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D E C I S I O N
of 12 May 2005

Case Number: T 0564/04 - 3.2.2

Application Number: 99961221.1

Publication Number: 1143857

IPC: A61B 8/12

Language of the proceedings: EN

Title of invention:
Ultrasonic visualisation systems

Applicant:
INTRAVASCULAR RESEARCH SYSTEMS

Opponent:

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Headword:

-

Relevant legal provisions:
EPC Art. 84

Keyword:
"Clarity - (no)"

Decisions cited:

-

Catchword:

-



Case Number: T 0564/04 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 12 May 2005

Appellant:
(Applicant)

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Representative:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 27 November 2003
refusing European application No. 99961221.1
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: T. K. H. Kriner
Members: D. Valle
E. J. Dufrasne

Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal on 27 January 2004 against the decision of the examining division, posted on 27 November 2003, refusing the European patent application 99961221.1. The fee for the appeal was paid simultaneously and the statement setting out the grounds of appeal was received on 26 March 2004.

II. The examining division held that the application did not meet the requirements of Article 84 EPC and of Article 123(2) EPC.

III. Oral proceedings took place on 12 May 2005.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request as filed during the oral proceedings or, in the alternative, on the basis of the first or second auxiliary request filed with the letter dated 26 March 2004 or third auxiliary request filed during the oral proceedings.

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

"An IVUS system comprising as elements making up said system:

- a) a catheter;
- b) a catheter interface module connected to the catheter;
- c) a display monitor;
- d) a control device for controlling the system;

e) a data processing module (27) and acquisition module (24) and for processing and storing data derived from the catheter interface module (4) to the display monitor (12);

characterized in that

said elements making up said system except for the catheter interface module, the display monitor and the control device are constructed to be remote from the catheter interface module, the display monitor and the control device so as to enable a clear space around a bed for supporting a patient for occupation by a medical team, and wherein the control device includes a wireless remote control device."

Claim 1 of the first auxiliary request reads as follows:

"A bed for supporting a patient with an IVUS system comprising as elements making up said system:

- a) a catheter;
- b) a catheter interface module connected to the catheter;
- c) a display monitor;
- d) a control device for controlling the system; and
- e) a data processing module (27) and acquisition module (24) and for processing and storing data derived from the catheter interface module (4) to the display monitor (12);

characterized in that

said elements making up said system are constructed to be remote from the bed at a sufficient distance to enable a clear space around the bed for occupation by a medical team so that the medical team can be adjacent to the patient except for the catheter interface

module, the display monitor and the control device that are constructed to be adjacent to the bed such as to be easily viewed and operated respectively by a clinician, and wherein the control device includes a wireless remote control device."

Claim 1 of the second auxiliary request reads as follows:

"A bed for supporting a patient with an IVUS system comprising as elements making up said system:

- a) a catheter;
- b) a catheter interface module connected to the catheter;
- c) a display monitor;
- d) a control device for controlling the system; and
- e) a data processing module (27) and acquisition module (24) and for processing and storing data derived from the catheter interface module (4) to the display monitor (12);

characterized in that

said elements making up said IVUS system are remote from the bed at a sufficient distance to enable a clear space around the bed for occupation by a medical team so that the medical team can be adjacent to the patient except for the catheter interface module, the display monitor and the control device that are adjacent to the bed such as to be easily viewed and operated respectively by a clinician, and wherein the control device includes a wireless remote control device."

Claim 1 of the third auxiliary request reads as follows:

"An IVUS system comprising as elements making up said system:

- a) a catheter having an ultrasonic transducer array mounted at least near a distal end thereof;
- b) a catheter interface module connected to a proximal end of the catheter;
- c) a display monitor;
- d) a control device for controlling the system;
- e) a signal processing data entry and data storage device for processing and storing data derived from energizing the ultrasonic transducer array to output a signal to the display monitor in order to display an image of an interior of a patient's body; and
- f) a bed for supporting a patient characterized in that

said elements making up said system except for the bed, the catheter, the catheter interface module and the display monitor are arranged to be located remotely from the bed at a sufficient distance to enable a clear space around the bed for occupation by a medical team so that the medical team can be adjacent to the patient except for the catheter interface module, the display monitor and the control device that are arranged to be located adjacent to the bed such as to be easily viewed and operated respectively by a clinician, and wherein the control device includes a wireless remote control device to enable control instructions to be given from a position adjacent to patient to remotely located units."

