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Kidmose et al.

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(54) **EAR PLUG WITH SURFACE ELECTRODES**

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CPC ***A61B 5/0478*** (2013.01); ***A61B 5/6817*** (2013.01); *H04R 25/652* (2013.01); *H04R 25/658* (2013.01); *H04R 2225/77* (2013.01); *Y10T 29/49204* (2015.01)

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See application file for complete search history.

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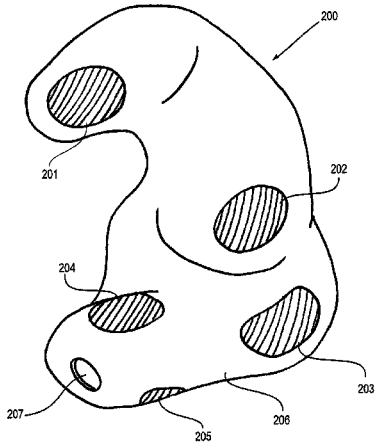
(57) **ABSTRACT**

An ear plug (**200**) comprises a shell (**206**) with at least two electrodes (**201-205**) adapted for measuring brain wave signals, said electrodes (**201-205**) being connected with means for processing the measured signals, wherein the contours of the outer surface of the ear plug (**200**) and the electrodes (**201-205**) are individually matched to at least part of the ear canal and the concha of the user. The invention further provides a method for producing an ear plug.

18 Claims, 7 Drawing Sheets