

Title (en)

METHOD FOR OBTAINING SELF-ALIGNED OPENINGS, IN PARTICULAR FOR MICROTIP FLAT DISPLAY FOCUSING ELECTRODE

Title (de)

VERFAHREN ZUR ERLANGUNG VON AUTOMATISCH AUSGERICHTETEN ÖFFNUNGEN, INSBESONDERE ZUR FOKUSSIERELEKTRODE FÜR EINEN FLACHEN MIKROSPITZEN-BILDSCHIRM

Title (fr)

METHODE D'OBTENTION D'OUVERTURES AUTO-ALIGNEES, EN PARTICULIER POUR ELECTRODE DE FOCALISATION POUR ECRAN PLAT A MICROPOINTES

Publication

EP 1000434 A1 20000517 (FR)

Application

EP 99922224 A 19990525

Priority

- FR 9901219 W 19990525
- FR 9806608 A 19980526

Abstract (en)

[origin: FR2779243A1] The invention concerns a method for producing a group of openings mutually positioned with accuracy on a structure and comprising, for example, a first opening produced in a first layer and a second opening produced in a second layer covering the first layer, the first opening being located inside the second opening. The method consists in: depositing on the first layer (41) a light-sensitive resin layer; etching said resin by photolithography, using a single mask, to leave on the first layer (41) a resin island (42) per group of openings, the resin island outer limit corresponding to the second opening, the resin island comprising an opening (43) corresponding to the first opening; vacuum depositing, on the first layer (41) and the remaining resin, a material (44) designed to constitute the second layer, said deposit being produced under a projection such that the first layer part (45) located at the resin island (42) opening (43) bottom is not covered by said deposit; etching the first layer (41) starting from the island (42) opening (43) to obtain the first opening (46) in the first layer; eliminating the remaining resin and the material covering it to obtain the second opening in the second layer.

IPC 1-7

H01J 9/02

IPC 8 full level

G03F 7/20 (2006.01); **G03F 7/40** (2006.01); **H01J 9/02** (2006.01)

CPC (source: EP US)

H01J 9/025 (2013.01 - EP US); **H01J 2329/00** (2013.01 - EP US)

Citation (search report)

See references of WO 9962094A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

FR 2779243 A1 19991203; **FR 2779243 B1 20000707**; EP 1000434 A1 20000517; JP 2002517066 A 20020611; US 6276981 B1 20010821; WO 9962094 A1 19991202

DOCDB simple family (application)

FR 9806608 A 19980526; EP 99922224 A 19990525; FR 9901219 W 19990525; JP 2000551413 A 19990525; US 46344400 A 20000404