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(54) Title: ARRAY OF PERMANENT MAGNETS FOR THE ROTOR OF A MAGNETIC BEARING AND METHOD OF ASSEMBLY OF THE ARRAY

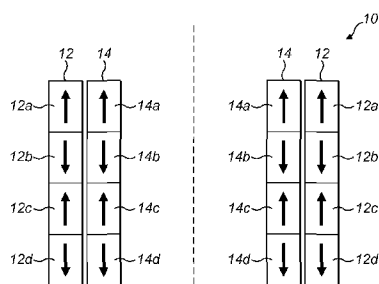


FIG. 1

(57) Abstract: Stray magnetic fields created by non-symmetrical magnetisation of the permanent magnets in a rotating magnet array of a magnetic bearing assembly, when used in turbo molecular pumps, can cause significant problems to devices such as scanning electron microscopes. In order to minimise the stray fields, at least the dipole and quadrupole moments of each magnet in the array is first measured. The magnets in the array are then arranged relative to one another such that both the dipole and quadrupole moments are minimised, thus minimising the stray magnetic field when the magnet array rotates in the turbomolecular pump.

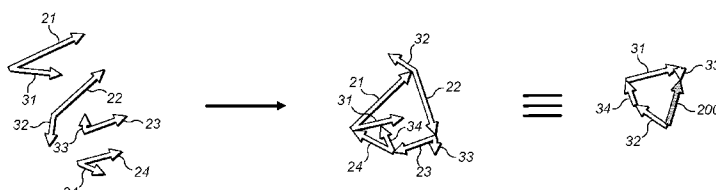


FIG. 6



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A. CLASSIFICATION OF SUBJECT MATTER
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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)
F16C G01R H01F
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 practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	DE 196 07 841 A1 (BALZERS PFEIFFER GMBH [DE] PFEIFFER VACUUM GMBH [DE]) 4 September 1997 (1997-09-04) the whole document -----	1-4
A	US 2004/189123 A1 (NUSSER PETER [DE] ET AL) 30 September 2004 (2004-09-30) paragraph [0001] - paragraph [0032] paragraph [0046] - paragraph [0051]; figures 1-5 -----	1-5
A	US 2009/039995 A1 (KIPP RONALD [US] ET AL) 12 February 2009 (2009-02-12) the whole document -----	1-6
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Further documents are listed in the continuation of Box C.

See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 30 32 938 A1 (THYSSEN EDELSTAHLWERKE AG [DE]) 15 April 1982 (1982-04-15) the whole document	3-6
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INTERNATIONAL SEARCH REPORT

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International application No PCT/GB2012/050975

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