BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

A		B		C	X

File Number: T 533/92 - 3.5.1

Application No.: 84 903 358.4

Publication No.: 0 159 362

Title of invention: Data Transmission system

Classification: H04L 5/16

D E C I S I O N
of 22 October 1992

Applicant: SONY CORPORATION

Headword:

EPC Art. 111(1)

Keyword: "Substantial amendments"
"Remittal to the first instance"

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number : T 533/92 - 3.5.1

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 22 October 1992

Appellant : SONY CORPORATION
7-35 Kitashinagawa 6-chome
Shinagawa-ku
Tokyo 141 (JP)

Representative : Thomas, Christopher Hugo
D. Young & Co.
10 Staple Inn
London EC1V 7RD (GB)

Decision under appeal : Decision of Examining Division of the European Patent Office dated 31 January 1992 refusing European patent application No. 84 903 358.4 pursuant to Article 97(1) EPC.

Composition of the Board :

Chairman : P.K.J. van den Berg
Members : R. Randes
G. Davies

Summary of Facts and Submissions

I. European patent application No. 84 903 358.4 (publication No. EP-A-0 159 362), filed on 5 September 1984, was refused by a decision of the Examining Division dated 31 January 1992.

II. The reason given for the refusal was that new Claim 1, filed on 19 July 1991, differed from the previous one "only in features that do not materially differentiate it any further from the known apparatus" (disclosed by D1 = JP-A-53-41903). It was stated that

"the refusal is, strictly taken a refusal on the grounds of lack of novelty (Article 54 EPC)",

however, it was also stated that

"when taking into account the probably intended scope of the claim, the refusal is on the grounds of lack of inventive step".

III. On 18 March 1992, the Appellant (Applicant) filed a notice of appeal, paying the appeal fee on 21 March 1992. A statement of grounds of appeal was filed on 26 May 1992 accompanied by a proposal for a new Claim 1. The following amendments have been made to Claim 1, as refused by the Examining Division, (additions to the refused claim are distinguished from the old text in that they are bold-typed, deletions made in the refused claim are put in brackets):

"A data communication apparatus in which bidirectional communication of data is carried out between a master apparatus (10) and a slave apparatus (20), the apparatus comprising:

a single communication line (30) connecting said master apparatus (10) and said slave apparatus (20);

means for arranging a first data transmission period of one apparatus (10, 20) and a second data transmission period of the other apparatus (20, 10) as one block such that said first and second data transmission periods can be discriminated from each other and said blocks can be discriminated from each other; and

means (114) for generating start signals which are transmitted from said master apparatus (10) prior to the respective starts of said first and second data transmission periods;

first and second blank periods containing only a respective said start signal preceding said first and second data transmission periods, respectively; characterized by:

said blocks and said start signals being transmitted repeatedly and periodically, and successive said blocks being separated by respective intervals long enough for processing of transmission data and for effecting operations corresponding to said data in said master apparatus (101) and said slave apparatus (20);

<a first blank period containing only a said start signal being interposed between successive said first and second data transmission periods, and a second blank period containing only a said start signal being interposed between successive said first and second blocks;> [and]

respective clock generator means (113, 212) for generating a clock signal disposed in both said master apparatus (10)

and said slave apparatus (20), said clock generator means (113, 212) of both said master apparatus (10) and said slave apparatus (20) being triggered by said start signal; and

said [clock signal not being transmitted with or being superimposed on] transmitted data signals comprising only data bit signals and no said clock signal, and said first and second data transmission periods being separated from one another in said repeated and periodical transmissions whereby said slave apparatus (20) can transmit data signals spontaneously without inquiry from said master apparatus (10)."

The characterising feature which is put within the following brackets < > by the Board should apparently also be deleted (this can be understood from the grounds of appeal, page 5, second paragraph), as this feature in principle has been introduced into the last paragraph of the precharacterising part of amended Claim 1.

The Appellant thus requests that the decision be set aside and that Claim 1 be amended as proposed. Claims 2 to 4 should remain as filed on 19 July 1991. The Appellant also requests that the description (page 1 as filed on 12 November 1990, pages 2 and 2a as filed on 19 July 1991 and pages 3 to 10 as filed on 17 January 1990) be amended in accordance with new Claim 1 (a revised statement of invention, page 1, line 29 to page 2, line 19) and that on page 2, between lines 19 and 20, the following phrase be introduced: "The invention will now be further described by way of example with reference to the accompanying drawings, in which:". Drawing sheets 1/4 to 4/4 remain as filed.

IV. The Appellant contests the decision of the Examining Division according to which the invention lacks novelty and does not have an inventive step. Nevertheless, Claim 1 has been amended so as to more clearly emphasise the inventive subject-matter of the claims. The following principal characterising features of Claim 1 are identified:

(a) The blocks and the start signals are transmitted repeatedly and periodically, and successive blocks are separated by respective intervals long enough for the processing of transmission data and for effecting operations corresponding to the data in the master apparatus and the slave apparatus.

The Appellant states that D1 does not specifically disclose repetition of blocks and start signals periodically (grounds of appeal, page 4, last line). The new feature (that the said blocks are separated by the said intervals), which is taken from the original description, page 11, lines 17 to 22, is said to be completely absent from D1. This feature, however, is said to enable the master apparatus and the slave apparatus to cooperate together with instructions being entered at either end, without conflict of operation.

