 2/2019, the EPO’s Principal Director for Patent Information, Richard Flammer, wrote that our new President’s Strategic Plan 2023 would be discussed in our Administrative Council. That happened, and the Council approved the plan. We have now moved into the implementation phase. The plan represents a commitment to sustainability and to excellence. For patent information, this translates into a focus on the completeness of the data we offer, and on enriching it so that users can obtain a complete picture, including data on court decisions and licensing opportunities.

We also want to invest even more effort on offering statistical tools for patent analysis.

For years, the EPO has enjoyed a reputation as the world’s leading provider of patent information. To keep that reputation, we must keep our fingers on the pulse of change as it happens, react fast as the changes come, and sometimes even drive change ourselves.

As John F. Kennedy once said, “Change is the law of life. And those who look only to the past or present are certain to miss the future.”

To read the Strategic Plan, see epo.org/strategy. For patent information, see Goal 4.

Christoph Ernst
Vice-President Legal/International Affairs

PUBLICATIONS

Patent Information News

Some readers may have noticed that the EPO did not publish a September issue of Patent Information News this year. The omission was part of a process of self-analysis about the publication and how to communicate with users as we approach the next decade of the 21st century. That process has led to a decision to explore more modern and dynamic forms of communication from 2020 onwards. As a result this edition will be the last in the current form.

For 28 years, Patent Information News has been reporting on developments in patent data and patent search tools from the EPO and around the world, including all the landmark events in European patent information: Espacenet, the revision of the IPC, the creation of the Cooperative Patent Classification, Patent Translate, legal status data from China, Japan and Korea, and Global Dossier. It was in Patent Information News that many readers first learnt of these developments.

In addition to major news, and perhaps more importantly even, the publication has also kept patent searchers up to date on incremental changes and has provided tips and tricks on how to use patent information from the EPO. Frequently, it was the only publication that covered this type of background information, which is so vital to experts in patent information.

Originally called “EPIDOS News”, the name was changed to “Patent Information News” in 2006. It was initially published in English only, but switched to three languages in 1998. The preparation of three versions rather than one meant a lot more work for the editorial team, as well as for the EPO’s Language Service, but the statistics showed that it was well worthwhile. About 50% of readers preferred the English version, 35% the German and 15% the French version.

For all 112 issues, Annegret Ehmke of Atelier 59, now based in Tenerife, was the graphic designer preparing the layout, and the EPO would like to thank her for the excellent work she has done over the years. For 111 out of the 112 issues, Daniel Shalloe of the EPO was the editor-in-chief.

Watch out for announcements from the EPO in 2020 on its new ideas for communication with patent information users.
New Espacenet now in production

After almost a year of intense testing and fine-tuning, the EPO is happy to announce that new Espacenet was launched into production on 19 November. The main improvements are:
– smooth user experience from search to results
– intuitive query building
– improved result-list handling and inspection
– filtering and analysis of results
– help at source
– reactive web design

Previous editions of Patent Information News have covered the various features of new Espacenet, and this issue includes an article (see below) on Boolean vs elastic search. Further information and guidance is available in Espacenet, on the EPO website (epo.org/patent-search) and in the Espacenet forum (https://forums.epo.org/new-espacenet-107/).

New Espacenet is available at epo.org/espacenet.

New Espacenet: Boolean vs elastic search

Using ranking to quieten down the noise in your searches

Many experienced searchers recommend the concept search approach as the best way to do a novelty, prior art or patentability search. This involves breaking the invention down into its various concepts and combining them to build up a comprehensive query using the Boolean AND operator.

Within one concept, you will typically then use the OR operator to cover synonyms and various classification symbols.

However, you might sometimes need the AND operator within one concept too, if your query has delivered too many results or there is too much noise, i.e. too many unwanted documents. It requires some experience and sometimes simple trial and error to refine the query to retrieve all the relevant documents with a tolerable noise level.

