Title (en)

ULTRASONIC SENSOR AND METHOD FOR MEASURING AN OBJECT DISTANCE

Title (de)

ULTRASCHALLSENSOR UND VERFAHREN ZUR MESSUNG EINES OBJEKTABSTANDS

Title (fr)

CAPTEUR D'ULTRASONS ET PROCÉDÉ DE MESURE DE LA DISTANCE D'UN OBJET

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2013139550A1] The invention relates to an ultrasonic sensor (10) for measuring the distance of an object, having a housing (20) and a damping compound (21). The latter at least partly fills the housing (20). The ultrasonic sensor (10) further comprises a membrane (30), a piezoceramic (40) and an electric contact member (22). The electric contact member (22) comprises at least one electrode (23) and a ground electrode (25). Furthermore, the piezoceramic (40) is divided into at least three segments (41, 42, 43), wherein a first segment (41) is connected to the ground electrode (25) and contact is respectively made with a second (42) and a third segment (43) via separate electrodes (23, 24). The invention further relates to a method for measuring an object distance by means of an ultrasonic sensor (10) having a piezoceramic (40), the rear side (31) of which has a first segment (41), a second segment (42) and a third segment (43). The method comprises a method step in which an opposing vibration is introduced into the vibrating membrane (30) by means of the second segment (42).

IPC 8 full level

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CPC (source: CN EP)

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