



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 1 054 145 A3**

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
**02.01.2002 Bulletin 2002/01**

(51) Int Cl.7: **F02B 63/04**

(43) Date of publication A2:  
**22.11.2000 Bulletin 2000/47**

(21) Application number: **00110646.7**

(22) Date of filing: **18.05.2000**

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

(30) Priority: **20.05.1999 JP 14071599**  
**21.05.1999 JP 14237899**

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

(72) Inventors:  
• **Hatsugai, Tsutomu**  
**Wako-shi, Saitama-ken (JP)**  
• **Asai, Kouichi**  
**Wako-shi, Saitama-ken (JP)**  
• **Morohoshi, Shinichi**  
**Wako-shi, Saitama-ken (JP)**

(74) Representative:  
**Prechtel, Jörg, Dipl.-Phys. Dr. et al**  
**Weickmann & Weickmann, Patentanwälte,**  
**Postfach 860 820**  
**81635 München (DE)**

### (54) Engine generator unit

(57) In an engine generator unit, an engine (40) is connected with an outer-rotor/magnet type generator that has a cantilevered outer rotor (54) functioning also as a substitute for an engine fly wheel. Cooling fan device (60) is attached to the outer rotor (54). The generator (50) and cooling fan device (60) are covered with a fan cover (80) that is made of die-cast aluminum alloy. The fan cover (80) has, at its one end remote from the engine (40), a cooling-air inlet portion (81) for introduc-

ing cooling air from the outside via the cooling fan device (60), and a recoil starter (70) is attached to the cooling-air inlet portion (81). Also, the fan cover (80) is connected at its other end to the engine (40) with a gap formed therebetween for blowing the cooling air onto an outer peripheral surface of the engine (40). Supporting leg members (43, 84) are secured to the fan cover (80) and engine (40), and these leg members (43, 84) are also mounted to a framework (11) via shock-absorbing members (44, 85).

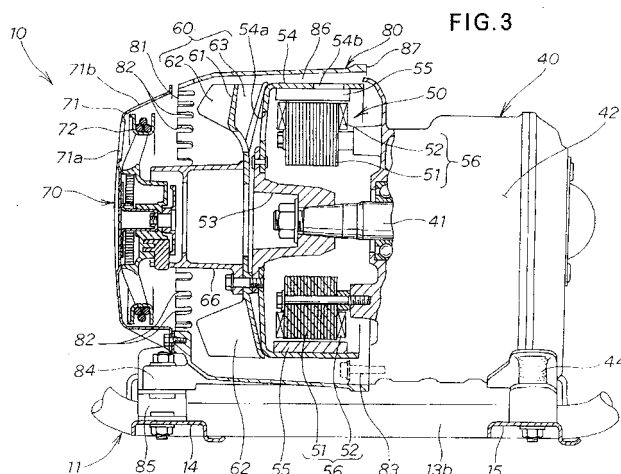


FIG. 3

EP 1 054 145 A3



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 11 0646

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	EP 0 893 586 A (HONDA MOTOR CO LTD) 27 January 1999 (1999-01-27) * figures 1-12 * * abstract * * column 7, line 7 - line 30 * * column 7, line 31 - line 46 *	1-3	F02B63/04
A	US 4 173 951 A (ISHIHARA MASAMITSU) 13 November 1979 (1979-11-13) * figure 1 * * abstract * * column 2, line 24 - line 64 *	1-3	
A	US 4 677 940 A (BRACHT JEFFREY L ET AL) 7 July 1987 (1987-07-07) * figures 1,3 * * column 2, line 47 - line 60 *	1-3	
A	US 4 702 201 A (ODO SATOSHI ET AL) 27 October 1987 (1987-10-27) * figures 1,3,7 * * abstract * * column 5, line 1 - line 48 *	1-3	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F02B F01N
Place of search		Date of completion of the search	Examiner
THE HAGUE		1 November 2001	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 00 11 0646

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.

01-11-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0893586 A	27-01-1999	JP 11036881 A	09-02-1999
		EP 0893586 A2	27-01-1999
		US 6028369 A	22-02-2000
US 4173951 A	13-11-1979	DE 7736582 U1	16-03-1978
US 4677940 A	07-07-1987	NONE	
US 4702201 A	27-10-1987	NONE	