

# WIPO



PCT/MIA/11/6

ORIGINAL: English only

DATE: February 8, 2005

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
GENEVA

INTERNATIONAL PATENT COOPERATION UNION  
(PCT UNION)

MEETING OF INTERNATIONAL AUTHORITIES  
UNDER THE PATENT COOPERATION TREATY (PCT)

Eleventh Session  
Geneva, February 21 to 25, 2005

PCT MINIMUM DOCUMENTATION:  
COMPREHENSIVE REVIEW

*Document prepared by the International Bureau*

## SUMMARY

1. This document sets out the main issues which must be addressed in reviewing the PCT minimum documentation. The Annexes reproduce details of the search documentation in use at the European Patent Office. They provide a practical insight into the scope and nature of the documentation actually in use by an International Authority, which goes significantly beyond the PCT minimum documentation defined by PCT Rule 34, and also provide some of the reasons that it has been desirable to expand the scope of the documentation available for search.

## BACKGROUND

2. PCT Rule 34 and the associated list of non-patent literature were designed to encourage a uniform high standard of international search across the International Searching Authorities. However, as noted in document PCT/MIA/10/5, the Rule and list were made at a time when the search collections of the International Authorities were based on physical collections of documents and, while the Rule and list have been updated, they have essentially remained the same in character. Meanwhile, the Authorities increasingly rely, both for performing the search and retrieving copies of citations, on electronic databases of prior art whose scopes do

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not fit in neatly with the periodicals which currently form the agreed list of published items of non-patent literature under Rule 34.1(b)(iii).

3. At its tenth session, the Meeting discussed, and gave its general support for, a proposed comprehensive review of the PCT minimum documentation (see document PCT/MIA/10/11, paragraphs 44 to 49) and agreed that the subject should be further discussed at the present session. In preparation for these discussions, the Meeting invited Authorities to provide comments on the points highlighted in document PCT/MIA/10/5.

4. To date, comments have been received from the Swedish Patent and Registration Office, supporting the review, but noting that it would not be feasible to include all periodicals available in searchable electronic form in the PCT minimum documentation and that, for the same reasons, the Office could not support the inclusion of all new electronic publications as a result of the Open Access movement. Also, further documents have been received from the EPO relating to the range of patent documentation available and the use of non-patent literature (NPL) in that Office. These provide an insight into the potential scope of the search documentation to be considered when carrying out the review and potential solutions to some of the issues that need to be addressed.

5. The document relating to the use of NPL in the European Patent Office is attached as Annex I and sample extracts of the document<sup>1</sup> detailing the patent documents available at the EPO are provided as Annex II. The extracts contained in the latter illustrate the inclusion in the EPO search files of patent documents relating to time periods which go beyond the present PCT minimum documentation (patent documents prior to 1920 from Austria) and to countries not currently part of the Rule 34 list (patent documents of the Republic of Korea).

## CONDUCT OF THE REVIEW

### *Objective/Expected Outcome*

6. Various reasons for and desirable objectives of a review were set out in the Annex to document PCT/MIA/10/5. In general terms, this would be to identify an appropriate way of setting out the material which should form the basis of an international search in an environment where the main means for performing the search is using electronically accessed databases, rather than manually searching documents and journals, taking into account the need to promote a uniform high quality of international search, together with the need to accommodate the different systems used by various International Authorities to access databases. The review should then identify any amendments which would be required to Rule 34 and make any recommendation for change. Any rule change would need to be adopted by the PCT Assembly, though it may be desirable first to make a report to the Committee for Technical Cooperation, depending on the nature of the recommendations.

### *Scope of the Review*

7. While the main motivation for commencing the review was to make the list of non-patent literature reflect better the realities of the current methodology of searching, it is clear that most International Authorities have patent documentation available in excess of the

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<sup>1</sup> A copy of the full document can be accessed by MIA members at [http://www.wipo.int/pct/mia/en/min\\_doc/docs/epo\\_patdoc.pdf](http://www.wipo.int/pct/mia/en/min_doc/docs/epo_patdoc.pdf)

minimum requirements of Rule 34 (see for example the extracts in Annex II from the list of patent documents available to the European Patent Office). Furthermore, the concept of novelty in most Contracting States is an absolute one, where an earlier disclosure is relevant irrespective of age, means and place of disclosure. Consequently, the limitations within the Rule are ones mainly associated with the practicality of accumulating a search collection which contains as large a body of disclosures as possible, while remaining manageable and possible for an examiner to understand and use it. It is recommended that the review should consider whether the relevant balances have changed in the light of modern search methods and that recommendations should be made covering both patent literature and non-patent literature.

*Review Group; Methodology; Timescale*

8. It is recommended that an informal task force be set up to consider the relevant issues and report back to the Meeting. Both the deliberations of the task force and its reporting to the Meeting could be conducted using the PCT/MIA electronic forum, depending on the progress of the review and the likely need for further physical meetings for proper discussion. It is recommended that each International Authority should nominate at least one relevant expert, bearing in mind that the expertise should include at least documentation, IT systems and searching methods.

9. Any changes to Rule 34 would need to be the subject of a decision of the PCT Assembly, which usually meets in September of each year. It may also be desirable for the recommendations of the review to be discussed by the Committee for Technical Cooperation, which could, if necessary, be convened during the same period as the session of the Assembly. Consequently, it is recommended that the review group should make final recommendations to the Meeting by January 2006.

