

Title (en)

MULTIFUNCTIONAL HEADPHONE SYSTEM FOR SPORTS ACTIVITIES

Title (de)

MULTIFUNKTIONSKOPFHÖRERSYSTEM FÜR SPORTLICHE AKTIVITÄTEN

Title (fr)

SYSTÈME ÉCOUTEUR MULTIFONCTION POUR ACTIVITÉS SPORTIVES

Publication

**EP 3097702 A1 20161130 (DE)**

Application

**EP 15701341 A 20150123**

Priority

- DE 102014100824 A 20140124
- DE 102014109007 A 20140626
- EP 2015051374 W 20150123

Abstract (en)

[origin: WO2015110587A1] A multifunctional headphone system for sports activities is described that has the following: a first apparatus that is set up to be worn in one ear of a user and has a first data communication unit and a first loudspeaker, and a second apparatus that is set up to be worn in the other ear of the user and has a second data communication unit and a second loudspeaker, wherein at least one of the first and second apparatuses has a sensor unit and a data processing unit, wherein the data processing unit is set up to produce performance data on the basis of measurement data captured by the sensor unit, wherein the first apparatus additionally has a signal processing unit that is set up to produce a binaural audio signal on the basis of the performance data, the binaural audio signal having a first signal component for output by the first loudspeaker and a second signal component for output by the second loudspeaker, and wherein the first data communication unit is set up to transmit the second signal component of the binaural audio signal to the second data communication unit. In addition, a method is described.

IPC 8 full level

**H04R 1/10** (2006.01); **H04R 5/033** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP US)

**H04R 1/1091** (2013.01 - EP US); **H04R 5/033** (2013.01 - EP US); **H04R 5/04** (2013.01 - US); **H04R 1/1016** (2013.01 - EP US);  
**H04R 1/1041** (2013.01 - EP US); **H04R 25/552** (2013.01 - EP US); **H04R 2201/107** (2013.01 - EP US); **H04R 2420/07** (2013.01 - EP US);  
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Citation (examination)

US 2013316642 A1 20131128 - NEWHAM ADAM E [US]

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2015110587 A1 20150730**; CN 106464996 A 20170222; EP 3097702 A1 20161130; US 10798487 B2 20201006;  
US 11523218 B2 20221206; US 11871197 B2 20240109; US 2017013360 A1 20170112; US 2021076138 A1 20210311;  
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DOCDB simple family (application)

**EP 2015051374 W 20150123**; CN 201580014988 A 20150123; EP 15701341 A 20150123; US 201515113437 A 20150123;  
US 202017061130 A 20201001; US 202218054502 A 20221110; US 202318545428 A 20231219