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**Datasheet for the decision  
of 14 March 2018**

**Case Number:** T 0598/15 - 3.5.05

**Application Number:** 10183918.1

**Publication Number:** 2339490

**IPC:** G06F19/00, A61B5/04

**Language of the proceedings:** EN

**Title of invention:**

Method for determining medication efficacy

**Applicant:**

CNS Response, Inc.

**Headword:**

Automated treatment of brain imbalance II/CNS

**Relevant legal provisions:**

EPC Art. 76(1)  
RPBA Art. 15(3)

**Keyword:**

Oral proceedings - non-attendance of the party  
Added subject-matter - (yes)

**Decisions cited:**

G 0001/07, T 0582/15



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Case Number: T 0598/15 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 14 March 2018**

**Appellant:** CNS Response, Inc.  
(Applicant) 2755 Bristol Street, Suite 285  
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**Representative:** Kinsler, Maureen Catherine  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 29 October 2014  
refusing European patent application  
No. 10183918.1 pursuant to Article 97(2) EPC**

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** K. Bengi-Akyuerek  
F. Blumer

## Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division to refuse the present European patent application, divided from its parent application EP 09006140.9 (underlying appeal case T 582/15), essentially on the grounds of added subject-matter (Articles 76(1) and 123(2) EPC) and lack of inventive step (Article 56 EPC), having regard to the combined disclosures of
- D1:** US-A-4 128 641, and
- D2:** E.R. John: "Principles of Neurometrics", American Journal of EEG Technology, pp. 251-266, December 1990.
- II. With the statement setting out the grounds of appeal, the appellant filed amended sets of claims according to a main request and first and second auxiliary requests. It requested that the examining division's decision be set aside and that a patent be granted on the basis of one of the above claim requests. In addition, oral proceedings were requested as an auxiliary measure.
- III. In a communication annexed to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board gave its preliminary opinion on the appeal. In particular, it raised objections under Articles 52(2) and (3), 53(c), 76(1) and 84 EPC, and indicated that all the claim requests on file seemed to lack inventive step (Article 56 EPC), having regard to D1 and D2.
- IV. With a letter of reply dated 12 March 2018 (i.e. two days before the scheduled oral proceedings), the appellant indicated that it would not be attending the oral proceedings. It made no comments on the substance

of the board's communication in that letter.

- V. Oral proceedings were held as scheduled on 14 March 2018 in the absence of the appellant. The board established from the file that the appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request or, subsidiarily, on the basis of either the first or second auxiliary request, all requests as submitted with the statement setting out the grounds of appeal filed on 9 March 2015.

After due deliberation on the basis of those final requests and the written submissions, the board's decision was announced at the end of the oral proceedings.

- VI. Claim 1 of the **main request** reads as follows:

"A method for determining the effect of a pre-administered compound by providing a first electroencephalography recording derived from a patient having a physiologic brain imbalance before administration of said compound and a second electroencephalography recording derived from said patient after administration of said compound; said method being characterized by:

- a) converting said first electroencephalography recording to at least one pre-administration multivariate descriptor wherein said pre-administration multivariate descriptor comprises a plurality of first univariate Z scores, wherein said pre-administration multivariate descriptor is derived from a

- frequency band selected from the group consisting of delta, theta, alpha, and beta;
- b) converting said second electroencephalography recording to at least one post-administration multivariate descriptor wherein said post-administration multivariate descriptor comprises a plurality of second univariate Z scores, wherein said post-administration multivariate descriptor is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta; and
- c) comparing said pre-administration multivariate descriptor with said post-administration multivariate descriptor wherein a change between said pre-administration descriptor and post-administration descriptor determines the effect of said pre-administered compound."

Claim 1 of the **first auxiliary request** reads as follows:

"Computer software for determining the effect of a compound using a first electroencephalography recording derived from a patient having a physiologic brain imbalance before administration of said compound and a second electroencephalography recording derived from said patient after administration of said compound; said computer software being characterized by being operable to:

- a) convert said first electroencephalography recording to at least one pre-administration multivariate descriptor wherein said pre-administration multivariate descriptor comprises a plurality of first univariate Z scores;

- b) convert said second electroencephalography recording to at least one post-administration multivariate descriptor wherein said post-administration multivariate descriptor comprises a plurality of second univariate Z scores; and
- c) compare said pre-administration multivariate descriptor with said post-administration multivariate descriptor wherein a change between said pre-administration descriptor and said post-administration descriptor determines the effect of said pre-administered compound."

