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(54) **Service apparatus particularly for road, railroad, subway tunnels or the like**

(57) A service apparatus (10) particularly for road, railroad, subway tunnels or the like, comprising a frame (11) for supporting means for cleaning at least one longitudinal portion of a wall (12) of a tunnel (13); the frame is associated with guiding means (27a,27b) and with means for advancement along the longitudinal extension of the tunnel, adjacent to the wall portion.

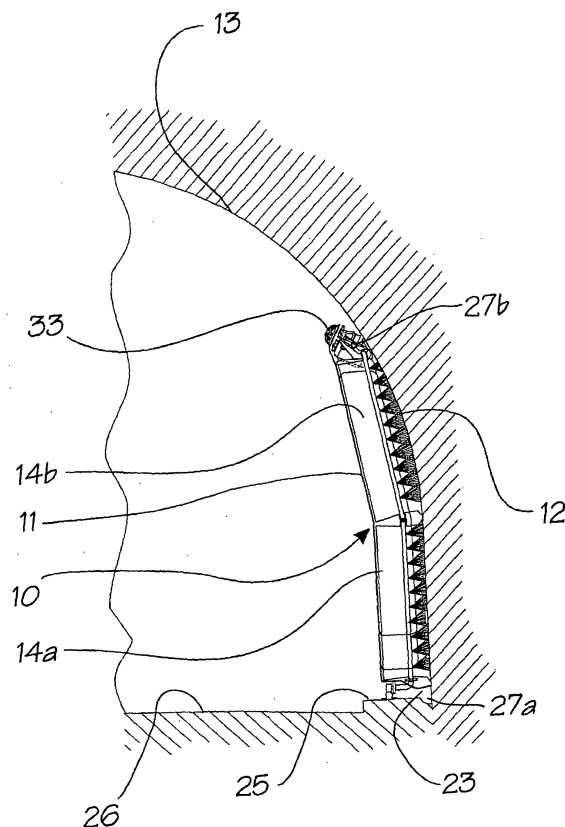


Fig. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 02 01 4042

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	US 4 163 301 A (GRIFFIN KENNETH E) 7 August 1979 (1979-08-07)	1,2	E01H1/00
Y	* the whole document *	13	
A	-----	9	
Y	EP 0 874 086 A (VILLANUEVA SAUIU JOSE ANTONIO) 28 October 1998 (1998-10-28)	13	
A	* the whole document *	1-3	
X	EP 0 364 348 A (PROTEE) 18 April 1990 (1990-04-18)	1	
Y	* the whole document *	2,7	E01H
A	-----	8	
Y	EP 0 381 904 A (PROTEE) 16 August 1990 (1990-08-16)	2,7	
A	* the whole document *	1,8,13	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E01H
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 October 2003	Examiner Dijkstra, G.
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			

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

EP 02 01 4042

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
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22-10-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4163301	A	07-08-1979	NONE	
EP 0874086	A	28-10-1998	ES 1034481 U1	01-01-1997
			AU 3095397 A	14-01-1998
			EP 0874086 A1	28-10-1998
			WO 9749868 A1	31-12-1997
EP 0364348	A	18-04-1990	FR 2637555 A1	13-04-1990
			AT 84337 T	15-01-1993
			DE 68904283 D1	18-02-1993
			DE 68904283 T2	24-06-1993
			DE 364348 T1	18-10-1990
			EP 0364348 A1	18-04-1990
			ES 2015245 T3	01-08-1993
			GR 91300074 T1	15-11-1991
			GR 3007258 T3	30-07-1993
EP 0381904	A	16-08-1990	CA 1330851 C	26-07-1994
			FR 2635024 A1	09-02-1990
			EP 0381904 A1	16-08-1990