

Half a century of the Patent Documentation Group (PDG) 1957–2007

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Abstract

The Patent Documentation Group (PDG) is a non-profit organisation consisting of companies using technical, patent and other intellectual property related information for their business. The PDG, which was founded in 1957 as a working group by 13 European chemical and petrochemical companies, seeks to promote the effective and efficient use of patent information. It has a reputation as an indispensable partner in all discussions relating to the quality and enhancement of patent information. The PDG currently comprises 40 multinational companies from eight different countries engaged in the automotive, chemical, electronics, engineering, household/personal care products, petrochemicals and the life science industries.

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1. Origin

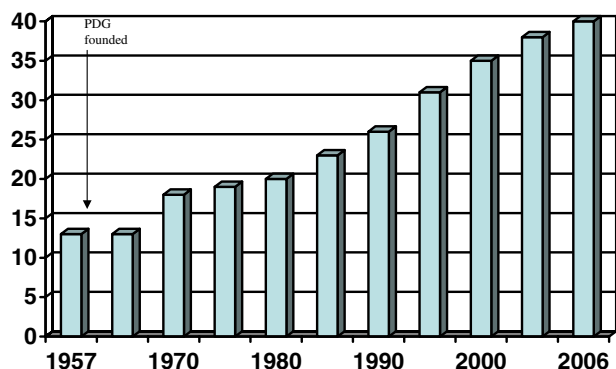
The Patent Documentation Group (PDG) is a non-profit organisation consisting of companies using technical, patent and other intellectual property related information for their business. The PDG was founded in 1957 as a working group by thirteen European chemical and petrochemical companies for sharing the burden of preparing patent abstracts, a service that was essentially unobtainable elsewhere at that time. As this cooperation was very successful, by 1966 the group had the capacity to assess 51000 patents and to abstract 28000 in that year alone. The PDG became increasingly engaged in other activities including devel-

opment of a uniform coding system, the successful introduction of mechanised systems for searching equivalents and testing new technologies in information and documentation. During the 1960s, the exchange of views on patent information management became just as important as indexing and abstracting. At the same time, a small patent abstracting company by the name of Derwent founded by Monty Hyams in London had started to offer very useful patent abstracts commercially. Most of the PDG members decided to leave the task of abstracting patents to Derwent and subscribe to the product, but it was decided to keep a watchful eye on the new product to ensure that their own high standards were maintained. Over the next decade, PDG patent abstracting activities were eventually discontinued in favour of a continuous, in-depth study of online retrieval, the implementation of networks and the impact of patent laws on documentation.

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Development of Corporate Membership of the PDG 1957–2006



Milestones: 1969 PDG becomes a registered association.
 1970 Abstracting of patent specifications discontinued by PDG due to Derwent Service.
 1976 First PDG official Working Group established – Networks and Online Retrieval.
 1980 Working Group IMPACT established.
 1984 PDG Statutes amended to allow non-chemical/oil companies to join the PDG.

During the 1980s, the PDG membership expanded further and the organisation is now widely recognised as an indispensable partner in all discussions related to information management. Today as an association, the PDG provides a forum for discussion and cooperation on all aspects of patent information and documentation.

1.1. Purpose and objectives

According to its statutes, the Patent Documentation Group's purpose is "to provide for cooperation in information and documentation from and for patents and to exchange knowledge and experience".

Our guiding principles are that only with accurate and reliable patent information, can we make sensible investment decisions and only through powerful search systems can we obtain this patent information efficiently.

Our objectives are to:

- debate and discuss new developments in patent information,
- compile opinions and common interests,
- formulate proposals and suggestions,
- communicate these to third parties in the field of intellectual property,
- deal with current and emerging problems.

The PDG cooperates worldwide with organisations and companies providing products and services related to patent information, in order to ensure that the quality of the products and services meet the needs of the users. It particularly

focuses on correctness, completeness, reliability, clarity of content and timeliness of delivery. The organisation stimulates both the improvement of existing and the development of new products and services and strives for a fair partnership between the suppliers and the users of such information products and services.

Regular high-level meetings take place with the European (an annual Forum) and other national Patent Offices as well as with major database producers and providers. The PDG also enjoys a permanent observer status at the World Intellectual Property Organization (WIPO).

