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**Datasheet for the decision  
of 9 February 2012**

**Case Number:** T 0926/08 - 3.5.01

**Application Number:** 05007755.1

**Publication Number:** 1589456

**IPC:** G06F 17/60, A61B 5/00,  
A61B 5/055, G01R 33/28,  
G06F 19/00, G06F 11/34

**Language of the proceedings:** EN

**Title of invention:**  
MRI system center and MRI system

**Applicant:**  
Kabushiki Kaisha Toshiba

**Headword:**  
MRI center / TOSHIBA

**Relevant legal provisions:**  
EPC Art. 52(1)  
RPBA Art. 12(4), 13(1), 13(3)

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

**Keyword:**  
"Inventive step (no) - Main and first auxiliary requests"  
"Amendment admitted (no) - Second auxiliary request"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 0926/08 - 3.5.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.01  
of 9 February 2012

**Appellant:**  
(Applicant)

Kabushiki Kaisha Toshiba  
1-1, Shibaura 1-chome  
Minato-ku  
Tokyo 105-8001 (JP)

**Representative:**

Kramer - Barske - Schmidtchen  
Landsberger Strasse 300  
80687 München (DE)

**Decision under appeal:**

Decision of the Examining Division of the European  
Patent Office posted 18 December 2007 refusing  
European patent application No. 05007755.1  
pursuant to Article 97(1) EPC 1973.

**Composition of the Board:**

**Chairman:** S. Wibergh  
**Members:** R. R. K. Zimmermann  
G. Weiss

## Summary of Facts and Submissions

- I. European patent application number 05 007 755.1 (publication number EP 1 589 456) claims priority from 2000 for a system center for transmitting the data of a clinical protocol produced on the user side and corresponding to an MR imaging procedure to a plurality of MRI systems.
- II. The examining division refused the application in oral proceedings on 6 December 2007. The reasons for the decision issued in writing on 18 December 2007 were based on an amended set of claims filed during the oral proceedings, claim 1 reading as follows (brackets <sup>1</sup><> etc added for convenience of reference):

"An MRI system center connected to a plurality of MRI systems (2) through an electronic communication means (33), comprising:  
a unit (17) configured to receive data of a clinical protocol regarding an <sup>1</sup><imgaging> [sic] procedure from at least one of the MRI systems;  
a unit (10) configured to store the received data of the clinical protocol;  
a unit configured to transmit the stored data of the clinical protocol to the MRI systems,  
a unit configured to store data of a plurality of sample images corresponding to a plurality of clinical protocols, respectively, and  
a unit configured to transmit <sup>3</sup><data of a showcase to the MRI systems, the showcase including a plurality of image samples and respective <sup>2</sup><> pulse sequence features corresponding to the plurality of clinical protocols, respectively>."

According to the decision, the invention did not meet the requirement of inventive step, considering as relevant prior art the following documents:

D5: US-A-5 740 801 published in 1998;  
D9 (DICOM standard): "Digital Imaging and Communications in Medicine (DICOM), Part 3: Information Object Definitions", Rosslyn, VA, USA, National Electrical Manufacturers Association, 1999, pages i-xiii, 1-5, 41-44, 183-196.

The difference between the invention and the endoscopy system of document D5 was found to be the storage of data of an MR imaging procedure corresponding to a clinical protocol received from one of a plurality of MRI systems, and the transmission, to the MRI systems, of data of a showcase corresponding to a plurality of clinical protocols. It was standard practice to include information like imaging conditions and other attributes characterising an MRI procedure into the definition of MR image objects.

III. The appellant (applicant) filed a notice of appeal on 13 February 2008 and a statement setting out the grounds of the appeal on 18 April 2008, including as the only request a clean copy of the claims filed during the oral proceedings before the examining division.

IV. In a communication summarising the results of a preliminary examination of the appeal, the Board indicated as a provisional opinion that the examining division seemed to have been right in denying

patentability of the invention in the light of documents D5 and D9.

