Title (en)

SENSOR ASSEMBLY AND METHOD FOR DETECTING THE SURROUNDINGS OF A VEHICLE

Title (de)

SENSORANORDNUNG UND VERFAHREN ZUR UMFELDERFASSUNG EINES FAHRZEUGS

Title (fr)

SYSTÈME DE DÉTECTION ET PROCÉDÉ DE DÉTECTION DE L'ENVIRONNEMENT D'UN VÉHICULE

Publication

EP 2976164 A2 20160127 (DE)

Application

EP 14703593 A 20140211

Priority

• DE 102013205157 A 20130322
• EP 2014052578 W 20140211

Abstract (en)

[origin: WO2014146828A2] The invention relates to a sensor assembly (1) which comprises a first acoustic transducer assembly (10) having at least one surface formed as a diaphragm (12), the diaphragm (12) being suitable to emit sound waves. An acoustic converter assembly (10) of this type is also designated a flexible resonator and can generate sound waves having a comparatively high acoustic pressure. The sensor assembly (1) according to the invention has a second acoustic transducer assembly (20), comprising a plurality of sensor elements (22a - 22i) which are arranged in an array. Provision is made for the second acoustic transducer assembly (20) to be arranged on a surface of the first acoustic transducer assembly (10) that is formed as a diaphragm (12). According to the invention, the second acoustic transducer assembly (20) comprises sensor elements (22a - 22i) which are formed as electret converter elements. A sensor assembly (1) of this type can be formed in particular as an ultrasound sensor assembly for detecting the surroundings of a vehicle.

IPC 8 full level

B06B 1/02 (2006.01); **G01S 15/04** (2006.01); **G01S 15/93** (2006.01); **H01L 41/31** (2013.01); **H04R 19/01** (2006.01)

CPC (source: EP)

B06B 1/0292 (2013.01); **G01S 7/521** (2013.01); **H04R 19/01** (2013.01); G01S 2015/932 (2013.01); H04R 2499/13 (2013.01)

Citation (search report)

See references of WO 2014146828A2

Cited by

DE102017207859A1; WO2017211537A1

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)

WO 2014146828 A2 20140925; **WO 2014146828 A3 20141204**; CN 105073281 A 20151118; CN 105073281 B 20181214; DE 102013205157 A1 20141009; EP 2976164 A2 20160127

DOCDB simple family (application)

EP 2014052578 W 20140211; CN 201480017488 A 20140211; DE 102013205157 A 20130322; EP 14703593 A 20140211