



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
12.04.2017 Bulletin 2017/15

(51) Int Cl.:
E04H 4/16 (2006.01)

(43) Date of publication A2:
26.06.2013 Bulletin 2013/26

(21) Application number: **12198112.0**

(22) Date of filing: **19.12.2012**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME

(71) Applicant: **Aquatron Robotic Technology Ltd.**
18550 Afula (IL)

(72) Inventor: **Porat, Joseph**
Delray Beach, FL 33483 (US)

(74) Representative: **Pearl Cohen Zedek Latzer Baratz
UK LLP**
16 Upper Woburn Place
London WC1H 0BS (GB)

(30) Priority: **19.12.2011 IL 21709311**

(54) **Automatic pool cleaner for cleaning a pool with minimum power consumption and method thereof**

(57) An automatic pool cleaner (10), comprising a pump unit (230), a control unit (280) and a sensor (60), the sensor (60) configured to detect foreign objects in the pool. The control unit (280) configured to activate the pump unit (230) at a first power level which is less than full power when a foreign object is not detected by the

sensor (60), and further configured to activate the pump unit (230) at a second power level, which is greater than the first power level, in response to a signal from the sensor unit (150) indicating the detection of a foreign object.

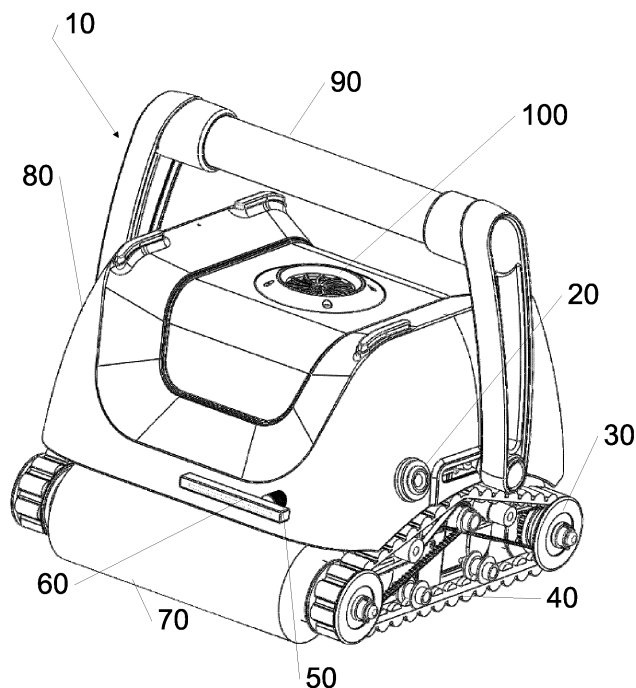


Fig.1



EUROPEAN SEARCH REPORT

 Application Number
 EP 12 19 8112

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 811 432 A2 (PEHRSON JONAS [SE]) 10 December 1997 (1997-12-10)	1-6	INV. E04H4/16
A	* column 2, lines 35-52; figure 1 *	7-12	
X	US 5 205 174 A (SILVERMAN EUGENE B [US] ET AL) 27 April 1993 (1993-04-27)	1-6	
X	US 2006/225771 A1 (CRAWFORD WILLIAM R III [US] ET AL) 12 October 2006 (2006-10-12)	1-6	
A	* the whole document *	7-12	
X	JP 2001 029910 A (TOKYO ELECTRIC POWER CO; TAKENAKA KOMUTEN CO; MITSUBISHI JUKO HIGASHI) 6 February 2001 (2001-02-06)	1-6	TECHNICAL FIELDS SEARCHED (IPC) E04H
X	EP 1 041 220 A2 (AQUAPRODUCTS INC [US]) 4 October 2000 (2000-10-04)	1-6	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 3 March 2017	Examiner Valenta, Ivar
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

 1
 EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 12 19 8112

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-03-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0811432 A2	10-12-1997	DE 69720858 D1	22-05-2003
		DE 69720858 T2	01-04-2004
		EP 0811432 A2	10-12-1997
		SE 504923 C2	26-05-1997
US 5205174 A	27-04-1993	NONE	
US 2006225771 A1	12-10-2006	US 2006225771 A1	12-10-2006
		WO 2006108086 A2	12-10-2006
JP 2001029910 A	06-02-2001	NONE	
EP 1041220 A2	04-10-2000	DE 60036431 T2	19-06-2008
		EP 1041220 A2	04-10-2000
		ES 2294984 T3	16-04-2008
		US 6299699 B1	09-10-2001