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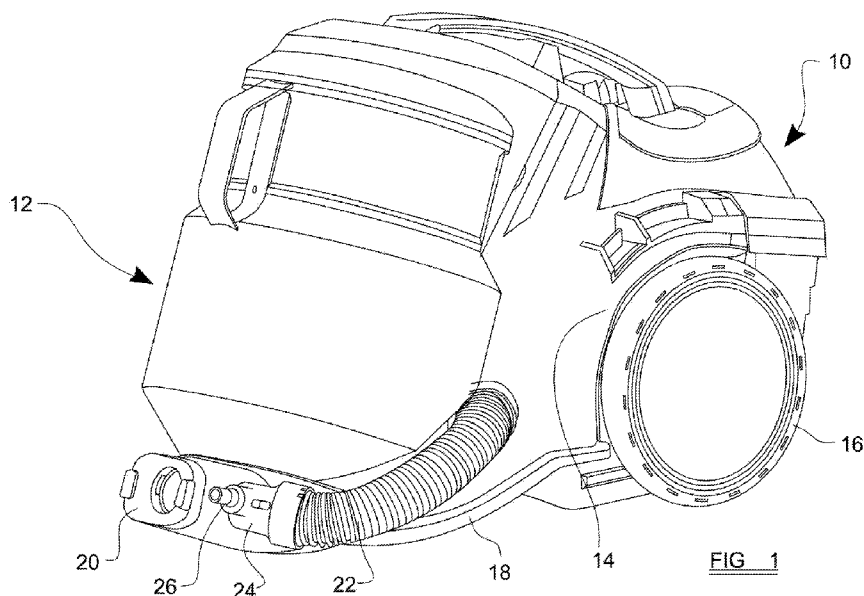
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Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: SUCTION CLEANER



(57) Abstract: A suction cleaner comprising a source of suction, for creating a suction airflow and a separator upstream of the source of suction, for separating and retaining entrained matter from the suction airflow, wherein the separator is adapted for separation of wet material from the suction airflow, the cleaner has a reservoir for liquid and there is a liquid delivery device for delivering the liquid into the suction airflow which enters the separator.



(88) Date of publication of the international search report:
6 December 2012

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
 INV. A47L9/24 A47L11/34 A47L9/16 A47L9/18 A47L11/40
 A47L7/00
 ADD.
 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)
 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 practicable, 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	WO 95/10972 A1 (SJOEGREEN JOERGEN [DK]) 27 April 1995 (1995-04-27) the whole document	1-5,7,11
X	EP 0 768 058 A2 (T P A IMPEX S P A [IT]) 16 April 1997 (1997-04-16) column 2, lines 19-48	1,3,4
A	GB 2 430 354 A (BISSELL HOMECARE INC [US]) 28 March 2007 (2007-03-28) column 4, line 15 - column 6, line 3	1-11,24
A	WO 2004/086930 A1 (SEKIJIMA TAKAYUKI [JP]) 14 October 2004 (2004-10-14)	1-11,24
A	US 2007/209340 A1 (CONRAD WAYNE E [CA]) CONRAD WAYNE ERNEST [CA] 13 September 2007 (2007-09-13) paragraphs [0004] - [0232]	1-11,24

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
- "E" earlier application or patent 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 22 June 2012	Date of mailing of the international search report 26/09/2012
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Martin Gonzalez, G
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2012/050638

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.: 26, 27
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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:

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 fees, this Authority did not invite payment of 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.:

see additional sheet(s)

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-11, 24

Wet/dry suction cleaner with liquid delivery to a surface-cleaning tool

2. claims: 12-18, 25

Wet/dry separator with improved handling and high separation efficiency

3. claims: 19-23

Liquid level detector in a wet/dry separator

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 26, 27

Contrary to Rule 6.2(a) PCT, claim 26,27 contain general references to the description and drawings for the definition of the claimed subject-matter. The references to the description and drawings used in claims 26,27 are vague and unclear and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT. It is particularly burdensome for a skilled person to establish the subject-matter for which protection is sought with claims 26,27 of the application. The non-compliance with the substantive provisions is to such an extent, that no meaningful search can be carried out for claims 26,27 (Article 17(2)(b) PCT).

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2012/050638

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2012/050638

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