(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 22 August 2002 (22.08.2002)

(10) International Publication Number WO 02/065538 A3

(51) International Patent Classification7: H01L 21/321, C11D 11/00

(21) International Application Number: PCT/US02/03422

(22) International Filing Date: 6 February 2002 (06.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

09/781,859 12 February 2001 (12.02.2001) US

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(81) Designated States (national): JP, SG.

(84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:

with international search report

(88) Date of publication of the international search report: 13 February 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

02/065538 A3

(54) Title: POST CHEMICAL-MECHANICAL PLANARIZATION (CMP) CLEANING COMPOSITION

(57) Abstract: A cleaning solution for cleaning microelectronic substrates, particularly for post-CMP or via formation cleaning. The cleaning solution comprises a quaternary ammonium hydroxide, an organic amine, a corrosion inhibitor, optionally an organic acid, and water. A preferred cleaning solution comprises tetramethylammonium hydroxide, monoethylanolamine, gallic acid ascorbic acid, and water with the alkalinity of the cleaning solution greater then 0.073 milliequivalents base per gram of solution.

INTERNATIONAL SEARCH REPORT

International Application No PCT/US 02/03422

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L21/321 C11D11/00

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

B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ \text{IPC} & 7 & \text{H01L} & \text{C11D} \\ \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

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A	page 7, paragraph 1 -page 8, paragraph 2 claims 1-7; examples 11,12	2–8
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P,X	WO 01 95381 A (ESC INC) 13 December 2001 (2001-12-13) page 4, line 1 -page 5, line 9 claims 1-8; examples 2,3,5,6	1,7
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 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "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 4 September 2002	Date of mailing of the international search report 20/09/2002	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Bertran Nadal, J	

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International Application No
PCT/US 02/03422

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