(b) Respective clock generator means for generating a clock signal are disposed in both the master apparatus and the slave apparatus, both the clock generator means being triggered by the start signal.

Having regard to the Examining Division's view that the wording of refused Claim 1 only covered a single clock generator (a common generator for both the master and the slave apparatus), the Appellant states that Claim 1 now clearly identifies respective clock generators in the

master and the slave apparatus. Moreover, he is of the opinion that "the provision of a clock generator and a clock regenerator as in D1 is not the equivalent of two clock generators, because a clock regenerator is entirely subservient to a clock generator elsewhere, and hence would not permit the slave apparatus to initiate operation" (grounds of appeal, page 5, third paragraph).

(c) The transmitted data signals comprise only data bit signals and no clock signals. The first and second data transmission periods are separated from one another in the repeated and periodical transmission whereby the slave apparatus can transmit data signals spontaneously without enquiry from the master apparatus.

According to the Appellant (grounds of appeal, page 4, second paragraph) "in D1 a clock signal and a data signal, each pulse of which lags behind the corresponding pulse of the clock signal, are transmitted from a controlling station to a controlled station. The controlled station is then able, after receiving the data signal, to transmit another data signal at timings determined by the clock signal received from the controlling station".

The Appellant concludes that the combination of the features of Claim 1 provides an advantageous data communication system capable of reliable bidirectional communication over a single communication line. The resulting independence of the slave apparatus makes it possible to transmit signals from the slave apparatus without the need for enquiry from the master apparatus. This is of particular importance when "locally or remotely operated function key sections are associated with the slave apparatus, and it is important that an operation initiated at one of these function key sections does not

conflict with an operation initiated at the master station".

V. The Appellant, moreover, for the first time in the proceedings alleges that the invention has been an outstanding commercial success (grounds of appeal, page 6). It is said that approximately ten million systems incorporating the invention have been sold. Moreover it is alleged that the invention has been licensed to the Japanese competitor companies Sanyo, Canon and Fuji. According to the Appellant, this commercial success indicates that there was a need for such a simple and reliable communication apparatus, the merits of which have been acknowledged by its clients and competitors.

VI. The Appellant requests that the decision to refuse the present application be set aside and the application be granted on the basis of the application documents as cited under paragraph III above. Moreover, were the Board minded to issue a decision dismissing the appeal, the Appellant requests oral proceedings.

Reasons for the Decision

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

2. As has been made clear above, the Appellant has added a new feature to Claim 1 taken from the description (see under IV(a) above - the said intervals should be long enough for the said processing). This addition appears to be an attempt to distinguish more clearly the subject-matter of Claim 1 from the teaching of D1 and to overcome the Examining Division's criticism in the impugned

decision under paragraph 4 wherein it was said that refused Claim 1 did not specify the form or the duration of the blank periods.

The Appellant has also tried to overcome the Examining Division's suggestion that refused Claim 1 could be so interpreted that only one clock generator was present. In amended Claim 1 it is stated therefore that respective clock generator means are present in both the master and in the slave apparatus. This amendment alone, in fact, in accordance with the Examining Division's view (the decision, paragraph 6), appears to imply that no further objection as to lack of novelty may be raised against the subject-matter of Claim 1. The Examining Division has recognised that the slave apparatus according to D1 comprises a clock regenerator and has stated that there would be a difference between the invention and the apparatus of D1 if refused Claim 1 would have been interpreted in such a way that a separate clock generator were comprised in each of the master and the slave apparatus.

Furthermore, the Appellant has tried to overcome the criticism of the Examining Division in that it is now stated in the claim that the transmitted data signals comprise only data bit signals and no said clock signal. It therefore appears that the subject-matter according to amended Claim 1 excludes the possibility that a clock signal could be incorporated in the data signal, which refused Claim 1 according to the Examining Division did not do.

Thus, it appears that amended Claim 1 identifies a data communication apparatus for bidirectional communication of data between a master and a slave apparatus, in which the master apparatus and the slave apparatus have separate

clock generators which produce local clock signals which are not transmitted over the single communication line. According to the Appellant, this in principle simple design, which now appears to be clearly identified by amended Claim 1, together with the additional features of Claim 1, leads to the advantages as referred to under point IV, last paragraph above.

3. As has been pointed out above, it appears that an objection on the ground of lack of novelty against Claim 1 may no longer be made out (see point 2, second paragraph).

It is true that the Examining Division tried to interpret the probably intended scope of refused Claim 1 and came to the conclusion that such intended subject-matter of said Claim 1 did not have an inventive step. However, as a matter of fact, the Appellant has made amendments that the Examining Division did not consider, either in isolation or in combination with the other features of the claim. Thus, the Examining Division has not considered the patentability of a data communication apparatus as now identified in amended Claim 1.

The Board, however, finds that substantial amendments have been made which require a re-examination of the patentability of the application. In the Board's view, moreover, it is proper that this re-examination should be carried out by the Examining Division, so that the Appellant is not denied the opportunity of having patentability examined by two instances. The Board, therefore, deems it appropriate to remit the case to the first instance for further prosecution (Article 111(1) EPC).

4. Since the appeal is not being dismissed (cf. paragraph VI above), there is no need to hold oral proceedings.

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 of the application on the basis of the documents set out in paragraph III above.

The Registrar: The Chairman:

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

14/3 ER DO

03237 5.10