- V. The appellant filed amended claims as an auxiliary request by letter dated 21 October 2011. Following summons to oral proceedings issued on 14 November 2011 the appellant filed by letter dated 20 December 2011 a further set of amended claims as second auxiliary request.
- VI. In oral proceedings held before the Board on 9 February 2012, the matter was discussed with the appellant. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 3 filed with the statement setting out the grounds of appeal (main request) or in the alternative on the basis of claims 1 to 3 filed with letter dated 21 October 2011 (first auxiliary request) or on the basis of claims 1 to 3 filed with letter dated 20 December 2011 (second auxiliary request).

Claim 1 of the main request is identical to claim 1 filed during the oral proceedings before the examining division (see above).

The auxiliary requests differ from the main request in the passages indicated at point II above as follows:

First auxiliary request:

<sup>1</sup><...> reads "imaging".

<sup>2</sup><> reads "types of RF coils, imaging conditions and".

Second auxiliary request:

<sup>1</sup><...> reads "imaging".

<sup>3</sup><...> reads "to the MRI systems data of a plurality of image samples and types of RF coils, imaging conditions and a pulse sequence feature corresponding to a license level of a client and one of the plurality of clinical protocols which is requested by the client".

VII. The appellant's submissions in support of the invention are summarised as follows.

- (a) According to the appellant, the generic definition of an "MRI system center connected to a plurality of MRI systems" in claim 1 should be construed to mean that the MRI systems are connectable to the center.
  
- (b) The claimed MRI system center was clearly novel and inventive over the prior art. The invention solved the technical problem to spread and promote technical data and know-how provided on the user side about MR imaging conditions and procedures to other users. Such data that an individual physician or MR technician had discovered before only by trial and error could now be reused by many other users at different MRI facilities. The showcase enabled the user to browse through clinical protocols and to download a clinical protocol that best suited his needs to configure his MRI facility. The specific data and parameters included in the showcase were technical data used to control an MRI facility and should thus be taken into account in the assessment of inventive step.

- (c) Document D5 did not relate to an MR imaging system, MRI merely being mentioned rather incidentally in the context of endoscopy, and it did neither disclose a system center nor a showcase, both essential concepts of the invention. It was actually directed to managing endoscopic procedure by using predefined device configuration data according to the individual user's preferences. There was no sharing of useful technical information between different users via a system center or by means of a showcase.
  
- (d) Document D9 was not related to any system at all, let alone a system comprising a center connected to a plurality of MRI systems. It simply disclosed a standardised format for storing images and parameters as attributes of an image object. The attributes to which document D9 referred did not provide sufficient information to control an MRI system or to define a clinical protocol. The fact that the DICOM standard did not mention a showcase including a plurality of sample images and respective pulse sequence features indicated that such features were not known to the skilled persons who defined the DICOM standard.
  
- (e) Regarding the admissibility of the second auxiliary request, an issue addressed by the Board in the oral proceedings, the appellant explained that this request was intended to clarify and emphasise the inventive concept to distribute proved clinical protocols to different users of the MRI system center. A claim according to the second auxiliary request had not been in the

proceedings before, neither in the first instance nor in the appeal proceedings.

### **Reasons for the Decision**

1. The appeal, although admissible, cannot be allowed since there is nothing in the requests before the Board that would warrant or require the requested reversal of the impugned decision.

#### Main request and first auxiliary request

2. The claimed invention does not meet the requirement of inventive step as set out in Article 52 (1) EPC and Article 56 EPC 1973.
  - 2.1 Document D5 has been used by the examining division as closest prior art and as starting point for assessing inventive step. It discloses an MRI system center (endoscopic procedure management system 10, see D5, figures 1 and 2) connectable to MRI systems (image input devices 16 including MRI, see col. 6, line 9 ff.). The center is configured to receive, store, and transmit to the MRI systems, data of a clinical protocol ("form" specifying appropriate data and associated images, see e.g. col. 37, line 47 ff., col.44, line 60 to col.46, line 11) as well as associated sample images (stored images, see for example col. 16, line 55 to col. 17, line 5) for a plurality of users and clinical protocols.
  - 2.2 The appellant's argument that document D5 did not disclose a center connected or connectable to a



plurality of MRI systems does not take full account of the prior art. System 10 is connected to a plurality of image input and output devices, among others to MRI scanners and to other computer systems. For example adapter 34f provides an interface for receiving text and image data from, or transmitting to, other computers, networks etc. (see col. 10, lines 35 to 39).