*Issues to be Considered*

10. Some of the issues to be considered by such a group would include:

- (a) what minimum search material should International Authorities have access to?
- (b) in what manner should the minimum search material be specified?
  - (i) to what extent must the material be specified by a Rule and a conventionally published list of journals?
  - (ii) do the various means of access to information and speed of development of services available mean alternative forms of guidance may be appropriate (such as the proposed Search Guidance Intellectual Property Digital Library; see document PCT/MIA/11/8) either in addition to, or as a partial replacement for the Rule and list?
- (c) what criteria should be applied for deciding whether to include material in the minimum search material?
- (d) what factors require special attention with regard to the source of and access to search information? examples might include:
  - (i) costs— acquisition, loading, maintenance etc;

- (ii) potential for sharing among International Authorities; reuse and copyright related issues;
- (iii) publisher agreements;
- (iv) special cases (for example sequence listings).

*11. The Meeting is invited to decide how to proceed with a review of the PCT minimum documentation and to comment on any of the issues needing to be considered.*

[Annex I follows]

## ANNEX I

USE OF NON-PATENT LITERATURE  
AT THE EUROPEAN PATENT OFFICE

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## **1. Summary**

This document describes the EPO approach to acquiring and accessing Non-Patent Literature (Scientific and Technical Material). This document summarises the EPO search and document retrieval methodologies.

It also explains how the EPO is looking at enabling linking to the full content of an article and how this technology can be used to give access to 3rd parties to NPL documents cited during the patent granting procedure. In this respect the issue of copyright and current patent practice is also discussed.

## **2. NPL DATABASES**

The EPO has defined its NPL policy. Most of the efforts are being concentrated in acquiring databases to be loaded in EPOQUE, so that examiners can search those databases without changing their search environment. The first chapter below shows the abstract databases available for search at the EPO and the second chapter presents the status of acquisition of full text databases and the planning for the future.

### **2.1. Abstract databases**

Abstract databases are also called secondary publisher databases because the abstracts have often been rewritten by the publisher of the database. They normally abstract a selective list of sources (journals, conference proceedings, manuals, thesis) in a specific technical field.

#### **Compendex**

A major improvement this year was the acquisition of the digitized archive of Compendex from 1874 to 1970. Thanks to this acquisition, the content of the EPOQUE Compendex database increased by about 2 million records.

#### **Inspec**

The archive of Inspec from 1898 to 1968 was acquired and loaded in 2004.

Here is the list of abstract databases searchable at the EPO in EPOQUE with the covered technical field and the number of available records. More than 50 million records are searchable as a whole internally.

	Field	Number of Records
INSPEC	Electricity/Physics	8 million
COMPENDEX	Electricity/Physics/Mechanics	6 million
FSTA	Food	0,6 million
BIOSIS	Biology	15 million
MEDLINE	Medicine	13.5 million
EMBASE	Biology, medicine, biotech	10 million

Additionally, examiners can search internally 8 million compounds and 10 million reactions in the Beilstein database.

Some abstract databases are available for search on Internet, such as:

- The Traditional Ecological Knowledge Prior Art Database (T.E.K. \*P.A.D.) with 40000 records;
- [Fridoc](#), the IIR's (International Institute of Refrigeration / Institut International du Froid) bilingual (English/French) abstract database with 60000 records;
- [DieselNet](#), the online information service on diesel emissions, emission control, diesel engines and fuels

Some other abstract databases like Chemical Abstracts can only be searched on external hosts like Questel or STN.

## 2.2. Full Text databases

In previous years, the EPO realized that searching article abstracts in certain technical fields (such as Computers, Telecommunications, and Audio/Video) did not yield satisfactory results for examiners. Therefore the decision was taken to acquire and create full text databases in these fields, insofar as it was realistic and possible to do so.

### 2.2.1. Journals and Conferences

The EPO decided to first acquire the academic collections (journals, conference proceedings) from the main scientific publishers, mainly in the field of Electricity/Physics.

- Elsevier journals: Elsevier is the largest publisher in Science and Technology in terms of the number of journals. In 1996, the EPO started loading about 120 important Elsevier journals. In 2004, the EPO started loading the full collection of 1828 journals of Elsevier in EPOQUE.
- IEEE: the EPO started loading all Conference Proceedings from IEEE from 1988 to now about 4 years ago. This database will soon be loaded with their complete journal collection.

- IEE journals: 13 IEE journals are available from 1994 onwards in EPOQUE. Soon the backfile archive of IEE journals will be added to this database.

- AIP journals: 6 important journals from AIP and affiliated societies are going to be available soon in EPOQUE.

### **2.2.2. Disclosure publications and Standards**

In addition to academic NPL, the EPO has loaded collections which examiners found even more important to load because they were not present in abstract databases. Those collections can be classified in 2 categories: Company Publications (disclosure/publications) and Industry Standards.

Currently the following databases are searchable in EPOQUE:

- XPMISC: a database containing the disclosure publications from Siemens and Alcatel together with some conference proceedings in the field of Speech Recognition.

- XPRD (Research Disclosure): a database containing the full text of the technical disclosures of the defensive periodical called Research Disclosure, which belongs to the list of minimum PCT magazines.

- XPETSI: This is a database containing European Telecommunication Standards. The EPO has acquired the standards on the basis of a subscription. The drafts and working documents brought during the working groups have been acquired on the basis of our Membership of ETSI, the European Telecommunication Standards Institute.

- XPIETF: those Telecommunication standards available on Internet for free at [www.ietf.org](http://www.ietf.org) have been acquired and will be soon available for search within EPOQUE.

### **2.2.3. Intranet search and future databases for EPOQUE**

Acquiring, converting and loading databases in EPOQUE is a long and expensive process. Therefore the EPO has committed itself to rollout only 5 new Full Text databases per year in EPOQUE. Priority has been given to the databases containing Standards since they are the most requested by examiners.

