

Title (en)

LITHOGRAPHY USING QUANTUM ENTANGLED PARTICLES

Title (de)

INTERFERENZLITHOGRAPHIE MITTELS QUANTENMECHANISCH VERSCHRÄNKTER PARTIKEL

Title (fr)

LITHOGRAPHIE UTILISANT DES PARTICULES DE QUANTA ENTREMELEES

Publication

**EP 1203265 A4 20060802 (EN)**

Application

**EP 00961318 A 20000519**

Priority

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- US 39345199 A 19990910

Abstract (en)

[origin: WO0075730A1] A system of etching using quantum entangled particles to get shorter interference fringes. An interferometer (100) is used to obtain an interference fringe. N entangled photons are input to the interferometer (100). This reduces the distance between interference fringes by n, where again n is the number of entangled photons.

IPC 1-7

**G03F 7/20**

IPC 8 full level

**G03F 7/00** (2006.01); **G03F 7/20** (2006.01)

CPC (source: EP)

**G03F 7/001** (2013.01); **G03F 7/2051** (2013.01); **G03F 7/70375** (2013.01); **G03F 7/70408** (2013.01)

Citation (search report)

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- [Y] US 5759744 A 19980602 - BRUECK STEVEN R J [US], et al
- [XY] FONSECA E J S ET AL: "Measurement of the de Broglie wavelength of a multiphoton wave packet", PHYSICAL REVIEW LETTERS APS USA, vol. 82, no. 14, 5 April 1999 (1999-04-05), pages 2868 - 2871, XP002385405, ISSN: 0031-9007
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- [X] OGAWA T ET AL: "Sub-quarter micron optical lithography with practical super resolution technique", PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING USA, vol. 2440, 1995, pages 772 - 783, XP002386016, ISSN: 0277-786X
- See references of WO 0075730A1

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