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Datasheet for the decision of 15 June 2015

Case Number: T 2242/11 - 3.2.02

Application Number: 05798813.1

Publication Number: 1954175

IPC: A61B5/00

Language of the proceedings: EN

Title of invention:
DEVICE FOR DETERMINING THE GLUCOSE LEVEL IN BODY TISSUE

Applicant:
Biovotion AG

Headword:

Relevant legal provisions:
EPC Art. 54, 111(1)

Keyword:
Novelty (yes)

Decisions cited:
T 0896/92, T 0190/99

Catchword:

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Case Number: T 2242/11 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 15 June 2015

Appellant: (Applicant)	Biovotion AG Technoparkstrasse 1 8005 Zürich (CH)
Representative:	Sutter, Kurt E. Blum & CO. AG Vorderberg 11 8044 Zürich (CH)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 23 May 2011 refusing European patent application No. 05798813.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	E. Dufrasne
Members:	M. Stern
	P. L. P. Weber

Summary of Facts and Submissions

I. The applicant lodged an appeal against the decision of the Examining Division, dispatched on 23 May 2011, refusing European application No. 05 798 813.1.

II. The appealed decision is a decision according to the state of the file which refers to three communications from the Examining Division (dated, respectively, 23 December 2008, 29 October 2009 and 9 December 2010) in which it was considered that claim 1 of the main and auxiliary requests did not satisfy the requirement of novelty in view of document

D5: WO-A-2005/077260.

This document, which had not been cited in the international search report performed by the EPO, was introduced by the applicant with its letter dated 4 June 2008 upon entry into the European phase.

III. Notice of appeal was filed on 28 July 2011 and the appeal fee was paid the same day. A statement setting out the grounds of appeal was filed on 30 September 2011.

IV. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the claims of the main request filed with letter dated 24 March 2009 or those of an auxiliary request (which is presumed to be the auxiliary request underlying the appealed decision, filed with letter dated 15 February 2010).

Following a communication of the Board of 8 April 2015, in a letter dated 17 April 2015 the appellant requested

oral proceedings only in case the application was rejected, adding that remittance to the first instance could take place without an oral hearing.

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

"An apparatus for determining a glucose level in body tissue or blood comprising

an electrical detection device (2) having an electrode arrangement (33, 35, 36; 45) for applying an electric field to the tissue or blood for measuring at least one first parameter describing a response of said tissue or blood to said electric field,

an optical detection device (3) comprising a light source (46) and a light detector (47) for measuring at least one second parameter describing a transmission or reflection of light by said tissue or blood, and

evaluation circuitry (1) for determining the glucose level from a combination of said first and second parameter,

characterized in that said light source (46) is located to emit light through said electrode arrangement (33, 35, 36; 45) and/or said light detector (47) is located to measure light transmitted through said electrode arrangement (33, 35, 36; 45) for measuring said second parameter in a part of said tissue or blood experiencing said electric field."

VI. The appellant's arguments relevant for the decision are summarised as follows:

The impugned decision decided on lack of novelty on the basis of Fig. 9 of D5. This figure was however very schematic in nature, comparable in its lack of detail to Fig. 1 of D5, which had been explicitly described as a "system level block diagram". The figures showed

merely the functional relationship between the individual components of the device, but provided no information regarding the detailed mechanical set-up and mutual physical positions of the components. According to T 896/92 (point 2.2), "not only should the structure of the feature be shown sufficiently clearly in the drawing but also the technical function achieved should be derivable". D5 did not however allow the skilled person to attribute any specific technical function to the allegedly disclosed feature. As a consequence, the characterising feature of claim 1 of the main request was not clearly shown in D5.

It lacked moreover technical sense to interpret claim 1 as the Examining Division did in its communication dated 29 October 2009, viz. to the effect that the claimed "electrode arrangement can be read for example as the surface of the sensor having the electrodes and contacting the skin". If the device had a surface that carried the electrodes in a portion thereof, it did not make any technical sense to the skilled person to interpret that the *whole* surface (including the portion not carrying the electrodes) was an "electrode arrangement" as claimed. The skilled person would interpret the wording "light through said electrode arrangement" in claim 1 as light passing through the portion carrying the electrodes, not as light passing through a region outside said portion. According to T 190/99, point 2.4, the skilled person when considering a claim should rule out interpretations which were illogical or did not make technical sense.