Elastic search in new Espacenet

Elastic search in new Espacenet offers a more elegant solution. The ranking algorithm normally manages to bring up the most relevant documents first, even if you only use the OR operator. Simply select the "ranking" sort order in the result list.

This approach is helpful, at least as a starting point for locating the most relevant documents.

Selecting the right field identifiers can also make all the difference when it comes to getting maximum potential out of elastic ranking. For example, if you search the word “laser” in the default identifier, which is “All text fields or names”, then the underlying algorithm will also rank inventions highly if the search term appears in the name. A more successful approach in this case would be to choose “All text fields” (comprising titles, abstracts, descriptions and claims) instead of “All text fields or names”.

epo.org/espacenet
PATENT ANALYSIS

EPO study on patenting activity in graphene composites

Graphene composites are the subject of the latest in a series of EPO Patent Insight reports that has so far covered CAR T-cell immunotherapy, blockchain and quantum technology (see Patent Information News 1/2018, 3/2018 and 1/2019 respectively).

Graphene
Graphene is a one-atom-thick layer of carbon atoms arranged in honeycomb fashion. Because of its unique structure and elemental composition, graphene has extraordinary physical and chemical properties which set it apart from other materials. It is 100 times stronger than the strongest steels, it is almost transparent and yet it conducts heat and electricity better than most metals. Graphene shows significant transistor and quantum effects. It can be integrated with biological tissue without rejection and can be used in nerve damage repairs and neural tissue regeneration, for example. Graphene has been described as a “wonder material”.

Graphene composites
Graphene’s physical properties lend themselves to high-performance composite materials, allowing previously unobtainable applications in electronics, paints and coatings, clothing, medical implants, automotive and aerospace structures and chemical processing.

Patent analysis
The EPO’s analysis was based on a dataset of more than 10 000 patent families. The main finding was that worldwide patenting activity in graphene composites took off in 2010 and has been growing steadily since then (Figure 1).

The majority of priority filings are in China, followed by Korea, the US and Japan. PCT first filings are in fifth position and EP direct filings are ninth overall. Filings at the USPTO peaked in 2014 and those at the EPO in 2016, while PCT filings peaked in 2017. Europe is, however, strongly represented in priority filings in the UK, France, Poland, Germany, Italy, Spain and Finland.

Figure 1: Patent families by 1st publication year

As far as specific technologies are concerned, the technology heat map shows that most activity can be found in graphene composite-based electrodes and enabling technologies for greenhouse gas mitigation (Figure 2).

Conclusions
Worldwide patenting activity in graphene composites is still growing strongly despite PCT filings and filings at the USPTO and EPO having peaked. Growth in overall patent filings is buoyed up mainly by filings in China, but also in Korea and Japan. Outside China there is a healthy balance of co-operation between industry and the research community.

This report and others in the series will, in due course, be published in full detail, with all supplementary information on the EPO’s website at epo.org/insight-reports.

Figure 2: Main CPC group / Patent families by 1st publication year

Composites
Composite materials are combinations of two or more material components with dissimilar properties, the combination of properties being greater than the properties of the individual components. Glass-reinforced plastic (GRP) is a familiar composite made of a plastic reinforced by fine fibres made of glass. Light and tough, its bulk strength and weight are also better than many metals, and it can be more readily moulded into complex shapes.
The power of patent analysis

Three examples of using the EPO’s PATSTAT database
– Insight reports into specific technologies
– Patent analytics reports for patent applicants
– Online statistics service on renewable energy

Three presentations at the EPO Patent Information Conference in Bucharest illustrated how the PATSTAT database can yield information and insights not available elsewhere. The key message from this series of talks was that you can use PATSTAT for an abundance of reasons – you just have to invest some time understanding how to use it.

Role of patent searchers in patent analytics
A further important message for the conference audience was that patent searchers can make all the difference when it comes to defining the data set for a piece of analysis. For example, if you want to study patent trends in, say, the field of graphene (see article on page 5), then a patent searcher with expertise in graphene will be the best person to help you gather all the relevant patent documents. After all, if you start with an incomplete data set, or a data set riddled with irrelevant documents, then your analysis will not be good. It’s as the saying goes: garbage in, garbage out. The patent searcher will ensure that you have “high quality in” and help you maximise the probability of “high quality out”.

