

12 **EUROPEAN PATENT APPLICATION**

21 Application number: 83302642.0

51 Int. Cl.³: **F 02 B 77/08**
F 02 D 17/04

22 Date of filing: 10.05.83

30 Priority: 10.05.82 US 376429

43 Date of publication of application:
16.11.83 Bulletin 83/46

88 Date of deferred publication of search report: 27.12.84

84 Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

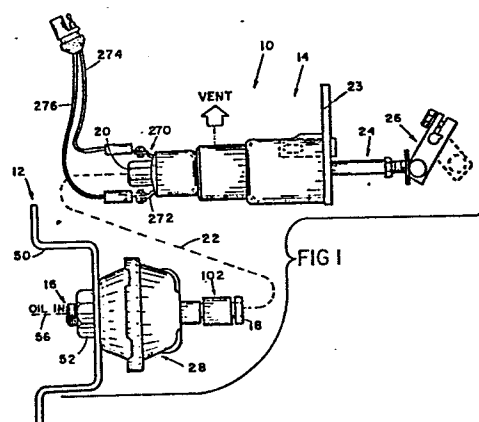
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54 **An actuator for use in an engine protection or shutdown system and a shutdown system for an internal combustion engine.**

57 An actuator (14) for use in an engine protection or shutdown system, connectable to a source of fluid under pressure (12), which has a body (170) defining a chamber (172), an inlet port (29) and a vent port (224), and a cup-shaped piston (188) and rolling diaphragm (194) connected to a rod which is electrically actuated by a solenoid valve (240) to selectively move the rod from a first to a second position, to selectively connect the source of fluid to the vent port or the inlet port thus causing a shift between a shutdown and a run position. The invention extends to a shutdown system for an internal combustion engine including such an actuator in which the source of pressurized fluid may also include fluid control means (102) and pressure regulating valve means (296).





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. 3)
Y	GB-A-2 028 425 (GROENEVELD) * the whole document *	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	F 02 B 77/08 F 02 D 17/04
Y	FR-A-2 385 901 (BOSCH) * page 14, line 1 - page 16, line 41 *	1-10	
P, A	US-A-4 351 293 (HEWITT) * column 2, line 9 - column 3, line 34 *	1	
A	US-A-1 908 471 (BREWER) * page 1, entirely *	1, 2, 3, 4	TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
A	GB-A-1 482 907 (ABSALOM) -----		F 02 B F 02 D F 02 M F 15 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25-09-1984	Examiner WASSENAAR G.
CATEGORY OF CITED DOCUMENTS 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 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			