Title: A METHOD OF IMPLANTING A SUBSTRATE AND AN ION IMPLANTER FOR PERFORMING THE METHOD

Abstract: An implanter provides two-dimensional scanning of a substrate relative to an implant beam so that the beam draws a raster of scan lines on the substrate. The beam current is measured at turnaround points off the substrate and the current value is used to control the subsequent fast scan speed so as to compensate for the effect of any variation in beam current on dose uniformity in the slow scan direction. The scanning may produce a raster of non-intersecting uniformly spaced parallel scan lines and the spacing between the lines is selected to ensure appropriate dose uniformity.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J37/317    H01J37/304

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

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>A</td>
<td>US 5 898 179 A (FARLEY MARVIN ET AL) 27 April 1999 (1999-04-27) cited in the application column 8, line 14 -column 11, line 43; figure 5</td>
<td>1,11,21, 24</td>
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<td>A</td>
<td>WO 00 05744 A (LANE LESLIE ; MITCHELL ROBERT JOHN (GB); POVALL SIMON HERBERT (GB);) 3 February 2000 (2000-02-03) cited in the application</td>
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Patent family members are listed in annex.

* Special categories of cited documents:
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Date of the actual completion of the International search 4 November 2003
Date of mailing of the International search report 12/11/2003

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