The EPO’s Patent Insight reports
Nowhere is the value of a patent searcher’s input more evident than in the EPO’s Patent Insight reports, as presented by Nigel Clarke and Björn Jürgens in Bucharest. The article on page 5 discusses one of these reports, on graphene composites. Others include analyses of patent activity in the fields of:
– CAR T-cells
– blockchain
– quantum technologies

To produce these reports, the EPO works with an external expert. First, it consults its own patent examiners specialising in the technical field concerned, to identify suitable keywords and classification symbols. This first step is essential. The external expert then checks the keywords for synonyms and for meanings that could lead to irrelevant documents being retrieved. This work leads to the formulation of a search command to retrieve a high-quality set of data, which is then cleaned up to remove any remaining unsuitable documents. At this stage, it is vital to pay attention to the harmonisation of applicants’ names, as these will be important for the analysis that follows.

SQL queries in PATSTAT can provide the numbers for creating visualisations of the results. These can be patenting activity by country or applicant, patenting activity over time, collaboration between applicants, and so on. See Figure 1 for an example chart.

Patent analytics reports
Catrina Bruce of IP Australia described another use of PATSTAT data as illustrated by the patent analytics reports that IP Australia now issues when it carries out international-type searches under the Patent Cooperation Treaty (PCT).

These analytics reports (see Figure 2) show the development over time of patent filings in the field of technology concerned, as well as noting the leading countries and patent applicants in the field. The reports are available via an interactive visualisation, allowing users to explore the results more easily. She reported that one customer had said: “The analytics report highlighted companies we were not aware of – this was very beneficial – and identified a different industrial use for the invention. It has provided further conviction to commercialise.”
Online statistics service

The International Renewable Energy Agency (IRENA) uses PATSTAT data, specifically the Y02 classification, in the INSPIRE (International Standards and Patents in Renewable Energy) interactive online interface on patenting activity (see irena.org/statistics). Alessandra Salgado of IRENA presented the interface and explained how IRENA had used SQL queries to produce the results it contains.

Notable features of INSPIRE include its ease of use and the high quality of its data visualisations. Users can select geographical regions and renewable energy technologies and sub-technologies to generate graphs (see Figure 3).

Conclusions

Patent analytics are gaining in importance, as is the variety of ways in which they can be used. This is an area where patent searchers can make an important contribution and help ensure the robustness of the results. The EPO’s PATSTAT database remains the leading tool in the field for this kind of work.

Improved text analysis in PATSTAT Online

PATSTAT Online offers extended syntax searching from Transact-SQL (T-SQL). This gives you more advanced search options over SQL for searching in the title or abstract. For example, the FREETEXT predicate allows searching for the meaning of a word instead of its exact letters. Thus, searching with FREETEXT for “string” will also retrieve documents containing the word “strung”.

The EPO’s PATSTAT database has become a point of reference in the field of patent intelligence and statistics. It helps you perform sophisticated statistical analyses of bibliographical and legal status patent data.

To test PATSTAT Online for free, go to epo.org/patstat.

Open Patent Services – video available

Open Patent Services (OPS) is a web service which provides access to the EPO’s data via a standardised XML interface. A new video gives you an overview of what it can do and where you can find more information on getting started.

epo.org/ops
Improved online file inspection of cited opposition documents

The European Patent Register now includes clearer references to documents filed during opposition procedures.

Many readers will already know that the European Patent Register provides access to all documents contained in the public part of the file for a European patent application. This is also known as file inspection or the file wrapper. This information is available in the “All documents” panel, and is the Register’s most visited section.

Until now, it was not possible to identify documents cited in the opposition procedure from the document label alone, so users had to click on each label and review the contents to identify the document. A long-standing request from users has thus been the ability to retrieve documents cited during the opposition procedure more easily. This was also mentioned in the Register user satisfaction survey carried out towards the end of 2018 (see Patent Information News 2/2019).

