

Title (en)

Ultrasonic sensor having a pot-like housing and its method of manufacture

Title (de)

Ultraschallsensor mit einem topfförmigen Gehäuse und zugehöriges Herstellungsverfahren

Title (fr)

Capteur ultrasonique dans un boîtier cylindrique fermé par une membrane et son procédé de fabrication

Publication

EP 1310942 B1 20180725 (DE)

Application

EP 02020785 A 20020917

Priority

DE 10156259 A 20011109

Abstract (en)

[origin: EP1310942A2] An ultrasonic sensor (41) has a pot-shaped membrane (45) that has a vibrating metal membrane base (49) and a membrane wall (51) with a foam-type structure surrounding the membrane base section by section. The membrane base does not have a foam-type structure. The outer side of the membrane wall has fastening devices (29) for fitting to a vehicle's bumper bar. <??>An Independent claim is also included for a method for producing an ultrasonic sensor.

IPC 8 full level

G10K 9/122 (2006.01)

CPC (source: EP US)

G10K 9/122 (2013.01 - EP US); **G10K 11/002** (2013.01 - EP US)

Citation (examination)

- US 5457352 A 19951010 - MUELLER ROLAND [DE], et al
- US 6587564 B1 20030701 - CUSSON RONALD Y [US]

Cited by

DE102015106044A1; CN104040619A; DE102004036215B4; US8276445B2; WO2013107542A1; WO2008025608A3

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

EP 1310942 A2 20030514; **EP 1310942 A3 20080730**; **EP 1310942 B1 20180725**; DE 10156259 A1 20030522; US 2003089172 A1 20030515; US 6792810 B2 20040921

DOCDB simple family (application)

EP 02020785 A 20020917; DE 10156259 A 20011109; US 28678202 A 20021104