

(1) Publication number: 0 625 615 A3

(12)

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 94303565.9

61 Int. CI.<sup>5</sup>: **E03C 1/30** 

(22) Date of filing: 18.05.94

30) Priority: 21.05.93 GB 9310593

(43) Date of publication of application : 23.11.94 Bulletin 94/47

84 Designated Contracting States : **DE FR IT NL** 

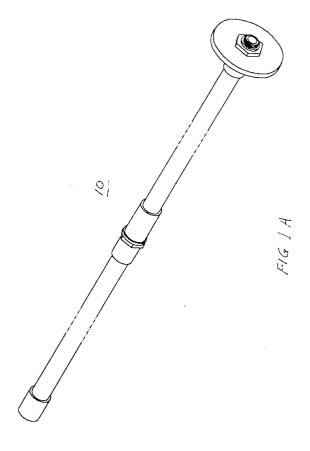
88 Date of deferred publication of search report : 28.12.94 Bulletin 94/52

(1) Applicant: Song, Andrew Chan Shen 98B, Upper Serangoon Road Singapore 1334 (SG) (72) Inventor: Song, Andrew Chan Shen 98B, Upper Serangoon Road Singapore 1334 (SG)

(74) Representative: Votier, Sidney David CARPMAELS & RANSFORD 43, Bloomsbury Square London WC1A 2RA (GB)

## 54 Drain plunger.

The present invention describes an apparatus for removing blockage in a tubular member with a plunger (10) having a hollow channel and flexible member. The drain plunger comprises a pipe terminating at one end with a cap and the other end a flexible member for exerting pressure on the stagnant fluid in the tubular member. Preferably, the flexible member has a cross sectional area corresponding to the inner diameter of the tubular member. In simplest implementation of the present invention, the flexible member is a flexible disk or washer. When the user exerts pressure on the column of stagnant fluids with the plunger in the tubular member, the compressed air in the hollow channel assists the user in reversing the direction of the plunger and dislodging the plumbing traps in a few reciprocating strokes.





## **EUROPEAN SEARCH REPORT**

Application Number EP 94 30 3565

Category	Citation of document with indication, of relevant passages	where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)	
X	US-A-3 315 280 (KRENN) * the whole document *		1-6	E03C1/30	
A	GB-A-651 454 (ADAMS)  * page 1, line 66 - page figures 1-3 *	2, line 44;	1-3,6		
A	GB-A-2 215 802 (ENGLISH)  * abstract; figure 6 *		1		
				TECHNICAL FIELDS SEARCHED (Int.Cl.5)	
				E03C E03F	
	The present search report has been draw	n up for all claims			
	Place of search	Date of completion of the search	_	Examiner	
Y:p	THE HAGUE  CATEGORY OF CITED DOCUMENTS  articularly relevant if taken alone articularly relevant if combined with another ocument of the same category schnological background on-written disclosure	T: theory or pring E: earlier patem after the filin D: document cit L: document cit	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  A: member of the same patent family, corresponding document		