BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Publication in the Official Journal ~~Yes~~ / No

File Number: T 25/91 - 3.5.1

Application No.: 83 903 660.5

Publication No.: WO 85/01854

Title of invention: EDUCATION UTILITY

Classification: H04N 7/16

D E C I S I O N
of 2 June 1992

Applicant: NATIONAL INFORMATION UTILITIES CORPORATION

Headword:

EPC Article 56, Rule 86(3)

Keyword: "Inventive step (no)"
"Late-filed amendments - not admitted"

Headnote

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number : T 25/91 - 3.5.1

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 2 June 1992

Appellant : NATIONAL INFORMATION UTILITIES CORPORATION
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Decision under appeal : Decision of Examining Division of the European Patent Office dated 24 August 1990 refusing European patent application No. 83 903 660.5 pursuant to Article 97(1) EPC.

Composition of the Board :

Chairman : P.K.J. van den Berg
Members : A.S. Clelland
E.M.C. Holtz

Summary of Facts and Submissions

I. European patent application No. 83 903 660.5, published under the international publication No. WO 85/01854 and based on an international application under the PCT in the United States of America filed there on 7 October 1983, was refused by decision of the Examining Division dated 24 August 1990.

II. The reason for the refusal was that the subject-matter of each of independent Claims 1 and 12 lacked an inventive step having regard, inter alia, to the following documents:

D1: US-A-3 606 688, and
D2: US-A-4 323 921.

III. On 19 October 1990 an appeal was lodged against this decision and the prescribed fee was paid. On 28 December 1990 a Statement setting out the Grounds of Appeal was filed. Cancellation of the decision and grant of a patent on the basis of the claims before the Examining Division was requested. The Appellant requested oral proceedings in the event that the Board was not in a position to allow the appeal.

IV. In a communication dated 16 August 1991 the Rapporteur expressed the preliminary view that the subject-matter of each of the claims lacked an inventive step having regard to D1 and D2 and to the following document, not referred to by the Examining Division but cited in the International Search Report:

D3: US-A-3 934 079.

V. Oral proceedings were appointed for 30 October 1991. The preceding day, 29 October 1991, the Appellant filed by facsimile a completely revised set of claims and supporting arguments.

VI. The oral proceedings were held on 30 October 1991. After deliberation, the Board refused to admit the claims filed on 29 October 1991. The Appellant was permitted to maintain claims filed on 14 June 1989 as a main request and to file as a first auxiliary request a claim based on a combination of the subject-matter of Claims 12, 13 and 16 of the main request and as a second auxiliary request a combination of the subject-matter of Claims 12, 13, 15 and 16 of the main request.

VII. At the oral proceedings the decision was given that the procedure would be continued in writing. In a further communication dated 8 November 1991 the Rapporteur expressed the preliminary view that the subject-matter of each of the claims of each request lacked an inventive step having regard to D1 to D3 and to the following documents:

D4: Encyclopedia of Computer Science and Technology, ed Belzer et al, Marcel Dekker Inc, New York 1975, page 234 "Privacy and Security",

D5: Advances in Computers, Vol. 21, ed M.C.Yovits, Academic Press, New York 1982, pages 180, 196 &197,

D6: Encyclopedia of Computer Science and Engineering, 2nd Ed. ed. A. Ralston et al, Van Nostrand Reinhold Company, New York 1983, pages 378 & 379,

D7: Information sheet G2: "BBC microcomputer system", Acorn Computers Limited, September 1981.

VIII. In a further submission received 7 January 1992 the Appellant filed new claims corresponding to those which

the Board refused to admit to the oral proceedings (point VI).

IX. Claim 1 of the main request, as admitted by the Board at the oral proceedings, reads as follows:

"A method of distributing educational information in digital form to a plurality of schools simultaneously comprising:

a) transmitting the information from a central location;

b) simultaneously receiving said information at a plurality of schools and storing said information; and

c) subsequently providing simultaneous access to said information by a plurality of students,

characterized by

keeping track of usage of said information and reporting back to the sender the level of usage to permit charging usage and royalty fees."

X. Claim 12, the other independent claim of the main request, reads as follows:

"A system for distributing educational information in digital form to a plurality of schools comprising:

a) means for transmitting said information from a central location;

b) means for simultaneously receiving said information at a plurality of schools and means for storing said information; and

c) means for subsequently providing simultaneous access to said information by a plurality of student terminals,

characterized by

d) means for keeping track of usage of said information and reporting back to the sender the level of usage to permit charging usage and royalty fees."

XI. In accordance with the first auxiliary request filed at the oral proceedings the features of Claim 12 are combined with those of Claims 13 and 16, adding to Claim 12 the features that the information comprises computer software and computer-aided instructional material, that the means for storing comprises a main computer and main computer storage device, and that the means for providing access includes a classroom computer, storage device, teacher's console and a plurality of individual student terminals simultaneously receiving information from the classroom computer storage device.

XII. The second auxiliary request adds to the first auxiliary request the features of Claim 15, namely that the digital information includes address information and means for decoding the address information at each individual school so that only schools to which said information is directed will receive access to said information.

Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.

2. Admissibility of Amendments

2.1 In accordance with Rule 86(3) EPC an applicant may of his own volition file amendments at the same time as a reply to a first communication of the Examining Division; no further amendments may be made without the consent of the

Examining Division. By way of Article 111(1) and Rule 66(1) EPC this also applies to proceedings before the Boards of Appeal. The appeal procedure is in any case not an extension of examination but is intended to consider the correctness of the appealed decision having regard to the requests and grounds as filed in the notice of appeal and statement of grounds, see G 1/84, OJ EPO 1985, 299, T 26/88, OJ EPO 1991, 30, T 611/90 of 21 February 1991 (not published) and T 34/90 of 15 October 1991 (to be published). The admission to appeal proceedings of amended claims is at the discretion of the Board, see T 63/86, OJ EPO 1988, 224.

2.2 The filing of amendments, as pointed out in the "Guidance for appellants and their representatives", OJ EPO 1984, 376, at 2.2 "Submission of amendments", "should be done at the earliest possible moment... the Board concerned may, for example, disregard amendments which... when a date for oral proceedings has been given, are not submitted in good time before the proceedings". T 95/83, OJ EPO 1985, 75, indicates that amendments not submitted in good time are only considered on their merits where there is some clear justification both for the amendment and for its late submission, whilst T 153/85, OJ EPO 1988, 1, additionally indicates that the Boards may refuse to consider late-filed alternative claims which are not clearly allowable.

2.3 In the present procedure, amended claims were filed on 29 October 1991 and were declared inadmissible at the oral proceedings held the next day on the ground that they were late filed; a contributory factor in this decision was that the claims, even on a preliminary consideration, clearly represent a radical departure from the claims previously maintained. No good reason was advanced at the oral proceedings as to why the amendments were filed so late.

2.3 The amended claims filed in response to the communication following the oral proceedings are identical to those which the Board refused to admit to the proceedings. These claims were not therefore drafted in response to the points raised in the communication and cannot constitute a bona fide response to that communication; they rather constitute a further attempt by the Appellant to amend of his own volition. The Board has therefore no alternative but to exercise its discretion in accordance with Rule 86(3) EPC and refuse consent to the filing of these claims.

2.4 Only the requests made in the course of the oral proceedings after the Board refused to admit the above-mentioned claims are accordingly considered in this Decision.

3. Request for further oral proceedings

3.1 With the submission received on 7 January 1992, in which the Appellant refiled the claims which the Board had refused to admit at the oral proceedings, it was requested that the oral proceedings be resumed should the Board not be in a position to acknowledge patentability.

3.2 Article 116(1) EPC, second sentence, provides that a request for further oral proceedings before the same department may be rejected when "the subject of the proceedings is the same". Since in the present procedure the facts of the case are in substance unchanged the request for further oral proceedings is refused.

4. Main request

4.1 A method of distributing educational information in digital form to a plurality of schools simultaneously is

known from D1. D1 shows that before the claimed priority date it was known to transmit not merely analog but also digital information by electromagnetic waves, for example by satellite broadcast or by terrestrial transmitter. D1 discloses a satellite system in which, as part of a televised school lesson, digital information containing an answer to a question posed to a school class is broadcast from a central location to a plurality of schools simultaneously. This is an example of the so-called teletext system, widely used in Europe from 1976, in which digital information is transmitted on spare lines as part of the video signal. The received information is stored prior to being provided to the students for comparison with their answer to the question. The features of the preamble of Claim 1 of the main request is thus known from D1.

4.2 Although D1 is largely concerned with a one-way flow of information, it does suggest at column 11, lines 9 to 55, that there are advantages in giving the teacher feedback by transmitting some information in the reverse direction. This passage would lead the skilled man in the direction of monitoring the use of the transmitted information. Moreover, keeping track of copyrighted information for charging and royalty purposes is a well-known aim of industry: in many countries, organisations exist whose sole aim is to register the use of music, video and film material for just this purpose. Any practical method of distributing copyrighted educational material must take account of this need, so that the skilled man would, in designing a practical distribution system for such material, keep this aim in mind.

4.3 Two alternative methods of keeping track of usage in the context of the disclosure of D1 present themselves to the skilled man: either an encryption system as widely used in the entertainment industry, or a feedback system. An encryption system as usually practiced would grant access to authorised users but would not meet the aim of monitoring the extent of use of the information. On the other hand, the arrangement of D1 lends itself to a feedback system. Such a system is common general knowledge in the art. D2 for example is concerned with payment for use of services transmitted in digital form. According to the prior art discussion at column 1 of the document, in interactive systems such as telephone databases charging can be directly based on consumption. Charging based on consumption is said to be fundamental to interactive systems. D3 discloses a pay-channel cable system in which the individual subscriber can select pay channels, the subscriber being charged for usage of each programme by means of a bilateral signalling system linking the subscriber with the head end equipment. This does not differ in concept from the invention, which applies a similar system to the distribution of educational information in digital form to schools. D4 refers at page 234 to "multiaccess time-shared computer systems" and an envisaged national information system having "large data banks with vast amounts of information which could be shared among a wide spectrum of organizations". D5 refers at page 180 to ARPANET and to PC networks modelled on it, and at page 196 to microcomputer networks connected to large scientific computer facilities providing specialised data bases and software. Finally D6, which bears a Library of Congress Catalog Card Number indicating that it was received in 1982, actually refers to a "computer utility" by analogy with other public utilities "available to all comers at their convenience and for their purposes, provided they pay for it" (Board's underlining).

