

Title (en)
MEMS microphone package

Title (de)
MEMS-Mikrofongehäuse

Title (fr)
Boîte pour microphone MEMS

Publication
EP 2051539 A1 20090422 (EN)

Application
EP 08017149 A 20080929

Priority
KR 20070104981 A 20071018

Abstract (en)
Provided is a MEMS microphone package (100) that can shield a MEMS microphone chip (10) from noise to greatly improve sound quality and reduce manufacturing costs, by inserting a PCB substrate (106) to which the MEMS microphone chip (10) is mounted into a metal case (102), and then by ground-connecting the metal case to a main board (200) using an assembly process including bending and clamping an end of the case. The MEMS microphone package (100) includes a tetragonal container-shaped metal case (102) having an open-side to insert components into an inner space, and a chamfered end on the open-side to easily perform a curling operation, a PCB substrate (106) to which a MEMS microphone chip (10) and an ASIC chip (20) are mounted, the PCB substrate (106) being inserted into the case (102), and a support configured to support the PCB substrate and define a space between the case and the PCB substrate.

IPC 8 full level
H04R 1/02 (2006.01); **H04R 19/04** (2006.01); **H04R 19/00** (2006.01)

CPC (source: EP KR)
H04R 1/02 (2013.01 - KR); **H04R 1/04** (2013.01 - KR); **H04R 19/005** (2013.01 - EP); **H04R 19/04** (2013.01 - KR); **H04R 1/02** (2013.01 - EP)

Citation (applicant)
• EP 1755360 A1 20070221 - BSE CO LTD [KR]
• WO 2005069682 A1 20050728 - BSE CO LTD [KR], et al

Citation (search report)
• [Y] EP 1755360 A1 20070221 - BSE CO LTD [KR]
• [Y] WO 2005069682 A1 20050728 - BSE CO LTD [KR], et al
• [Y] JP 2001268695 A 20010928 - HOSIDEN CORP
• [Y] JP 2007150507 A 20070614 - MATSUSHITA ELECTRIC WORKS LTD
• [PA] EP 1898666 A2 20080312 - BSE CO LTD [KR]

Cited by
US8879767B2; US8737674B2; WO2013028399A3; WO2021128418A1

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

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2051539 A1 20090422; CN 201195694 Y 20090218; JP 2009100471 A 20090507; JP 4777406 B2 20110921; KR 100925558 B1 20091105; KR 20090039375 A 20090422; MY 150111 A 20131129; SG 152176 A1 20090529; TW M345339 U 20081121; WO 2009051317 A1 20090423

DOCDB simple family (application)
EP 08017149 A 20080929; CN 200820105556 U 20080416; JP 2008258431 A 20081003; KR 20070104981 A 20071018; KR 2008001862 W 20080403; MY PI20084028 A 20081010; SG 2008077802 A 20081017; TW 97204492 U 20080314