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(71) Applicant *(for all designated States except US)*: **INDESIT COMPANY S.P.A.** [IT/IT]; Viale Aristide Merloni, 47, I-60044 Fabriano (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **MARCHITTO, Giuseppe** [IT/IT]; Via Città di Gap 16, I-10064 Pinerolo (IT). **GAUDIANO, Nicola** [IT/IT]; Via Peyron 15, I-10143 Torino (IT).

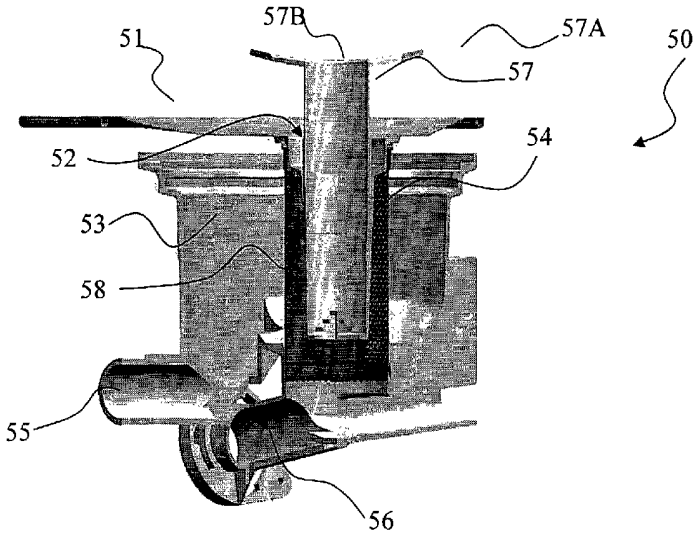
(74) Agent: **DINI, Roberto**; Merloni Elettrodomestici S.p.A., Ufficio Brevetti e Marchi, Via Pinerolo, 25, I-10060 None (TO) (IT).

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[Continued on next page]

(54) Title: IMPROVED WASH METHOD, AND DISHWASHING MACHINE IMPLEMENTING SUCH A METHOD



(57) Abstract: The present invention relates to a wash method in a dishwashing machine, of a type suitable for implementing at least one phase for checking the value of the pressure (12, 15, 17, 36) existing in one or more points of the hydraulic circuit of said dishwashing machine through sensor means in order to carry out subsequent actions (13, PF, 16, 18) of said method (1), which are commanded by a machine management and control system suitable for detecting and processing information. The peculiarity of the wash method consists in the fact that it comprises a special wash cycle (PF) which is capable of, when said sensor means in a pressure value check phase (12, 15, 17) provide values which are below a certain threshold suitable for ensuring a sufficient head to a wash pump of said hydraulic circuit in order to carry out an effective washing of the kitchenware, accomplishing hydraulic pressure conditions similar to those attainable in normal operating conditions, i.e. with filters (51, 52, 54) of the same hydraulic circuit free from residues or solid dirt.

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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/001310

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A47L15/46 A47L15/00 A47L15/42

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 A47L

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, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 659 381 A (ZANUSSI ELETTRODOMESTICI) 28 June 1995 (1995-06-28) column 3, line 1 - column 9, line 4	1-11, 15-19, 21-24,27
X	WO 01/82769 A (FAVRET UGO ; ELECTROLUX ZANUSSI ELETTRODOME (IT)) 8 November 2001 (2001-11-08) page 2, line 20 - page 3, line 2 page 4, line 26 - page 5, line 16	1-4, 17-19, 21,22, 25,26
A	US 4 673 441 A (MEYERS THEODORE F) 16 June 1987 (1987-06-16) column 3, line 31 - column 4, line 30	12-14,20

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

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"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)

"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

"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

"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

"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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
22 September 2004	12. 01. 2005

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Martin Gonzalez, G

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/001310

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 852 929 A (BOSCH SIEMENS HAUSGERAETE) 15 July 1998 (1998-07-15) column 3, line 15 - column 9, line 20 column 11, lines 30-45	1-3
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2004/001310

Box 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.:
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:

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 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:

see additional sheet

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 an additional fee, this Authority did not invite payment of any additional fee.

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.:

1-27

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-27

   Wash method for ensuring sufficient pressure head to a wash pump acting on the working times of the pum, water supply/drain phases and checking of hydraulic pressure head in the circuit as well as dishwashing machine susceptible of implementing said method

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2. claims: 28,29

   Constructional details of the filter in a dishwashing machine to improve the prevention of clogged filter and its cleaining in case of clogging

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/001310

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