

Title (en)
Headphone apparatus.

Title (de)
Kopfhörergerät.

Title (fr)
Dispositif de casque d'écoute.

Publication
EP 0448110 A2 19910925 (EN)

Application
EP 91104475 A 19910321

Priority
JP 7381490 A 19900323

Abstract (en)
An inner-ear type headphone apparatus includes a diaphragm (2), a driving portion (3), a case (1), a duct (19), and a sound-absorbing portion (20). The driving portion (3) drives the diaphragm (2). A diaphragm backside space (15a) is formed between the diaphragm (2) and the driving portion (3). The driving portion (3) is attached to the case (1). The duct (19) conducts the diaphragm backside space (15a) to the external space outside the case (1). The sound-absorbing portion (20) communicates with the duct (19). The sound-absorbing portion (20) absorbs sound of high frequency range emitted to the external space outside the case (1) through the duct (19). The amount of unpleasant high frequency range sound leaking outside is reduced. <IMAGE>

IPC 1-7
G10K 11/16; **H04R 1/10**

IPC 8 full level
H04R 1/10 (2006.01); **H04R 1/22** (2006.01)

CPC (source: EP KR)
H04R 1/1016 (2013.01 - EP); **H04R 9/18** (2013.01 - KR); **H04R 1/2811** (2013.01 - EP)

Cited by
EP1722592A1; EP2677767A3; CN110602614A; GB2438910A; GB2438910B; US9258663B2; US9712905B2; EP4109925A4; US7697710B2; US10694282B2; US11317196B2; US11750966B2; US8976994B2; US9161118B2; US9510086B2; US9936284B2

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0448110 A2 19910925; **EP 0448110 A3 19921202**; JP H03274892 A 19911205; KR 910017904 A 19911105

DOCDB simple family (application)
EP 91104475 A 19910321; JP 7381490 A 19900323; KR 910004541 A 19910322