An Intranet-based Search engine has been developed to enable full text searches by examiners as soon as new articles are received. PDF files are indexed by a Verity software program and a web-based interface allows full text searches on the indexed data using the EPOQUE query syntax. The system, called Special Document Service (Specdocs), offers much less functionality than EPOQUE, especially in that it doesn't prepare the data for citation (it doesn't attribute any XP) and it doesn't offer all the viewing possibilities that EPOQUE offers.

Below is a view of this Intranet search platform:

The screenshot shows a web browser window titled "PD Tools - Documentation". The browser address bar shows "DG1-2l line PD Tools - Doc" and a search icon. The page content is as follows:

## Welcome to the Special Document Service

The Special Documents Service contains NPL full text searchable collections which the EPO has received the rights to acquire.

Most of those collections will be made available in EPOQUE since EPOQUE contains important features which are not offered by this Intranet facility and it is not the intention of PDDOC to multiply the sources of searching environment.

However, one of the advantages of this search facility is that it can integrate collections quickly. Therefore, it has been decided to offer it, creating an intermediary solution before the collections are made available in EPOQUE.

The collections currently searchable on this site have been grouped by type of publications to facilitate the display. In each type of publication, a division by technical field is done, where possible.

1. **Company Disclosures:** periodical publications from companies.
2. **Defensive Publications:** periodical publications from publishers gathering companies publications. Their goal is to create prior art, so that noone can get property rights on the features disclosed by companies.
3. **Standards:** publications which normalise the technology in a technological field
4. **Books, Conference Proceedings and Journals**
5. **Open Access:** Sources with free accessible technical publications

**Important Tip:** you can use the EPOQUE query syntax to perform searches (boolean operators,

The interface includes a left sidebar with a tree view of search tips and techniques, a search bar at the top with "Search" and "Clear" buttons, and a navigation menu at the bottom with various document categories and sub-categories.

**Search Tips**

- Search Basics
- What Is a Search?
- Tools for Searching

**Simple Searches**

- Simple Searches
- Searching With Single Words
- Searching With Topics
- Searching With Phrases
- Using Wildcards

**Combining Search Terms**

- Combining Search Terms
- Broadening Searches
- Refining Searches
- Excluding Terms From Searches
- Proximity Searching
- Query By Example

**Attribute Searching**

- Attribute Searches
- Zones and Fields
- Searching for Terms in Zones
- Searching for Terms in Fields
- Searching for Dates in Fields

**Navigation Menu:**

- All documents
- Company disclosures
  - Alcatel
  - Siemens
  - XEROX
- Defensive publications
  - IP.COM
  - Research Disc.
- Standards
  - Computer
  - Audio-Video
  - Recording
  - Semi
  - IEEE
  - JPEG
  - OASIS
- Telecom
  - ETSI
  - IETF
  - ITU-T
  - EIA/TIA
- Books, Conference Proceedings and Journals
- Open Access
  - Echocardio
  - Speech Recognition
  - Detergents
  - Soc. Info Display
  - Food Processing
  - TREC
  - Audio Eng. Soc.
  - Inst. Of Physics
  - Tech Comm Data Engineering
  - Open eBook Forum
- Biomed

The table below shows the list of collections searchable via the Intranet and also the number of available records.

<b>Special Document Service (SPECDOCS)</b>		
	<b>Collection Name</b>	<b>Records</b>
<b>Defensive Publications</b>		
1	Alcatel	467
2	Siemens	34
3	Xerox +	1427
4	IPCOM	23937
5	Research Disclosure	33922
<b>Standards</b>		
6	SEMI	1036
7	IEEE-standards	1301
8	JPEG	4937
9	OASIS-standards	437
10	ETSI-standards	15326
11	IETF-drafts and RFC's	19269
12	ITU-T-standards	4092
13	EIA/TIA	4440
<b>Books, Conf., Journals</b>		
18	Speech Recognition	6626
20	SID	1873
22	TREC	1847
23	AES	10225
24	IOP	26078
25	TCDE	47
27	Biomed	6299
<b>ALL documents</b>		<b>163620</b>

### 3. Linking to the full article content

Once articles that are of interest have been identified by the user as a result of a search, he typically has to view the full articles. EPO examiners have a variety of methods to access the full copies of the articles, and they are fully described in the document in Appendix 1.

The EPO is also investigating ways of obtaining the Digital Object Identifier (DOI) of every NPL article whenever possible. The aim is to use the DOI as a means of providing external users with a location on the Internet where they can access the full article. For those cases where a DOI cannot be supplied, users shall be provided with a hyperlink to a public library and/or document delivery service that can supply the article.

Providing the DOI as assigned to a full NPL article would solve issues related to delivery of full documents to other Offices and 3rd parties.

#### **4. Ordering documents**

The EPO has developed an improved system to allow examiners to order documents from external libraries when those documents are not available in our internal collections.

The system checks before ordering if the document is not already available in the internal collection i.e. the paper library, the internal electronic library BNS and the external electronic library EVL.

If none of those collections have the document, the order is forwarded to the documentation department who forwards it to external libraries.

