



(11) **EP 1 903 596 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:

Corrected version no 1 (W1 A2)

Bibliography INID code(s) 72

(51) Int Cl.:

H01J 37/317 ^(2006.01)

H01J 37/305 ^(2006.01)

H01J 37/28 ^(2006.01)

(48) Corrigendum issued on:

02.07.2008 Bulletin 2008/27

(43) Date of publication:

26.03.2008 Bulletin 2008/13

(21) Application number: **07018076.5**

(22) Date of filing: **14.09.2007**

(84) Designated Contracting States:

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

Designated Extension States:

AL BA HR MK RS

• **Panteleit, Friedhelm, Dr.**

73431 Aalen (DE)

• **Clauss, Tobias**

89518 Heidenheim (DE)

• **Budach, Michael**

63456 Hanau (DE)

(30) Priority: **19.09.2006 DE 102006043895**

(71) Applicant: **Carl Zeiss NTS GmbH**

73447 Oberkochen (DE)

(74) Representative: **Schorr, Frank Jürgen et al**

Diehl & Partner,

Augustenstrasse 46

80333 München (DE)

(72) Inventors:

• **Bihl, Johannes**

73431 Aalen (DE)

(54) **Electron microscope for inspecting and processing of an object with miniaturized structures and method thereof**

(57) The invention relates to a method for manufacturing an object with miniaturized structures, comprising: Processing the object by supplying reaction gas during concurrent directing an electron beam onto a location to be processed, to deposit material or ablate material; and inspecting the object by scanning the surface of the object with an electron beam and leading generated backscattered electrons and secondary electrons to an energy selector, reflecting the secondary electrons from the energy selector, detecting the backscattered electrons passing the energy selector and generating an electron microscopic image of the scanned region in dependence on the detected backscattered electrons; and examining the generated electron microscopic image and deciding whether further depositing or ablating of material should be carried out. Furthermore, the invention relates to an electron microscope and a processing system which are adapted for performing the method.

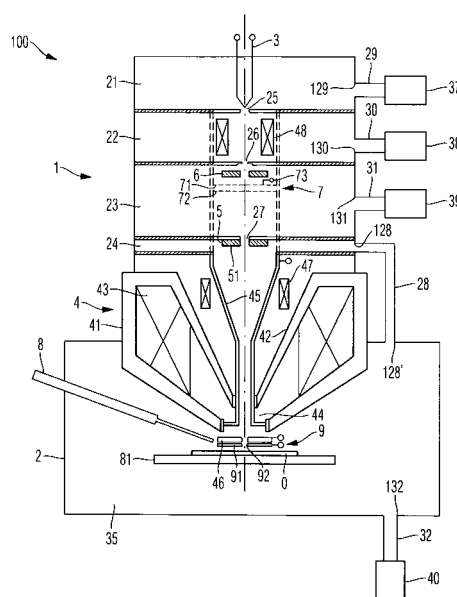


Fig. 1