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Datasheet for the decision of 10 July 2014

Case Number: T 0624/11 - 3.5.05

Application Number: 98304102.1

Publication Number: 0880136

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Language of the proceedings: EN

Title of invention:
Data recording, reproducing and transmission

Applicant:
Sony Corporation

Headword:
Data recording, reproducing and transmission/SONY

Relevant legal provisions:
EPC Art. 123(2)
EPC 1973 Art. 56

Keyword:
Amendments - added subject-matter (yes)
Inventive step - (no)

Decisions cited:

Catchword:

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Case Number: T 0624/11 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 10 July 2014

Appellant: (Applicant)	Sony Corporation 1-7-1 Konan Minato-ku Tokyo (JP)
Representative:	Jackson, Jonathan Andrew D Young & Co LLP 120 Holborn London EC1N 2DY (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 15 November 2010 refusing European patent application No. 98304102.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Ritzka
Members:	M. Höhn
	G. Weiss

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division, posted on 15 November 2010, refusing European patent application No. 98304102.1 on the grounds of Article 123(2) EPC, lack of clarity (Article 84 EPC 1973) and lack of inventive step (Article 56 EPC 1973) with regard to prior-art publications:

D1: JP6342579 A and
D2: US 5999505 A1.

II. The notice of appeal was received on 19 January 2011. The appeal fee was paid on 20 January 2011. The statement setting out the grounds of appeal was received on 14 March 2011. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request on which the decision under appeal is based, or according to the auxiliary request as submitted with the statement setting out the grounds of appeal. Oral proceedings were requested on an auxiliary basis.

III. With a communication dated 19 March 2014 the board summoned the appellant to oral proceedings on 9 July 2014, re-scheduled to 10 July 2014. In an annex to the summons the board expressed its preliminary opinion that both requests lacked clarity (Article 84 EPC 1973) and inventive step (Article 56 EPC 1973). Furthermore, it appeared that the main request did not fulfil the requirements of Article 83 EPC 1973 and the auxiliary request did not fulfil the requirements of Article 123(2) EPC.

IV. By letter dated 6 June 2014 the appellant submitted two sets of claims according to an amended main request and

an amended auxiliary request supported by arguments in favour of clarity and inventive step.

V. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 16 according to the main request filed with letter dated 6 June 2014. The first auxiliary request filed with letter dated 6 June 2014 was withdrawn.

VI. Independent claim 1 according to the main request reads as follows:

"1. A data recording apparatus comprising:
an identifying means (42) for identifying first data that is real-time data and second data that is random access data; and
a recording means (13) for recording the first data by a first method in a recording medium (14) having thereon a replacement sector, while recording the second data by a second method in said recording medium whereby the recording means is operable such that in said first method the recording of the first data to the replacement sector is limited to enable continuous writing of the first data to the recording medium (13) and whereby in said second method the recording of the second data to the replacement sector is not limited."

VII. Oral proceedings were held on 10 July 2014. After due consideration of the appellant's arguments the chair announced the decision.

Reasons for the Decision

1. The appeal is admissible.

2. Prior art on file

Document D2 (published on 07 December 1999) is a late family member of document D1 (published on 13 December 1994, i.e before the priority date of the present application). In the decision under appeal, the argumentation was based on D2, the content of which was considered to exactly correspond to the content of the passages in document D1.
This was accepted by the appellant, who also referred to D2 in the statement setting out the grounds of appeal (see page 2, first paragraph of the section "Inventive Step"; see also letter dated 6 June 2014, first paragraph of the section "Inventive Step").

The board also accepts the correspondence between D2 and D1 and therefore also refers to D2 in its argumentation.

Main request

3. Amendments - Article 123(2) EPC

3.1 In the decision under appeal, claim 1 was objected to for lack of clarity, in particular because it was not clear which technical features were implied by the verb "limit" in the expression "the recording of the first data is limited to the replacement sector" and the expression "without limiting to the replacement sector", as claimed by claim 1.

The appellant reacted to this objection by amending claim 1 by shifting the verb "limited" to read "the recording of the first data to the replacement sector is limited" and "the recording of the second data to the replacement sector is not limited".

3.2 With regard to support for this amendment the appellant referred to page 21, lines 9 to 15, and the paragraph bridging pages 21 and 22 of the application as filed. The relevant passages read:

"... the CPU 42 controls the component circuits in a manner to limit writing with seek to a replacement sector and to enable continuous writing of the data on the magnetic disk 22." and

"the CPU 42 controls the component circuits in a manner to write the data on the magnetic disk 22 without limiting the writing with seek to a replacement sector...".

3.3 The appellant argued during oral proceedings (see also page 2, paragraph 6 of the statement setting out the grounds of appeal) that the expression "limited" must mean that the real-time data is not written to a replacement sector, but instead is written to continuous sectors. The appellant further argued that according to the present invention real-time data was continuously recorded onto a disc, irrespective of defects. The skilled person would therefore understand that the disclosure of the description referred to has to be interpreted such that the preposition "to" refers to the act of writing and not to the verb "limit".