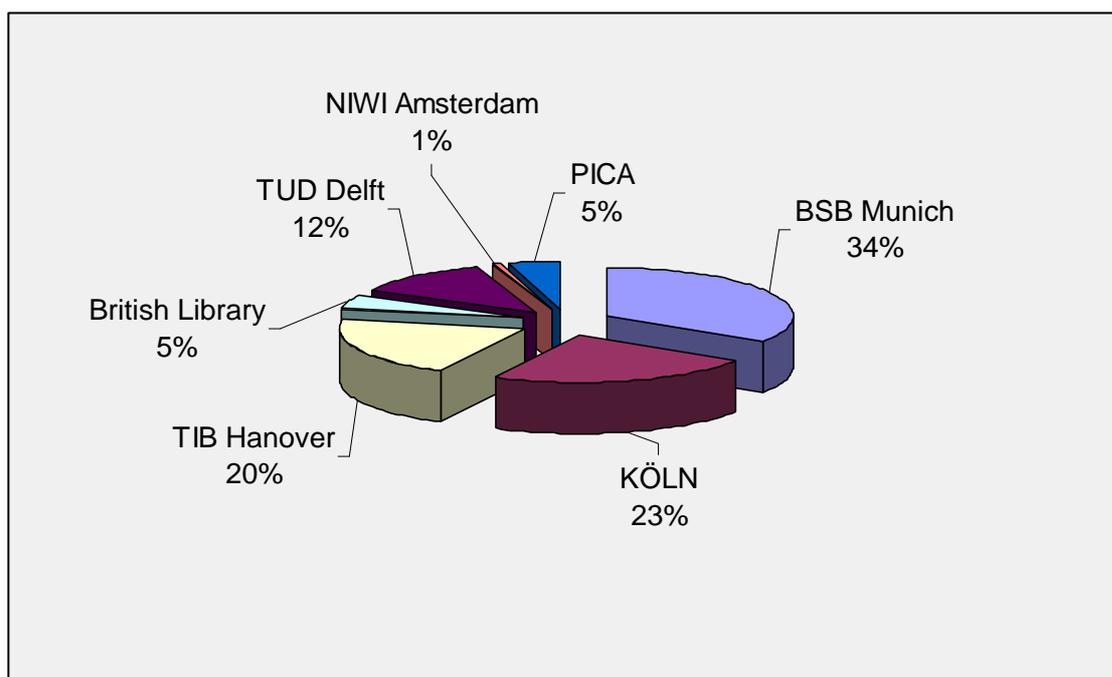
##### **4.1. Libraries used by the EPO**

The number of orders for NPL by examiners has decreased in 5 years by about 50%, from about 100,000 requests per year to 50,000 in 2003. This took place during a period in which the number of searched patent applications dramatically increased. The reason for this trend is that since 1999, the EPO made available to examiners more than 3000 online journals, all Conference Proceedings from major publishers and several other sources in its EPO Virtual Library.

About two-thirds of the orders received by examiners are forwarded to external libraries. Orders are forwarded by email, and the articles are also sent by the library back to the EPO via email and forwarded to the examiner.

Statistics show that 80% of articles ordered to external libraries are received and sent to the examiner within 8 hours.

The EPO works with external libraries that can meet our requirements in the following areas: email delivery, breadth of coverage, fast response time, and low costs. Here is the list of libraries used in 2004, along with the ratio of orders treated by each of them:



When the article cannot be retrieved from those libraries (e.g. “obscure documents”, drafts of standards, thesis) the EPO either contacts the author himself or the patent applicant if it has been cited in a patent application.

## 5. NPL and Copyright in Patent Granting

This subject is dealt with in detail in Appendix 2.

The general policy is to negotiate with major publishers in the license contract a clause specifically mentioning the patent granting procedure as a supplement to the usual exceptions for evidentiary and governmental procedures and mentioning permission to send a copy to the applicant. The text of the clause can be found in Appendix 2.

For granting access to 3rd parties the EPO is studying the use of the DOI, and in particular the possibility to assign a DOI to all citations. Using linking mechanisms above any 3rd party should be able to retrieve a copy of the full article content either for free, using his own subscriptions or in a pay-per-view mode.

## 6. Appendix 1 – Linking to the full content of the article

This appendix describes the various methods that an EPO User can use to access a physical copy of the full content of an NPL (Non-Patent Literature) article.

In all cases, we assume that the user starts by performing a search either in an Internal Abstract/Full Text Database, or in an External Database. If the search was performed on an Internal database, the results of the search are stored in the Log file of the Internal session; otherwise the search results are stored in the Caesar mailbox. What we refer to as ‘search results’ are typically one or more database

records containing the *bibliographic data* of the NPL articles that are of interest to the User.

The general strategy of the EPO is to provide the user with the most rapid and straightforward way of going from the bibliographic data describing an NPL article, to a copy of the physical article itself.

This is done by attempting to locate the physical copy of the article from a wide variety of sources, namely:

- from the EPO's internal Digital Library, the BNS;
- from the EPO's internal paper Library collection;
- from the EPO's Virtual Library (EVL) - an electronic collection of Journals, Books and periodicals hosted either on the EPO's Intranet or on the content provider's website;
- from the Internet, preferably through the use of Digital Object Identifiers (DOI) and the CrossRef organization,
- and finally, by ordering the article from a Public Library.

#### **6.1. Facilities available for Internal Users to access NPL articles**

- **Consulting the BNS through the use of the Epoque NPL database**

The Epoque NPL database stores all the NPL articles available in the EPO's Digital Library, the BNS. Each NPL article in the BNS has a unique identifier called the XP number with which an Examiner can view and print a facsimile copy of the article.

Using this method, the Examiner would perform a search for the article's bibliographic data in the Epoque NPL database. If the search is successful, he would obtain the corresponding XP number of the article and use the XP number in the Epoque JViewer to view and/or print the facsimile copy of the article in the BNS. This is the quickest way to access an NPL article that is available internally within the EPO.

