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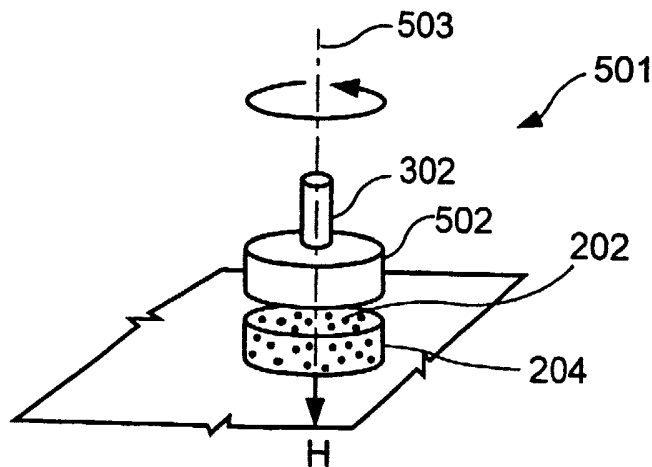
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(54) Title: METHOD AND ARRANGEMENT OF ROTATING MAGNETICALLY INDUCIBLE PARTICLES



(57) Abstract: A device and method for rotating magnetically inducible particles (204) suspended in a fluid by rotating a multidirectional magnetic field through the suspended particles. A rare earth magnet (502) is positioned adjacent to the suspended particles and oriented such that the axis of a magnetic field generated by the magnet passes through the suspension. The magnetic flux lines of the magnet's field radiate in multiple directions through the suspended particles, them to form long multidirectional chains (601). The magnet and the chains of suspended particles (601) are rotated with respect to one another, the axis of the rotation (503) being approximately parallel to

the magnetic axis of the multidirectional magnetic field. This causes the particle chains (601) to rotate about the magnetic axis, thus mixing the fluid.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/19257

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B01F 13/08

US CL : 366/273, 274

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)

U.S. : 366/273, 274

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)
EAST: search terms: microspheres, magnetic particles, magnetic powder, mix, magnet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,468,616 A (COULTER et al) 21 November 1995 (21.11.1995), see figures 8, column5, lines 41-60.	1-2, 16-17
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Y		3-8, 18-23
Y	US 2,932,493 A (JACOBS) 12 April 1960 (12.04.1960), see element 15 and 17.	3-8, 18-23
A	US 2,735,232 A (SIMJIAN) 21 February 1956 (21.02.1956), see entire document.	1-32
A	US 3,848,363 A (LOVESS et al) 19 November 1974 (19.11.1974), see entire document.	1-32
A	US 2001/0007312 A1 (SIDDIQI) 12 JULY 2001 (12.07.2001), see entire document.	1-32
A	US 3,869,251 A (TSANTKER et al) 04 March 1975, (04.03.1975), see entire document.	1-32

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" 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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