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**Datasheet for the decision
of 22 December 2009**

Case Number: T 0287/08 - 3.2.02

Application Number: 02800850.6

Publication Number: 1441642

IPC: A61B 5/0205

Language of the proceedings: EN

Title of invention:

System for processing signal data representing physiological parameters

Applicant:

Draeger Medical Systems, Inc.

Opponent:

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Headword:

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Relevant legal provisions:

EPC Art. 84

Relevant legal provisions (EPC 1973):

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Keyword:

"Clarity (no)"

Decisions cited:

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Catchword:

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Case Number: T 0287/08 - 3.2.02

DECISION
of the Technical Board of Appeal 3.2.02
of 22 December 2009

Appellant: Draeger Medical Systems, Inc.
16 Electronics Avenue
Danvers, MA 01923 (US)

Representative: Preuss, Udo
Maiwald Patentanwalts GmbH
Elisenhof
Elisenstrasse 3
D-80335 München (DE)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 20 August 2007
refusing European patent application
No. 02800850.6 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: M. Noël
Members: S. Chowdhury
J. Geschwind

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division dated 20 August 2007 to refuse European patent application No. 02 800 850.6.

The application was refused on the grounds that the application did not meet the requirements of Article 84 EPC and Article 123 (2) EPC.

II. On 26 October 2007 the appellant lodged an appeal against the decision and paid the prescribed fee on the same day. On 20 December 2007 a statement of grounds of appeal was filed.

III. Oral proceedings were held before the Board on 22 December 2009, which the appellant did not attend as signalled in its telefax dated 21 October 2009.

The appellant's written request is that the decision be set aside and a patent be granted on the basis of the claims 1 to 12 filed with the grounds of appeal.

IV. Independent claims 1 and 5 read as follows:

"1. A system for determining a pulsation associated with a physiological parameter, comprising:
an input device (10, 20, 30, 40) for receiving a plurality of different signals, each of the plurality of different signals indicating a pulsation in respective different physiological parameters;
a signal processor (60) for determining pulsations from one or more of said plurality of signals and accumulating information from the one or more of the

plurality of different signals, the information including values of relative delay between the pulsation in the respective different parameters, characterized in that a timing processor (60) determines a temporal relationship between a determined pulsation of a first one of said plurality of different signals and an undetermined pulsation of a second one of said plurality of different signals based on values of a combination of two or more of said parameters; the plurality of different signals comprise at least two of (a) an electrocardiogram signal, (b) a blood oxygen saturation representative signal, (c) an invasive blood pressure representative signal and (d) a non-invasive blood pressure representative signal.

5. A method for determining a value of a physiological parameter, comprising:
receiving a plurality of signals, each of said plurality of signals representing a respective one of plurality of physiological parameters and comprising a pulsation associated with a corresponding parameter of said plurality of physiological parameter;
characterized by determining pulsations of one or more of said plurality of signals and accumulating information from the one or more of the plurality of different signals, the information including values of relative delay between the pulsation in the respective different parameters;
determining, for each of a plurality of combinations of parameters for a particular patient, a temporal relationship between corresponding pulsations associated with different parameters of said plurality of combinations of parameters, said plurality of

combinations of parameters comprising a heart beat associated parameter in combination with a parameter associated with at least one of, (a) non-invasive blood pressure, (b) invasive blood pressure, (c) blood oxygen saturation level and (d) respiration rate, the determined temporal relationship being between a determined pulsation of a first one of said plurality of signals and an undetermined pulsation of a second one of said plurality of different signals based on values of a combination of two or more physiological parameters."

Claims 2 to 4 and 6 to 12 are dependent claims.

Reasons for the Decision

1. The appeal is admissible.
2. The claimed system is not described clearly in the application, a deal of guesswork and conjecture is involved in attempting to understand the invention. In particular the following points are unclear:

Description:

a) It is not clear what is meant by "pulsation", i.e. is it a pulsating signal, and is it the same as a beat (cf page 1, last paragraph and page 2, Summary)?

b) The expression "determine a pulsation" (page 8, line 16) is not clear because normally a parameter of a pulse is determined, such as frequency, amplitude, timing, etc.

- c) If a signal is not of good quality, it is not clear how it can be used "to determine a pulsation" (page 8, lines 13 to 16).
 - d) The two crucial paragraphs starting at page 8, line 20, which are referred to by the appellant in the grounds of appeal, are not understood.
3. Claim 1 is also unclear, and the description, which itself is unclear, cannot be invoked in order to understand the meaning of certain terms. The claim contains the following defects in this respect.
- a) The system as claimed appears merely to derive the timing of a pulsation so that "A system for determining a pulsation", apart from being unclear, appears to be incorrect since the description discloses a system for determining the timing of a pulsation". Moreover, it is not clear what the benefit of determining the timing is.
 - b) The expressions "determined pulsation" and "undetermined pulsation" are not clear in the context.
 - c) The expression "based on values of a combination of two or more of said parameters" is not clear in the context.
 - d) It is not clear that claim 1 defines the mapping process, or the treatment of good quality and poor quality signals and their use together with the maps to derive information which, insofar as the description may be understood, all appear to be essential features of the system.

4. For the above reasons claim 1 does not meet the clarity requirement of Article 84 EPC.
5. Claim 5 is similarly objectionable.

Order

For these reasons, it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

D. Sauter

M. Noël