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Victor, Maurice; 8 Harbour Heights, Gloucester, MA 01930 (US). GRAF, Michael, Anthony; 3 Locust Terrace, Cambridge, MA 02138 (US). RATHMELL, Robert, Day; 5 Twin Pond Circle, Exeter, NH 03833 (US).

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(74) Agents: BURKE, Steven, D. et al.; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).

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(71) Applicant: AXCELIS TECHNOLOGIES, INC.
[US/US]; 55 Cherry Hill Drive, Beverly, MA 01915 (US).

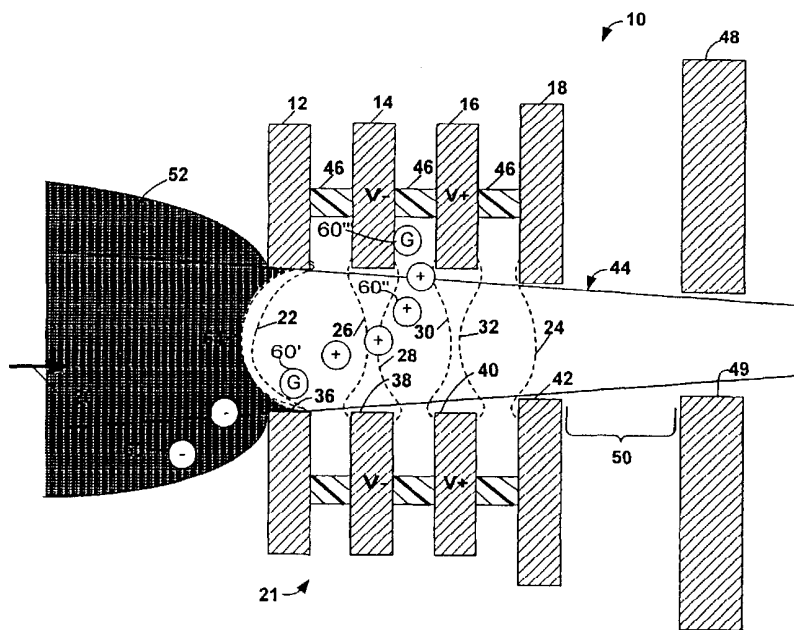
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(71) Applicant (for CA only): EATON LIMITED [GB/GB];
Norfolk Street, P.O. Box 22, Worsley Road North, Worsley, Manchester M28 3ET (GB).

(72) Inventors: HARRINGTON, Eric, Ryan; 42 Market Street #1, Ipswich, MA 01938 (US). BENVENISTE,

[Continued on next page]

(54) Title: ELECTROSTATIC TRAP FOR PARTICLES ENTRAINED IN AN ION BEAM



(57) Abstract: A system (10) for inhibiting the transport of contaminant particles (60) with an ion beam (44) includes a pair of electrodes (14, 16) that provide opposite electric fields (26, 28, 30, 32) through which the ion beam (44) travels. A particle (60) entrained in the ion beam (44) is charged to a polarity matching the polarity of ion beam (44) when traveling through a first of the electric fields (26, 28). The downstream electrode (16) provides another electric field (30, 32) for repelling the positively charged particle (60) away from the direction of beam travel.



WO 02/19377 A3



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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)
 IPC 7 H01J

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)
 WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 148 034 A (KOIKE YUKIO) 15 September 1992 (1992-09-15)	1,4,8, 13,16
X	column 3, line 55 -column 5, line 12 ---	19
A	WO 00 26938 A (ASECHI HIROSHI ;ITO HIROYUKI (JP); APPLIED MATERIALS INC (US)) 11 May 2000 (2000-05-11) & EP 1 130 623 A (APPLIED MATERIALS INC) 5 September 2001 (2001-09-05) paragraph '0033! - paragraph '0034! -----	1,4,8, 13,16,19

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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)	*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.
O document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

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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 Schaub, G
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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