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(71) Applicant: **SOITEC** [FR/FR]; PARC TECHNOLOGIQUE DES FONTAINES, CHEMIN DES FRANQUES, 38190 BERNIN (FR).

(72) Inventors: **BROEKAART, Marcel**; c/o SOITEC, PARC TECHNOLOGIQUE DES FONTAINES, CHEMIN DES FRANQUES, 38190 BERNIN (FR). **MAUROIS, Cécile**; c/o SOITEC, PARC TECHNOLOGIQUE DES FONTAINES, CHEMIN DES FRANQUES, 38190 BERNIN (FR). **CHARLES-ALFRED, Cédric**; c/o SOITEC, PARC TECHNOLOGIQUE DES FONTAINES, CHEMIN DES FRANQUES, 38190 BERNIN (FR).

(74) Agent: **IP TRUST**; 8 rue La Fayette, 75009 PARIS (FR).

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(54) **Title:** HETEROSTRUCTURE COMPRISING A ROUGH EXPOSED PORTION OF A SUPPORT SUBSTRATE

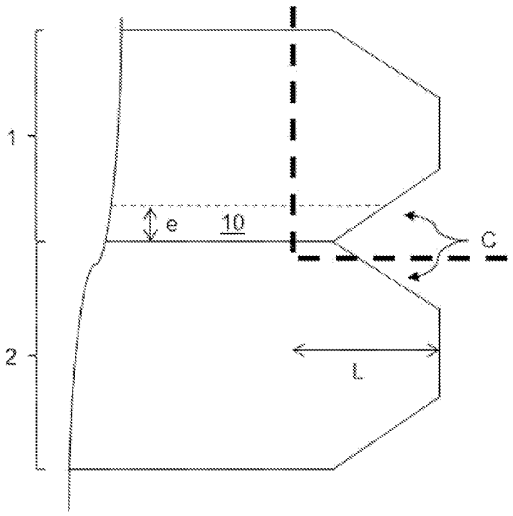


Fig 2A

(57) **Abstract:** The present invention relates to a method of method of manufacturing a heterostructure for the manufacture of a Piezoelectric on Insulator, POI, structure, comprising providing a support substrate, forming a block of a piezoelectric material on or over the support substrate, removing a first peripheral portion of the block of a piezoelectric material and a first peripheral portion of the support substrate to obtain an exposed portion of the support substrate with a roughness with a root-mean-square height, Sq, in the range of 0.4 μm to 0.8 μm, thinning the block of a piezoelectric material after removal of the first peripheral portion of the block of a piezoelectric material to obtain a piezoelectric substrate.

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