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(54) Title: PHYSIOLOGICAL MONITORING FOR ELECTRONIC GAMING

(57) Abstract: An adherent device configured to couple to a user of a video game is provided. The adherent device measures user data, such as heart rate, respiration rate, temperature, hydration, activity, and posture, and wirelessly transmits the measured data to the circuitry of the video game. The video game may comprise circuitry configured to alter the gaming experience based on the received user data. The video game may comprise circuitry configured to display an avatar. At least one of the activity or the appearance of the avatar is configured to change in response to the measured user data. The adherent device may also comprise adherent devices with accelerometers and which are coupled to the user's limbs. The adherent devices with accelerometers detect motion of the user's limbs and transmit the motion data to circuitry of the video game. Movements of the avatar can be based on the received motion data.
A. CLASSIFICATION OF SUBJECT MATTER

A63F 13/02(2006.01)i, A63F 13/10(2006.01)i, G06F 3/00(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)
A63F 13/02; A61B 5/04; A63F 9/24; A61B 5/0402, A63F 13/10, G06F 3/00

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) & Keywords: physiological, electrodiagram, adherent, measure.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>Y</td>
<td>US 2008-0293491 A1 (WU TUNG-KE et al.) 27 November 2008 See abstract, paragraph 0006-0032, figures 1B,2,4</td>
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<td>US 5960860 A1 (CLAYMAN; HENRY M.) 19 January 1999 See abstract, column 2 line 32-37, 48-54, figures 1,2</td>
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<td>A</td>
<td>US 2008-0220865 A1 (HSU WEI) 11 September 2008 See abstract, paragraph 0013-0016, figures 1,2</td>
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<td>24.12.2008</td>
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<td>WO 2007-072239 A2</td>
<td>28.06.2007</td>
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<td>WO 2007-072239 A3</td>
<td>28.06.2007</td>
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