1.2. Major achievements

Through their dedicated work over the past fifty years, the efforts of PDG companies has led to major improvements in the field of patent information. PDG Working Groups make proposals and put forward ideas for new products and services to information providers. They cooperate closely with the major patent information providers and vendors and assist them in improving the quality, content and the usability of their databases. Many of the most useful commands, search and display features, post processing and statistical analysis tools offered by various hosts are the results of their initiatives. Many of the databases and search facilities such as those for Markush chemical structures, which are now taken for granted, have been developed with the help and involvement of the PDG companies. The Thomson Patent Citation Index database was built following requests from the PDG companies. The most widely used communication software, STN-Express[®], was born from a project of an *ad hoc* PDG Working Group. The PDG companies were also the driving force behind the creation of the best-known legal status database INPADOC. PDG companies played a major role at the EPO Hearing on provision of patent information to the public in 1997 and its availability to commercial providers at cost prices. Subsequently, the EPO offered the database Esp@cenet[®]. The PDG members were instrumental in bringing about the standardisation of correction procedures (ST 50) and the availability and implementation of SPC data. More recently they were active participants in WIPO discussion on the introduction of IPC 8. PDG members monitor, test and compare information systems and services and strive for fair pricing and information use policies. Thereby, the entire user community benefits from their sustained efforts in the search of high quality patent information products.

2. Organisation and structure

2.1. Membership

Corporate Membership is by invitation and election through the existing Member Companies and is open to firms actively engaged in industrial research and innovation,

with a substantial patent portfolio. Members are usually significant players in their own industrial sector and have a major presence or at least an affiliated company in Europe. The PDG corporate membership includes many well-known blue chip companies, which are very familiar household names with a strong R&D focus, representing all major areas of technology. In fact, some 65% of members (26) are listed in the latest Fortune 2006 Global 500 rankings [1], 3 (Shell, BP and DAIMLERCHRYSLER) can even be counted amongst the top 10 global players in terms of turnover. In Fortune's global chemical sector, PDG companies (BASF, Bayer and Akzo Nobel) account for three of the top 10 positions while in the corresponding electronic sector, a PDG company (SIEMENS) heads the list. As far as the Household and Personal Care Products category is concerned L'Oreal and Henkel can be counted amongst the top 4 corporations in this market. Three member companies are amongst the top 15 in the Motor Vehicles and Parts sector, while 8 of the top 12 rankings in the pharmaceuticals sector are taken by PDG companies. A new Member Company is expected to have an active patent and/or information department or to have professional staff engaged in patent and information activities.

Member Companies, through their Main Delegates or other interested staff, are expected to participate actively in at least one of the PDG Working Groups and/or other activities, for example by offering to host meetings or to provide other facilities on an occasional but informal basis. Notwithstanding normal commercial confidentiality, all Member Companies are encouraged and expected to cooperate with other Member Companies within the framework of PDG activities.

The PDG currently (September 2006) consists of 40 multinational companies from eight countries. Many of its founding members (albeit some with a change of company name over the years) continue to appreciate the advantages of membership.

2.2. PDG Board

The Board is the executive authority of the PDG and defines its course of action. It is obliged to implement the decisions of the Members' Conference. It is also responsible for the selection, appointment and supervision of the Secretary General and for the smooth operation of the PDG in general.

The Board has a minimum of five and a maximum of nine members, who are elected by the Main Delegates, usually at the Annual Member's Conference for a term of four years, which can be extended once. The Board elects a President (at present Ms. Minoo Philipp of Henkel) and a Vice-President (at present Mr. Henk Tomas of Akzo-Nobel) from its members.

Although the Working Groups play a vital role, much of the high level contact with major patent information providers takes place by correspondence or by dedicated meetings with their senior management and policy makers. The

PDG participants are usually Main Delegates or other senior Member Company representatives with responsibility for patent and/or information departments. Such meetings and contacts have a high success rate in terms of end results.

The Board has the responsibility to initiate and lead strategic discussions with patent offices and external partners of the PDG through regular dialogue with, and feedback from, the Main Delegates. The Board encourages active participation by Member Companies in the various Working Groups and the Annual Members' Conference and aims to foster a culture of cooperation in the decision-making process and communication within the PDG. The day-to-day management of the office of the PDG is done by the Secretary General (at present Dr. Sandy Mullen) who also deals with all official communications with external partners.

3. Activities, past and present

3.1. Working groups

The Working Group (WG) concept forms the backbone of the PDG. The task of monitoring, testing or comparing patent information resources is carried out within the WGs of the PDG in such a way that there is no duplication of effort but, if advantageous, there is cooperation between different WGs. Each WG has a chairperson, selected from the WG members, who is responsible for its smooth operation and who presents an annual report of progress and future plans at the Members' Conference.

Companies that send their experts to the working group sessions (usually once or twice a year) consider their time and money well spent. They share and exchange their experiences concerning databases, hosts, vendors and producers. Furthermore, they make qualified and considered proposals to the vendors for improvements, new services and products. Member organisations can carry out surveys within the PDG, but the results remain confidential within the participating organisations.

