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MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
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Notes on Codes and Abbreviations" appearing at the beginning
of each regular issue of the PCT Gazette.*

(54) Title: NOVEL NANOMAGNETIC PARTICLES

(57) Abstract: A composition containing nanomagnetic particles. The nanomagnetic particles have an average particle size of less than about 100 nanometers, a saturation magnetization of from about 2 to about 2,000 electromagnetic units per cubic centimeter, a phase transition temperature of from about 40 to about 200 degrees Celsius, and a squareness of from about 0.05 to about 1.0; the average coherence length between adjacent nanomagnetic particles is less than about 100 nanometers; and the nanomagnetic particles are at least triatomic.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09980

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **H01F 1/00**(2006.01)

USPC: 252/62.51R
 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. : 252/62.51R

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)

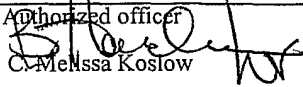
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,4151,220 A (ZIOLO et al) 17 September 2002 (17.09.2002), col. 5, line 54-col. col. 16, line 62.	1-6,9,10,13,17,18,20-23,29,30,32-41,53 and 85
X	US 5,080,718 A (SULLIVAN et al) 14 January 1992 (14.01.1992), col. 3, line 65-col. 4, line 58.	1-10,13,17-19,29,34,36-41,53

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 13 October 2006 (13.10.2006)	Date of mailing of the international search report 22 NOV 2006
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09980

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 12,14-16,24-28,42-52,54-84 and 86-98
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
Claims 14-16,42-52,54-57,76-84 and 86-98 are not supported by the specification and claims 12, 24-28 and 58-75 are so unclear it cannot be determined what is being claimed

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
 2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
 3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

 4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
 - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - No protest accompanied the payment of additional search fees.