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**Datasheet for the decision
of 7 November 2008**

Case Number: T 0390/06 - 3.5.01

Application Number: 01912300.9

Publication Number: 1229472

IPC: G06F 17/60, A61B 5/00

Language of the proceedings: EN

Title of invention:
MRI system center and MRI system

Applicant:
KABUSHIKI KAISHA TOSHIBA

Opponent:
-

Headword:
MRI system center/TOSHIBA

Relevant legal provisions:
-

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

Keyword:
"Inventive step - (no)"

Decisions cited:
T 0154/04

Catchword:
-



Case Number: T 0390/06 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 7 November 2008

Appellant:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 7 November 2005
refusing European application No. 01912300.9
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: S. Steinbrener
Members: R. R. K. Zimmermann
G. Weiss

Summary of Facts and Submissions

- I. European patent application number 01 912 300.9 (publication No. EP-A-1 229 472) claimed a priority date from 2000 for an invention related to a magnetic resonance imaging (MRI) system center connected to a plurality of MRI systems.
- II. The examining division refused the application on the basis of claims filed as main and auxiliary requests in oral proceedings on 14 October 2005, claim 1 of the main request reading as follows:
- "1. An MRI system center connected to a plurality of MRI systems (2) for visualizing an interior of a subject to be examined using a magnetic resonance phenomenon, through an electronic communication means (33), comprising:
- a unit (17) configured to receive data of log files on which a use state of the MRI systems is recorded or use-state data extracted from the log files, from the MRI systems;
- a unit (10) configured to store the data of the log files or the use-state data; and
- a unit (18) configured to analyze the data of the log files or the use-state data that is received within a given period of time and generate analyzed data, wherein the analyze unit (18) individually calculates an amount of use of constituting elements of the MRI systems (2), applications, clinical protocol data and/or image data."

The auxiliary request differed from the main request only in claim 1 by adding an additional feature to the end of the claim with the wording as follows:

", and further comprising a unit (15) for estimating the cause of a malfunction from the use-state data of the log files."

According to the grounds for the decision issued by the examining division in writing by letter dated 7 November 2005, the claimed subject matter did not meet the requirements of inventive step with respect to the following documents:

D3: US-A-5 600 574 (published in 1997) and

D4: US-A-5 935 262 (published in 1999).

III. The appellant (applicant) lodged an appeal against that decision. The notice of appeal was filed and the appeal fee paid on 29 December 2005. On 6 March 2006, a written statement setting out the grounds of appeal was filed, including an auxiliary request for oral proceedings.

IV. In a communication pursuant to Article 15(1) RPBA, the Board gave a preliminary opinion indicating that the examining division was essentially right in the assessment of inventive step but that the decision did not fully comply with the practice of the EPO only to take the technical features and aspects of an invention into account in assessing inventive step. In the present case, centralising medical services in a hospital and collecting medical examination results and other data did not per se solve any technical problem

and had to be ignored in the assessment of inventive step. Neither did the claimed analysis of use-state data and the calculation amount of use of system elements solve any technical problem.

Oral proceedings before the Board took place on 7 November 2008.

- V. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of claims 1 to 7 according to the main and auxiliary requests, both requests as filed during the oral proceedings before the examining division dated 14 October 2005.
- VI. According to the appellant, the invention provided a technical contribution over the prior art in that the claimed MRI system center encompassed the function of estimating the cause for a malfunction of system elements from the use-state data as disclosed at col. 6, section [0032] and col. 13 f., sections [0071] and [0072] of the A-publication.

Document D3 did neither disclose nor render obvious an MRI system center connected to a plurality of MR image acquisition devices and receiving centrally all the MR images. Without such a center, it was not feasible to receive log files for analysing log data centrally and calculating the amount of use of constituting elements of the MRI systems. The document was silent on the location where the log files should be stored.

The prior art of document D4 was not relevant to the present invention. The skilled person, an expert in the

field of designing, maintaining and implementing MRI systems, would even not consult this document since it was in the remote field of data processing and computer networks. For this reason alone, he would not combine document D3 with document D4. But even if he considered such combination, he would not arrive at the present teaching of providing use-state data for calculating the amount of use of individual elements of the MRI system. The claimed invention was clearly novel and inventive over the prior art of documents D3 and D4.

