

Title (en)
METHOD AND APPARATUS FOR DATA HIERARCHY MAINTENANCE IN A SYSTEM FOR MASK DESCRIPTION

Title (de)
METHODE UND GERÄT ZUR STRUKTURIERUNG HIERARCHISCHER DATEN IN EINER MASKEN-DEFINITION

Title (fr)
PROCEDE ET DISPOSITIF SERVANT A MAINTENIR UNE HIERARCHIE DE DONNEES DANS UN SYSTEME DE DESCRIPTION DE MASQUE

Publication
EP 1023639 A4 20090429 (EN)

Application
EP 98947103 A 19980917

Priority

- US 9819438 W 19980917
- US 5930697 P 19970917
- US 93192197 A 19970917
- US 6954997 P 19971212
- US 13099698 A 19980807
- US 15439798 A 19980916
- US 15378398 A 19980916

Abstract (en)
[origin: WO9914638A1] A method for performing design rule checking on an optical proximity correction (OPC) corrected or otherwise corrected designs is described. The corrected design is accessed to generate a simulated image (2010). The simulated image corresponds to a simulation of an image which would be printed on a wafer if the wafer was exposed to an illumination source directed through the corrected design (2020). The characteristics of the illuminaiton source are determined by a set of lithography parameters. In creating the image, additional characteristics can be used to simulate portions of the fabrication process. The simulated image can then be used by the design rule checker. Importantly, the simulated image can be processed to reduce the number of vertices in the simulated image, relative to the number of vertices in the OPC corrected design layout (2020). Also, the simulated image can be compared with an ideal layout image, the results of which can then be used to reduce the amount of information that is needed to perform the design rule checking.

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IPC 8 full level
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G03F 1/36 (2013.01 - EP); **G03F 7/70116** (2013.01 - KR); **H01L 27/0207** (2013.01 - KR)

Citation (search report)

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- [X] HARAFUJI K ET AL: "A NOVEL HIERARCHICAL APPROACH FOR PROXIMITY EFFECT CORRECTION IN ELECTRON BEAM LITHOGRAPHY", IEEE TRANSACTIONS ON COMPUTER AIDED DESIGN OF INTEGRATEDCIRCUITS AND SYSTEMS, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 12, no. 10, 1 October 1993 (1993-10-01), pages 1508 - 1514, XP000452154, ISSN: 0278-0070
- See references of WO 9914636A1

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DOCDB simple family (application)
US 9819510 W 19980917; AU 9396098 A 19980917; AU 9396198 A 19980917; AU 9775198 A 19980917; EP 98947103 A 19980917; EP 98951922 A 19980917; JP 2000512110 A 19980917; JP 2000512112 A 19980917; KR 20007002869 A 20000317; KR 20007002873 A 20000317