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(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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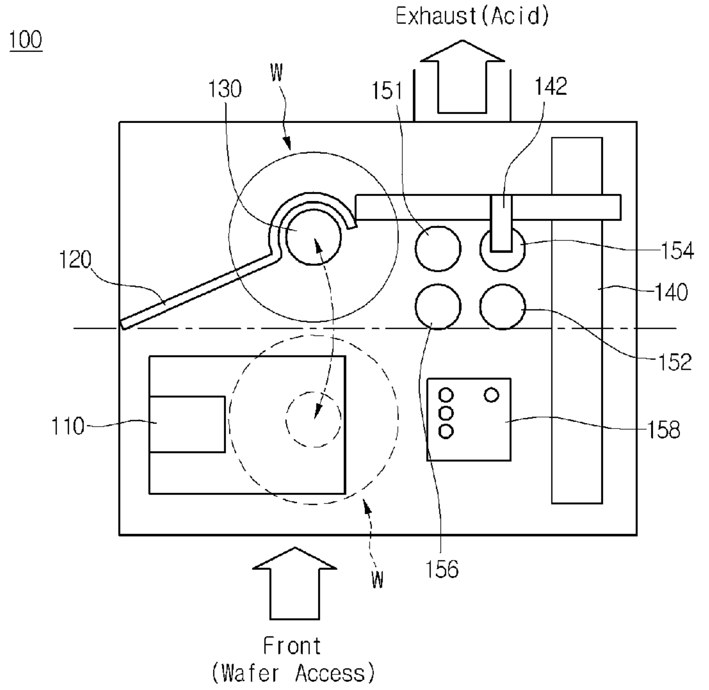
— *with international search report (Art. 21(3))*

[Continued on next page]

(54) **Title**: APPARATUS FOR MEASURING IMPURITIES ON WAFER AND METHOD OF MEASURING IMPURITIES ON WAFER

[Fig. 1]



(57) **Abstract**: Provided are an apparatus for measuring impurities on a wafer and a method of measuring impurities on a wafer. The apparatus includes: a wafer aligning device for aligning a wafer; a loading robot for moving and loading the aligned wafer; a rotation stage for rotating the loaded wafer; a scan robot for holding a natural oxide layer etching solution for the wafer and a metallic impurity recovery solution; and a container for receiving a predetermined etching solution and a recovery solution, wherein the scan robot removes an oxide layer on an edge region of the wafer.

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

H01L 21/66(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H01L 21/66; H01L 21/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: impurit*, measure*, solution, wafer, substrate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 10-2002-0074757 A (SAMSUNG ELECTRONCS CO., LTD.) 04 October 2002 See abstract; figures 1-7; page 2, line 44 - page 5, line 51	1-6,11-12
Y	KR 10-2004-0001918 A (HYNIX SEMICONDUCTOR INC.) 07 January 2004 See abstract; figures 1-3; page 2 line 46- page 3 line 55	1-6,11-12
A	KR 10-2004-0055934 A (SAMSUNG ELECTRONICS CO., LTD.) 30 June 2004 See abstract; figure 9; page 3, line 10 - page 7, line 44	1-12

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search 22 OCTOBER 2012 (22.10.2012)	Date of mailing of the international search report **23 OCTOBER 2012 (23.10.2012)**
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Information on patent family members

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KR 10-2004-0055934 A	30.06.2004	US 2004-0131783 A1	08.07.2004