2.3 The meaning of the term "showcase" and the corresponding definition in present claim 1 requires some interpretation. The term appears only once in the present description, at col. 10, paragraph 0057, stating that "various showcases can be prepared on a WWW server as operating patterns of the center 1 on the maker side". In the light of the appellant's arguments, the basic idea behind the showcase feature is that the user is provided with a tool to browse and download medical images and respective clinical protocols for operating MRI systems. In the Board's view the page of postage stamp miniature representations of the stored images (D5, loc. cit.) provides such a kind of "showcase" to the user.

2.4 Browsing a database and downloading selected data are common functions in database applications. The system of document D5 provides such a functionality for retrieving images and related data from a hospital database system (see for example col. 16, line 55 ff., col.38, line 66 to col. 39, line 15).

2.5 The object of the present invention is in fact not the automatic control of an MRI device but the distribution and promotion of clinical and medical-technical data concerning MR imaging (see for example description,

paragraphs 0008 f. "spread or promotion"; 0048 "know-how called a clinical protocol"; 0053; 0057 "The user can browse a clinical protocol by the Internet browser or the like and download his or her favourite one for trial"). The specific kind of data presented by the "showcase" to the user, like image samples, types of RF coils, imaging conditions, and pulse sequence features of the applied clinical protocol, serves the informational needs of an MRI physician or radiologist, which however is not a technical aspect capable of contributing to inventive step.

2.6 It is thus difficult in the present case to identify any technical aspect which unambiguously distinguishes the claimed invention from the prior art of document D5. In the present application the emphasis is on the exchange of MR images and MRI related data, whereas document D5 focuses on images captured in endoscopic surgical procedures, which includes MR imaging. Although in document D5 the storage and exchange of MR images and related data are implicit possibilities provided by this prior art system, these functions are not explicitly disclosed. Hence the invention as claimed is distinguished from the system of document D5 in that the data of the showcase include MR images and MRI related data like types of RF coils, imaging conditions and pulse sequence features.

2.7 Even if communicating MR images and MRI related data (as opposed to other kinds of data) within a clinical information system could be seen as a technical distinction, something which the Board finds doubtful since the data are hardly functional (cf point 2.4 above), this feature is rendered obvious by the DICOM

standard as set out in document D9. This standard indicates the need then existing in the field of clinical MR imaging to communicate MR image and protocol data over a digital medium (see for example D9, title of the document and page 1, line 2f.). The attributes of the MR image object and the MRI device object as defined by the DICOM standard include all the data and parameters referred to in the present application (see D9, Table A.4-1 at page 43 in connection with Table C.8-4 at page 184 ff.).

- 2.8 Starting from the prior art system of document D5, the skilled person would consider an adaptation as obvious to bring the system in compliance with the DICOM standard. Such an adaptation would endow the prior art system with the additional functionality of the present invention for exchanging MR images and MRI related data. Such an adaptation does not require any considerations beyond the normal practice in the field of medical information systems and does thus not involve an inventive step.

#### Second auxiliary request

3. The second auxiliary request introduces into claim 1 the feature "a licence level of a client". The request was filed after the oral proceedings had been arranged. The new feature has not been relied on before, neither in the statement setting out the grounds of appeal nor in the reply to the Board's communication concerning the results of the preliminary examination of the appeal. It has also not been a matter of discussion before the examining division. Furthermore, the amendment does *prima facie* not result in a clearly

allowable claim since the term "licence level" points to a business concept, which is *per se* non-patentable subject matter and, if considered, would require the opening of a completely new discussion at a very late stage of the proceedings.

Considering all these circumstances, the Board decides, pursuant to Article 12, paragraph (4) RPBA and Article 13, paragraphs (1) and (3) RPBA, not to admit the second auxiliary request.

## **Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Wibergh