The good news is that, for files where a first opposition is filed on or after 1 July 2019, the EPO now labels cited opposition documents in the Register file inspection with identifiable document codes (e.g. “Citation in opposition procedure – 001”, “Citation in opposition procedure – 002”) (Figure 1).

For these files, the EPO has also implemented a user-friendly consolidated list, available in the public part of the file, giving an overview of the opposition citations in numerical order (e.g. D1, D2, and so on) (see Figure 2). The list includes opposition citations filed by the proprietor (column P) and documents filed by the different parties (column 1, 2, etc.). The consolidated list will be kept up to date by the EPO for the duration of the opposition proceedings.

The consolidated list of opposition citations within the file provides an overview of the documents and helps users to identify and download documents cited during the opposition proceedings (e.g. “citation in opposition procedure – 001” for D1).

A webinar took place on this subject at the beginning of September. A recording is available at epo.org/pi-videos.

European Patent Register Assistant updated

An updated version of the European Patent Register Assistant online tutorial, reflecting the recent changes in the Register, is now available.¹

To access the European Patent Register, go to epo.org/register.

¹) https://e-courses.epo.org/pluginfile.php/41708/mod_resource/content/5/EPRA/index.html
FEDERATED REGISTER

France joins the Federated Register service

Following the integration of direct links to the national registers of Malta and Morocco (see Patent Information News 1/2019), France has now also been added to the Federated Register service. The addition to the service of one of the countries with the highest numbers of national validations of European patents will be seen by users as a very important step.

The Federated Register service has now grown to 31 participating states: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Finland, France, Germany, Greece, Ireland, Lichtenstein, Lithuania, Luxembourg, Monaco, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Available within the European Patent Register (epo.org/register), the Federated Register allows you to retrieve reliable and up-to-date bibliographic and legal status information for granted European patents once they have entered the national phase in the participating countries and view them all together in a table in just a few seconds.

More information about the Federated Register, as well as on which countries are integrated and what content they provide, is available on the EPO website.¹

Ultimately, it is the goal of the Federated Register to offer access to the status of a granted European patent across all the designated states, as well as the extension and validation states.

DATA NEWS

EP authority file now also available in JSON format

Updated every six months, the EP authority file is now available in three formats: CSV, XML and JSON. The JSON – or JavaScript Object Notation – data exchange format is a simple and widely-used schema-less text format for coding key-value pairs. Unlike CSV, with JSON values can be combined and nested, allowing complex structures to be meaningfully coded without impairing readability.

Modern, schema-free (NoSQL) database systems usually offer direct import of JSON documents. For example, just one single command line is needed to input the six million publication numbers of the current EP authority file into a MongoDB database.

This means that users and database hosts can be sure that they have a complete set of all EP publications.

See epo.org/authority-file.

¹ epo.org/searching-for-patents/legal/register/documentation/federated-register.html
Database coverage

The maps you see here are updated versions of a set of maps published in Patent Information News 3/2018. They show the coverage of the EPO's worldwide bibliographic and legal status databases. The colours indicate how up to date the data is.

The images are based on a snapshot of the databases taken at the end of July 2019. They do not include regional authorities, such as the EPO and WIPO, or authorities which no longer exist.

You might come across isolated records in the database from countries in grey on the map. In these cases, the records may be present in the database because the patents they refer to were cited in search reports or for other reasons, but there is no regular reliable data supply in place (yet). In some other cases, the data was temporarily processed manually and no electronic deliveries put in place to feed the database. This results in fragmented coverage that cannot be represented on the map.

The maps give you a quick global view of the data that is available. More comprehensive coverage information on the EPO’s databases is available on the EPO’s website at epo.org/searching-for-patents/data/coverage/weekly.html.

