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- **Nozue, Yutaka**  
**Gunma-ken (JP)**
- **Tanaka, Kazuaki**  
**Kiryu-shi, Gunma-ken (JP)**
- **Hagimura, Masami**  
**Kiryu-shi, Gunma-ken (JP)**
- **Arai, Makoto**  
**Kiryu-shi, Gunma-ken (JP)**

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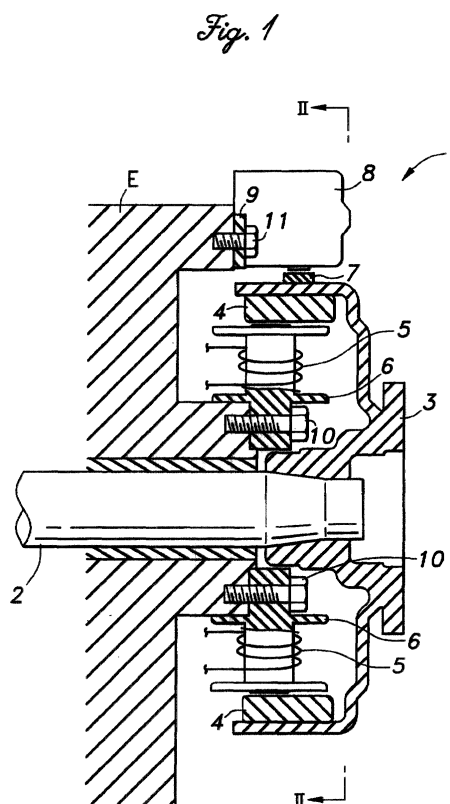
(71) Applicant: **Mitsuba Corporation**  
**Kiryu-shi, Gunma 376-8555 (JP)**

(74) Representative: **Waxweiler, Jean et al**  
**Dennemeyer & Associates S.A.,**  
**P.O. Box 1502**  
**1015 Luxembourg (LU)**

(72) Inventors:  
• **Kuniyoshi, Kazunori**  
**Kiryu-shi, Gunma-ken (JP)**

(54) **Engine ignition system**

(57) In an engine ignition system utilizing an AC generator (1) for supplying an electric power to an ignition coil (13), a phase relationship between the generator voltage and an ignition timing (T1) is determined so that an electric current flowing through a primary winding (L1) of the ignition coil (13) due to the voltage generation by the AC generator (1) at the ignition timing (T1) is greater than a predetermined current (Ad) required to produce a sufficient spark from a spark plug (14). Such an ignition system can advantageously ensure achieving ignition even when the battery is disconnected or totally discharged. Preferably, a capacitor (C1) is connected in parallel with the primary winding (L1) of the ignition coil (13). A stator core (6) for supporting a stator coil (5) in the AC generator (1) may be circumferentially displaceable to adjust the phase relationship between the ignition timing and the generator voltage.





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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 20 3176

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)
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X	US 4 291 661 A (GERRY MARTIN E) 29 September 1981 (1981-09-29) * figure 5 * * column 6, line 25,26 * * column 11, line 18-48 * ---	1,3,4, 6-10	
A	US 3 824 976 A (KATSUMATA M ET AL) 23 July 1974 (1974-07-23) * figures 1,8 * ---	1-5	
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A	US 3 405 347 A (CAMPBELL NODDIN RAY ET AL) 8 October 1968 (1968-10-08) * column 10, line 42-48 * -----	1-6,8-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7)  F02P F02N
The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>19 December 2002</b>	Examiner <b>Ulivieri, E</b>
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	

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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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  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82