- **Consulting the EPO's internal paper Library collection**

The Epoque BOCA database is a catalogue of the paper collection of Books, Magazines and Periodical publications that are available at the EPO's premises in The Hague. Similarly, the LibCat database is a catalogue of the paper collection of Books, Magazines and Periodical publications that are available at the EPO's premises in Munich. Users within the Office can search these databases to see if the EPO has a paper copy of the publication containing the NPL article that they are interested in. These catalogues give the physical location of all the paper periodicals available within the Office; if the article is available, then the User can make a photocopy of it for further consultation.

- **Consulting the EPO's Virtual Library**

The EPO Virtual Library is an electronic collection of Journals, Books, Thesauri, Dictionaries and Conference proceedings that the EPO subscribes to. Users can access these electronic publications by performing a search for an article's bibliographic data in the EVL Catalogue, and viewing the resulting article (usually in PDF format) in a Web browser.

- **Searching for the article on the Internet**

Users can also search for facsimile copies of NPL articles on the Internet by using specialised sites such as CiteSeer or Search Engines like Google or Vivissimo. The user enters the bibliographic data, and the website will return a hyperlink to the article, if it is found. The disadvantage of accessing NPL articles in this way is that the hyperlinks to the articles can (and usually do) change, so a user has no guarantee that a hyperlink that he used to access a given article on a certain date will still be valid at a later date.

In order to solve this problem, many content providers are assigning **Digital Object Identifiers (DOIs)** to their electronic articles. The idea behind DOI technology is that if a bibliographic data provider (such as a Website or database) knows the DOI of an article, it can also provide a link to the article that can be redirected (via a *link resolution service*) directly to the article's content.

The use of DOIs is emerging as an industry standard way of assigning persistent identifiers to articles, enabling them to be retrieved from the Internet in a location-independent manner. **CrossRef** is a non-profit independent membership organization that utilizes DOI technology to enable efficient and reliable linking to full text NPL articles on the Internet. CrossRef provides a database for publishers to deposit metadata for online articles, including a DOI and a URL for each article. Third parties can then query the CrossRef metadata database to find the DOI matching the bibliographic data they used in their query. If there is a match, then the DOI and the associated URL registered by the article's publisher is returned. The URL will then lead the user to a webpage from which the full article can be obtained.

- **Obtaining the article from a public library**

If the user cannot obtain the article using one of the methods above, he can order the article from the EPO's Retrieval section. After ensuring that the article is not available from within the EPO (using the methods described above), the Retrieval Section will order the article from an external Public Library using e-OLIT, the EPO's Electronic Document Ordering system. The desired article's bibliographic data is sent to the public library via email or fax, and the ordered article is sent back electronically to the EPO as an Email attachment in PDF format. The article is then sent to the user via Email allowing him to view and/or print it using Adobe's Acrobat Reader.

## 6.2. DOCLINK, the EPO's Internal Document linking solution

As we have seen above, once a user has the bibliographic data of an NPL article he wishes to consult, he first checks to see if the article is available internally within the EPO. There is an Epoque Public preparation called **DOCLINK** that automates many of the steps involved in doing so. DOCLINK works by:

- checking to see if the article is available in the BNS;
- checking to see if the article is present in The Hague's paper library collection by searching in the Epoque BOCA database;
- checking to see if we have an electronic subscription to the publication containing the article by searching in the EVL;
- checking the CrossRef database on the Internet to see if the DOI of the article exists.

Next, DOCLINK gathers all the search results of the queries it performed above and reformats the results in HTML format for display in a Web Browser (See Fig 1). In particular, DOCLINK shows the bibliographic data of each article followed by a list of hyperlinks to the article that the user can click on. Depending on the results, the links shown may be as follows:

- DOI : the document provided by [dx.doi.org/doi](http://dx.doi.org/doi)
- PDF : a link to a PDF representation of the article
- HTML : a link to the article's full text or abstract in HTML format
- PubMed : the corresponding bibliographic data record at [www.pubmed.org](http://www.pubmed.org) (Medline and Biosis only)
- Citation Map : a graphical representation of cited and citing documents from HighWire Press (for Highwire Journals only)
- Scirus : a metasearch engine from Elsevier (for Elsevier publications only)
- TOC : table of content page of the journal issue which contains the paper
- Search : the search page on the editor's web site
- Home : the journal home page as registered in the EVL database
- BOCA : the information on the journal as present in BOCA

When the journal is not available via an online subscription the web browser displays a choice of links to search engines (Google, AllTheWeb, Vivisimo, Scirus, NEC CiteSeer) in order to try to find the paper on the Internet by means of its title and first author.