Key:
- Most recent data is less than six months old
- Most recent data is more than six months but less than two years old
- Data is available but is not complete or recent
LEGAL EVENT DATA

News on legal event data

More information for new users
Two new pages on the EPO website, targeted at newcomers to patent information, give a brief introduction to legal event data.

Located in the “First time here” section in the “Searching for patents” area, the new pages describe the data in the EPO’s worldwide legal status database (INPADOC). There is also a good overview of the INPADOC classification scheme for legal event data, designed to make searching legal event data easier (see Patent Information News 1/2019, cover page).

epo.org > Searching for patents > First time here? > Legal event data or go to epo.org/legal-event-data.

In addition to extending the information available, the EPO has modified and colour-coded it for a better grasp of what is included in the database. For example, the information now includes legal event descriptions and categories (“event class”).

Go to epo.org/data-coverage and click on “Weekly updates”.

European Patent Bulletin – full archive now available online

Over the years, the European Patent Bulletin has been made available to the public in different formats. Since 2002, the EPO has been producing it in character-coded, fully searchable PDF format only.

In June 2019, the EPO finished processing PDF editions of Bulletin issues dating from 1978 to 2001 as scanned copies of the original paper documents.

As a result, the full archive of the Bulletin from 1978 is now available. To access it, go to epo.org/bulletin-archive.

For more information on the European Patent Bulletin, please contact bulletin@epo.org.

WIPO ST.27


A task force responsible for ST.27 met at the beginning of July and discussed proposals for revising it. WIPO has published a report of that meeting on its website.¹

Overview of legal event data in the INPADOC worldwide legal status database

The EPO has improved the regular statistical overview it provides of the data available in its INPADOC worldwide legal status database.

¹ wipo.int/min/docs/classifications/en/cws_7/cws_7_12.pdf
Keeping up to date with CPC revisions

If you are a user of the Cooperative Patent Classification (CPC) system, you will no doubt be interested in finding out about revisions to the classification scheme in your technical field. This topic was addressed in detail at the EPO Patent Information Conference 2019 by the EPO’s classification expert, Pierre Held.

Since 2013, more than 9 000 new CPC symbols have been created in response to developments in technology and patent documentation. Each new CPC symbol (or change to an existing symbol) is the result of a complex decision-making process between the EPO and the United States Patent and Trademark Office (USPTO), the two co-operating partners that operate the CPC.

The EPO and USPTO have agreed on the following publication schedule for the 2020 CPC scheme and corresponding product updates:

– 2020.01 (January)
– 2020.02 (February)
– 2020.05 (May)
– 2020.08 (August)

Details on the CPC website

The CPC website includes a “CPC Revisions” section which lists revisions to the scheme. Under the navigation title “Pre-release”, material such as the scheme, notices of changes and concordances are available to the public about one month ahead of the official entry into force of the corresponding material. Changes that have already occurred are listed under the “Notice of changes” option.

Details in Espacenet

Once a CPC change has entered into force, you can see it in Espacenet’s “Classification search”. Once you have done your search and are looking at the on-screen results, simply click on the “toggle dates” button to show or hide the dates of the latest revision (Figure 1). You can also ask the system to show you all the changes that happened within a particular time range.

Searching in technical areas affected by a revision

The reclassification of the documents in the EPO’s collections takes place after the publication of the revised CPC scheme. In these cases, “warnings” are provided to inform users of the ongoing reclassification process (Figure 2).

If there is a warning for a classification symbol you want to use for your search, you might not retrieve all the relevant documents because some of them will not have been reclassified yet. You will therefore need to repeat your search using the symbols that applied before the revision.

For detailed information

The CPC website provides comprehensive details about forthcoming CPC revisions as well as all previous ones, including:

– compilation of the changes for each revision
– new or modified definitions (where applicable)
– revision concordance list showing the relationship between the old and new classification symbols
– CPC-to-IPC concordance list
– cross-reference list, updating scheme references located elsewhere in the CPC
– list of valid symbols showing all the CPC symbols currently in force
– CPC validity file showing all the CPC symbols that have ever existed, together with the time range during which they were valid.
– complete CPC scheme in XML and PDF formats

For more information, see cpcinfo.org.

