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Attorney Docket No. 128877 Please record the attached original document or copy thereof. 1. A. Name of conveying parties: 2. A. Name and address of receiving party: [1] Shigeki NAKAYAMA [2] Koji KITANO [3] Taro AOYAMA [4] Ryo HASEGAWA TOYOTA JIDOSHA KABUSHIKI KAISHA [5] Takashi KOYAMA 1, TOYOTA-CHO [6] Kazuhisa INAGAKI [7] Yoshifumi WAKISAKA TOYOTA-SHI, AICHI-KEN 471-8571 **JAPAN** [8] Matsuei UEDA [9] Kiyomi NAKAKITA Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No A. Nature of conveyance: Additional name(s) & address(es) attached? \boxtimes Assignment ☐ Merger ☐Yes ☑ No ☐ Change of Name Security Agreement Other Execution Date: [1-3, 5] June 19, 2006; [4] July 3, 2006; [6-8] July 17, 2006; [9] July 18, 2006 This document is being filed together with a new application. B. Patent No.(s) Patent Application No.(s) ___ C. Title of Application: GAS-MIXTURE-IGNITION-TIME ESTIMATION APPARATUS FOR INTERNAL COMBUSTION ENGINE, AND CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINE Name and address of party to whom correspondence Total number of applications and patents involved: $\underline{1}$ concerning document should be mailed: Name: James A. Oliff Total fee (37 CFR 3.41)......\$ 40.00 Enclosed (Check No. 182582) Address: OLIFF & BERRIDGE, PLC Credit any overpayment or charge any underpayment to P.O. Box 19928 deposit account number 15-0461. Alexandria, VA 22320 Statement and signature. To the best of my knowledge and believ. the foregoing information is true and correct and any attached copy is a true copy of Date: July 31, 2006 Oliff, Registration, No. William P. Berridge, Registration No. 30,024 Total number of pages including cover sheet, attachments, and document: 2

> PATENT REEL: 018131 FRAME: 0460

ASSIGNMENT

		(1)	Shigeki Nakayama	(6)	Kazuhisa Inagaki	
(1-8)	Insert Name(s)	(2)	Koji Kitano	(7)	Yoshifumi Wakisaka	
	of Inventor(s)	(3)	Taro Aoyama	(8)	Matsuei Ueda	
		(4)	Ryo Hasegawa	(9)	Kiyomi Nakakita	
		(5)	Takashi Koyama	_		
		paid to	e each of the undersigned, each undersigned		\$1.00) and other good and valuable consess to assign, and hereby does assign, training	
(9)	Insert Name of Assignee	(9)	TOYOTA JIDOSHA KABUSHIKI K.	AISH.	A	
(10)	Insert Address of Assignee	(10)	1 Toyota-cho, Toyota-shi, Aichi 471-85	1 Japa	an	
		the entinvent	nafter designated as the Assignee) and Assig tire right, title and interest for the United Sta- tion, and in all applications for patent includ- uation, international, confirmation, substitu- tions, reissues and reexamination certificates	tes of ing an e and	America as defined in 35 U.S.C. §100, in y and all provisional, non-provisional, divi reissue application(s), and all Letters Pater	the isional,
(11)	Insert	(11)	GAS-MIXTURE-IGNITION-TIME E COMBUSTION ENGINE, AND CON COMBUSTION ENGINE		ATION APPARATUS FOR INTERNAL APPARATUS FOR INTERNAL	AL
	Identification such as Title, Case					
	Number, or Foreign Application Number	(Attor	mey Docket No. 128877)
	for which the undersigned has (have) executed an application for patent in the United States of America					
		on eve	en date herewith or		•	
(12)	Insert Date of Signing of Application	(12)	on even date herewith			
(13)	Alternative	(13)	U.S. application Serial Number			
	Identification for filed applications	filed	July 31, 2006			
applicat any applicate the Assi claims of reexami Patents full righ and agree identifie	applications for the invention ions and patents as the Assig 2) Each undersigned agreed ication or continuation or dignee in every way possible in 3) Each undersigned agree or provisions of the Internation 4) Each undersigned agreemation a grant of a valid Unit 5) Each undersigned authout the United States resulting to to convey the entire interestes that this assignment is bit 6) Each undersigned here!	a, and an mee may be to exe vision the obtaining to exe on al Cones to perfect State or ize of the configuration o	cute all papers necessary in connection winereof, or any patent or reissue applicationing evidence and going forward with such cute all papers and documents and performing vention for Protection of Industrial Propertion all affirmative acts which may be necessary.	cute so the any a therfee any a ty or si essary tatent: assigned will a legal power	interference which may be declared concentration, for the invention, and to cooper rence. In this property is a connection of the invention, and to cooper rence. In this property is a connection of the invention of the invention of the interest, and covenants the cooper rence. In this property is a confirmal or c	erning rate with m with the or the has erewith,
	In witness whereof, execut	ted by tl	ne undersigned on the date(s) opposite th	e und	ersigned name(s).	
Date	June 19 20	206	Inventor Signature	rigek	ri Makayama (S	SEAL)
Date	June 19 21	206	Inventor Signature Ke	il_	<u>Kitano</u> (s	SEAL)
Date	June 19. 20	006	Inventor Signature	aro	agama (S	SEAL)
Date	July 3,	2006	Inventor Signature	yo .	Horyan (5	SEAL)
Date	June. 19. 20	06	Inventor Signature	ako	shi Koyama (S	SEAL)
Date		006	Inventor Signature	suh	isa Inggahi (S	SEAL)
Date	July , 17, 2	006	Inventor Signature	ehifi	rmi Wahisaka (S	SEAL)
Date		006	Inventor Signature	tsu	ei Neda (S	SEAL)
Date	July 18.	2006	Inventor Signature	pm	i Napapita (SEAL)
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