

# WIPO



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## WORLD INTELLECTUAL PROPERTY ORGANIZATION GENEVA

### PATENT COOPERATION TREATY

#### INTERIM COMMITTEE FOR TECHNICAL COOPERATION

Fourth Session: Geneva, November 14 to 19, 1974

PCT MINIMUM DOCUMENTATION (NON-PATENT LITERATURE):  
FREQUENCY OF CITATION OF NON-PATENT LITERATURE

Progress report prepared by the International Bureau

#### Introduction

1. The PCT Interim Committee for Technical Cooperation (hereinafter referred to as "the Interim Committee") in its third session, held in Tokyo, in October 1973, asked its Standing Subcommittee to continue the study on the frequency of citation of non-patent literature in the light of the discussions at that session.
2. Since no session of the Standing Subcommittee is scheduled to take place in 1974, the International Bureau is submitting its progress report on such study to the Interim Committee.

#### Background

3. It is recalled that the International Bureau has already reported on studies on the frequency of citation of non-patent literature conducted by six offices (the German Patent Office (DT), the Japanese Patent Office (JA), the Netherlands Patent Office (NL), the Swedish Patent Office (SW), the United States Patent Office (US), and the International Patent Institute (IIB); see documents PCT/TCO/SS/III/9, 16 and 19 and PCT/TCO/III/2).

#### New Developments

4. The International Bureau has, since the last session of the Interim Committee, received the results of the studies carried out in the Austrian Patent Office (OE) and the Soviet Union Patent Office (SU). These results are reproduced as Annex A and Annex B respectively to this progress report.
5. The Austrian statistics show that citations of non-patent literature in the electrical and physics field are roughly twice as high as in the chemical field and seven to eight times as high as in the mechanical field. The average percentage of citations of non-patent literature over all three fields is roughly three percent.
6. The Soviet Union statistics showed a 22 percent average citation rate for non-patent literature with the highest percentages being reported in the physics and electrical areas and the lowest in the mechanical areas. The Soviet Union Patent Office, in this context, informed orally the International Bureau, that it was of the opinion that this seemingly high percentage was due to some particularities of the patent system in the Soviet Union. It was therefore thought not to be useful to make a direct comparison with the results obtained in other Offices.

7. The German Patent Office, in its proposal on the periodicals to be included in the minimum list to be part of the PCT minimum documentation in accordance with Rule 34.1(b)(iii). (see Annex III, document PCT/TCO/IV/2), has indicated that the percentage of non-patent literature cited in the course of isolated searches has decreased for all citations from 2.1 percent in 1972 to 1.8 percent in 1973. In a letter of February 6, 1974, the German Patent Office confirmed this decrease in the percentage of non-patent literature cited and indicated a percentage of 1.9 percent in 1973. (See Annex C)

8. Information received from the United Kingdom Patent Office concerning experience gained with non-patent literature in searching of patent applications shows that the percentage of non-patent literature cited is insignificant.

9. Information obtained at the IIB showed that in some particular technical fields, such as static memories (Int.Cl. G11) and pulse technique (Int.Cl. H03k), the proportion of non-patent literature cited as reference in novelty searches reaches 50 percent.

10. In Annex D a summary is given of citation rates of non-patent literature so far reported by the PCT authorities. From this summary the following emerges:

- (i) There exists a wide variance of overall (total) citation rates ranging from 21.6% (SU) to 1.9% (DT, 1973 survey).
- (ii) The overall citation rate shows a downward trend at the German Patent Office and the United States Patent Office.
- (iii) The citation rate in the mechanical field is considerably lower than in the other fields.
- (iv) Except the US Patent Office, the highest citation rates are in the electrical field.

11. It is hardly possible at this stage to draw any conclusion from the figures summarized in Annex D. However, a certain number of questions of interest arise: Which are the periodicals most cited? Are the citations from these periodicals merely illustrative as to the general state of the art, or are they cited against the claims or the inventive concept in the disclosure of the patent application? Comparisons between different Offices could be attempted if the answers to the two preceding questions could also be refined to the extent of identifying the patent classification of the particular fields in more detail, preferably by indicating the corresponding IPC subclass or group symbol. The identification of the technical field with some precision seems to be necessary, of course, only in those cases of periodicals whose coverage is very broad.