Pierre Held’s presentation is available as a PDF file at epo.org/pi-conference.
CPC International – available now for searching

Managed by the EPO and USPTO, the Cooperative Patent Classification (CPC) system is being used by an increasing number of patent offices. This growth in use led to the launch of the CPC International (CPCI) project to provide information on which office assigned which classification symbols.

Thanks to this work, the EPO’s patent information products now indicate the authorities that assigned the CPC classification symbols for each patent publication. Figure 1 shows an example in Espacenet.

CPCI is maintained at family level, so every member of a simple patent family will display the same set of CPC symbols and the same assignment information.

Searching for CPC symbols in Espacenet

If you are familiar with command-line searching in Espacenet, you will be able to use the “cpc” field identifier in Smart search to retrieve documents with a particular CPC symbol, as in the past, and independently of the assigning authorities. You can also use the “CPC” field in Advanced search to do this. What is new is that you can now also search the assigning authorities using the “sentence” proximity operator. The basic notion is that the symbols and the offices are stored in the same sentence. Here is an example of a query that can be used for this purpose:

cpc=(C08F2220/1825 prox/unit=sentence EP)

This query retrieves documents where the EPO assigned the respective CPC symbol irrespective of how other offices classified the documents.

You can also search for cases where two or more offices have assigned the same classification symbol by putting the country codes for the offices in brackets, as follows:

cpc=(C08F2220/02/low prox/unit=sentence (US, KR, EP))

cpc=(Co8F2220/o8 prox/unit=sentence (Co8F220/o6, US, EP))

This syntax is also feasible for searching combination sets (C-sets) that are used to describe, for example, process steps or the sequence of layers in chemical products. Here is an example:

cpc=(C08F218/08 prox/unit=sentence (C08F220/06, US, EP))

CPCI in other EPO products and services

Global Patent Index (GPI) also allows you to search for the assigning offices in CPC classification symbols or combination sets:

CPC = Co8F2220/1825 with CPCAO = EP or US
CSET = Co8F218/o8 with Co8F220/o6 with CSAO = EP or US

Finally, the EPO’s bulk data products now include CPCI information. If you use Open Patent Services (OPS), for example, you will be able to retrieve it. Further information is available on the EPO’s website and on the CPC website.1 2

1 epo.org/service-support/updates/2019/20190724.html
2 http://www.cooperativepatentclassification.org/publications/Miscellaneous/TheCPCInternationalProject.pptx

PUBLICATIONS CORNER

"Publications corner" presents the latest statistics on EPO publications.

- EP-A2: European patent applications published without search report
- EP-A3: European search reports
- EP-B1: European patent specifications
- EP-B2: revised European patent specifications

Note: The table does not include statistics on European patent applications filed via the PCT route (Euro-PCT applications). These are published by WIPO and are not made available by the EPO unless they are in a language other than English, French or German. Currently about 60% of all European patent applications are Euro-PCT filings.

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CNIPA revises its examination guidelines

According to an official notice from the China National Intellectual Property Administration (CNIPA), a revised version of its examination guidelines entered into force on 1 November 2019.

Applicants can now request deferral of the examination of a patent application by one, two or three years. Changes have been made to the allowable submission time for divisional applications and to the provisions for graphical user interfaces and the eligibility for patenting of stem cells from human embryos.

A detailed comparison table, highlighting all the changes over the previous version, can be downloaded from CNIPA’s website (Chinese only) at www.cnipa.gov.cn/docs/20190925150749766977.pdf.

New patent system to be launched on 19 December 2019 in Hong Kong SAR (China)

A new patent system is due to enter into force in Hong Kong SAR (China) on 19 December 2019. The revised system introduces an “original grant patent (OGP) system” to provide applicants with an alternative route for standard patent protection. Under the new system, applicants can file standard patent applications direct with the Hong Kong Intellectual Property Department (HKIPD). Prior filing of a corresponding application at the EPO, UKIPO or CNIPA – as required under the existing “re-registration” system – is no longer required.

