

Veröffentlichung im Amtsblatt	Ja/Yes
Publication in the Official Journal	Yes/Yes
Publication au Journal Officiel	Oui/Yes



15

Aktenzeichen / Case Number / N° du recours : T 178/84

Anmeldenummer / Filing No / N° de la demande : 80 107 150.7

Veröffentlichungs-Nr. / Publication No / N° de la publication : 031 031

Bezeichnung der Erfindung: Serial storage interface apparatus for coupling a
Title of invention: serial storage mechanism to a data processor input/
Titre de l'invention : output bus.

Klassifikation / Classification / Classement : G06 F13/00

ENTSCHEIDUNG / DECISION

vom / of / du 7 December 1987

Anmelder / Applicant / Demandeur : IBM Corporation

Patentinhaber / Proprietor of the patent /
Titulaire du brevet :

Einsprechender / Opponent / Opposant :

Stichwort / Headword / Référence : Unreported lack of unity/IBM

EPO / EPC / CBE Article 82; Rules 25(1), 46(1); Rules Relating to Fees
Article 2 No. 2

Kennwort / Keyword / Mot clé : "Lack of unity - not reported in search stage"
"Divisional application - not required"

Leitsatz / Headnote / Sommaire

- I. It lies within the discretion given to the Examining Division by Rule 25(1)(b) EPC to decide that a patent application lacks unity of invention in the sense of Article 82 EPC even if the Search Division did not raise a similar objection under Rule 46(1) EPC. (This is the opposite of the situation Rule 46(2) EPC pertains to).
- II. The provisions of the Convention relating to unity of invention illustrate its general intention to leave it to the applicant to decide with which subject-matter to proceed in his patent application.

(cont'd)

This does however, not hold for subject-matter which was abandoned at an earlier stage of the procedure, in particular as a legal consequence of non-payment of a further search fee in response to an invitation under Rule 46(1) EPC.

Europäisches
Patentamt

Beschwerdekammern

European Patent
Office

Boards of Appeal

Office européen
des brevets

Chambres de recours



Case Number : T 178/84

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 7 December 1987

Appellant : IBM Corporation
Armonk
New York 10504
USA

Representative : Bonneau, Gérard
Compagnie IBM France
Département de Propriété Intellectuelle
F-06610 La Gaude

Decision under appeal : Decision of Examining Division 065
of the European Patent Office
dated 19.04.84 refusing European
patent application No. 80 107 150.7
pursuant to Article 97(1) EPC

Composition of the Board :

Chairman : P.K.J. Van den Berg

Members : W.B. Oettinger
F. Benussi

Summary of Facts and Submissions

- I. European patent application No. 80 107 150.7 filed on 18 November 1980 claiming a priority of 14 December 1979 and published under No. 31031 was refused by a decision of Examining Division 2.2.01.065 dated 19 April 1984.
- II. The reason given for the refusal was that the subject-matter of Claim 1, filed on 21 November 1983, lacked an inventive step.

More specifically, of two embodiments disclosed in the application and falling under that claim, the one described, with reference to Fig. 3 and 4, as the second embodiment of the invention was considered to be obvious having regard to the prior art, *inter alia* US-A-3 406 378.

Dependent Claims 4 to 6, filed on the same day, were rejected for the reason that their additional features were known or contained already in Claim 1. This implies that the subject-matter of these claims was also considered to lack an inventive step.

- III. In contrast, dependent Claims 2 and 3, filed on 21 November 1983, were not rejected for any reason relating to their subject-matter, but only for the formal reason that they would presuppose an allowable main claim.

Of these claims, Claim 2 was exclusively directed to the other one of the two embodiments disclosed, namely the one described, with reference to Fig. 1 and 2, as the first embodiment of the invention. Claim 3 was appended to Claim 2.

IV. As an **obiter dictum**, in the decision under appeal, the Examining Division had expressed its opinion that Claims 2 and 3 filed on 21 November 1983 could not lead to a patentable independent claim within the present application because that would contravene Article 82 EPC.

