

Title (en)
DIFFERENTIAL PRESSURE MEASURING CELL

Title (de)
DIFFERENZDRUCKMESSZELLE

Title (fr)
CELLULE DE MESURE DE PRESSION DIFFÉRENTIELLE

Publication
EP 3167264 A1 20170517 (DE)

Application
EP 15726994 A 20150608

Priority
• DE 102014109491 A 20140708
• EP 2015062699 W 20150608

Abstract (en)
[origin: WO2016005120A1] A differential pressure measuring cell (100) comprises a measuring membrane (110); two opposing bodies (140, 170); and one converter (120), wherein the measuring membrane (110) is arranged between the opposing bodies (140, 170) and is connected in a pressure-tight manner to the two opposing bodies, forming in each case one measuring chamber (160, 190), wherein the opposing bodies (140, 170) each have a pressure duct (164, 194) through which a pressure (p1, p2) can be made to act on the respective measuring chamber (160, 190), wherein the converter (120) is provided in order to convert a deformation of the measuring membrane (110), which deformation is dependent on a difference between the pressures (p1, p2), into an electrical signal; wherein the opposing bodies (140, 170) each have a chamber section (142, 172) oriented toward the measuring membrane (110) and a rear wall section (144, 174) oriented away from the measuring membrane (110) with, between these, a decoupling chamber (162, 192), wherein the chamber sections (142, 172) each have an equalizing duct (163, 193) between the measuring chamber (160, 190) and the decoupling chamber (162, 192), wherein the decoupling chamber (162, 192) has a diameter that is at least as large as the diameter of the measuring chamber (160, 190).

IPC 8 full level
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Citation (search report)
See references of WO 2016005120A1

Citation (examination)
US 2014157905 A1 20140612 - TOKUDA TOMOHISA [JP], et al

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