12. Among the results that could be expected from action along the lines indicated in the preceding paragraph the following seem to be the most important:

- (i) Are there sources of technical information currently used by one prospective Authority, the potential value of which is still unknown to other Authorities? This question could be answered by identifying certain periodicals for certain technical fields.
- (ii) As far as periodicals are concerned, the names of those identified may be taken up for consideration for inclusion in the PCT minimum list of non-patent literature according to PCT Rule 34.1(b)(iii), if not already proposed for inclusion.
- (iii) Emphasis on inventive activity may be placed on certain technical fields in the countries in which the prospective Authorities are located, or for which they work as is the case with the IIB. It could be that certain periodicals, possibly in the language of the country in which the prospective Authority is located, could be drawn to the attention of the prospective Authority as a periodical much cited by other prospective Authorities.

13. In the long run it would seem that the study on the frequency of citations of non-patent literature should be coordinated with the study on the minimum list of non-patent literature, as the results from the former could, or should be the basis for some of the decisions taken in the latter.

14. In support of this argument, it is recalled that the Netherlands Patent Office, in indicating a selection of periodicals to be included in the PCT minimum documentation, based its selection on an already conducted survey in which periodicals were listed along with an indication of the number of articles which were cited there from in search reports for patent examination, as well as other statistical indications on the use of these periodicals (see documents PCT/TCO/III/10 and PCT/TCO/IV/2).

15. The IIB also has conducted surveys which identified the number of articles cited from non-patent literature sources over a certain period of time (see document PCT/TCO/III/4).

16. The Interim Committee is invited to advise the International Bureau on the continuation of the study and in particular whether such study should:

- a) be limited to the chemical and electrical fields or also include the mechanical field;
- b) enquire into the actual citation levels of identified periodicals and utilize such information in the establishment of the list of non-patent literature to be introduced into the PCT minimum documentation.

[Annexes A to D follow]

VIZEPRÄSIDENT DES PATENTAMTES  
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 Zl. 2714/Präs. 73

Wien, am 19. Oktober 1973

Austrian Patent Office

Citations in patent application prosecution  
 from December 1972 to August 1973

Mr. K. Pfanner  
 Senior Counsellor  
 WIPO  
 32, chemin des Colombettes  
 CH-1211 Genève 20

Dear Mr. Pfanner,

With Circular No. 1462, dated July 4, 1972, the International Bureau requested statistics on the proportion of non - patent literature to patent literature cited in patent application prosecution. As such statistics were not available at this office, we had to undertake studies on citations, which have been carried out since December 1972 and will be continued.

Now I have the honour to send you enclosed the results of the statistics for the period from December 1972 to August 1973.

Encl.

Yours sincerely,



Technological field (IPC Section)	Number of applications	Patent literature cited	%	Non-patent literature cited	%
A	675	1481	97.31	41	2.69
B	850	2280	99.17	19	0.83
C	975	3038	96.81	100	3.19
D	250	572	97.95	12	2.05
E	400	1120	97.39	30	2.61
F	275	735	99.19	6	0.81
G	175	333	94.60	19	5.40
H	575	1380	93.88	90	6.12
Total	4175	10939	97.18	317	2.82

PCT/TCCO/IV/3  
ANNEX A

Percentage of non-patent literature cited

Chemistry	3.2
Electricity	6.1
Mechanical field	0.8
Total	2.8

REPLY OF THE STATE COMMITTEE FOR INVENTIONS AND DISCOVERIES  
OF THE COUNCIL OF MINISTERS OF THE USSR

Relative Percentage of Non-Patent Literature Citations by IPC Classes\*

<u>IPC Class</u>	<u>% Non-Patent Literature Citations</u>
A	20
B	19
C	21
D	15
E	20
F	16
G	32
H	30

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\* Based on a survey of individual examiner's files with some 500 applications in each IPC Class.

DER PRÄSIDENT  
DES DEUTSCHEN PATENTAMTS

8000 MÜNCHEN 2, den Februar 3, 1974  
Zweibrückenstraße 12  
Fernruf (08 11) 2 19 51      Fernschreiber 5 23 534  
Fernrufdurchwahl (08 11) 21 95      Hausruf 1024  
Geschäfts-Nr.: \_\_\_\_\_  
Bitte in der Antwort die vorstehende Geschäftsnummer angeben.

