Title (en)

METHOD FOR PURGING A MULTI-LAYER SACRIFICIAL ETCHED SILICON SUBSTRATE

Title (de)

VERFAHREN ZUM BESEITIGEN EINES VIELLAGIGEN GEÄTZTEN OPFERSUBSTRATES AUS SILIZIUM

Title (fr)

PROCEDE PERMETTANT DE PURGER UN SUBSTRAT SACRIFICIEL MULTICOUCHE AU SILICIUM SOUMIS A UNE ATTAQUE ACIDE

Publication

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Application

EP 96942020 A 19961118

Priority

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Abstract (en)

[origin: WO9722140A2] An accelerometer is fabricated by forming a proofmass and at least one associated hinge in a silicon substrate through a variety of etching and bonding processes. The processes entail ion implantation and formation of an oxide support layer (40, 42, 44) below the proofmass, integrally bonding two complementary proofmass (62) and substrate structures together, and then removing the oxide support layer (40, 42, 44) to leave the proofmass (62) supported by the hinge (67) within the body of silicon material (12). In a bond and etch back process, the wafer (532) is processed, sawed in half, and then bonded together again wherein the complementary halves are joined to obtain the finished accelerometer. During fabrication of the composite wafer (900), the wafer (900) is mounted to a centrifuge (902), and spun to remove etchant. The centrifuge (902) is constructed from a bar shape platform (904) that is rotated by a motor (906). Two compartments (910) are lined with filter paper (912, 914, 916) that contain the composite wafers (900), and are covered by lid (918).

IPC 1-7

H01L 21/00; B44C 1/22

IPC 8 full level

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