Title (en)

METHOD FOR MAKING A PLANAR SUSPENDED MICROSTRUCTURE, USING A SACRIFICIAL LAYER OF POLYMER MATERIAL AND RESULTING COMPONENT

Title (de)

VERFAHREN ZUR HERSTELLUNG MIKROMECHANISCHER BAUTEILE UNTER VERWENDUNG EINER POLYMERSCHICHT UND NACH DIESEM VERFAHREN HERGESTELLTE BAUTEILE

Title (fr)

PROCEDE DE REALISATION D UNE MICRO-STRUCTURE SUSPENDUE PLANE , UTILISANT UNE COUCHE SACRIFICIELLE EN MATERIAU POLYMERE ET COMPOSANT OBTENU

Publication

EP 1572578 A2 20050914 (FR)

Application

EP 03799623 A 20031218

Priority

- FR 0303789 W 20031218
- FR 0216088 A 20021218

Abstract (en)

[origin: FR2849016A1] Production of integrated micro-system components comprises, successively, depositing a sacrificial polymer layer (2), deposition, on at least a part of the substrate (1) and of the leading surface of the sacrificial layer, of an embedding layer (6) of thickness greater than that of the sacrificial layer and planation so the sacrificial layer and the embedding layer form a common plane surface. A layer (3) for the formation of a suspended structure (5) is deposited on the leading surface of this common plane surface. The planation may include a mechano-chemical polishing and engraving of the embedding layer. Engraving of the sacrificial layer uses a mask, formed on the leading surface of a polymer layer, eliminated during planation. An Independent claim is also included for: a component produced by this method, in which the two surfaces of the suspended structure formation layer are totally flat.

IPC 1-7

B81C 1/00; B81B 3/00

IPC 8 full level

B81B 3/00 (2006.01); **B81C 1/00** (2006.01)

CPC (source: EP)

B81C 1/00611 (2013.01); B81C 2201/0108 (2013.01); B81C 2201/0125 (2013.01); H01L 2924/01082 (2013.01)

Citation (search report)

See references of WO 2004056698A2

Citation (examination)

US 5636070 A 19970603 - JI JEONG-BEOM [KR], et al

Designated contracting state (EPC)

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