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**Datasheet for the decision  
of 9 January 2017**

**Case Number:** T 2269/12 - 3.2.02

**Application Number:** 02739108.5

**Publication Number:** 1494586

**IPC:** A61B5/103

**Language of the proceedings:** EN

**Title of invention:**

PASSIVE PHYSIOLOGICAL MONITORING (P2M) SYSTEM

**Applicant:**

Hoana Medical, Inc.

**Headword:**

**Relevant legal provisions:**

EPC Art. 54(1), 111(1)

**Keyword:**

Novelty (yes)

Remittal for further prosecution

**Decisions cited:**

**Catchword:**



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Case Number: T 2269/12 - 3.2.02

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.02**  
**of 9 January 2017**

**Appellant:** Hoana Medical, Inc.  
(Applicant) 1001 Bishop Street,  
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Pacific Tower  
Honolulu, HI 96813-2833 (US)

**Representative:** Hedges, Martin Nicholas  
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**Decision under appeal:** **Decision of the Examining Division of the European Patent Office posted on 5 June 2012 refusing European patent application No. 02739108.5 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** E. Dufrasne  
**Members:** M. Stern  
D. Ceccarelli

## Summary of Facts and Submissions

- I. The applicant lodged an appeal against the decision of the Examining Division, dispatched on 5 June 2012, refusing European patent application No. 02 739 108.5.
- II. In the appealed decision it was held that the subject-matter of independent claims 1 and 15 lacked novelty in view of document

D3: US-A-5 853 005.

- III. Notice of appeal was filed on 3 August 2012 and the appeal fee was paid the same day. A statement setting out the grounds of appeal was filed on 15 October 2012.

- IV. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the claims underlying the appealed decision (main request) or, in the alternative, on the basis of one of the first and second auxiliary requests filed with letter dated 15 October 2012. Oral proceedings were requested in case the Board intended to reject the application.

- V. Claims 1 and 15 of the main request read as follows:

"1. An apparatus for passively monitoring physiology of a patient, the apparatus including:

at least two sensors; a converter communicating with the at least two sensors for converting physiological and environmental signals from the sensors into digital signals;

a processor communicating with the converter for isolating the physiological signals from the environmental signals by using the digital signals

between the at least two sensors to provide physiological data; and

a monitor communicating with the processor for displaying the physiological data; characterised in that each of the at least two sensors each comprises a piezoelectric film (1) and each is disposed for sensing both physiological signals from the patient and environmental signals from an environment around the patient; and in that the processor isolates the physiological signals from the environmental signals by correlating the digital signals between the at least two sensors to provide physiological data."

"15. A method for passively monitoring physiology of a patient in a high noise and vibration environment, the method including:

coupling a plurality of piezoelectric film sensors with the patient at different locations on the patient's body;

sensing both physiological signals and environmental signals with each of the sensors;

converting the physiological and environmental signals from the sensors into digital signals;

isolating the physiological signals from the environmental signals by correlating the signals sensed by the sensors to derive physiological data; and

displaying the physiological data."

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

In reaching the decision of lack of novelty, the examiner had completely overlooked the feature of a "piezoelectric film" recited in claims 1 and 15. D3 neither disclosed nor suggested the use of such a film which could be coupled directly with the patient

through a solid or semi-solid interface to facilitate the sensing of mechanical signals such as those associated with cardiac and respiratory motion of the patient. D3 used a fluid-filled pad to improve the coupling of audio signals from the body to the sensors in the pad and to attenuate unwanted ambient noise.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Novelty over D3*
  - 2.1 Document D3 discloses a physiology monitoring apparatus comprising, in essence, a plurality of sensors (acoustic transducers 14 in Figure 3; column 4, lines 37 to 46; column 7, lines 44 to 51) for sensing both physiological signals from a patient and environmental signals from an environment around the patient (column 7, lines 54 to 58) and a processor (15) (column 5, lines 45 to 47) which isolates the physiological signals from the environmental signals by using the digital signals between the sensors to provide physiological data (column 7, lines 54 to 60; column 13, lines 12 to 17).
  - 2.2 D3 discloses that the acoustic transducers are, inter alia, piezoelectric transducers (column 5, lines 23 to 27). D3 does not disclose, however, that these sensors comprise, specifically, a piezoelectric film as defined in claims 1 and 15. A sensor comprising a piezoelectric film - for example, a polyvinylidene fluoride (PVDF) film, as mentioned on page 14, paragraph 3 of the original application - is a specific type of piezoelectric transducer differing from, for example, a

(generally bulkier) transducer including a piezoelectric crystal or ceramic.

2.3 As mentioned under point 1.2, last paragraph of the decision under appeal, during the examination proceedings the applicant submitted the argument that D3 failed to disclose that the sensors comprised a piezoelectric film. Nevertheless, the decision only includes the general statement that D3 discloses in column 5, lines 23 to 24 a piezoelectric transducer (point 1.3, penultimate paragraph), omitting any rebuttal of the applicant's pertinent argument regarding the lack of disclosure of a piezoelectric film.

2.4 The Board therefore concludes that the subject-matter of independent claims 1 and 15 of the main request satisfies the requirement of novelty with respect to document D3; Article 54(1) EPC.

3. This requirement is the only ground on which the appealed decision is based. It is noted that the decision further includes a final additional remark positing a lack of inventiveness of another feature of claims 1 and 15. The question of inventive step taking into consideration the differentiating feature mentioned above is, however, not addressed.

Therefore, the Board considers it appropriate to remit 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