



Europäisches Patentamt
European Patent Office
Office européen des brevets



Publication number:

0 364 147 A3

12

EUROPEAN PATENT APPLICATION

21 Application number: **89310105.5**

51 Int. Cl.⁵: **F02M 67/02, F02M 67/12,
F02M 69/08, F02M 57/02**

22 Date of filing: **03.10.89**

30 Priority: **12.10.88 US 256466**

43 Date of publication of application:
18.04.90 Bulletin 90/16

84 Designated Contracting States:
DE FR GB

88 Date of deferred publication of the search report:
27.02.91 Bulletin 91/09

71 Applicant: **FORD MOTOR COMPANY LIMITED**
Eagle Way
Brentwood Essex CM13 3BW(GB)
84 **GB**

Applicant: **FORD-WERKE**
AKTIENGESELLSCHAFT
Werk Köln-Niehl Henry-Ford-Strasse

Postfach 60 40 02
D-5000 Köln 60(DE)

84 **DE**

Applicant: **FORD FRANCE S. A.**
B.P. 307
F-92506 Rueil-Malmaison Cédex(FR)

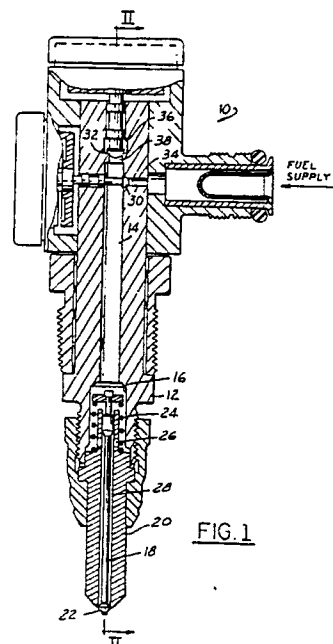
84 **FR**

72 Inventor: **Schechter, Michael Moses**
27686 Sutherland
Southfield Michigan 48076(US)
Inventor: **Cloke, Martin**
3131 Walma
Orchard Lake Michigan 48033(US)

74 Representative: **Messulam, Alec Moses et al**
A. Messulam & Co. 24 Broadway
Leigh on Sea Essex SS9 1BN(GB)

54 **A fuel injection system.**

57 A fuel injection system includes an injector having a fuel and air/gas mixing chamber (14) that includes a normally closed injector valve (18), the chamber (14) being for premixing fuel and air, complete with controls to provide a time interval between introduction of the fuel into the air chamber and the introduction of compressed air/gas to cause the injection event by opening of the valve (18) to permit evaporation of the fuel whereby a premixed rich air/fuel mixture charge is discharged into the engine combustion chamber.



EP 0 364 147 A3



European
Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 31 0105

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.5)
X,Y	US-A-1 560 025 (YOUNG) * column 1, lines 66 - 98; figure 1 ** page 2, lines 25 - 63 * - - -	2,1,3,5	F 02 M 67/02 F 02 M 67/12 F 02 M 69/08 F 02 M 57/02
Y	BE-A-7 382 80 (KHARKOVSKY AVIATIONNY INSTITUT) * page 4, line 3 - page 5, line 17 * - - -	1,5	
D,Y,A	US-A-4 465 050 (IGASHIRA) * column 3, lines 22 - 54; figure 1 ** column 4, lines 19 - 23 * - - -	3,1	
A	FR-A-5 119 39 (DUPERRON) * page 2, lines 6 - 67 * - - -	1,2,5	
A	WO-A-8 807 628 (ORBITAL ENGINE COMPANY LTD.) * page 15, lines 8 - 20 * - - - - -	1,2,5	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F 02 M
Place of search		Date of completion of search	Examiner
The Hague		20 December 90	JORIS J.C.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
Y : particularly relevant if combined with another document of the same category		D : document cited in the application	
A : technological background		L : document cited for other reasons	
O : non-written disclosure		& : member of the same patent family, corresponding document	
P : intermediate document			
T : theory or principle underlying the invention			