

International Patent Classification Reform

How will it impact your research?



Overview

The International Patent Classification (IPC) system provides a single scheme to organize and access the world's patent literature according to technology groups. In January 2006 the IPC underwent its most radical revision to date. The result is a new system referred to as IPC 8 or IPC Reform (IPC R) that has far-reaching implications for all patent information users.

Thomson Scientific has embraced IPC R with significant changes to patent-based products and services, including:

- Aureka®
- Delphion®
- Derwent World Patents Index®
- Dialog®
- PatentWeb®

Thomson Scientific is committed to giving you the maximum benefit from IPC R, with as little disruption as possible, throughout its roll-out in 2006 and beyond.

An introduction to IPC R

Background

The objective of IPC R is to increase the flexibility of the system to allow for more consistency of classifications into technology groups across patent offices.

Prior to this reform, the IPC was seen by many as not detailed enough for the larger patent offices, which led to parallel systems such as ECLA. Conversely, it was too detailed for many smaller patent offices to apply. Inconsistencies also developed as codes were applied that, while accurate in terms of technology mentioned in the patent, did not necessarily cover the “inventive step.” Moreover, inaccuracies were inevitable as the pace of technological development demanded a more regular revision of codes to give classifiers appropriate, up-to-date technology groups.

In addition to these on-going concerns, the previous seven versions of IPC, while improving technological categorizations, had not been applied to “backfile” patents. Searching on IPC consequently meant multiple searches with different criteria which was time-consuming and overly complex.

New approach

IPC R is designed to work for both small and large patent offices, to be responsive to technological change, and to improve the consistency and accuracy of coding across patent offices — and to do it retrospectively. The key elements of the new system are:

- **Advanced and core levels for different sized patent offices**
 - Core for small offices
 - Advanced for large offices
- **Increased frequency of revision cycles**
 - 3 years for core
 - 3 months for advanced
- **“Backfile” patents being reclassified and regularly updated**
 - Master Classification Database (MCD) being developed
 - IPC codes propagate among patent family members from all countries
- **New IPC classification rules for more consistent coding**
 - “Invention” codes identify patentable features
 - “Additional” codes assist with searching

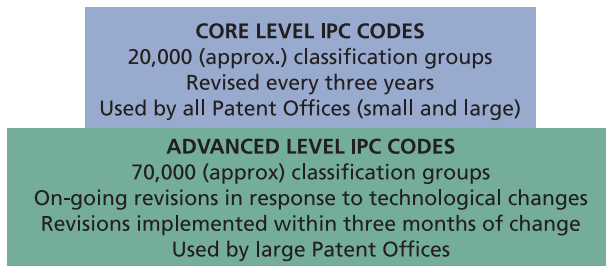
These four facets of the new IPC R system have several immediate and longer term implications for all patent information users.

IPC R is designed to work for both small and large patent offices; to be responsive to technological change; and to improve the consistency and accuracy of coding...

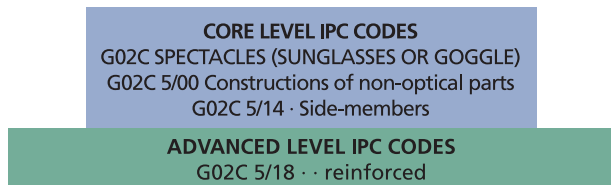
The impact of IPC R

Advanced and core levels of IPC

In answer to the varying needs of different sized patent offices, IPC R has two levels of classification available. The two levels have different revision schedules and offer different levels of granularity that complement each other to allow for consistent coding.



How to approach the two levels of IPC classification may depend on the specific goals of the search. For searching publications of the major authorities, it will be sufficient — and more precise — to use the advanced level classification. Since all records will also have an automatically generated core classification, a more comprehensive—although more general — search can be accomplished using only core classification.

