

Title (en)

METHOD FOR PRODUCING RESIST SUBSTRATES

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES RESISTSUBSTRATS

Title (fr)

PROCEDE DE REALISATION D'UN SUBSTRAT DE RESERVE

Publication

**EP 1599764 A2 20051130 (DE)**

Application

**EP 04713886 A 20040224**

Priority

- EP 2004001817 W 20040224
- DE 10308317 A 20030226

Abstract (en)

[origin: WO2004077161A2] The invention relates to a method for producing a substrate provided with a resist layer in the form of a relief structure comprising a diffraction structure. Said resist layer interacts with at least areas provided with a conductive layer which diffuses primary electrons and/or produces secondary electrons when the resist layer is exposed to an electron beam effect. For the inventive method, the material of the resist and conductive layers and exposition parameters are co-ordinated therebetween in such a way that the resist layer is also exposed outside the area exposed to the electron beam in such a way that the lateral parts of the relief structure hold an inclined shape.

IPC 1-7

**G03F 7/09**; H01J 37/317; G03F 7/00; G03F 7/20

IPC 8 full level

**G02B 5/18** (2006.01); **G03F 7/00** (2006.01); **G03F 7/09** (2006.01); **G03F 7/20** (2006.01); **G06K 19/16** (2006.01)

CPC (source: EP US)

**G02B 5/1857** (2013.01 - EP US); **G03F 7/0005** (2013.01 - EP US); **G03F 7/09** (2013.01 - EP US); **G03F 7/2059** (2013.01 - EP US); **G03F 7/2061** (2013.01 - EP US); **G06K 19/16** (2013.01 - EP US); G03H 1/0244 (2013.01 - EP US); G03H 1/0891 (2013.01 - EP US); G03H 2001/0478 (2013.01 - EP US); G03H 2224/04 (2013.01 - EP US); G03H 2260/14 (2013.01 - EP US); G03H 2260/63 (2013.01 - EP US); Y10S 430/143 (2013.01 - EP)

Citation (search report)

See references of WO 2004077161A2

Citation (examination)

DATABASE INSPEC [online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; 1995, WELLS G M ET AL: "X-ray mask fabrication process", Database accession no. 5147491 & PHOTOMASK AND X-RAY MASK TECHNOLOGY II 20-21 APRIL 1995 KAWASAKI CITY, JAPAN, vol. 2512, PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING SPIE-INT. SOC. OPT. ENG. USA, pages 167 - 171, ISSN: 0277-786X

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 10308317 A1 20040909**; AU 2004214638 A1 20040910; AU 2004214638 B2 20090723; CN 1754128 A 20060329; CN 1754128 B 20110928; EP 1599764 A2 20051130; RU 2005129551 A 20070420; RU 2334261 C2 20080920; US 2006257583 A1 20061116; US 7655381 B2 20100202; WO 2004077161 A2 20040910; WO 2004077161 A3 20050127

DOCDB simple family (application)

**DE 10308317 A 20030226**; AU 2004214638 A 20040224; CN 200480005071 A 20040224; EP 04713886 A 20040224; EP 2004001817 W 20040224; RU 2005129551 A 20040224; US 54526104 A 20040224