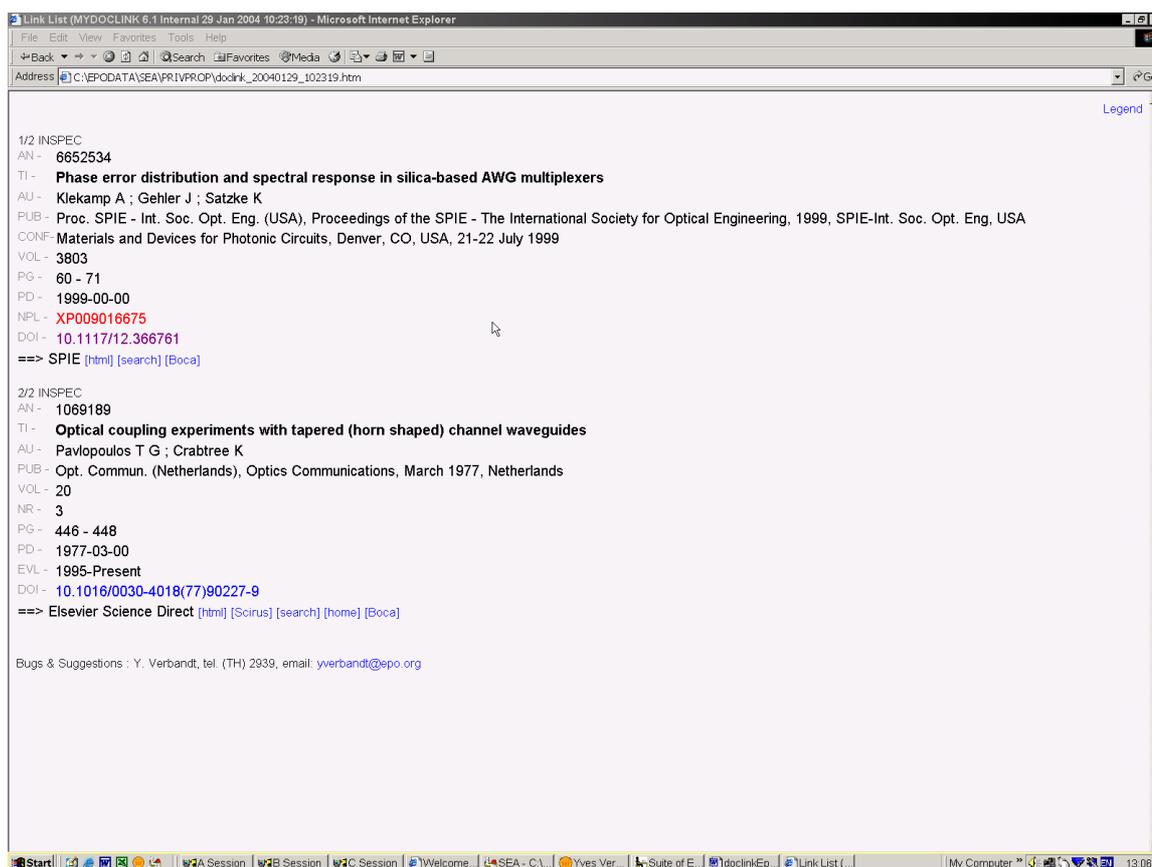


Figure 1: The Results of DOCLINK, displayed in a Web browser

### 6.3. Facilities available for 3rd party users to access NPL articles

At this moment, the current strategy is to offer 3rd party users a solution whereby they can easily obtain access to NPL articles that are cited in European Patent Search Reports or are referenced elsewhere in the procedure. The aim is to provide a clickable hyperlink with each NPL article citation on a European Patent Search Report that will transport the user to a webpage containing the full article. Access to the article shall be set by the article's provider— if the user has the appropriate credentials, they will have direct access to the article's content.

Given the emergence of DOIs as an industry-wide method of accessing online copies of NPL articles, the EPO has set up a pilot project to investigate the possibility of obtaining the DOIs of all the NPL articles stored in its Digital archive, the BNS. We are currently working with the CrossRef organization to determine to what extent the NPL articles in the BNS have corresponding DOIs, and how to efficiently query their database and to make those DOIs available to the EPO's external users.

For those cases where the EPO cannot provide a hyperlink to the full article, we intend to provide a link to the website of a public library (or libraries) that are capable of supplying the article to the external end user. Three examples of such public libraries are the Subito Document Delivery Service, the British Library, and ProQuest.

#### **6.4. The future of the DOI**

There is no doubt that the DOI is rapidly emerging as an industry standard, and its adoption is increasing exponentially. Over 700 publishers and participating societies (representing articles published in over 10,000 Journals) are now systematically assigning DOIs to their reference works, as well as more than 400 Libraries. To date, 12.4 million Digital Object Identifiers have been assigned to reference works; in September 2004 alone, over 240,000 articles with DOIs were registered with the CrossRef organization. Although the bulk of DOIs are being assigned to newly-published material, there is a growing number of publishers who are also assigning DOIs to their older publications. Elsevier, the largest publisher of scientific and technical information, has assigned DOIs to all of its publications right back to article 1.

Patent Offices could consider whether a similar approach to provide DOIs related to all Non Patent Literature articles used during the Patent Granting Procedure could be implemented in all Offices. This would allow National Patent Offices as well as 3rd parties to use their own acquisition methods and take benefit of their subscribed collections to consult the full content of the NPL.

### **7. Appendix 2 – NPL and Copyright in Patent Granting**

The EPO, like other Offices, has a long standing tradition of reviewing, classifying, storing and citing Non Patent Literature. In the past this was carried out by subscription to technical journals and then classifying and storing copies of articles for eventual retrieval and citation. This document looks at the current working practices at the EPO and how these are reflected in current copyright legislation.

The EPO is also aware of the discussions on aspects of copyright which have taken place in the Working Group on Reform of the PCT (PCT/R/WG/5/5) in which significant questions on the current practice in Patent Offices have been raised with little conclusion other than the general agreement that an open task force needs to work on the issues.

#### **7.1. Patent Granting Requirements**

The EPO's patent granting procedures and practices requires the consultation and use of Non Patent Literature in various different ways.

