

Title (en)

MEMS ACOUSTIC TRANSDUCER WITH SILICON NITRIDE BACKPLATE AND SILICON SACRIFICIAL LAYER

Title (de)

AKUSTISCHER MEMS-WANDLER MIT SILICIUMNITRIDRÜCKPLATTE UND SILICIUMOPFERSCHICHT

Title (fr)

TRANSDUCTEUR ACOUSTIQUE DE MICRO-SYSTÈME ÉLECTROMÉCANIQUE PRÉSENTANT UNE PLAQUE SUPPORT À BASE DE NITRURE DE SILICIUM ET UNE COUCHE SACRIFIÉE À BASE DE SILICIUM

Publication

**EP 2969911 A1 20160120 (EN)**

Application

**EP 14775941 A 20140312**

Priority

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- US 2014024147 W 20140312

Abstract (en)

[origin: WO2014159552A1] A microelectromechanical system (MEMS) microphone has a substrate including a backside trench, and a flexible membrane deposited on the substrate extending over the backside trench. The flexible membrane includes a first electrode. A silicon spacer layer is deposited on a perimeter portion of the flexible membrane. The spacer layer defines an acoustic chamber above the membrane and the backside trench. A silicon rich silicon nitride (SiN) backplate layer is deposited on top of the silicon spacer layer extending over the acoustic chamber. The backplate defines a plurality of opening into the acoustic chamber and includes a metallization that serves as a second electrode.

IPC 8 full level

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CPC (source: EP)

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