The existing “short term patent system” has also been refined, but still offers a cost-effective way of obtaining protection in Hong Kong SAR (China).

The new regulations – the “Patents (Amendment) Ordinance 2016” and “Patents (General) (Amendment) Rules 2019” – can be found on the HKIPD website at www.ipd.gov.hk/eng/whats_new/news.htm.


Extension of granted Korean patents to Cambodia now possible

According to a Memorandum of Understanding between the Korean Patent Office and the Ministry of Industry and Handicraft of the Kingdom of Cambodia, Korean patents granted from 1 November 2019 onwards may now also be registered in Cambodia following a simple three-month procedure.

For further information, see KIPO’s press release of 23 August 2019: www.kipo.go.kr/kpo/BoardApp/UnewPressApp?area=&board_id=press&cp=1&pg=1&npp=1&catmenu=m03_05_01&date=2019101100487.htm&searchVal=%C4%AF%BA%B8%B5%F0%BE%C6&bunruy=&st=&c=1003&seq=17709.

Expedited examination of PCT and AI-related applications in the ASEAN region

The ASEAN member states have agreed to broaden the scope of the existing ASEAN patent examination co-operation system (ASPEC). Under ASPEC, the member states share their search and examination results for corresponding patent applications. The idea is to reduce duplication of work and to accelerate the examination procedure.

On 27 August 2019, the member states launched two further initiatives under the ASPEC system:

– “PCT-ASPEC”: extension of the existing ASPEC programme to international search reports and international preliminary examination results issued by an ASEAN member acting as an international searching authority (ISA) or an international preliminary examination authority (IPEA) (currently Singapore or the Philippines).

– “ASPEC AIM”: agreement to prioritise applications related to artificial intelligence, permitting first office actions within a period of six months.

PCT-ASPEC will run for a trial period of three years and ASPEC AIM for two years, both limited to a certain number of applications per year. For further information, visit the website of the Intellectual Property Office of Singapore at www.ipos.gov.sg/protecting-your-ideas/patent/application-process/accelerated-programmes.

Eurasian Patent Office deposits industrial design protocol

On 1 October 2019, the Eurasian Patent Office (EAPO) deposited the Protocol on the Protection of Industrial Designs to the Eurasian Patent Convention with WIPO.

Once ratified by all EAPO member states, this protocol will enable applicants to file a single design application with EAPO and obtain protection in all the member states of the Eurasian Patent Convention after grant. The protocol was adopted at a diplomatic conference on 9 September 2019 and signed by representatives of the Republic of Azerbaijan, the Kyrgyz Republic, the Republic of Armenia, the Republic of Kazakhstan, the Russian Federation and the Republic of Tajikistan.

For more information, see the EAPO website: www.eapo.org/ru/index.php/newspress=view&d=966.
Recent developments in Saudi Arabia

On 27 September 2019, the Saudi Authority for Intellectual Property (SAIP) signed a patent prosecution highway (PPH) agreement with the US Patent and Trademark Office. The goal is to develop the bilateral partnership in the field of intellectual property and accelerate the registration procedure of Saudi Arabian patents and trade marks in the United States. A further aim is to encourage applicants for US patents and trade marks to register their rights in Saudi Arabia.

On 23 October 2019, at a meeting of the 4th session of the Saudi-Japanese 2020 Committee, SAIP signed a memorandum of co-operation in the field of intellectual property with the Japan Patent Office, with the aim of establishing a framework for co-operation activities, enhancing co-operation in IP protection, raising awareness of IP value and developing human resources.

More information on these co-operation projects is available on the SAIP website: www.saip.gov.sa/en/news/.

Korea: expanded scope for keyword and CPC searches

The Korean Intellectual Property Office (KIPO) has recently implemented changes regarding searches with CPC symbols, keywords and other items in its KIPRIS public search system:

– Search with CPC symbols: foreign family members of Korean documents are now included in the search. Even if a CPC symbol is not included in a Korean document but only in an EP or US family member, the Korean document will also be shown in the result list.

– Keyword searches are now performed in all available publications, i.e. laid-open publications and granted patents. (Previously, the search engine only considered the most recent publication).

For more information, see KIPRIS News of 30 September 2019 (Korean only): kpbs.kipris.or.kr/kpbs/kr/notice.do?act=view&SEQ=1616&TYP=1.

Japan: design law now offering broader perspectives

On 1 November 2019, the Japanese parliament agreed to changes to the Japanese design law which will enter into force on 1 April 2020. The main points are as follows:

– Broadening the concept of what is considered a “design”: after the change, it will be possible to protect designs founded on the inner or outer appearance of buildings.

– Extending the time span for filing related design applications: it will be possible to file a design application based on the concept of and related to a design already filed by the same applicant within 10 months of the original filing date (previously: eight months).

– Extending the duration of a design right from 20 years from the registration date to 25 years from the application date.

– Simplifying filing procedures to allow the filing of several designs with a single application.

– Tracking of partial infringement of protected designs.

For detailed information, see: www.jpo.go.jp/system/laws/rule/hokaisei/tokkyou/document/tokkyouhoutou_kaieki_010517/01.pdf (Japanese only).

For more news from Asia, see the Updates section at epo.org/asia.
Webinar schedule 2020

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The EPO has published its 2020 programme of webinars on patent information, which are now open for registration. They are free and take place online. Here is the complete list.

Recordings of webinars
If you miss one of the webinars, then don’t worry because most of them will be available as recordings for up to one month after they have taken place. Simply go to epo.org/pi-videos and choose the webinar that interests you.

For more information on the webinars, see epo.org/pi-training.

World Patent Information at 40

World Patent Information is a quarterly journal born from an initiative of the European Commission and WIPO. It aims to keep the patent community and industry informed about the latest developments in patent information and analysis.

In September, it celebrated its 40th birthday. Elsevier, the journal’s publisher, hosted a meeting in Oxford to celebrate the occasion, inviting 30 of its board members and other guests to reflect on the journal’s success and how to prepare it for the next 40 years.

Register now: Search Matters 2020

Search Matters 2020 is a three-day conference for patent and innovation professionals, researchers, students and others interested in patent information and strategy.

On 11 May, at our “at-the-desk” sessions, participants will have a chance to meet with EPO examiners and learn first-hand how they search in specific technical areas.

On 12 and 13 May, a total of 27 workshops will be run by patent examiners. Participants will be able to take a close look at a wide range of topics, including how to search disruptive technologies such as 3D printing and AI. They can also pick up tips and tricks on searching Asian prior art, learn how to make the best use of search tools, and much much more.

More information and registration: epo.org/search-matters
Save the date!

As the year comes to a close, now’s the time to block your calendar for some important events taking place in the field of patent information in 2020. See the table below.

Important patent information events in 2020

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Patent Olympiad

The EPO hosted the 2nd Patent Olympiad in Bucharest immediately before the EPO Patent Information Conference.

The Patent Olympiad is a fun competition where patent searchers can flex their search muscles in a friendly but competitive environment. The challenge is set up like a triathlon and the competitors had to face a prior art search, craft a complex patent search strategy and tackle multiple-choice questions.

There were 18 Patent Olympians from 10 different countries. All of them fought bravely, but there could only be three champions: the gold trophy went to Manolis Chrysallos (ASML, Netherlands), silver to Agnes Wycisk (Thyssen Krupp Germany) and bronze to Marjolaine Thulin (AWA Sweden AB, Sweden).

The organisers would like to thank Questel and Google (the diamond sponsors and generous donors of the additional gold and silver prizes) and Patseer (sapphire sponsor and additional bronze prize donor).

The winners and runners-up of the Patent Olympiad receiving their prizes

1/ patentolympiad.org/