Claim 1 of the **second auxiliary request** reads as follows:

"Computer software for determining the effect of a compound using a first electroencephalography recording derived from a patient having a physiologic brain imbalance before administration of said compound and a second electroencephalography recording derived from said patient after administration of said compound; said computer software being characterized by being operable to:

- a) convert said first electroencephalography recording to at least one pre-administration multivariate descriptor wherein said pre-administration multivariate descriptor comprises a plurality of first univariate Z scores;
- b) convert said second electroencephalography recording to at least one post-administration multivariate descriptor wherein said post-administration multivariate descriptor

comprises a plurality of second univariate Z scores; and

- c) compare said pre-administration multivariate descriptor with said post-administration multivariate descriptor, and
- (d) determine the effect of the pre-administered compound based on a change between said pre-administration descriptor and said post-administration descriptor."

## **Reasons for the Decision**

### 1. *Non-attendance of the appellant at oral proceedings*

1.1 The appellant decided not to attend the scheduled oral proceedings before the board (cf. point IV above). Pursuant to Article 15(3) RPBA, the board is not "obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case."

1.2 In the present case, the appellant did not respond in substance to the objections raised in the board's communication under Article 15(1) RPBA. So, in the exercise of its discretion under Article 15(3) RPBA, the board took a decision at the end of the oral proceedings, in the absence of the duly summoned appellant.

### 2. MAIN REQUEST

Claim 1 includes the following features, as labelled by the board:

A method for determining the effect of a pre-administered compound, comprising the steps of:

- A) providing a first electroencephalography (EEG) recording derived from a patient having a physiologic brain imbalance before administration of said compound and a second EEG recording derived from said patient after administration of said compound;
- B) converting said first EEG recording to at least one pre-administration multivariate descriptor wherein said pre-administration multivariate descriptor comprises a plurality of first univariate Z scores, wherein said pre-administration multivariate descriptor is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta;
- C) converting said second EEG recording to at least one post-administration multivariate descriptor wherein said post-administration multivariate descriptor comprises a plurality of second univariate Z scores, wherein said post-administration multivariate descriptor is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta;
- D) comparing said pre-administration multivariate descriptor with said post-administration multivariate descriptor wherein a change between said pre-administration descriptor and post-administration descriptor determines the effect of said pre-administered compound.

2.1 *Added subject-matter (Article 76(1) EPC)*

In response to the objection raised under Article 76(1)



EPC in the decision under appeal (see Reasons 2.1), claim 1 was amended with the statement setting out the grounds of appeal such that the "differential change" previously recited in feature D) was replaced by "change". The board, however, holds that the subject-matter of claim 1 still goes beyond the original content of the present application's parent application, for the reasons set out below.

- 2.1.1 As to the comparing step according to feature D), the appellant argued that the use of the wording "pre-administration" and "post-administration" fell clearly within the intended scope of disclaimers as set out in G 1/07 (OJ EPO 2011, 134) and did not represent a mere re-ordering of the method steps claimed, as held in the impugned decision.
  
- 2.1.2 As to features A) to D) of present claim 1, it is apparent to the board that the parent application as filed teaches solely that electroencephalography (EEG) recordings are derived from the patient's brain (cf. page 1, lines 21-24 and 34-36 and page 13, lines 12-15) and that "pretreatment EEG information" can be used to predict EEG-specific medication responses (cf. page 43, line 31 to page 44, line 8 and page 26, line 27 to page 27, line 9).

However, regardless of whether the use of the terms "pre-administration", "post-administration" and "pre-administered compound" in feature D) of claim 1 implies a disclaimer or a form of omitting the step from the claim within the meaning of G 1/07 (see Reasons 4.2.1), the board finds that the above teaching of the parent application does not constitute an unambiguous basis for the conclusion that two different EEG recordings, derived before and after the

administration of a compound, are *first* provided, *then* converted to respective multivariate descriptors, and *lastly* compared with each other in order to eventually determine the compound's effect, as required by claim 1. Accordingly, present claim 1 amounts to an unallowable limitation of the original content of the parent application, contrary to Article 76(1) EPC.

2.1.3 The appellant did not comment on the above objection indicated in the board's communication under Article 15(1) RPBA.

2.2 Hence, in view of the above deficiency under Article 76(1) EPC alone, the board concludes that the main request is not allowable.

### 3. AUXILIARY REQUESTS

3.1 Claim 1 of the first and second auxiliary requests differs from claim 1 of the main request essentially in that it is now directed to a "computer software being operable to" perform the respective method steps, and no longer includes the sub-feature that the multivariate descriptors are derived from a certain frequency band in features B) and C). However, the objections set out in point 2.1.2 above apply *mutatis mutandis* to the present auxiliary requests.

3.2 Therefore, the first and second auxiliary requests are likewise not allowable under Article 76(1) 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