VII. The Board announced the decision on the appeal at the end of the oral proceedings.

Reasons for the Decision

1. The appeal, although admissible, is not allowable since the claimed subject-matters of the main and auxiliary requests do not meet the requirements of inventive step as set out in Article 56 EPC 1973.
2. Both requests relate to an MRI system center connected to a plurality of MRI systems for visualising the interior of a subject to be examined using a magnetic resonance phenomenon, through an electronic communication means (see the introductory wording of the claims).

In the light of the description, the term "center" and the claimed configurations of the center are not to be understood literally, however, as follows from col. 4, lines 19 to 23 (see the A-publication): Units having the same function even though they are located

geographically away from each other can be "included in the system center" in accordance with the invention.

3. Figures 1 and 2 in document D3 show a basic and a preferred embodiment, respectively, of a prior art medical imaging system comprising a network 50 connecting a plurality of image acquisition devices 10, in particular magnetic resonance imaging devices (MRI, see col. 4, line 42 and col. 9, lines 37 to 40), image display devices 20, and image storage device sites 30 at central locations (see col. 5, lines 7 to 26).

The preferred embodiment is a Picture Archiving and Communications System (PACS, see col. 5, lines 27 to 38) comprising an image server system with local administration of the network as part of the image storage device 30 at the central location (see col. 5, line 19 f. and lines 39 to 52).

The image storage device 30 including image server system and control CPU 201 thus discloses essential features of an "MRI system center" in terms of present claims 1 and is thus an appropriate starting point for assessing inventive step. The relevance of document D3 has not been disputed by the appellant.

4. Furthermore, the PACS of document D3 comprises a unit configured to receive log files recording the use-state data from the MRI systems. Such log files result from quality control procedures testing the functioning of the image acquisition devices as shown in fig. 13 and explained at col. 25, line 10 to col. 26, line 63. The log data are stored in an image analysis results database (see col. 24, lines 60 to 64). The quality

control functions are located at computer 209 of the image acquisition device 10 although parts of the software systems are executed on the image server 201 (see col. 23, line 57 to col. 24, line 10). The data are used to indicate and locate system malfunction as pointed out at col. 3, line 7 ff. and col. 5, line 3 ff., which anticipates the claim feature added according to the auxiliary request (see point III above).

5. Peripheral computer 209 and central image server 201 thus store and analyse the log and use-state data. The subject-matter of claim 1 (both requests) differs thus from the prior art of document D3 only in the following two features:

(A) The system center comprises the units for storing and analysing the log and use-state data.

(B) An amount of use of constituting elements of the MRI systems, applications, clinical protocol data and/or image data is calculated from the log data.

6. The relevance of difference A is doubtful since the term "system center" has to be given a broad scope of meaning in the light of the description (see point 2 above). In any case however, in a distributed system the geographical allocation of functions is determined by convenience and availability of resources and is a routine task to be solved in the field of information systems.

7. The technical purpose of calculating the amount of use of elements of the MRI systems according to difference

B above, is not *prima facie* clear. As indicated in the application at section [0028], the amount of use includes the use time, the number of times of use etc. From sections [0035] to [0043], it follows that the amount-of-use data are exploited for charging and billing purposes, for developing and planning a sales strategy, and for offering maintenance services at appropriate times.

However, neither one of these functions addresses a problem in a technical field. They are rather business concepts applied to a medical PACS environment. According to the practice and case law of the EPO, non-technical aspects of a claimed invention like business concepts and methods have to be ignored in assessing inventive step (see for example Reasons Nos. 5 and 16 of decision T 154/04 - Estimating sales activity/DUNS LICENSING ASSOCIATES, OJ EPO 2008, 46).

This leaves the technical implementation of the functions for creating the appropriate data for the said business purposes. The claimed features of the implementation follow directly from the functional definitions of the business concept applied. For example, having a unit for calculating an amount of use follows directly from the business idea of charging for the use of the system. Technical features, however, which are nothing else than the direct and logical translation of the business concept to be implemented cannot provide an inventive step.

8. As evidence for a technical effect achieved by the claimed invention beyond any business applications, the appellant cited sections [0071] and [0072] of the

application, in which the control of the service lifetime of an RF coil on the basis of the amount of use of such a coil is described.

However, the claimed invention is not limited to any such use but undisputedly encompasses embodiments using the log and use-state data exclusively for billing purposes, for example. The argument of a technical use of such data can, therefore, not be accepted.

9. In summary, the invention as claimed according to the present requests does not provide any inventive contribution over the prior art of document D3 and does thus not meet the requirements of inventive step as set out in Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Steinbrener