At present, the PDG has the following Working Groups:

- Networks and on-line retrieval, **WG ONLINE** (since 1976).
- Impact of patent laws on documentation, **WG IMPACT** (since 1980).
- Patent database vendors, **WG PDV** (since 1992).
- Internal management of information, **WG IMI** (since 1994).
- Biotechnology searching (since 2001 linked to the **WG ONLINE**).
- Full-text searching (since 2002 linked to the **WG ONLINE**).
- Education and Certification **WG E&T** (since 2005).
- Analysis and Visualisation, **WG A&V** (formerly IP tools since 2001, re-established 2006 and linked to **WG ONLINE**).

In addition to the larger, well-established working groups, there are at any one time a number of short-term *ad hoc* working groups that deal with special projects or subjects that require an immediate investigation. Over the years, many such *ad hoc* WGs have been set up and then discontinued once they have completed their task.

3.1.1. Working group networks and online retrieval

The first meeting of the Working Group Networks and Online Retrieval took place in 1976, when online searching was still in its infancy, which makes it the oldest WG of the PDG but it still has the largest number of active and regular participants. The majority of its members are professional information scientists or engineers involved in the day-to-day business of information retrieval. This WG was set up for exchanging experience in the use of electronic databases, online searching, quality of databases as supplied by various hosts, internet, communication and retrieval software. The group aims to provide a forum for information specialists to meet and exchange ideas and experiences on searching for patent information. The members discuss problems associated with searching patent information and suggest solutions. The WG meets once a year for a two-day meeting hosted by a Member Company and the second day of this meeting is dedicated to presentations by external partners. The PDG organises various inter-company tests, comparisons and evaluation studies and the results are presented to the invited information providers in a uniform and objective manner. This approach has proven to be very effective for drawing attention to the needs of professional patent information searchers in industry.

3.1.2. Working group IMPACT

The mission of this Working Group is to monitor and discuss the impact of national, regional and international patent laws on patent information and to seek transparent patent information policies from patent offices. The WG cooperates closely with representatives of supplier organisations such as Chemical Abstracts Service (CAS), Thomson Scientific, the national patent offices, and regional and international organisations such as the European Patent Office (EPO), EPI (Institute or Professional representatives before the European Patent Office) and WIPO. The WG aims to improve the quality of patent information, its viability, timeliness, correctness, and completeness of data.

Their members have been especially active in the following areas:

- standardisation of correction procedures (ST 50),
- extension of data coverage in INPADOC,
- availability of information about the EP and PCT cases entering the national/regional phases,
- availability of patent information through appropriate channels used by the producers e.g. CD-ROM/DVD, internet archives including web services, or other media,

- availability and implementation of SPC data,
- quality management of family and legal status,
- IPC 8 (extensively involved as user observer),
- patent citation database.

3.1.3. Working group patent database vendors

As the name implies, this group focuses on the relationships with major patent information suppliers. The group aims to build good working relationships with key patent information vendors, to understand their strategies and to represent the interests of the users in industry and help to maintain the balance of public vs. private sector. The WG monitors and makes contact with new vendors and/or products on the market, in order to assess their suitability for Member Companies. Matters discussed cover such items as vendor strategy, pricing structure, invoicing, information policy, database quality, etc. This working group often functions as a kind of “think-tank” for the PDG Board. The group usually meets twice a year for a one day meeting and invites decision makers from patent database vendors to exchange views and present their latest enhancements and future plans.

3.1.4. Working group internal management of information

The PDG Working Group “Internal Management of Information” serves as a forum for the exchange of knowledge and experience in the field of information management and to give leaders of Information and Documentation (I&D) centres support in the management of their departments. This WG was formed to address the challenges involved in information management. These include organisation of information centres, human resources, methods and technicalities in general with priority given to patent information, internal marketing, competitive intelligence, cost-analysis, and end-user searching and training. Presentations and discussions on these subjects give managers of I&D centres the opportunity for interchange of expertise and ideas.

3.1.5. Ad hoc working group biotechnology

The aim of this WG is to identify relevant sources and compare their advantages, limitations and differing implementations on various hosts. Members of this group have worked hard to develop effective communication channels with vendors/database producers regarding policy, pricing, and timeliness. One of their major aims is to create a system to deepen, improve and renew the existing crude and limited indexing/classification of biotech patents and literature. This would require the creation of a thesaurus. The group collaborates constructively with patent offices in order to improve the existing IPC/ECLA systems and has an EPO examiner as a permanent group member. They want to work towards a single user interface for homology searching as well as identifying and testing post-processing tools in a biotech context.

3.1.6. *Ad hoc working group full-text searching*

The recent creation of this Working Group indicates the importance that our members now attach to full-text searching. The WG aims to evaluate available full-text sources in the field of patent information. They carry out comparison tests of full-text and “classical” bibliographic databases and monitor new developments. The members cooperate closely with online hosts and patent offices in order to help our partners to understand and support our needs in using full-text patent information. The members meet to exchange experience and aim ultimately to develop a knowledge base for effective and cost-efficient use of full-text sources. The increasing number of non-English full-text databases will provide interesting challenges for the multinational and multilingual members of this group.