- consulting and searching NPL in structured databases which may be
  - acquired for internal loading in EPO systems
  - consulted on the Internet by subscription or on a free of charge basis
- selecting, classifying and storing full articles from subscribed journals
- downloading, indexing and storing material from Internet sites
- acquiring and storing individual articles from document suppliers
- storing articles supplied by applicants or 3rd parties during the granting procedure
- reuse of the stored articles in future patent examination cases
- supplying a copy of relevant articles to the applicant and / or his representative

- public file inspection into procedural files which contain articles cited during the granting procedure

## **7.2. Copyright law and the exceptions**

Copyright protects the labour, skill and judgement of someone. Where an author, artist or some other creator expends effort in the creation of an original piece of work, whether it is a literary work, a piece of music, a painting, a photograph, a TV programme or whatever it is covered by copyright. Copyright is a negative right. The owner of the copyright has the right to prevent third parties, without permission, from doing a number of acts with the copyright work. Copyright law seeks to indicate what may be exempt from protection along with the numerous types of ways that damages can be sought.

Copyright law is subject to international treaties, the most important of which is the Berne Convention. This gives reciprocal protection for nationals from different countries. The Convention also states that what is crucial is not where the material was created, but where the alleged infringing act took place. There is a lot of debate in multinational networked systems about how to determine the place of infringement.

### **7.2.1. Databases**

It is generally accepted that raw bibliographic data including the author abstract is exempt from copyright under article 10 of the Berne Convention:

- It shall be permissible to make quotations from a work which has already been lawfully made available to the public, provided that their making is compatible with fair practice, and their extent does not exceed that justified by the purpose, including quotations from newspaper articles and periodicals in the form of press summaries.
- Where use is made of works in accordance with the preceding paragraphs of this Article, mention shall be made of the source, and of the name of the author, if it appears thereon.

However, where database providers have made additional intellectual effort in either capturing, compiling, adding value or in the presentation of the data then the database itself and therefore its enhanced contents is protected by copyright with the rights belonging to the owner / creator of the database.

### **7.2.2. Articles**

Full copies of articles are likely to be doubly covered under existing copyright legislation. The individual article is the copyright of the author (who may have signed over unlimited usage and distribution rights to a publisher) and the copyright of the publisher on the compilation of the articles (in a journal, book or database).

### **7.2.3. Exceptions to copyright**

As mentioned above the Berne convention allows for exceptions to copyright. These have been enshrined in subsequently in various national laws under the so called

“fair use” clause. Article 9(2) of the Berne convention contains a yardstick which has been repeated in TRIPS and in the EU copyright directive (2001/29/EC) - Article 5.5. That is that any exceptions to copyright shall be granted on the basis of the following:

- shall be restricted to special cases
- shall not conflict with reasonable exploitation of the work
- do not unreasonably prejudice the legitimate interests of the rightholder

The EU copyright directive also indicates that member states may provide for exceptions for cases such as educational and scientific purposes, for the benefit of public institutions such as libraries or archives ...and for uses in administrative and judicial proceedings. The directive goes on to state that in certain cases of exceptions and limitations, rightholders should receive fair compensation. When evaluating such use a valuable criteria is the possible harm resulting from the act in question. In cases where rightholders have already received payment in some form, for instance as part of a licence fee, no specific or separate payment may be due. In situations where the prejudice to the rightholders would be minimal, no obligation for payment may arise. Article 5.2 (e) specifically allows for the exception to use copyrighted material to ensure the proper performance or reporting of administrative, parliamentary or judicial proceedings.

Obviously, the EU copyright directive is a directive which foresees various implementations in national legislation and currently only some countries have implemented the directive.

Furthermore the act of sending cited documents to the applicant is enshrined in the international treaties of the PCT and the EPC which both foresee the requirement of the EPO to transmit to the applicant copies of documents cited in the search report (Article 20(3) of the PCT and EPC Article 92(2)). However, it should also be mentioned that neither of these treaties suggest that this act should be carried out free of any compensation to the rightholders.

### **7.3. The Approach**

The EPO believes in an approach to the issues of copyright and patent granting which is based on the following principles:

#### **7.3.1. For internal use of the data and supply of a copy to the applicant**

In the case of commercially available licensed data products the EPO makes a commercial contract for the data and pays the full subscription charges related to the product. During negotiation for any commercial contract the EPO tries to include a usage clause in the contract where use of the data is explicitly permitted for the patent granting procedure including the storage and supply of a copy to the applicant.

Even though according to some major publishers, the “fair-use” clause for governmental evidence and procedures which is featured in most commercial license agreements should cover use in Patent Granting by the EPO, they are in most cases willing to add a clause specifically mentioning the patent granting procedure. The clause currently used by the EPO is:

- “ In the course of the patent granting procedure, Licensee and Authorised users may supply the Patent Applicant with evidentiary copies (print or electronic) of individual articles of the Licensed Electronic Products and may store such articles for internal use. Any electronic file deliverable to a non-subscriber must be in the form of a non-re-workable PDF or equivalent.”

The EPO is convinced that the “fair use” principle and the exemptions for proper performance of governmental administrative proceedings as mentioned above do encompass the selection, copying and usage internally of individual single articles consulted during the patent granting procedure and the supply to the applicant of an evidentiary copy. It is also of comfort that major publishers are of the same opinion and agree to specifically mention the patent granting procedure in their allowable acts. Furthermore, in this case of commercial licensing and subscriptions there is clearly also the element of “compensation” by licence fee as specifically mentioned within the copyright directive.