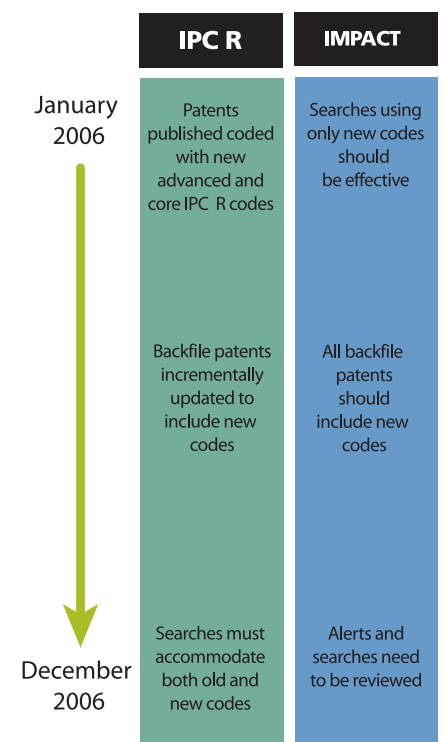


If a complete and comprehensive search of all authorities is called for, then a two-step process will be needed. In this case, a search using appropriate advanced codes (G01C 5/18 in the spectacle example) might be followed up by a search using the corresponding core classes (G02C 5/14 in the spectacles example) in which the patents having advanced classification are excluded. The final results set will then include the results of the advanced IPC search and the results of the core IPC search, without duplication.

Revision cycles

The regular revisions of core codes and the on-going revision of advanced codes should significantly improve the accuracy of patent coding in-line with new technological developments. In turn there should be an improvement in consistency of coding of patents (including backfile patents) across offices.

IPC R: The three stages of impact on patent information users



The key challenge for the patent information user is to keep abreast of the new codes and modify search and alerts to ensure the most accurate results.

Changes will be published on the WIPO website three months in advance of the date on which they enter into force. You will therefore have time to review the changes and modify alerts or stored searches before the changes come into force.

Backfile reclassification

The objective is that, by the end of 2006, nearly all patent documents will be classified using IPC R codes. Projects to reclassify patent backfile in line with the new IPC R codes are in progress. The European Patent Office (EPO), for example, established the Master Classification Database (MCD), a central repository of 54 million documents. A concordance has been created so that 23 million ECLA-classified documents within the MCD have already been reclassified with an equivalent IPC R code.

Other offices, including Germany and Japan, are in the process of similar reclassification processes for their national collections.

The effect of this for searchers is that only one version of the IPC will need to be used for retrieval, instead of the mixture of versions IPC 1–7 that was previously essential. Searches and alerts should ultimately be easier to create with far quicker results.

New IPC classification rules for more consistent coding

Location of the technical concept within the claims was sufficient for attachment of a "main" IPC code in the old system. In the new system the "invention" code is attached to the technical concept(s) that are novel and make the invention patentable.

Most indexing codes have been eliminated in favor of the concept of additional codes that describe the technical field in which the invention sits. This is an aid to narrowing searches.

The invention codes and additional codes are clearly identified on the patent when published. These code attributes are therefore usable as search parameters and should allow for more focused results.

The key challenge for the patent information user is to keep abreast of the new codes and modify search and alerts to ensure the most accurate results...

Thomson Scientific and IPC R

Since the announcement of the IPC Reform, Thomson Scientific has been working closely with the patent offices and patent information users at every step of the way, to enable our patent based products to be redesigned as appropriate — embracing IPC R with a minimum of disruption to customers.