Reasons for the Decision

1. The appeal is admissible.

2. Novelty over D5

2.1 The subject-matter defined in claim 1 is an apparatus for determining glucose comprising, in essence, an electrical detection device having an electrode arrangement, an optical detection device comprising a light source and a light detector and an evaluation circuitry for determining the glucose level from a combination of the parameters measured by the electrode arrangement and the optical detection device.

The apparatus as defined in the preamble of claim 1 is, undisputedly, known from D5 (page 9, lines 15 to 21; page 12, lines 11 to 12; page 26, lines 7 to 10).

2.2 The characterising portion of claim 1 defines the location of the light source and/or the light detector in relation to the electrode arrangement by specifying that the light source (and/or the light detector) is located to emit light (and/or receive light) "through the electrode arrangement". On page 12, lines 19 to 36 of the description, referring to Figures 6 to 8, an example of such a set-up is presented in which light is emitted and/or detected through gaps between parallel strip electrodes 45.

2.3 The Examining Division considered that, on the basis of the disclosure given in D5 in Figures 9 and 11, paragraphs [0093] and [0095], and page 12, lines 11 to 12, the features of the characterising portion of claim 1 were also known from D5.

2.4 The Board disagrees with this view for the following reasons.

2.4.1 The text of D5, in particular the passages cited by the Examining Division (paragraphs [0093] and [0095]; page 12, lines 11 to 12), is entirely silent as to the mutual positions of the optical detection device and the electrodes. Figures 9 and 11 depict different block diagrams of the system (similar to Figure 1, which is explicitly referred to as a "system level block diagram" on page 9, line 15). These figures show the functional relationship between the individual components of the apparatus, without, however, providing any direct and unambiguous information regarding the detailed mechanical set-up and mutual physical positions of the components. In particular, one of the blocks shown in these figures corresponds to a "sensor" in which, from left to right, an electrode pair, LEDs, a photodetector and another electrode pair are schematically depicted. The depicted block does not amount to a clear disclosure of the geometrical placement of the LEDs, photodetector and electrodes, nor is this placement or any technical effect resulting from it mentioned in the corresponding text. The skilled person cannot infer from these figures any specific technical function of the alleged mutual geometrical placement. Since no technical teaching may be attributed to the inferred mutual geometrical placement, the figures cannot be seen as disclosing this feature (T 896/92, point 2.2). The figures may at best cause the skilled person to speculate or think about the placement of the components, but any result emerging therefrom would not be relevant to the novelty of the claimed subject-matter.

2.4.2 The Board dismisses also another argument advanced by the Examining Division in the communication dated 29 October 2009 to which the appealed decision according to the state of the file refers. It was said

that in D5 the "electrode arrangement can be read for example as the surface of the sensor having the electrodes and contacting the skin", and it was thus concluded that light from the LEDs (or to the photodetector) would necessarily pass through the bottom surface of the sensor to the skin.

As correctly pointed out by the appellant, if the device had a surface that carried the electrodes in a portion thereof, it would not make any technical sense to the skilled person to interpret that the *whole* surface (including the portion not carrying the electrodes) was an "electrode arrangement" as claimed. With this interpretation, whichever way the LEDs (or the photodetector) are placed on the surface with regard to the electrodes, they would always be deemed to be located to emit light (and/or receive light) "through the electrode arrangement", thereby always falling under the terms of claim 1. The skilled person when considering a claim should rule out interpretations which are illogical or which do not make technical sense, as was indicated in T 190/99, point 2.4.

2.5 Consequently, the Board concludes that the subject-matter of claim 1 is novel over D5 within the meaning of Article 54 EPC.

3. Novelty in view of D5 was the only objection on which the appealed decision (and the entire examination proceedings) was based.

The Board therefore considers it appropriate that the further examination of the application should be performed by the Examining Division. The Board consequently remits the case to the Examining Division

for continuation of the examination proceedings on the basis of the present main request (Article 111(1) EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution.

The Registrar: The Chairman:

D. Hampe E. Dufrasne

Decision electronically authenticated