

Title (en)
Slim width microspeaker

Title (de)
Mikrolautsprecher mit schlanker Breite

Title (fr)
Micro-haut-parleur à faible largeur

Publication
EP 2811759 A1 20141210 (EN)

Application
EP 14001115 A 20140326

Priority
KR 20130063306 A 20130603

Abstract (en)
The present invention relates to a slim width microspeaker. The present invention discloses a slim width microspeaker including: a frame; a yoke coupled to the bottom of the frame; an inner magnet attached to the top of the yoke; an outer ring magnet attached to the top of the yoke with a predetermined gap from the inner magnet; a voice coil having a lower end positioned in the gap between the inner magnet and the outer ring magnet; a diaphragm vibrating together with the vibration of the voice coil to produce a sound; and a suspension guiding a vibrating direction of the diaphragm and the voice coil and having a center portion to which the voice coil is attached, a ring-shaped outer peripheral portion disposed with a predetermined gap from the center portion, and a connecting portion connecting the center portion to the outer peripheral portion and performing a damping function, wherein the microspeaker is generally formed in a rectangular shape having a pair of short sides and a pair of long sides, and the connecting portion of the suspension is disposed in a pair on the short sides to connect the short side of the center portion to the short side of the outer peripheral portion.

IPC 8 full level
H04R 7/04 (2006.01); **H04R 9/04** (2006.01); **H04R 9/06** (2006.01)

CPC (source: EP KR)
H04R 7/04 (2013.01 - EP); **H04R 7/20** (2013.01 - KR); **H04R 9/02** (2013.01 - KR); **H04R 9/04** (2013.01 - EP)

Citation (search report)

- [XYI] WO 2011065795 A2 20110603 - EM TECH CO LTD [KR], et al
- [Y] EP 1768447 A2 20070328 - SONION HORSENS AS [DK]
- [XY] US 2013016874 A1 20130117 - HUANG XING-ZHI [CN], et al
- [XA] KR 20100121771 A 20101119 - SUNG JU SOUND CORP [KR]
- [YA] WO 2012157888 A2 20121122 - EM TECH CO LTD [KR], et al
- [A] KR 20110002370 A 20110107 - BUJEON ELECTRONICS CO LTD [KR]
- [A] US 2007291976 A1 20071220 - KAJIWARA HIROO [JP]
- [A] US 2011293121 A1 20111201 - YAN XU-DONG [CN]

Cited by
US9813821B1; CN105101022A; CN109151682A; CN105704625A; EP3035708A3; US9832557B2; WO2021134363A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2811759 A1 20141210; KR 101439915 B1 20140915

DOCDB simple family (application)
EP 14001115 A 20140326; KR 20130063306 A 20130603