### **7.3.2. Copies of NPL used in the patent granting procedure to 3rd parties**

In the case of supply to 3rd parties of articles cited by the EPO during the granting procedure, the EPO has concluded that giving on-line access to the full NPL article may be a possible infringement of the rights of the copyright holders. Although these NPL articles are part of the file, the issue of copyright hinges on the amount of information required for a citation. Whereas general practice indicates that a complete article or document is cited, in fact only the relevant portions of the document are necessary. The question to be addressed is: is it valid to reproduce a whole article or book in an internal file when the relevant portion is a paragraph or page? If only the relevant portion of the work is taken, then copyright infringement is not an issue, as partial citation of works is permissible in all copyright laws. Because of this concern, and in order not to dramatically change practice that has been continuing for many years in the paper world, the EPO believes that a good solution for the supply to 3rd parties is to provide the bibliographic reference with, where possible a DOI, to articles cited in the search report, and a means by which those references can be ordered by a 3rd party from the original publisher or from a document supplier (see Appendix 1 on linking technology).

In the case of articles submitted by 3rd parties during the granting procedure, these become fully part of the file, and thus the EPO has concluded that they are open to public inspection. In general, world-wide copyright systems, maintain a balance between the protection of the intellectual property and the public interest in having access to use such protected materials. The EPO takes the view that the functions and duties imposed on this Office under international law constitute a solid basis so that the on-line access to NPL given to the public to the limited extent described above cannot be considered as an infringement of copyright and similar rights. However, where possible, the EPO would like to provide a technical means to link to this information using a DOI thereby enabling any 3rd party to acquire the article using his own document delivery services.

### **7.3.3. Constructing searchable databases**

However, there are still some areas of operation where the further exploitation of NPL during the patent granting procedure is necessary for the business but is not necessarily exempt from copyright considerations:

A particular case is in the download from Internet sites of large amounts of publicly available information for the construction of internal databases. In this case some claim for compensation due to loss of income by the rightholders could be envisaged. The problem, in the case of Internet is that it is often difficult to identify the rightholders and in many cases impossible to acquire a license. Some sites have very detailed license arrangements for what can and cannot be done with the data whereas others have no information at all. The problem with the availability of technical information on web sites is that a patent office needs access to this data to fulfil its mission, and to be able to do that it needs to index and record the information for efficient searching. This is an awkward subject on which there is little clarity.

Therefore, the EPO welcomes an exchange of opinions on the current practices with other offices to look at the technological options against the various requirements in each office.

[Annex II follows]

ANNEX II

PATENT DOCUMENTS AVAILABLE  
AT THE EUROPEAN PATENT OFFICE

The following pages are sample extracts, showing the extent of the patent documentation available to the European Patent Office issued by the Offices of two States (Austria and the Republic of Korea). The full document from which these extracts are taken (293 pages) includes further details of the patent documentation from these and 75 other national and regional Offices, together with international publications under the PCT. It is available to International Authorities from the PCT/MIA electronic forum at [http://www.wipo.int/pct/mia/en/min\\_doc/docs/epo\\_patdoc.pdf](http://www.wipo.int/pct/mia/en/min_doc/docs/epo_patdoc.pdf)



### 4.3 Coverage - EPO Databases

#### Total Coverage

AT	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Full text	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IPC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Legend:	at least 100 documents online for the indicated five-year period 1.000 to 99.999 documents online for the indicated five-year period more than 99.999 documents online for the indicated five-year period X There is no data published for the indicated five-year period															

#### Loaded in 2003/2004

AT	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Full text	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IPC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Legend:	at least 100 documents online for the indicated five-year period Loaded in 2003/2004 X There is no data published for the indicated five-year period															

#### To be loaded in 2004 or later

AT	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Title (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Full text	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IPC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Legend:	at least 100 documents online for the indicated five-year period To be loaded in 2004 To be loaded in the future X There is no data published for the indicated five-year period															

The acquisition of the full text of unique Austria Patents and Utility Models is planned.



### 39.3 Coverage - EPO Databases

#### Total Coverage

KR	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X										
Title (English)	X	X	X	X	X	X										
Title (Original)	X	X	X	X	X	X										
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X										
Full text	X	X	X	X	X	X										
IPC	X	X	X	X	X	X										
Legend:	<div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">100 to 999</span> <span style="width: 75%;">documents online for the indicated five-year period</span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">1.000 to 99.999</span> <span style="width: 75%;">documents online for the indicated five-year period</span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">more than 99.999</span> <span style="width: 75%;">documents online for the indicated five-year period</span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">X</span> <span style="width: 75%;">There is no data published for the indicated five-year period</span> </div>															

#### Loaded in 2003/2004

KR	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X										
Title (English)	X	X	X	X	X	X										
Title (Original)	X	X	X	X	X	X										
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X										
Full text	X	X	X	X	X	X										
IPC	X	X	X	X	X	X										
Legend:	<div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">at least 100</span> <span style="width: 75%;">documents online for the indicated five-year period</span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">Loaded in 2003/2004</span> <span style="width: 75%;"></span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">X</span> <span style="width: 75%;">There is no data published for the indicated five-year period</span> </div>															

#### To be loaded in 2004 or later

KR	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Bibliographic data	X	X	X	X	X	X										
Title (English)	X	X	X	X	X	X										
Title (Original)	X	X	X	X	X	X										
Abstract (Original)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abstract (English)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Images	X	X	X	X	X	X										
Full text	X	X	X	X	X	X										
IPC	X	X	X	X	X	X										
Legend:	<div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">at least 100</span> <span style="width: 75%;">documents online for the indicated five-year period</span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">To be loaded in 2004</span> <span style="width: 75%;"></span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">To be loaded in the future</span> <span style="width: 75%;"></span> </div> <div style="display: flex; justify-content: space-between;"> <span style="width: 10%;"></span> <span style="width: 15%;">X</span> <span style="width: 75%;">There is no data published for the indicated five-year period</span> </div>															