

Title (en)

ETCHING PROCESS FOR MICROMACHINING CRYSTALLINE MATERIALS AND DEVICES FABRICATED THEREBY

Title (de)

ÄTZPROZESS ZUR MIKROBEARBEITUNG VON KRISTALLINEN MATERIALIEN UND DADURCH HERGESTELLTE VORRICHTUNGEN

Title (fr)

PROCEDE DE GRAVURE PAR ATTAQUE CHIMIQUE POUR LE MICRO-USINAGE DE MATERIAUX CRISTALLINS ET DISPOSITIFS AINSI FABRIQUES

Publication

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Application

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Abstract (en)

[origin: WO03008139A2] The present invention provides an optical microbench having intersecting structures etched into a substrate. In particular, microbenches in accordance with the present invention include structures having a planar surfaces formed along selected crystallographaich planes of a single crystal substrate. Two of the structures provided are an etch-stop pit and an anisotropically etched feature disposed adjacent the etch-stop pit. At the point of intersection between the etch-stop pit and the anisotropically etched feature the oreintation of the crystallographic planes is maintained. The present invention also provides a method for micromachining a substrate to form an optical microbench. The method comprises the steps of forming an etch-stop pit and forming an anisotropically etched feature adjacent the etch-stop pit. The method may also comprise coating the surfaces of the etch-stop it with an etch-stop layer.

IPC 8 full level

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Citation (search report)

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- See references of WO 03008139A2

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