From the papers on file, including the Search Report, a communication of the Examining Division, dated 27 September 1983, and the decision under appeal itself, it follows that this opinion was based upon the following facts and considerations:

- (a) It is true that the Search Division did not consider that the application did not comply with the requirement of unity of invention according to Article 82. The Search Report was, therefore, drawn up for all claims; no action under Rule 46(1) was taken.
- (b) However, the subject-matter of Claims 2 and 3, filed on 21 November 1983, was not in the original claims. Their features were taken from the description.
- (c) In the Examining Division's opinion, no common inventive concept in the sense of Article 82 EPC could be found between the embodiment claimed in Claims 2 and 3 on file, i.e. the first one of the two embodiments described, and the embodiment claimed in the original dependent Claims 7 to 13, namely the second one of these two embodiments. The only common concept was comprised in the subject-matter of the then valid Claim 1 which lacked an inventive step.
- (d) Had the first embodiment been claimed originally, it would have led to a lack of unity objection under Article 82 EPC at the search stage.

(e) The objection was not lack of unity of Claims 2 and 3 with any other claim then on file. Rather, the objection was that, according to the Guidelines C VI 3.2 (c) and III 7.12, amendments must not result in claims for an invention not forming unity with the invention originally claimed and in respect of which search fees have been paid.

(f) It was considered that the first embodiment now claimed had not been searched, as it had not been claimed (b).

This is implied in the Examining Division's statement that the fact that the first embodiment falls within the area searched, did not mean that it had been searched.

(g) The subject-matter of Claims 2 and 3 then on file was, for these reasons, to be excised from the present application.

Its pursuance presupposes that it is made the subject of a divisional application.

V. The applicant filed a notice of appeal against that decision, and paid the appeal fee, on 28 June 1984.

A statement setting out the grounds of appeal had been filed two days before.

VI. In communications to the appellant the rapporteur of the Board supported the view that Claim 1 as rejected covered an embodiment, the second one, which must be regarded as lacking an inventive step, and was therefore unallowable.

VII. In response to these communications, the appellant deleted all references to that embodiment from the description and drawings, and eventually filed, on 1 July 1987, an amended Claim 1 restricted, in the sense of Claim 2 filed on 21 November 1983, to said first embodiment.

This claim reads as follows (with corrected punctuation):

"Serial storage interface apparatus for coupling a charge coupled device or magnetic bubble storage (1) to the input/output (I/O) bus (2) of a processor (3) comprising data transfer circuitry (5) between the serial storage mechanism and the I/O bus for transferring data between the addressed storage locations and said processor; said apparatus being characterised in that it comprises:

- an I/O controller (4) connected to said I/O bus (2) including a processor handshaking circuit providing an indication of the time taken by said processor to send back a reply to each service request received from said I/O controller, thereby determining the data transfer availability of said I/O bus;
- a bus utilisation monitor (7) connected to said processor handshaking circuit for monitoring the transfer of data on said I/O bus between said processor and said data transfer circuitry, and providing a speed control signal in response to the data transfer availability of said I/O bus provided by said processor handshaking circuit; and
- a clock generator (6) for, in response to said speed control signal, causing the transfer of data between said data transfer circuitry and said serial storage mechanism to be carried out at a higher speed when said

I/O bus is available a greater percentage of the time and at a lower speed when said I/O bus is available a lesser percentage of the time".

Dependent Claims 2 to 4 were also filed on 1 July 1987. Claim 3 was deleted on 14 July 1987 implying that Claim 4 was renumbered 3.

VIII. The appellant requests that the decision under appeal be set aside and a patent be granted, according to his later submissions, on the basis of the following documents:

Claims 1, 2 and 4 (renumbered 3) filed on 1 July 1987;
Description, page 1 as published;
Description, pages 2 to 5, 5a, 6 to 9 and 12, filed on 1 July 1987;
Description, pages 10 and 11 filed on 5 December 1986;
Drawings, sheets 1-3 filed on 5 December 1986.

Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.
2. The amendments made to Claim 1 are based on the original description. In particular:
 - (a) The amendment relating to the application of the claimed apparatus to a charge coupled device or magnetic bubble storage, is based inter alia on original page 5, lines 10-16.
 - (b) The amendments relating to the kind of I/O controller, bus utilisation monitor and clock generator, find their

particular basis in the description (in particular original page 10, lines 27-33 and page 11, lines 4-9 and 13-18) of the embodiment shown in Fig. 1 and 2.

So no objection under Article 123(2) EPC arises against Claim 1 on file. This also applies to Claims 2 and 3.

3. The claims and description have been restricted to one of the two embodiments originally disclosed, namely to the first one described with reference to Fig. 1 and 2.

The application in its present form therefore meets the requirement of unity of invention according to Article 82 EPC.

It is noted that in this respect the Examining Division did not express a different opinion. Its objection against Claims 2 and 3 filed on 21 November 1983 was not lack of unity of invention in the sense that the application would still lack unity even if it is restricted to these claims.

4. The real issue of the present case follows from the fact that in the decision under appeal, the Examining Division rejected Claims 2 and 3 of 21 November 1983 as a basis for an allowable independent claim essentially with the following argumentation:

- (a) the invention as originally formulated in Claim 1 lacked an inventive step and given, that Claim 1 had to fall for this reason, the two embodiments as disclosed lacked a **posteriori** unity;

- (b) the second of these embodiments was comprised in the original claims and therefore searched by the Search Division, and this embodiment lacked also an inventive step;

(c) the first embodiment, however, was not comprised in the original claims but only in the description and therefore not searched; had it been in the claims it would have led to a lack of unity objection at the search stage and a further search fee would have been required for its search; this, the unsearched, first embodiment cannot therefore be pursued in the present application; it can only be made the subject of a divisional application.

From the Examining Division's reference to the Guidelines, it is clear that the above argumentation is, in effect, based

- (a) on what Rule 46(1) EPC prescribes for cases where the Search Division finds an application to lack unity of invention, and
- (b) on the assumption that similar consequences as follow from Rule 46(1) EPC must also hold if lack of unity was not detected at the search stage.

The Board has considered all circumstances of this case with regard to the provisions in the Convention. It concludes that, contrary to the opinion expressed by the Examining Division in respect of Claims 2 and 3 filed on 21 November 1983, no objection arises against the corresponding Claims 1 and 2 now on file from an earlier problem of lack of unity of invention, if there was any. These claims can therefore remain in the present application.

This opinion is based upon the following considerations:

- 4.1 According to the wording of Article 82 EPC the requirement of unity of invention has to be satisfied by the patent application. More specifically, it must be satisfied not only by the patent application as filed but also by the patent application at later stages of the patent granting procedure, i.e. before the Examining Division, until grant of the patent. This follows particularly from Rule 25(1)(b) EPC which mentions explicitly the Examining Division to make objections under Article 82 EPC.

The Implementing Regulations applying when Article 82 EPC is not satisfied, are laid down, for the Search Division, in Rule 46(1) EPC and, for the Examining Division, in Rules 46(2) and 25(1)(b) EPC. Rule 25(1)(b) may be considered to constitute for the Examining Division the equivalent of Rule 46(1) for the Search Division.

In cases where a clear lack of unity of invention is easily recognisable, the Search Division will apply Rule 46(1) and the Examining Division will apply Rule 25(1)(b). However, Rule 46(2) explicitly states the possibility that the Examining Division disagrees with the Search Division concerning lack of unity of a particular patent application and that then the Examining Division's opinion is decisive in that the latter may order refund of any further search fee at the applicant's request.

The Board considers that, as a further possibility, also the opposite may occur, i.e. that a patent application is not considered by the Search Division to lack unity of invention and that no Rule 46(1) invitation was issued, but that it is within the discretion of the Examining Division nevertheless to decide that there is non-unity, be it in the claims as searched or in amended claims, and to issue an invitation according to Rule 25(1)(b) EPC to limit the patent application.

