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[Continued on next page]

(54) Title: ADAPTIVE PERFORMANCE TRAINER

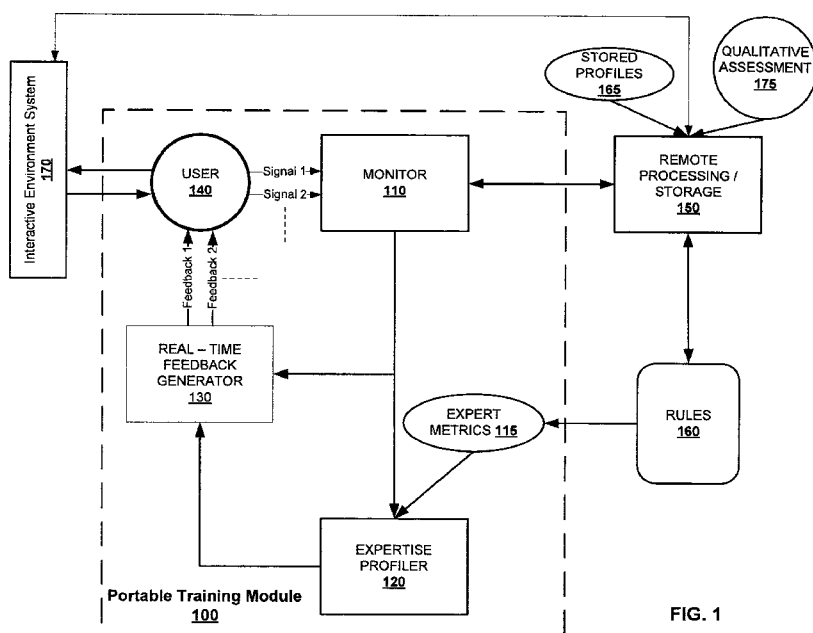


FIG. 1

(57) Abstract: Techniques for accelerating training through optimization of the psychophysiological state of the trainee are provided. These techniques include an adaptive performance training system configured to acquire, analyzed, display, and translate data that reflects the psychophysiological state of the user, including the electrical activity of the brain (EEG), the heart (EKG), the musculature (EMG), respiration and other parameters that characterize the state of the user in real-time. The system includes a plurality of feedback mechanisms for providing visual, auditory, and/or tactile feedback based on the current psychophysiological state of the user and for facilitating moving the user toward a goal psychophysiological state for performing a particular task and for optimizing performance of that task.

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**A. CLASSIFICATION OF SUBJECT MATTER***A61B 5/0205(2006.01)i, A61B 5/0402(2006.01)i, A61B 5/0488(2006.01)i, A61B 5/02(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

A61B 5/0205; G06F 15/16; H04J 3/22; H04B 7/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords:psychophysiological signal, sensor, real-time, feedback

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0214903 A1 (TUVI ORBACH) 04 September 2008 See abstract, paragraphs 144-152, 196-286, and figures 1-4,12	1-25
A	US 2009-0075781 A1 (SCHWARZBERG ROBERT et al.) 19 March 2009 See abstract, paragraphs 21-32, and figures 1-3	1-25
A	US 2009-0047645 A1 (CHRISTIAN DIBENEDETTO et al.) 19 February 2009 See abstract, paragraphs 63-71, 331-351, and figures 1,2,42-45	1-25
A	US 4,984,578 A1 (WILLIAM KEPPEL et al.) 15 January 1991 See abstract, column 5 line 11 - column 6 line 28, and figures 3,4	1-25

 Further documents are listed in the continuation of Box C. See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

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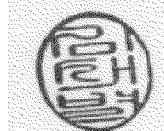
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2010/032291**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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