3.4 In the board's judgment, however, this interpretation is in contrast with the literal meaning of the expression "limited to", which means that the recording of the first data, i.e. the real-time data, is only to the replacement sector. This is in contrast with the appellant's interpretation of how the invention works and also with the wording of amended claim 1. In

particular, the board does not follow the appellant's argument that the preposition "to" refers to the act of writing. Article 123(2) EPC requires a direct and unambiguous disclosure which, in the board's view, is not found in the description as filed, in particular not in the passages referred to by the appellant. In view of the expression "writing with seek" the preposition "to" rather refers to the verb "limit" or "limiting". In any case, this is not considered by the board to be a direct and unambiguous disclosure.

3.5 The subject-matter of claim 1 therefore does not fulfil the requirements of Article 123(2) EPC.

4. Inventive step - Article 56 EPC 1973

The aforementioned objection notwithstanding, the subject-matter of claim 1 does not involve an inventive step.

4.1 The board agrees with the decision under appeal that D1 can be regarded as the closest prior art, the content of which corresponds to the family member D2.

D2 discloses (the references in parentheses applying to this document):
a data recording apparatus (column 4, line 12 - 31 and figure 3) comprising an identifying means for identifying first data and second data of mutually different kinds (column 9, line 61 - column 10, line 1 and column 8, line 43 - 49 imply the existence of identifying means for identifying two sorts of data, namely audio data and still picture (image) data); and a recording means for recording the first data by a first method in a recording medium (column 9, line 55 -

58 and figure 9), while recording the second data by a second method in said recording medium (column 8, line 43 - 49). The "first data" in D2 is real-time data; the second data is non-real-time data.

4.2 The decision under appeal further maintained that the data recording apparatus of D2 must have a mechanism for dealing with bad sectors, as otherwise it would not be able to store and reproduce data correctly. In order to be able to deal with bad sectors, there implicitly would have to be replacement sectors. Therefore the data recording apparatus of D2 was considered to implicitly disclose replacement sectors.

This interpretation explicitly was not disputed by the appellant (see letter dated 6 June 2014, second and third paragraphs of section "Inventive Step").

4.3 The board also regards the use of a strategy to deal with bad sectors as an implicit requirement when operating a magnetic or magneto-optical disc for storing data thereon. This is considered to be common general knowledge of a person skilled in the art of digital storage. The skilled person would therefore read this between the lines of D2 without the need for inventive skills.

4.4 The claimed invention therefore is distinguished from the disclosure of D2 in the way in which the first data is handled in order to solve the objective technical problem of efficiently recording real-time data.

4.5 D2 explicitly discloses that real-time data is to be recorded on the disc without interruption (see e.g. column 10, lines 18-20). The board therefore does not agree with the appellant's argument as to the contrary

(see in particular page 3, second paragraph of the statement setting out the grounds of appeal; letter dated 6 June 2014, last two paragraphs of page 2), but it considers that the skilled person was motivated to implement the disclosed apparatus such that continuous writing of the real-time data is guaranteed and to disable any functions which would compromise the real-time character of that data. In particular, D2 cannot be interpreted such that without interruption is a spatial requirement. In contrast, the reference to real-time data makes it clear that it is to be interpreted as a temporal requirement.

4.6 The board is not convinced that the solution claimed by claim 1 actually amounts to a solution of a technical problem by inventive technical means, considering to be merely a trade-off between the well-known requirements of data integrity and completeness of recorded data which does not involve an inventive technical contribution.

According to the appellant's argumentation the heart of the invention is the decision not to use replacement sectors for real-time data (see e.g. page 3, paragraph 5, of the statement setting out the grounds of appeal). The board is not convinced that this involves a solution to the technical problem by the use of technical means. Rather, a disadvantage with regard to data integrity is accepted.

In contrast to the known measures presented in the introductory part of the description (e.g. increase of the capacity of a buffer memory, raise of the transfer rate attained by increasing the rotation speed), which all involve technical means, the claimed solution does not add a technical measure, but seeks to circumvent

the technical problem of fulfilling both requirements of data integrity and completeness of recorded data rather than solving it by technical means. Instead, the requirement of data integrity with regard to bad sectors is abolished and consequences are risked by going back to the technology prior to the use of replacement sectors.

4.7 As mentioned above, the content of the passages referred to in D2 corresponds to the content of the passages in document D1, referenced in the Search Report.

4.8 For the aforementioned reasons the board regards the subject-matter of claim 1 as obvious with regard to document D1 and the skilled person's common general knowledge. It therefore does not meet the requirements of Article 56 EPC 1973.

5. The above objections against claim 1 apply, *mutatis mutandis*, to independent claims 7, 8, 15 and 16.

In particular, the reasoning above applies accordingly to the step of limiting the number of retries as claimed in claims 8 and 15 directed to a data reproducing apparatus and method.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz A. Ritzka

Decision electronically authenticated