

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
13 December 2007 (13.12.2007)

PCT

(10) International Publication Number  
**WO 2007/142927 A3**

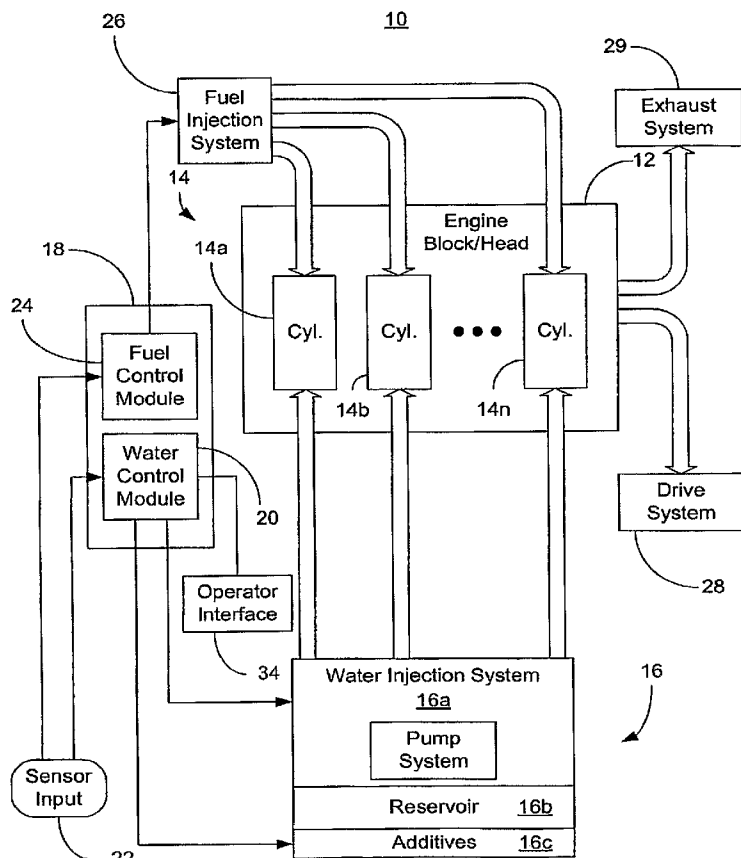
- (51) International Patent Classification:  
F02B 47/02 (2006.01)
- (21) International Application Number:  
PCT/US2007/012664
- (22) International Filing Date: 30 May 2007 (30.05.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/809,020 30 May 2006 (30.05.2006) US
- (71) Applicant and  
(72) Inventor: **ORLOSKY, James, Robert** [US/US]; 18452  
Wisecarver Truck Trail, Jamul, CA 91935 (US).
- (74) Agents: **MESSINA, Gerard, A.** et al.; Kenyon & Kenyon  
LLP, 1500 K Street, N.W., Suite 700, Washington, DC  
20005 (US).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report  
(88) Date of publication of the international search report:  
21 August 2008

(54) Title: COMBUSTION-STEAM ENGINE



(57) Abstract: Systems and methods of controlling an internal combustion engine provide for a fuel combustion cycle that takes place in a combustion chamber of the engine. Injection of water into the combustion chamber during the fuel combustion cycle is controlled based on sensor input, such as temperature, extinguishment and pollution level input.

WO 2007/142927 A3

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US07/12664

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **F02B 47/02** (2006.01)  
  
 USPC: 123/25C,25J,25A,1A,228,198A  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 123/25C,25J,25A,1A,228,198A

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 NONE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,125,366A (HOBBS) 30 June 1992 (30.06.1992), column 2, lines 45-65, column 3, lines 10-45, column 4, lines 1-5.	7-9,14,17,19-21
X	US 4,031,864A (CROTHERS) 28 June 1977 (28.06.1977), column 4, lines 10-50.	7-9,14,17,19-21
---		-----
Y		10-13
X	US 5,284,116A (RICHESON, JR.) 08 February 1994 (08.02.1994), column 6, lines 12-45.	7-9,14,17,19-21
---		-----
Y		10-13
X	US 6,606,973 B2 (MOE) 19 August 2003 (19.08.2003), column 5, lines 48-65.	7-9,14,17,19-21
---		-----
Y		22

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search  
 28 April 2008 (28.04.2008)

Date of mailing of the international search report  
**22 MAY 2008**

Name and mailing address of the ISA/US  
 Mail Stop PCT, Attn: ISA/US  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 Facsimile No. (571) 273-3201

Authorized officer  
 Stephen Kirk Cronin  
 Telephone No. (703) 308-0861

*Ann H. Rath*  
*JCY*