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(57) Abstract :

An earphone device 100 with auto on and off by monitoring brain signals 206 comprises a headset 102, a pair of earphones 104 with a UV lamp 106, a plurality of sensors 108 to detect brain signals 206 of a user 202, a location detection module 112, and a control unit 110 comprises a microcontroller in communication with a mobile device in a Bluetooth network 120. The detected brain signals 206 are transmitted to the mobile device to analyse the state of sleep of the brain 204 and to switch on and off the device 100. UV lamps 106 generate UV rays to kill bacteria in the ear.

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