4.4 Because in a system in accordance with D1 the information is broadcast, so that a number of schools receive the information simultaneously, keeping a record of usage at the transmitting computer as in most of the above examples is not possible; the only manner in which feedback can be effected is by recording usage at the receiving computer. No invention can be seen in this appreciation. The subject-matter of Claim 1 accordingly lacks an inventive step.

4.5 Claim 12, an independent claim directed to a system having the features required by the method of Claim 1, is open to the same objection of lack of inventive step as Claim 1.

5. First Auxiliary Request

5.1 This request is based on Claim 12 of the main request, see point 4.5 above, together with the features of Claims 13 and 16 of the main request. The balance of the invention is thereby changed: Claim 12, like Claim 1, makes no reference to the nature of the information to be distributed other than to indicate that it is digital in form and for educational use in schools; the claim of the first auxiliary request indicates that the information is software-based and used in a hierarchical structure comprising a main computer/main store, a classroom computer and individual student terminals. The invention as now presented thus lays more stress on aspects of computer design and for that reason D7 was introduced by the Board in the communication subsequent to the oral proceedings.

5.2 As shown in D7, as early as 1981 schools in the UK were being fitted with the BBC microcomputer connected by way of the so-called ECONET network to a file server computer

fitted with a storage disk. Educational software was supplied to the individual computers by way of the file server and could be recorded on floppy disks for future use. The hierarchical structure represented by main computer -classroom computer - student terminal is not disclosed in D7, but it is self-evident that a teacher's console must be provided and furthermore that above a certain size of network it is necessary to pass the data by way of a concentrator (i.e. classroom computer) and thence to the main computer. In a classroom in which all pupils are working on the same material it would be economically unjustifiable and wasteful of time for each pupil to access the main computer directly; the self-evident solution to this problem is for each classroom teacher to access the data once only and pass it to the pupils, e.g. a system as envisaged in D7 in which the file server computer is linked to a main computer.

5.2 D7 does not disclose how the information is distributed to individual schools, nor does it make provision for recording usage for charging and royalty purposes. However, at the filing date the transmission of digital information as part of a broadcast television signal was as noted at point 4.1 above well known in the context of the teletext system, one example of such a system being D1. The skilled man, desiring to supply digital information (i.e. programs) to a plurality of schools simultaneously for use in a computer network in accordance with D7 would at the international filing date without the exercise of invention have appreciated that he could achieve this goal by encoding the information in a broadcast television signal. As regards recording usage for charging and royalty purposes, reference is directed to point 4.3 above.

5.5 The subject-matter of Claim 1 of the first auxiliary request therefore lacks an inventive step.

6. Second auxiliary request

6.1 This merely adds to the claim of the first auxiliary request the provision of address information and decoding means, so that only schools to which the information is directed have access to the information.

6.2 The problem of unauthorised access to data is not a problem exclusive to the present invention. Reference is directed to the discussion on D3 to D6 at point 4.3 above. The solution as presented in the claim according to the second auxiliary request was thus at the international filing date common general knowledge in the art.

6.3 The subject-matter of Claim 1 of the second auxiliary request therefore also lacks an inventive step.

7.1 Turning now to the arguments in support of patentability advanced by the Appellant, it is said that the invention permits the storage of information in a mass storage device so as to build up a library of information. This is also achieved by the D7 arrangement, which by means of the file server computer permits the storage of information so as to build up a "library".

7.2 Although the Appellant has also questioned the publication date of D7, contending that the technology discussed in this document had not been developed by 1981, the Board sees no reason to doubt the correctness of the date given in the document itself.

7.3 The Board accepts the Appellant's contention that the claimed system differs from a standard computer database

such as the Derwent system, in which each individual user accesses the system directly and interactively, so that the database can calculate usage. The Appellant goes on to compare the invention to the transfer of such a database or a fraction thereof to a plurality of schools and by a variety of methods. This analogy does not seem to the Board to be well-taken; a database cannot easily be divided up into portions for holding in "libraries" since a random search could require the entire database, whilst at the claimed priority date the size of hard disk available would have been a major limitation on the amount of information storable. A more apposite analogy would seem to be with a school (hard copy) library system in which textbooks are drawn from the publisher (the "central location") and held in the school (the "mass storage device") until needed in the classroom. Information is taken from a central source, held in store, and when needed passed to the end user. It does not appear to the Board that the implementation of such an arrangement electronically, in which the additional problem of royalty payments occurs, involves an inventive step. As noted above, the problem of assessing royalties is separate from the problem of distributing information.

Order

For these reasons, it is decided that:

The Appeal is dismissed

The Registrar: The Chairman:

M. Kiehl P.K.J. van den Berg