- 2 -

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9330/10 H5 Bd II 64/74  
9330/10 (11) - 3.1.3. Bd XIII 7

Re.: Statistics on the number of publications ascertained in  
"isolated searches"

Ref.: Documents PCT/TCO/III/13 paragraphs 53-59 and  
PCT/TCO/SS/III/16

Annex: - 1 -

Dear Dr. Bogsch,

Also this year there has been an investigation carried out on the number of publications ascertained in "isolated searches". As was already the case in 1971 and 1972 the Table in the Annex provides the statistics for the technological fields: mechanical engineering, mechanical technology, electrical engineering, chemistry and physical science with a splitting up of the ascertained publications into German and foreign patent literature as well as into non-patent literature.

As to the results the following may be said:

The number of the ascertained publications for all technological fields during the period from January to September 1973 (the values for the periods March to June 1972 and May to October 1971 have been added in brackets): is 5,0 (5,3; 6,3).

50,4 % (48,3 %; 46,5 %) are allocated to German patent literature, 47,7 % (49,6 %; 47,6 %) to foreign patent literature and 1,9 % (2,1 %; 5,9 %) to non-patent literature.

The system of the "isolated search" now being prosecuted in the German Patent Office since already four years the number of the ascertained publications seems to be swinging towards approximately five. Compared with the percentage of foreign literature the citation of German patent literature has somewhat increased - possibly due to the fact that the applications laid open to the public are published almost exactly 18 months after the priority or application date - while the proportion of the non-patent literature has an average of 1,9 %, with higher percentages naturally being observed in electrical engineering, chemistry and physical science, lower ones in mechanical engineering.

The view expressed in my report of August 16, 1972 (document PCT/TCO/SS/III/16 Annex b), that the percentage of the non-patent literature will decrease in favour of the patent literature, has been confirmed.

Sincerely yours,

  
Haertel

PCT/TCO/IV/3  
ANNEX C

Statistics on the number of publications ascertained in "isolated searches", split up according to technological fields:

January to September 1973 (approx. 5.200 searches)

Technological Field	Number of Citations	DT patent Literature		Foreign patent Literature		Non-patent Literature	
		average number	%	average number	%	average number	%
Mechanical engineering	5,1	2,37	46,6	2,67	52,5	0,05	1,0
Mechanical technology	5,2	2,78	54,0	2,32	45,0	0,06	1,1
Electrical engineering	4,8	2,55	53,4	2,05	43,1	0,17	3,5
Chemistry	5,3	2,27	43,1	2,83	53,9	0,16	3,0
Physical Science	4,0	2,30	57,4	1,61	40,2	0,10	2,4
=====							
Average rate	5,0	2,51	50,4	2,37	47,7	0,09	1,9

[Annex D follows]

Summary of Citation Rates (In Percentages) of Non-Patent Literature

Period Covered		Chemical	Electrical	Mechanical		Total	Reference
OE	Dec.72-Aug.73	3.2	6.1	0.8		2.8	This document Annex A
DT	May-Oct.71	13.8	5.9	Engn.	Techn.	5.9	PCT/TCO/SS/III/16 Annex B
	March-June 72	3.5	3.8	3.7	4.8	2.1	
	Jan.-Sept.73	3.0	3.5	0.6	1.2	1.9	
JA	1970 (1)			1.0	1.1	9.9	PCT/TCO/SS/III/19
	(2)	5 20	< 30	15 - 18		21.6	
SW	March-June 72(3)					6.0	PCT/TCO/SS/III/16 Annex C
US	1963					4.4	PCT/TCO/SS/III/9
	1970					3.8	
	June-Oct.71	6.5	3.5	0.8		3.2	
NL	1957	28	15	2		15	PCT/TCO/SS/III/16 Annex A
	1968	13	19	8		11	
IIB	1970	6.5	15.4	1.3		7.8	PCT/TCO/SS/III/16 Annex D
	1972	10.2	21.0	0.36		10.7	

- Notes (1) The report of the Japanese Patent Office gives citation rates for industrial fields which in some instances covered several of the three areas, i.e. chemical, electrical or mechanical, found in this table. The industrial field including the chemical area did have the highest citation rate.
- (2) Averages calculated by the International Bureau.
- (3) The report of the Swedish Patent Office used technical fields which did not in all cases fit into the three broad categories used in this table. In general it appeared that the fields related to the chemical area had the highest citation rates followed by the electrical and the mechanical areas with the mechanical predominant areas having 1% citation rates.

[End of Annex]

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