3.1.7. *Ad hoc working group education and training*

The *ad hoc* Working Group Education and Training was founded during the PDG Annual Conference in 2005. A major objective of this group is to define the requirements for a skilled patent information searcher.

These requirements are intended to serve as an input for educational institutes to provide training programmes for new entrants in the profession leading to examination and certification. The aim is to help support the establishment of a suitable, internationally recognised, qualification for professional patent information searchers.

3.1.8. *Ad hoc working group analysis and visualisation*

This WG aims to provide a forum for continuous exchange of best practices and experiences. The aim is better understanding of the terminologies such as data mining, text mining, bibliometric, scientometrics, patentometrics and technology, e.g. algorithms and the identification and the evaluation of tools of interest (vendors’ presentations, trials, WG presentations). This WG wants to consolidate requirements with regards to vendors’ future developments and policies. They intend to investigate the various business models, pricing models, terms and conditions for using analysis and visualisation tools.

4. Annual members’ conference

The PDG Main Delegates attend an annual two-day conference hosted by one of the Member Companies, which is carefully prepared to yield maximum benefit to the participants. The Annual Members’ Conference is the highest authority that decides on official matters concerning the internal organisation and the external relations of the PDG. These may include changes to the PDG Statutes, admission of new members and election of Board Members. Every Member Company has one vote, which must be exercised by an authorised representative. The members usually meet within the first six months of the year, to agree on the accounts of the past year, the final budget for the current year and the provisional budget for the coming

year and to re-assess the membership fee. The conference is also the occasion for the election and discharge of the Board Members and the Secretary General from their duties during the previous year. The Main Delegates are required to review and assess the proposals recommended by the Board, as well as the actions planned by the Working Groups.

The second day of the meeting is dedicated to presentations and discussions on current topics when it is customary to invite eminent speakers from outside the PDG to address important issues.

5. The future

For a newcomer to the field of patent information, it is hard to imagine what it was like fifty years ago. Thanks to the vision and foresight of our founding members, we have come a long way from a few brief abstracts, initially handwritten, then typed on paper, later on punch cards, then on to microfiche and then advanced to magnetic tape. Patent information is now available in the digitised form and OCR software has made it possible to search facsimile documents. With the advancement of technology and the reduction in cost of computer storage, access to millions of published patent applications is possible. However, finding and assessing the relevant patent information amongst this huge volume of data is more difficult than ever before.

Twenty years ago, PDG members were concerned about what they saw as “future oriented areas” such as the processing of character-coded or facsimile information, machine translation and the handling of full-text databases. That future, as seen twenty years ago, is a lot nearer today but has not fully arrived yet. We are still dealing with these subjects and working closely with our information providers to optimise services such as access to up-to-date and reliable legal status information.

Furthermore, the complex and dynamic relationship between the patent offices, patent information services, tool providers and users, including the individual end-users, balance against the interest of the public, and the expected future developments provide us with major challenges for the future.

Whereas patents are free of copyright and almost all patent offices now publish them through the internet, this cannot be said for non-patent literature. The majority of peer-reviewed scientific literature is still being published by the large international publishers. Access to their e-journals is only possible by paying substantial subscription fees.

Developing countries are also beginning to realise the importance of patent information and they are even systematically recording the prior art in the traditional remedies and the natural healing arena. Furthermore, as the number of patent applications from China and South East Asia continues to increase at a phenomenal rate, we are confronted with new problems to solve, such as their translation.

In general we see that access to electronic information is now possible for anyone with a computer and an internet

connection but the quality of much of the information available and the average level of expertise to retrieve relevant and reliable information is deteriorating.

One of our major aims is to help establish the job of patent information searcher as a recognised profession and give it the standing it deserves. Having set up a WG to help define minimum standards of training, experience and competence, we hope one day to see an internationally recognised qualification for patent information searchers, obtained by examination and granted by an independent body.

The future will bring new challenges that are no less daunting than those of the past. The PDG has spent the last fifty years working ceaselessly to improve the availability, correctness and timeliness of patent information. Much has been achieved, but there is still plenty more to do.

Acknowledgements

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- [2] This article is one of an occasional series covering patent information user and provider groups around the world, such as – in addition to PDG – WON, PIUG, PATMG, AIDB, PATCOM and TSUG. These are fully referenced in the most recent article in the series Appleton B, Bullen J, Walden N, Eldridge J. TSUG, the Thomson scientific user group in the UK. World Patent Inform 2006;28 (4):319–22.



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