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**Datasheet for the decision
of 12 February 2019**

Case Number: T 1412/14 - 3.5.05

Application Number: 06827752.4

Publication Number: 1955237

IPC: G06F19/00

Language of the proceedings: EN

Title of invention:

SYSTEM AND METHOD FOR ANATOMY LABELING ON A PACS

Applicants:

GENERAL ELECTRIC COMPANY
The Board of Trustees of the
Leland Stanford Junior University

Headword:

Display settings/GE

Relevant legal provisions:

EPC Art. 54(1), 54(2), 56

Keyword:

Novelty - main request (no)
Inventive step - auxiliary request (no)



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Case Number: T 1412/14 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 12 February 2019

Appellant: GENERAL ELECTRIC COMPANY
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Schenectady, NY 12345 (US)

Appellant: The Board of Trustees of the
(Applicant 2) Leland Stanford Junior University
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 19 December
2013 refusing European patent application No.
06827752.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair A. Ritzka
Members: E. Konak
W. Sekretaruk

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse the application for, *inter alia*, lack of novelty (Article 54(1) and (2) EPC) with regard to the following document:

D4: Brown et al., Handbook of Medical Imaging, Chapter 7: "Medical Image Interpretation"; Medical image processing and analysis, Eds. M. Sonka; J. M. Fitzpatrick, May 2000.

II. With its statement setting out the grounds of appeal, the appellant filed claims 1 to 7 of a main request and claims 1 to 6 of an auxiliary request. The appellant requested that the decision be set aside and a patent be granted based on these requests. It requested oral proceedings as a further auxiliary measure.

III. In its preliminary opinion, the board raised objections under Articles 123(2), 84, 54 and 56 EPC.

IV. In reply to the summons to oral proceedings the appellant filed claims 1 to 7 of a new main request and claims 1 to 7 of a new auxiliary request to replace the requests on file.

V. Claim 1 of the main request reads as follows:

"An image registration system (100) for correlating clinical information with at least one image, said system comprising:

a reference image set (210) comprising one or [sic] reference images, wherein at least one reference anatomy is identified in each of said one or more reference images, and relevant anatomy information is

correlated with said at least one reference anatomy in each of said one or more reference images; and an image registration module (110) for registering one or more acquired images (220) with said reference image set, wherein said image registration module (110) registers at least one acquired anatomy in said one or more acquired images (220) with said reference image set, and wherein said image registration module (110) associates said relevant anatomy information with said one or more acquired images (22) based on said reference image set (210); and wherein said reference image set (210) is used to correlate anatomical structures depicted in images to relevant clinical information from one or more sources; the relevant anatomical information includes a plurality of display settings with associated priorities, and an acquired image is displayed according to an anatomy having a highest associated priority in that acquired image; and the display settings are automatically applied based upon the anatomy in the acquired image being displayed."

- VI. Claim 1 of the auxiliary request differs from claim 1 of the main request in that its last two paragraphs read as follows (with additions underlined and deletions ~~struck through~~):

"...

the relevant anatomical information includes a plurality of window level display settings for display of said one or more acquired images (220), each window level setting is associated with a respective anatomy, and each anatomy is with associated with a respective priorityies, wherein and an acquired image is displayed at the window level setting for ~~according to~~ an anatomy

having a highest associated priority in that acquired image; and
the window level display settings are automatically applied based upon the anatomy in the acquired image being displayed."

Reasons for the Decision

1. Main request
- 1.1 According to the appellant, the subject-matter of claim 1 of the main request differs from D4 in that
 - (i) the relevant anatomical information includes a plurality of display settings with associated priorities, and an acquired image is displayed according to an anatomy having a highest priority in that acquired image; and
 - (ii) the display settings are automatically applied based upon the anatomy in the acquired image being displayed.
- 1.2 The appellant interprets section 7.6.1 of D4 to merely disclose automatic segmentation of a medical image, but not the automatic application of display settings based on the anatomy identified in the segmented image. It further argues that D4 is completely silent regarding priorities associated with display settings.
- 1.3 The board does not share this view. D4 discloses, in the second sentence of the first paragraph on page 435, that not all of the anatomy in the image volume is of interest to a particular patient's clinical problem and that some tissues may be obscured with a technique where "each tissue" can be assigned a specific opacity

value and colour. In the board's view, it is apparent from this passage that the "display settings are ... applied based upon the anatomy in the acquired image being displayed" and that they are associated with priorities. As only the anatomy of interest to a particular patient's clinical problem is visualised, it is further apparent that the acquired image is "displayed according to an anatomy having a highest priority in that acquired image".

1.4 With regard to the automatic application of display settings, the appellant argues that the invention applies the display settings without any user input, whereas D4 does require user input to select which display settings to apply. It draws the board's attention in particular to the third paragraph on page 435 which discloses that "visualization of structures can be selectively turned on and off" and that "if there were more than one desired tissue in the image data, then the tissues could be rendered together or separately, simply by having a user select a set(s) of labeled voxels". These statements, however, obviously relate to how a user may interact with an already rendered image, i.e. an image to which the display settings have already been applied automatically by the system, and hence fail to convince the board.

1.5 Therefore, the subject-matter of claim 1 of the main request is not new (Article 54(1) and (2) EPC).

2. Auxiliary request

2.1 The subject-matter of claim 1 of the auxiliary request differs from the subject-matter of claim 1 of the main request essentially in that the display settings are specified to be window level settings.

2.2 At the oral proceedings, the appellant submitted that this is a clarifying amendment based on the example provided in the last two paragraphs on page 17 and in Table 1 on page 18 of the description. It did not provide any further specific advantages compared with the more general term "display settings" used in the main request.

2.3 D4 does not specifically disclose window level settings as an example of the display settings applied to the images. Therefore, the subject-matter of claim 1 is new. Nevertheless, window level settings are an obvious example of display settings applied to radiological images and thus cannot establish an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated