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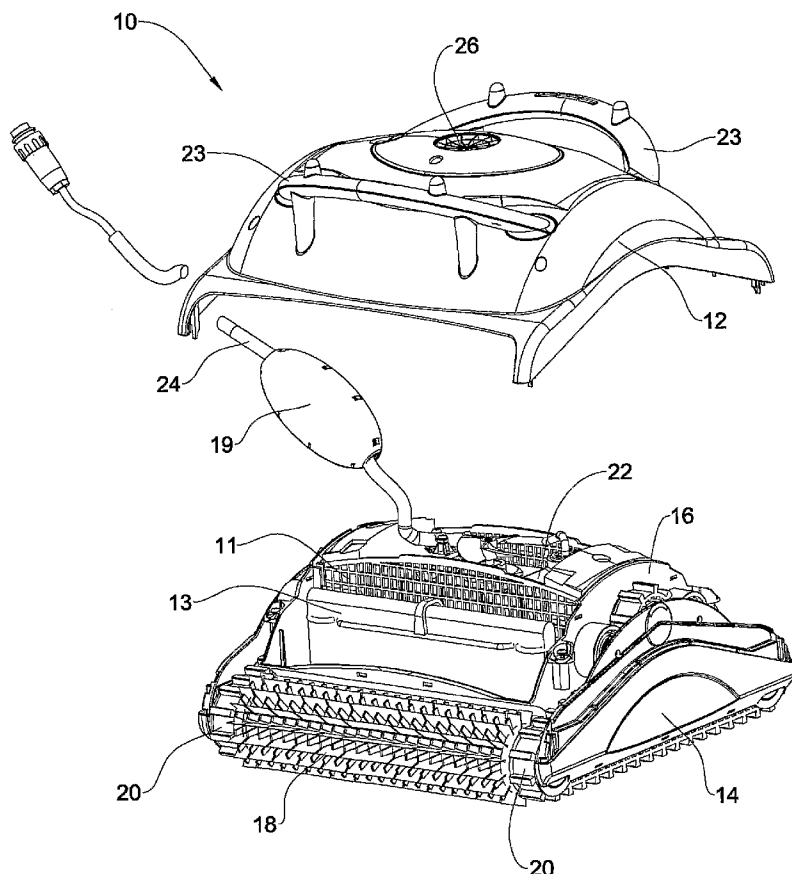
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MAYTRONICS LTD. [IL/IL]; Kibbutz Yizrael, 19350 D.n. Yizrael (IL).
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[Continued on next page]

(54) Title: POOL CLEANING ROBOT



(57) Abstract: A pool cleaning robot comprising a frame, at least one inlet, at least one outlet, and a motor carrying module. The robot further comprises a filter unit mountable to the frame. The filter unit has a filter bag with an inlet facing surface and an outlet facing surface. The robot further comprises a filter cavity formed between the outlet facing surface of the filter bag and the frame. The frame has an open area above the cavity. The open area faces the outlet and is designed for the insertion therethrough of the module into the filter cavity when the filter unit is mounted to the frame.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2006/000901

A. CLASSIFICATION OF SUBJECT MATTER INV. E04H4/16				
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) E04H				
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				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X A X A A X A	WO 02/50388 A (ZODIAC POOL CARE EUROP [FR]; PICHON PHILIPPE [FR]) 27 June 2002 (2002-06-27) page 8, line 1 - page 9, line 2; figures 1-7 ----- US 2004/025268 A1 (PORAT JOSEPH [US] ET AL) 12 February 2004 (2004-02-12) figure 6 ----- US 4 168 557 A (RASCH WILHELM ET AL) 25 September 1979 (1979-09-25) column 2, line 59 - line 66; figures 1,3 ----- DE 87 14 647 U1 (BAUER, MICHAEL, 8752 MOEMBRIS, DE) 3 March 1988 (1988-03-03) ----- -/--	1-5,7,8, 10,11,20 6,13 19 1,7 1,9, 21-24 25-27, 29-36 1,10,11, 28		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <ul style="list-style-type: none"> *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 </td> <td style="width: 50%; border: none; vertical-align: top;"> <ul style="list-style-type: none"> *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. *Z* document member of the same patent family </td> </tr> </table>			<ul style="list-style-type: none"> *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 	<ul style="list-style-type: none"> *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. *Z* document member of the same patent family
<ul style="list-style-type: none"> *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 	<ul style="list-style-type: none"> *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. *Z* document member of the same patent family 			
Date of the actual completion of the international search <p style="text-align: center;">22 January 2007</p>	Date of mailing of the international search report <p style="text-align: center;">29/01/2007</p>			
Name and mailing address of the ISA/ 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	Authorized officer <p style="text-align: center;">Zuurveld, Gerben</p>			

INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2006/000901

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/104790 A1 (LINCKE STEVEN L [US]) 8 August 2002 (2002-08-08) column 14; figures 3-5 -----	1, 12, 37
A	EP 0 465 453 A (SUENNEN JEAN ALBERT FRANCOIS [BE]) 8 January 1992 (1992-01-08) -----	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2006/000901

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.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- 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: 1-5,8,20

A pool cleaning robot

2. claims: 1,6,13-18

A pool cleaning robot with front, back and side-walls

3. claims: 1,7,19

A pool cleaning robot with a wheel comprising means to avoid dislocation

4. claims: 1,9,21-24

A weight imbalance

5. claims: 1,10,25-29

A pool cleaning robot adapted for climbing a sidewall of a pool comprising a freely-rotating roller

6. claims: 1,11,30-36

A pool cleaning robot with a projection

7. claims: 1,12,37-42

A pool cleaning robot comprising a second filter unit

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IL2006/000901

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