V. In support of his request the appellant relied essentially on the following submissions.

The subject-matter of all present claims was sufficiently defined by structural and functional features so that the claims gave a clear teaching to the skilled person.

The feature contained in all the requests, according to which the elements making up the IVUS system, except for the catheter interface module, the display monitor, and the control device, were constructed to be located remotely from a bed so as to enable a clear space around the bed for occupation by a medical team, unequivocally taught that these elements had to comprise a means allowing a spatial separation. Such means could be for example a sufficiently long cable or a remote control device. It was not necessary to explicitly define such means, since the skilled person knew how to realize it on the basis of the functional feature cited above.

Furthermore this feature gave the clear teaching that the bulky elements of the IVUS system had to be arranged remotely from the bed in order to provide sufficient space for a medical team.

Even if the elements designed to be remote from the bed were represented by a small chip or card, situating them remote from the further elements could nevertheless enable a clear space around a bed.

In any case the third auxiliary request clearly excluded the case in which the elements designed to be remote could be represented by a small chip, since feature e) of claim 1 of this request defined a bulky device which had to be arranged remotely from the bed.

Reasons for the Decision

1. The appeal is admissible.
2. *Clarity*
 - 2.1 According to claim 1 of all present requests the IVUS system comprises as elements making up said system:
 - a) a catheter,
 - b) a catheter interface module,
 - c) a display monitor,
 - d) a control device,
 - e1) a data processing module and acquisition module for processing and storing data derived from the catheter interface module to the display monitor (main request, first and second auxiliary request), or
 - e2) a signal processing data entry and data storage device for processing and storing data derived from energizing the ultrasonic transducer array to output a signal to the display monitor in order to display an image of an interior of a patient's body (third auxiliary request).

Out of these elements exclusively the data processing module and acquisition module (feature e1) or the signal processing data entry and data storage device (feature e2) shall be constructed in such a way that they can be arranged remotely from the remaining elements so as to create a clear space around a bed for occupation by a medical team.

The board agrees to the appellant's statement that it is not necessary to define the means which allow a remote arrangement of these elements. However, it is not clear how the remote arrangement only of the elements cited under e1 or e2 has to be done so as to enable a space large enough for occupation by a whole medical team, in particular since all the remaining elements of the IVUS system (a - d) at least implicitly have to be arranged adjacent to the bed.

- 2.2 The elements cited under e1 are not necessarily bulky elements and can be very small. Even in accordance with the present application the data processing module (22) and acquisition module (24) can be represented by an analogue to digital converter module and a signal processing card which are contained in a small box (see page 7, lines 1, 2 and 12 to 14 and Figure 4 of the patent application in suit). Moreover, it is also generally known that such elements can be represented by small electronic chips. Therefore the appellant's statement that the present claims taught a remote arrangement of the bulky elements of the IVUS system is not understandable.

In such cases where the modules according to feature e1 are not bulky, claim 1 of the main request, the first and second auxiliary request lacks clarity, since they do not give any teaching how these elements have to be located remote from the further elements of the system so as to enable a clear space around a bed, in particular when considering that the position of a small element has no significant influence on the free space around a bed. The appellant's statement that even the remote arrangement of a small element enabled a

clear space around a bed is therefore also not understandable.

- 2.3 The appellant's argument that the device described in feature e) of the third auxiliary request could not be represented by a small element, in particular an electronic chip, is also not convincing. This device is provided for processing and storing data derived from energizing an ultrasonic transducer array to output a signal to the display monitor. Therefore, with respect to the description of the present application and in particular with respect to Figure 4, the device has to comprise the data processing module (27) and acquisition module (24) according to feature e1, and in addition a data store (28). Since the data store can be arranged in the same small box as the data processing module and the acquisition module (see Figure 4), the device according to feature e2 can have the same size as the modulus according to feature e1. Consequently the reasoning for lack of clarity of claim 1 of the main request, the first and second auxiliary request is also valid for claim 1 of the third auxiliary request.

3. *Conclusions*

From the above considerations, it follows that the subject-matter of claim 1 of all present requests does not meet the requirements of clarity according to Article 84 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

V. Commare

T. Kriner