IPC R and DWPI

DWPI has been adapted to incorporate IPC R into all relevant applications including the host platforms Dialog, STN, and Questel·Orbit®, as well as on Delphion and Derwent Innovations IndexSM. The modifications made to DWPISM include:

- **IPCs are represented at two levels: family (invention) and member patent**
 - The IPC field for the DWPI family is now redefined as “Current (Latest) IPCs” and existing content updated with reclassification data when available
 - New IPC fields now added for individual members of DWPI family: “Original IPCs” as published on specification for individual patent document
 - “Current (Latest) IPCs” as reclassified with IPC R
- **New fields will also be added to make use of the new IPC “attribute” information**
 - IPC7: Main/Secondary/Additional/Index
 - IPC8: Advanced/Core/Invention/Additional
- **A “super-index” allowing for a single search across all the available IPC fields will also be made available**
 - Users are now able to search selectively whatever version of IPC is applied to an invention, together with whatever attribute information may be available for either a patent family or for individual patent documents, within that patent family. If the user simply wishes to retrieve all inventions where an IPC has been applied, regardless of whether it is core or advanced, invention or additional, that too is possible using the “super-index” field.

Thomson Scientific and IPC R

2003/4	Reviewed Patent Office plans at a detailed level
	Reviewed products to evaluate potential impact of IPC R
2004	Worked with Patent Offices and patent information users to define appropriate changes that would be required
2005	Notified customers of forthcoming changes
	Reformatted databases to accept new data, and redesigned affected parts of the products
2006	Will bring new frontfile information to customers in all products, and provide training and best practice suggestions
	Will reload backfiles as the new backfile data becomes available

DWPI Enhancements

As well as the IPC R modifications, Thomson Scientific is making enhancements to the file structure of *DWPI* and adding additional content, including an extra 750,000 Documentation Abstracts backfile and original patent data: author title, abstract, and main claim; full inventor and agent names and addresses; and USPTO national classifications.

The enhancements and additional content will soon be available to searchers.

During the interim, reclassification period through 2006, *DWPI* users need to:

- Use the "super-index" IPC field to retrieve all instances of IPC whether IPC R or previous IPC versions 1-7
- Identify any alerts and stored searches that use IPC and add any relevant IPC R codes and retain existing IPC 1-7 codes to ensure ongoing retrieval of pre-IPC R documents

Once IPC R is fully implemented, users will have the flexibility of searching original/revised IPCs with associated attributes (advanced/core; inventive/additional).

IPC R and Delphion, Dialog, PatentWeb, and Aureka

All fulltext content on *Delphion*, *Dialog*, *PatentWeb*, and *Aureka* stems from patent offices that are applying advanced codes. In all four products, the corresponding core codes are added to the record when the data is loaded, so that every new fulltext record will have both advanced and core classifications.

The new codes are searchable using the "Any IPC" field or the specific fields created for the new IPC R. Updates, provided by the European Patent Office's MCD, will be applied weekly. Future revisions to the IPC R codes, expected to begin at the end of 2006, will be reflected in the weekly updates. Updated IPC R codes will replace the entire content of the "Current IPC" field, leaving the "Original IPC" intact. The "Any IPC" field will continue to search both original and current IPCs, and will retrieve all instances of IPC, including IPC R and IPC 1-7.

The backfile, which reclassified most of the pre-2006 publications according to IPC R, has been applied to *Delphion*, *PatentWeb*, and *Aureka*. Classification updates issued since the backfile was published are currently being processed for *PatentWeb* and *Aureka*. *Delphion's* normal weekly update process includes changes to IPC R. The backfile is being loaded incrementally on *Dialog* throughout 2006.

While the reclassification is taking place, we advise users to check that alerts and stored searches include any relevant IPC R codes and retain existing IPC 1-7 codes. This should ensure ongoing retrieval of pre-IPC R documents.

Thomson Scientific is committed to working with the patent offices and patent information users as IPC R rolls out through 2006

Continuing support on IPC R

Thomson Scientific is committed to working with the patent offices and patent information users as IPC R rolls out through 2006. In addition to worldwide customer support, there have been special web seminars to help you fully understand the best way to benefit from IPC R with minimum disruption.

You can view recordings of these sessions or access more support information at: www.scientific.thomson.com/ipc-reform

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