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(54) **Arrangement for door closers and/or door openers**

(57) Arrangement for operating devices for mechanically operated doors with a driving mechanism and a manoeuvring mechanism including a rotatable device in the form of a cog wheel and a linear device furnished with cogs that interact with the cog wheel.

The novel aspect is that two linear devices furnished with cogs are arranged with a distance between one another with the cog wheel between them, whereby

the size of the cog wheel is adapted to this distance so that it is only able to engage with one row of cogs at a time, and that the cog wheel is mounted in a housing (17) that is displaceable relative to the frame on which the rows of cogs are mounted to allow the displacement of the cog wheel to engage in an operating position with one row of cogs at a time.

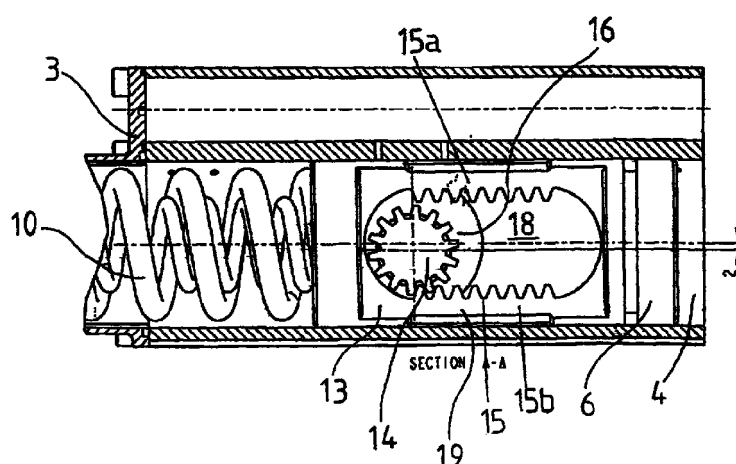


FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 98 85 0090.6

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.6)
A	WO 9502107 A1 (GEZE GMBH & CO.), 19 January 1995 (19.01.95) --		E05F 3/00 E05F 3/06 E05F 15/04 E05F 15/12
A	US 3059268 A (F.V. MCHALE), 23 October 1962 (23.10.62) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.6)
			E05F
The present search report has been drawn up for all claims			
Place of search STOCKHOLM		Date of completion of the search 30 December 1998	Examiner WENDENIUS CHRISTER
<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 & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO. EP 98 85 0090.6**

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 01/12/98
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9502107 A1	19/01/95	AT 154665 T	15/07/97
		DE 4323150 A	12/01/95
		DE 59403198 D	00/00/00
		EP 0715675 A,B	12/06/96
		ES 2104409 T	01/10/97
		US 5687451 A	18/11/97

US 3059268 A	23/10/62	NONE	
