As Di	rector and D. Bo	op: nent Recordation Services RECORDATION FOR r of the U.S. Patent PATENTS Trademark Office ox 1450 dria, VA 22313-1450	
Ple	ase r	ecord the attached document.	
То	tal nu	mber of pages including cover sheet, attachments, and docun	nent: <u>2</u>
1.	А.	Name of conveying parties: [1] Toshiyuki TAGUCHI [2] Toshihiro WAKITA [3] Kiyomi SAKAKIBARA Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	2. A. Name and address of receiving party: KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO 41-1, AZA YOKOMICHI OAZA NAGAKUTE, NAGAKUTE-CHO AICHI-GUN, AICHI 480-1192, JAPAN
3.	A. 🖾 🗆 B.	Nature of conveyance: Assignment	B. Additional name(s) & address(es) attached? □Yes ☑ No
4.	A.	Patent Application No. <u>12/521,099</u>	B. Patent No.(s)
		Additional numbers attac	hed? 🔲 Yes 🗵 No
	C.	Title of Application: GAS DETECTING METHOD	AND GAS DETECTING APPARATUS
5.		ne and address of party to whom correspondence cerning document should be mailed:	6. Total number of applications and patents involved: 1
	Na	me: James A. Oliff	7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00.
	Ad	dress: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850 Phone Number: 703-836-6400 Fax Number: 703-836-2787	Credit any overpayment or charge any underpayment to deposit account number 15-0461.
9.	To the original origi	ement and signature. the best of my knowledge and belief, the foregoing information in all document. See A. Oliff, Registration No. 27,075 They H. Rothwell, Jr., Registration No. 60,728	n is true and correct and any attached copy is a true copy of the Date: <u>June 24, 2009</u>

PATENT REEL: 022872 FRAME: 0236

ASSIGNMENT

(4)	assign, transfer and set
(3) Kiyomi Sakakibara (7) (4) (8) In consideration of the sum of one dollar (\$1.00) and other good and value to each of the undersigned, each undersigned agrees to assign, and hereby does over to (9) Insert Name of Assignee (9) KABUSHIKI KAISHA TOYOTA CHUO KENI (10) Insert Address of Assignee (10) 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun	uable consideration paid assign, transfer and set
(4) In consideration of the sum of one dollar (\$1.00) and other good and value to each of the undersigned, each undersigned agrees to assign, and hereby does over to (9) Insert Name of Assignee (10) KABUSHIKI KAISHA TOYOTA CHUO KENI 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun	uable consideration paid assign, transfer and set
In consideration of the sum of one dollar (\$1.00) and other good and value to each of the undersigned, each undersigned agrees to assign, and hereby does over to (9) Insert Name of Assignee (10) Insert Address of Assignee (10) 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun	uable consideration paid assign, transfer and set
to each of the undersigned, each undersigned agrees to assign, and hereby does over to (9) Insert Name of Assignee (10) Insert Address of Assignee	assign, transfer and set
(10) Assignee (9) KABUSHIKI KAISHA TOYOTA CHUO KENI 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun	KYUSHO
(10) Insert Address of Assignee (10) 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun	
(hereinafter designated as the Assignan) and Assignant hairs associated	
the entire right, title and interest for the United States of America as defined in invention, and in all applications for patent including any and all provisional, no divisional, continuation, substitute, and reissue application(s), and all Letters Pareissues and reexamination certificates that may be granted on the invention known and the	35 U.S.C. §100, in the on-provisional, atent, extensions, own as
Identification GAS DETECTING WIETHOD AND GAS DETECTING	<u>J APPARATUS</u>
such as Title, Case Number, or Foreign Application Number (Attorney Docket No. 142005	
for which the undersigned has (have) executed an application for patent in the U	
on even date herewith or (12) Insert Date of	
Signing of (12) on May 11, 2009 Application	
(13) Alternative (13) U.S. application Serial Number 12/521 099 Identification for	
filed applications filed June 24 2009	
1) Each undersigned agrees to execute all papers necessary in connection with any application and any continuous applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in conapplications and patents as the Assignee may deem necessary. 2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, the Assignee in every way possible in obtaining evidence and going forward with such interference. 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary claims or provisions of the International Convention for Protection of Industrial Property or similar agreements. 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or conferexamination a grant of a valid United States patent to the Assignee. 5) Each undersigned authorizes and requests the Director of Patents to issue any and all Letters Patents of the from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full right to exhere a saigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that binding on him and his heirs, successors, assigns and legal representatives. 6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trader recordation of this document.	declared concerning , and to cooperate with in connection with firm by reissue or United States resulting onvey the entire interest this assignment is
In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).	
Date May 11, 2009 Inventor Signature Foskingular Jaquelis	(SEAL)
Date May 11, 2009 Inventor Signature Foshihar Waksta	(SEAL)
Date May 11, 2009 Inventor Signature Foshita Wakite	SEAL)
Date May 11, 2009 Inventor Signature Toshuku Waksta Date May 11, 2009 Inventor Signature Zuyomi Sakakil Date Inventor Signature	4
Date May 11, 2009 Inventor Signature Toshuko Waksta Date May 11, 2009 Inventor Signature Date Inventor Signature Inventor Signature	SEAL) (SEAL) (SEAL)
Date May 11, 2009 Inventor Signature Toshiha Wakita Date May 11, 2009 Inventor Signature Uryomi Sakakit Date Inventor Signature Date Inventor Signature Date Inventor Signature	(SEAL) (SEAL) (SEAL) (SEAL)
Date May 11, 2009 Inventor Signature Tobular Waksta Date May 11, 2009 Inventor Signature Date Inventor Signature	(SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
Date May 11, 2009 Inventor Signature Toshiha Wakita Date May 11, 2009 Inventor Signature Date Inventor Signature Date Inventor Signature Date Inventor Signature	(SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
Date May 11, 2009 Inventor Signature Toshuke Waketa Date May 11, 2009 Inventor Signature Date Inventor Signature Date Inventor Signature Date Inventor Signature Date Inventor Signature This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consulting the Consulting Signature	(SEAL) (SEAL) (SEAL) (SEAL) (SEAL) if outside the U.S.A. If

RECORDED: 06/24/2009

REEL: 022872 FRAME: 0237