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(54) **Self-cleaning floor drain**

(57) There is described a water trap for use in a floor drain in the shape of a vertical pipe (38). The water trap is designed with an outer, upwards open bowl (1) with a bottom and an inner pipe (2) mounted therein which together with the bowl (1) form a water trap. The inner pipe (2) is disposed with a lower edge spaced apart from the bottom of the bowl and with an upper edge located at a position above the upper edge of the bowl (1). The water

trap is provided with an outer cylindric bushing (33) adapted for disposition in the vertical pipe, and the outer side of the lower edge area (36) of the bushing (33) has a conical shape.

Hereby is achieved a water trap which has optimal through-flow and thereby a particularly efficient self-cleaning action that reduces the need for cleaning or makes it completely superfluous.

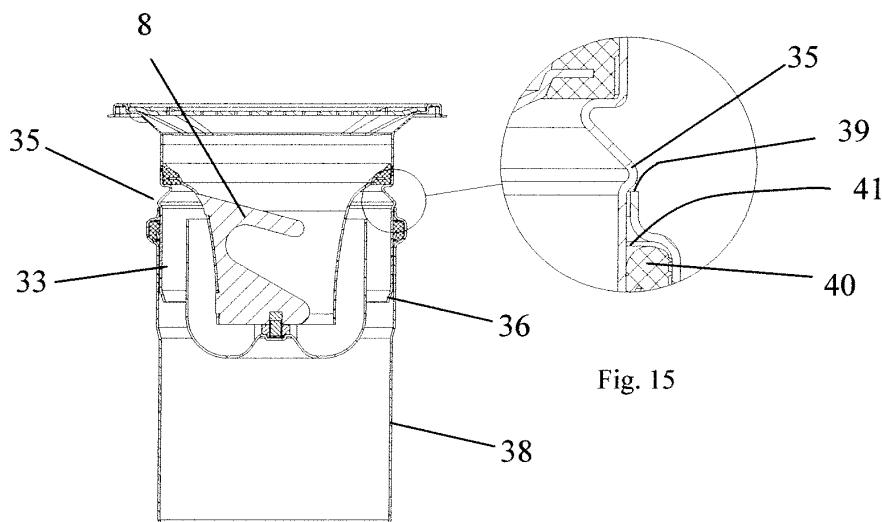


Fig. 14

Fig. 15

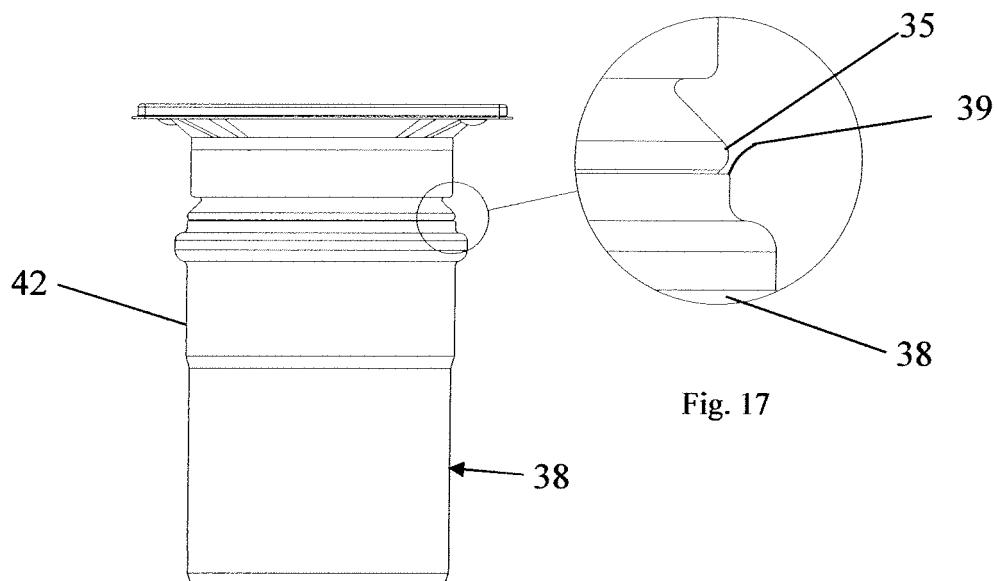


Fig. 16

Fig. 17



EUROPEAN SEARCH REPORT

Application Number
EP 08 16 9041

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	EP 1 329 562 A2 (DALLMER GMBH & CO KG [DE]) 23 July 2003 (2003-07-23) * figure 1 *	1-7,9,10	INV. E03F5/04
A	-----	8	
A	WO 99/51824 A1 (KNIGHT RODNEY PAUL [NZ]) 14 October 1999 (1999-10-14) * figure 1 *	1	
A	DE 31 24 558 A1 (KLENK HELMUT) 30 December 1982 (1982-12-30) * figures 1,2 *	1	
	-----		TECHNICAL FIELDS SEARCHED (IPC)
			E03F E03C
<p>1 The present search report has been drawn up for all claims</p>			
1	Place of search	Date of completion of the search	Examiner
	Munich	20 November 2013	Geisenhofer, Michael
CATEGORY OF CITED DOCUMENTS		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	
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			

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

EP 08 16 9041

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.

20-11-2013

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1329562	A2	23-07-2003	DE	10201345 A1		24-07-2003
			EP	1329562 A2		23-07-2003
			ES	2397057 T3		04-03-2013
<hr/>						
WO 9951824	A1	14-10-1999	AU	745922 B2		11-04-2002
			AU	3177299 A		25-10-1999
			CA	2327346 A1		14-10-1999
			EP	1068406 A1		17-01-2001
			NZ	330123 A		24-11-2000
			US	6418569 B1		16-07-2002
			WO	9951824 A1		14-10-1999
<hr/>						
DE 3124558	A1	30-12-1982		NONE		
<hr/>						