According to Rule 46(1) EPC an applicant has a choice, apart from the invention first mentioned in the claims which will always be searched, as to which of the further inventions contained in the same patent application he wishes to be searched.

Rule 25(1) goes, in its paragraph (b) as well as in paragraph (a), still further by leaving it entirely to the applicant to decide with which subject-matter he wishes to proceed in the earlier patent application when considering the filing of one or more divisional applications.

The foregoing illustrates the general intention of the EPC to leave it to the applicant to decide with which subject-matter a patent application is to proceed, and it therefore seems to the Board that normally the applicant should be free to decide this question as he sees fit.

- 4.2 This holds, however, only for subject-matter which was not abandoned at an earlier stage of the procedure of that application.

Abandoned subject-matter is to be understood here to establish subject-matter which is excluded from further prosecution within the application in which it was originally filed (e.g. as subject-matter which is not intended to be maintained within the application as originally filed).

It lies clearly within the intention of Rule 46(1) EPC to regard subject-matter as abandoned in a particular patent application if, in response to an invitation according to this rule, the further search fee is not paid for this subject-matter within the time limit set by that rule.

Otherwise Rule 46(1) would not have any legal effect and any invention for which the required search fee was not paid could be pursued in the respective patent application just in the same way as an invention for which it was duly paid. This would make no sense and therefore be against the spirit of Rule 46(1) EPC.

The particular reason why in such a case of non-payment of the further search fee the invention which lacks unity with the searched invention, can indeed be regarded as abandoned, is seen in the fact that the applicant was expressly offered the opportunity to have the search extended to this invention but he decided not to take this opportunity and expressed this decision by not responding to the invitation to pay. With the expiry of the time limit set in Rule 46(1), this expressed decision becomes final. In other words: the applicant is, in this case, deemed to have definitely executed his general right, which he has according to paragraph 4.1. above, to decide with which one of a plurality of disclosed inventions to proceed in the respective patent application. This also applies if the applicant contests the Search Division's objection under Article 82. He then can request refund of the further search fees under Rule 46(2) to the Examining Division later, but he must pay first if he wishes to avoid that subject-matter is deemed abandoned.

It is, thus, only as a consequence of such abandonment of matter and not as a direct consequence of non-unity as such, that an amendment "must not result in claims for an invention not forming unity with the invention originally claimed and in respect of which search fees have been paid" assuming that this phrase as used by the Examining Division is intended to have the same meaning as the actual wording of Guidelines C-VI, 3.2(c) which contains the expression "invention or inventions" wherever the cited

phrase mentions the word "invention" and also assuming that in the wording of the Guidelines "which" refers to "the invention or inventions originally claimed". It is further only because of this consequence that, in case an amendment of such kind is nevertheless submitted, the applicant "should be told that he may file a divisional application in respect of any invention claimed for which a search fee has not been paid".

- 4.3 As the present case shows, it is not of the kind in which the subject-matter as now claimed can be deemed to have been abandoned.

The Search Division did not consider that the patent application lacked unity of invention and consequently no invitation under Rule 46(1) EPC to pay a further search fee was issued. Without such invitation, the appellant had no reason to suspect that the application might suffer from a lack of unity problem; he had therefore no opportunity to decide whether to pay or not to pay a further search fee. No time limit according to Rule 46(1) was set in force, and from non-payment of a further search fee cannot therefore be derived any legal consequence such as a deemed abandonment of subject-matter.

This means that the appellant remained, even in the stage of substantive examination, still free to decide with which one of the disclosed embodiments to proceed in the present application, as he eventually did by restricting the application to one of them, namely the one described first.

- 4.4 Summarizing the outcome of the issue in the present case, the amendments made to the application are unobjectionable under any one of the requirements which might directly or

indirectly derive from Article 82 EPC. The amended documents can therefore serve as a basis for further pursuance of their subject-matter within the present application and, consequently, this matter need not be made the subject of a divisional application for its pursuance.

