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(71) Applicant: **International Business Machines Corporation**
Armonk, N.Y. 10504 (US)

(72) Inventor: **Ronay, Maria**
Briarcliff Manor, New York 10510 (US)

(74) Representative: **Burt, Roger James, Dr.**
IBM United Kingdom Limited
Intellectual Property Department
Hursley Park
Winchester Hampshire SO21 2JN (GB)

(54) A method of chemically-mechanically polishing an electronic component

(57) A method of chemically polishing aluminum from a semiconductor wafer to leave a wiring pattern thereon. The surface of the aluminum in aqueous environment consists of hydrated alumina; upon contact with the hydrated silica particles of a polishing slurry at neutral pH, the surface alumina is transferred to the surface of the silica by aluminosilicate formation removing the alumina layer by layer by contact chemical reaction. Wafers thus polished have nearly scratch-free and corrosion-free polished aluminum lines in an insulator surface.

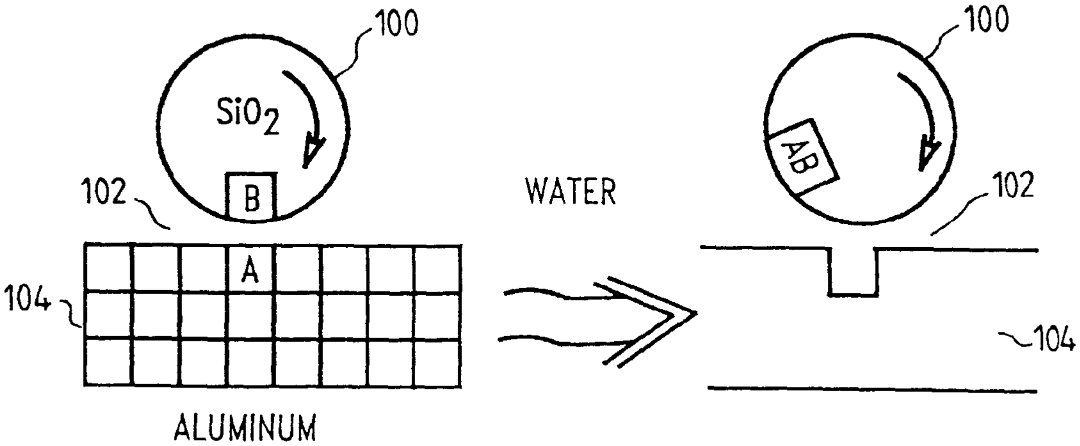

FIG. 2 B

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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 7792

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	US 4 944 836 A (BEYER KLAUS D ET AL) 31 July 1990 * column 2, line 59 - column 3, line 17 * * column 7, line 2 - column 7, line 29 * * claim 5; figure 3 * ---	1-3,7,10	H01L21/768 H01L21/304
Y	US 5 328 553 A (POON STEPHEN S) 12 July 1994 * column 4, line 60 - column 5, line 11 * * claim 1; figures 5,6 * ---	1-3,7,10	
A	US 4 789 648 A (CHOW MELANIE M ET AL) 6 December 1988 * column 3, line 15 - line 57; figures 4-6 * ---	1-3	
A	US 5 352 277 A (SASAKI SHIGEO) 4 October 1994 * column 16, line 39 - line 68 * ---	4	
A	EP 0 379 361 A (MINNESOTA MINING & MFG) 25 July 1990 * claim 4 * ---	8	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	EP 0 685 877 A (SHINETSU HANDOTAI KK) 6 December 1995 * column 2, line 50 - column 3, line 18 * -----	10	H01L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	24 April 1997	Hammel, E

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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