

Title (en)
EARPHONE WITH DISCONNECTABLE CABLE

Title (de)
OHRHÖRER MIT ABNEHMBAREM ANSCHLUSSKABEL

Title (fr)
ÉCOUTEUR AVEC DÉMONTABLE CÂBLE

Publication
EP 3682648 B1 20240327 (DE)

Application
EP 18769168 A 20180912

Priority
• DE 102017121137 A 20170913
• EP 2018074562 W 20180912

Abstract (en)
[origin: WO2019053042A1] Connection cables of wired earphones are sensitive and often lead to problems, such as cable fracture for example. When connection cables are connected to the housing (110) of the earphone (100) by way of a releasable plug-in connection, this releasable plug-in connection is likewise sensitive and easy to damage on account of its small size. The plug often breaks when inserted or due to laterally acting forces. In the case of an earphone according to the invention, the connection cable can be connected to the housing of the earphone by way of a robust and reliable plug-in connection. The plug-in connection comprises a coaxial plug (200) with rotationally symmetrical plug contacts (230, 240) and is surrounded by a plastic encapsulation (210, 220). When the plug-in connection is inserted, the plastic encapsulation forms a first bearing point for absorbing mechanical forces (F1) which act laterally on the plug, while at least one of the plug contacts of the coaxial plug forms a second bearing point for absorbing forces (F2) of this kind. The distance (L) between the first and the second bearing point is greater than the diameter (d) of the plug contacts (230, 240) of the coaxial plug in this case.

IPC 8 full level
H04R 1/10 (2006.01)

CPC (source: EP US)
H04R 1/1016 (2013.01 - US); **H04R 1/1033** (2013.01 - EP US); **H04R 1/1016** (2013.01 - EP); **H04R 2420/09** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102017121137 A1 20190314; **DE 102017121137 B4 20221117**; CN 111133769 A 20200508; CN 111133769 B 20230411;
DK 3682648 T3 20240415; EP 3682648 A1 20200722; EP 3682648 B1 20240327; US 10924840 B2 20210216; US 2020267466 A1 20200820;
WO 2019053042 A1 20190321

DOCDB simple family (application)
DE 102017121137 A 20170913; CN 201880059292 A 20180912; DK 18769168 T 20180912; EP 18769168 A 20180912;
EP 2018074562 W 20180912; US 201816645035 A 20180912