



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 1 544 362 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**23.11.2005 Bulletin 2005/47**

(51) Int Cl.7: **E03D 9/10**

(43) Date of publication A2:  
**22.06.2005 Bulletin 2005/25**

(21) Application number: **04029443.1**

(22) Date of filing: **13.12.2004**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**  
Designated Extension States:  
**AL BA HR LV MK YU**

• **Traversari, Carmela**  
**01012 Capranica (VT) (IT)**

(72) Inventors:  
• **Di Battista, Vittorio**  
**01033 Civita Castellana (VT) (IT)**  
• **Traversari, Carmela**  
**01012 Capranica (VT) (IT)**

(30) Priority: **17.12.2003 IT PI20030104**

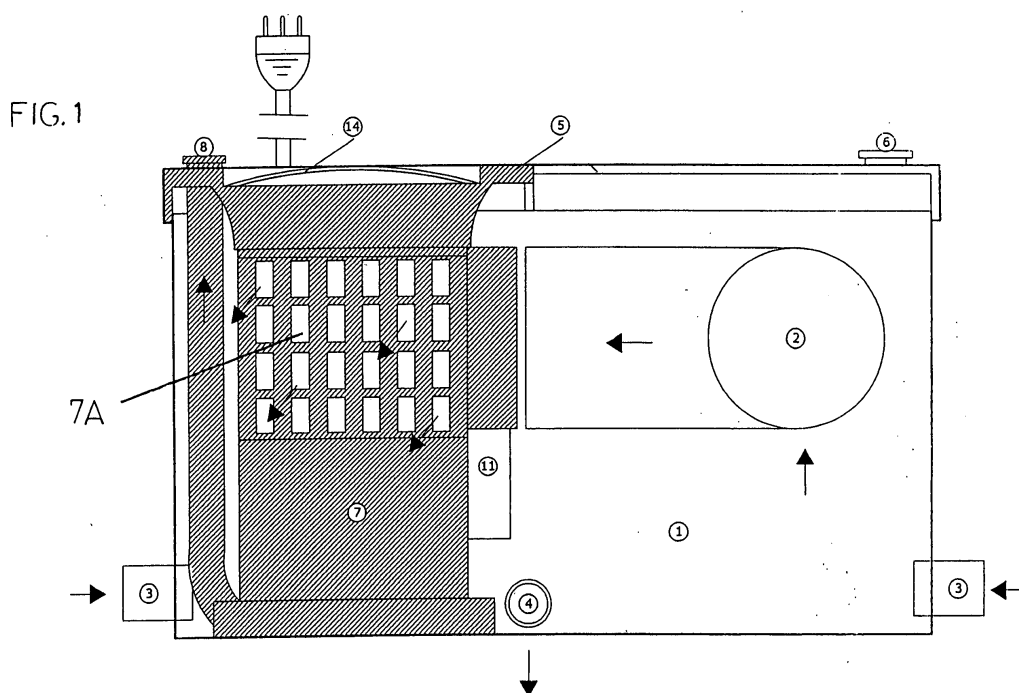
(71) Applicants:  
• **Di Battista, Vittorio**  
**01033 Civita Castellana (VT) (IT)**

(74) Representative: **Turini, Laura**  
**P.za S. Giovanni, 8**  
**56038 Ponsacco (PI) (IT)**

(54) **Apparatus for crushing and pumping sewage and wastewater equipped with removable engine**

(57) This invention consists of a crushing apparatus including an engine for crushing and pumping sewage that is connected to a removable lid and is immersed into a tank, in the portion opposite to the conduit con-

nected to the toilet, so that it can be easily raised and removed. The lid includes also an area for the electric connections of the engine. In this way, the user can drain the tank and then remove the engine and proceed without any problem with the maintenance of the same tank.



**EP 1 544 362 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 04 02 9443

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	FR 2 833 979 A (BALLESTRA VICTOR JEAN) 27 June 2003 (2003-06-27) * the whole document *	1-9	E03D9/10
A	EP 1 028 201 A (TECMA S.R.L.) 16 August 2000 (2000-08-16) * column 2, line 42 - column 3, line 25; figures 1-3 *	1-9	
A	FR 1 575 696 A (M.A.S.E.) 25 July 1969 (1969-07-25) * page 2, line 27 - page 4, line 5; figures *	1-9	
A	FR 2 741 825 A (DERWENT INDUSTRIES BV) 6 June 1997 (1997-06-06) * page 2, line 24 - page 3, line 23; figures *	1,4-6,8,9	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E03D E03C E03F B02C
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		4 October 2005	Van Bost, S
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

1  
EPO FORM 1503 03.82 (P04C01)

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

EP 04 02 9443

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.

04-10-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2833979	A	27-06-2003	NONE	
EP 1028201	A	16-08-2000	AT 303476 T	15-09-2005
FR 1575696	A	25-07-1969	NONE	
FR 2741825	A	06-06-1997	IT RM960039 A1	21-07-1997