



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
02.05.2003 Bulletin 2003/18

(51) Int Cl.7: **F02G 1/055, A61F 2/76**

(43) Date of publication A2:
31.07.2002 Bulletin 2002/31

(21) Application number: **01130436.7**

(22) Date of filing: **20.12.2001**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
 Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
 • **Asai, Masahiro,**
c/o K.K. Honda Gijutsu Kenkyusho
Wako-shi, Saitama (JP)
 • **Ban, Masaki, c/o K.K. Honda Gijutsu Kenkyusho**
Wako-shi, Saitama (JP)

(30) Priority: **26.01.2001 JP 2001019120**
29.01.2001 JP 2001020637

(74) Representative: **Liska, Horst, Dr.-Ing. et al**
Weickmann & Weickmann
Patentanwälte
Postfach 86 08 20
81635 München (DE)

(71) Applicant: **HONDA GIKEN KOGYO KABUSHIKI**
KAISHA
Minato-ku Tokyo (JP)

(54) **Heating device for external combustion engine**

(57) The invention provides a heating device for an external combustion engine, which is capable of improving stabilization of combustion in a control state with a relatively small quantity of heat and the property of an exhaust gas, and realizing long-time operation of the external combustion engine.

To achieve this, a heating device 14 for an external combustion engine includes: a combustion housing 25

provided so as to surround a heating portion 11 of an external combustion engine E; an fuel-air mixer 27 provided at one end of the combustion housing 25 and an exhaust pipe 28 provided at the other end of the combustion housing 25; and an oxidation catalyst 26, disposed in the combustion housing 25, for accelerating combustion of a fuel-air mixture of a fuel and air supplied through the fuel-air mixer 27.

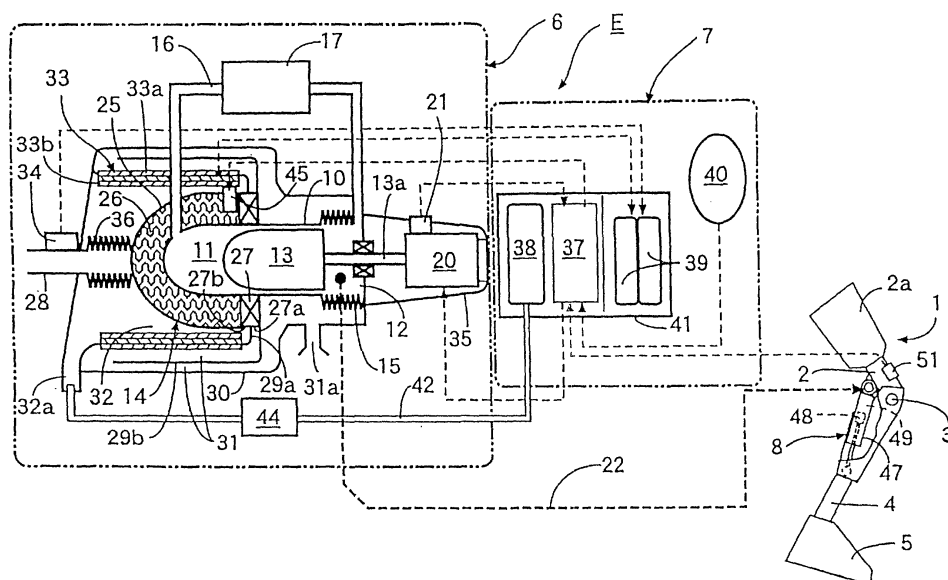


FIG. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 13 0436

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	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03, 31 March 1997 (1997-03-31) & JP 08 296501 A (AISIN SEIKI CO LTD), 12 November 1996 (1996-11-12) * abstract * -----	1-3	F02G1/055 A61F2/76
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F02G A61F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		13 March 2003	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			

EPO FORM 1503 03 B2 (P04C01)

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

EP 01 13 0436

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-03-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 08296501 A	12-11-1996	DE 19607902 A1	12-09-1996

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82