5. The case requires no decision whether the objection of the Examining Division to lack of unity between the first and second disclosed embodiments of the originally claimed invention was actually justified. Nor is it necessary to investigate whether, as a consequence of such possible a **posteriori** lack of unity, any intermediately filed claims lacked unity of invention.

Such retrospective considerations would be irrelevant for the patent application in its present form and played, as paragraph 4 above shows, no role even in the question at issue which was to be decided.

6. Further, the case requires no decision of the Board in respect of the question whether the subject-matter of present Claim 1 was actually not included in the search by the Search Division.

This question will have to be investigated within the substantive examination procedure, since, if said subject-matter was not included in the search, an additional search is required. This investigation can, however, and should, be left to the instance which will have to carry out that substantive examination (see paragraph 7 below).

In respect of search, and search fee, only the following should be noted:

- 6.1 When deciding upon the question whether the subject-matter of the Claims was searched or requires an additional search, it should be taken into consideration, that
- (a) according to the Search Report, the search included the original Claim 5; this claim contained a functional feature which was disclosed, according to the description, page 11 first paragraph, as being the function of the first embodiment now being the subject of Claim 1;
 - (b) the technical features for implementing said function have, on the other hand, only been disclosed in the description, page 10 third paragraph, and it does not follow from the Search Report or any other paper on file whether the search was extended to the description;
 - (c) for the question to be decided, it might be relevant what conclusions the result of the search as far as it was carried out would allow to draw for the function claimed in the original Claim 5.
- 6.2 The fact that a further search fee has not been paid, is, in the circumstances (see paragraph 4), not relevant to the present case for the following reasons:
- (a) If a further search fee was due in the search stage, it could have been required only within the procedure according to Rule 46(1) EPC, but this procedure was not followed.
 - (b) For an additional search, if it is necessary, no further search fee is required according to Article 2 No. 2 Rules Relating to Fees.

In respect of (a) it may be added that even if Rule 46(1) EPC had been followed in the search stage, it is not clear that it would have been applied in the way the Examining Division supposes. As the original Claim 5 was directed to functional features of the embodiment described with reference to Fig. 1 and 2, it would well appear possible that this first embodiment would have been taken as constituting the invention "first mentioned in the claims", and the second embodiment, claimed in the original Claims 7 ff, as constituting the "other invention" for which a further search fee must be paid, and not **vice versa**.

However, as Rule 46(1) EPC was not applied, it need not be decided, for which one of the two embodiments, if they lacked unity of invention, the single search fee, paid according to Article 78(2) EPC, was, in effect, destined.

7. Whether searched or not, the claims now on file have not been examined as to whether their subject-matter meets, apart from the question of unity, the further requirements of the Convention.

It is noted that, in the communication dated 11 February 1983, the Examining Division gave a provisional opinion on the substance of original Claim 5, but in the decision under appeal the Examining Division eventually considered that no search, or only an incomplete one, was made for the subject-matter giving rise to the function claimed in that original Claim 5, namely for the matter with the technical features of Claims 2 and 3 filed on 21 November 1983. Consequently, it neither gave a decision nor issued an opinion on the question of patentability, in particular inventive step, for that subject-matter which is now claimed.

Remittance to the first instance for carrying out that examination is therefore appropriate.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside;
2. the case is remitted to the first instance for further prosecution on the basis of the following application documents:

Claims 1, 2 and 4 (renumbered 3), filed on 1 July 1987;
Description, page 1 as published

pages 2 to 5, 5a, 6 to 9 and 12 filed on
1 July 1987;

pages 10 and 11 filed on 5 December 1986;

Drawings, sheets 1-3 filed on 5 December 1986;

with the proviso that this Board has decided that the said claims satisfy Article 82 EPC.

The Registrar:

The Chairman:

F.Klein

P.K.J. van den Berg