

Title (en)

Signalling device comprising an electrical acoustic signal generator

Title (de)

Signalgebereinrichtung mit einem elektrischen akustischen Signalgeber

Title (fr)

Dispositif d'émission de signal doté d'un émetteur de signal acoustique électrique

Publication

**EP 2346026 A3 20121017 (DE)**

Application

**EP 10196143 A 20101221**

Priority

DE 102010005654 A 20100119

Abstract (en)

[origin: EP2346026A2] The device (11) has a signal generator (13) e.g. piezo-buzzer, comprising a piezo-ceramic disk (14) and arranged on a printed circuit board (18). The board has an opening (21) in an area of the piezo-ceramic disk and/or metal membrane (15). The metal membrane overlaps the opening for attachment on the printed circuit board in an edge area of the opening. The piezo-ceramic disk is arranged on the metal membrane in the edge area of the opening. A contact protrusion unit (29) is provided for electrical contacting of the signal generator at the edge area of the opening.

IPC 8 full level

**G10K 9/122** (2006.01)

CPC (source: EP US)

**G10K 9/122** (2013.01 - EP US)

Citation (search report)

- [XYI] EP 0796034 A2 19970917 - TDK CORP [JP]
- [YD] DE 3718018 A1 19881208 - DIEHL GMBH & CO [DE]
- [A] EP 0755167 A2 19970122 - TAIYO YUDEN KK [JP]
- [A] JP 2008079230 A 20080403 - HOKURIKU ELECT IND
- [A] US 2009189488 A1 20090730 - RAY RAND KALANI [US], et al

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 2346026 A2 20110720; EP 2346026 A3 20121017**; CA 2728239 A1 20110719; DE 102010005654 A1 20110721; JP 2011151799 A 20110804; JP 5632737 B2 20141126; MX 2011000699 A 20110718; US 2011176392 A1 20110721; US 8644114 B2 20140204

DOCDB simple family (application)

**EP 10196143 A 20101221**; CA 2728239 A 20110113; DE 102010005654 A 20100119; JP 2010291478 A 20101228; MX 2011000699 A 20110118; US 201113008363 A 20110118