(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 March 2009 (12.03.2009)

PCT

(10) International Publication Number
WO 2009/031129 A3

(51) International Patent Classification:
*G01N 15/06* (2006.01) *G01N 35/00* (2006.01)
*G01N 27/72* (2006.01) *G01N 27/00* (2006.01)
*G01N 33/543* (2006.01)

(21) International Application Number:
PCT/IB2008/055606

(22) International Filing Date:
5 September 2008 (05.09.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/970,678 7 September 2007 (07.09.2007) US
07 57437 7 September 2007 (07.09.2007) FR

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*[Continued on next page]*

(54) **Title:** METHOD AND DEVICE FOR ANALYSING A MAGNETIC MATERIAL, AND ANALYSER INCLUDING THE DEVICE

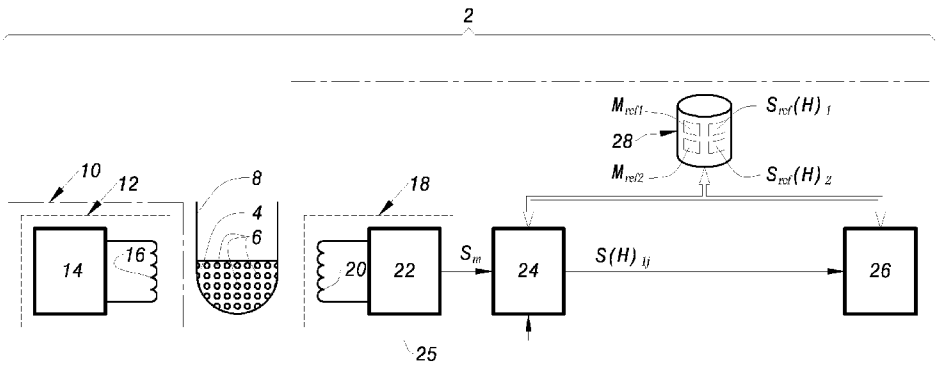



*Fig. 1*

(57) **Abstract:** This method of analysing a magnetic material (6) includes : b) the construction (48) of a signature S(H) of the magnetic material formed from at least two points $S(H)_P$, this construction including obtaining the value of each point $S(H)_p$ by measuring, over each period fraction, the amplitude and possibly the phase of a harmonic of the magnetic field induced in the magnetic material, said amplitude and phase being obtained in response only to an excitation during this period fraction, the harmonic having a frequency $nf_H$, where n is a non-zero positive integer; and c) the identification (72) and/or the determination (80; 90) of the mass of the magnetic material from several points of the constructed signature S (H).

WO 2009/031129 A3

**(88) Date of publication of the international search report:**
6 August 2009

# INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2008/055606

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01N15/06 G01N27/72 G01N33/543 G01N35/00 G01N27/00

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)
G01N

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)
EPO-Internal, WPI Data, BIOSIS, EMBASE, INSPEC, COMPENDEX

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 4 June 2009 | 17/06/2009 |

| Name and mailing address of the ISA/ | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040,<br>Fax: (+31-70) 340-3016 | Johnson, Keith |

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International application No
PCT/IB2008/055606

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