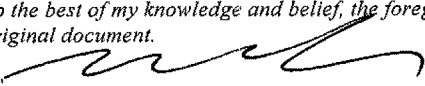


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1. A. Name of conveying parties: Shunsuke KASUGA Atushi WATANABE Shin-ichiro TANAKA Osamu AZEGAMI B. Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			2. A. Name and address of receiving party: TOYOTA JIDOSHA KABUSHIKI KAISHA 1, TOYOTACHO, TOYOTA-SHI, AICHI 471-8571, JAPAN B. Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3. A. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ B. Execution Date: <u>ALL: October 7, 2011</u>					
4. A. Patent Application No.(s) <u>13/144,404</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No C. Title of Application: <u>ENGINE</u>					
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>James A. Oliff</u> Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850 Phone Number: 703-836-6400 Fax Number: 703-836-2787			6. Total number of applications and patents involved: <u>1</u>		
			7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of <u>\$40.00</u> .		
			8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.		
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>  James A. Oliff, Registration No. 27,075 Vitaliy L. Orekhov, Registration No. 66,731 Date: <u>October 20, 2011</u>					

CH \$40.00 150461 13144404

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter "ASSIGNOR") by

TOYOTA JIDOSHA KABUSHIKI KAISHA

(Insert
ASSIGNEE's
Name(s)
Address(es))

1, Toyotacho, Toyota-shi, Aichi 471-8571, Japan

(hereinafter "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

ENGINE

(Title of
Invention)

relating to International Patent Application PCT/JP 2009 / 050785 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(Insert date
of execution
of application,
if not
concurrent)

(a) executed on _____;

(b) filed on October 20, 2011.

Serial No. 13 / 144,404;

Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Signatures)

1) <u>Shunsuke Kasuga</u> (SIGNATURE)	Shunsuke Kasuga (TYPE NAME)	October 7, 2011 (DATE)
2) <u>Atushi Watanabe</u> (SIGNATURE)	Atushi Watanabe (TYPE NAME)	October 7, 2011 (DATE)
3) <u>Shin Tanaka</u> (SIGNATURE)	Shin-ichiro Tanaka (TYPE NAME)	October 7, 2011 (DATE)
4) <u>Osamu Azegami</u> (SIGNATURE)	Osamu Azegami (TYPE NAME)	October 7, 2011 (DATE)
5) _____ (SIGNATURE)	_____ (TYPE NAME)	_____ (DATE)
6) _____ (SIGNATURE)	_____ (TYPE NAME)	_____ (DATE)
7) _____ (SIGNATURE)	_____ (TYPE NAME)	_____ (DATE)
8) _____ (SIGNATURE)	_____ (TYPE NAME)	_____ (DATE)

PATENT

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