

Title (en)

DEVICE FOR DETERMINING A SPEED OF SOUND OF A SOUND SIGNAL IN A FLUID

Title (de)

VORRICHTUNG ZUM BESTIMMUNG EINER SCHALLGESCHWINDIGKEIT EINES SCHALLSIGNALS IN EINEM FLUID

Title (fr)

DISPOSITIF PERMETTANT DE DÉTERMINER LA VITESSE DU SON DANS UN FLUIDE CONTENU DANS UN RÉSERVOIR DE FLUIDE

Publication

**EP 3087387 A1 20161102 (DE)**

Application

**EP 15738295 A 20150706**

Priority

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Abstract (en)

[origin: WO2016005343A1] The invention relates to a device for determining a speed of sound in a fluid (1) in a fluid container (3), comprising a sound transducer (5), a first reflector element (7), which is arranged in a fluid space (11), at least one additional reflector element (13, 15), which is arranged in the fluid space (11), wherein the first reflector element (7) and the at least one additional reflector element (13, 15) are integrally formed in a reference element (17), and a control unit (19), which is designed to control the sound transducer (5) in such a way that a specified sound signal (S) is produced, to determine a first signal propagation time period between a transmission time and a reception time of a first reflection of the sound signal (S) on the first reflector element (7), to determine a respective additional signal propagation time period between the transmission time and a reception time of a respective additional reflection of the sound signal (S) on the respective additional reflector element (13, 15), and to determine the speed of sound within the fluid (1) on the basis of the first signal propagation time period and the respective additional signal propagation time period of the sound signal (S).

IPC 8 full level

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Citation (search report)

See references of WO 2016005343A1

Citation (examination)

US 2012118059 A1 20120517 - REIMER LAWRENCE B [US], et al

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DOCDB simple family (application)

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