To the Director of the U.S. Pat Please record the attached original development of the property (see): Name of conveying party(ies): Name in didditional name(s) of conveying party(ies): Name: Name and address of receiving party(ies): Name: Toyota Jidosha Kabushiki Kalsha	FORM PTC-1595 1-31-92		07-31-2003		HEET U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 07057.0049-0000 Attorney Customer Number: 22,852					
Name of conveying party(les): Kiyolinb MURATA; and T-24403 Name: Toyota Jidosha Kabushiki Kaisha	To the	Director of the U.S. Pat				Mail	Stop A	ssignment R	lecordatio	n Services
Additional name(s) of conveying party(les) attached?		Name of conveying party	(i==)-		2.	Name an	d addres	ss of receiving	party(ies):	
Street Address: 1, Toyota-cho, Toyota-shi			1.49	しり	Name:	Toyot	a Jidos	ha Kabushik	i Kaisha	
Assignment	Addition	nal name(s) of conveying p	arty(ies) attached?	Yes 🛛 No	Internal	Address:				
Country: Japan Zip Code: 471-8571 Security	3.	Nature of conveyance:			Street A	ddress:	1, To	yota-cho, Toy	∕ota-shi	
Additional name(s) & Address(es) attached? Execution Date: July 7, 2003	×	Assignment	Merger		City:	Aichi-ken				or T
Other: Additional name(s) & Address(es) attached? Yes No No Yes No No No No No No No N		•	Change of Name		Country	Japan		Zip Code:	471-8571	535
Execution Date: July 7, 2003 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application: July 7, 2003 A. Patent Application Number(s): /0625535 B. Patent Number(s): Additional numbers attached?					Addition	al name/s	& Addr	pec(pe) attack	ned?	.62
the application: July 7, 2003 A. Patent Application Number(s): / 0625535 B. Patent Number(s): Additional numbers attached? ☐ Yes ☐ No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: James W. Edmondson 7. Total number of applications and registrations involved: 1 Total fee (37 CFR 3.41): \$40 ☐ Enclosed (Please charge deficiency to deposit account) ☐ Authorized to be charged to deposit account ☐ Authorized to be charged to deposit account Street Address: 1300 I Street, N.W. ☐ Washington, D.C. State: Zip: 20005-3315 B. Deposit Account No.: 06-0916 9. Statement and signature. 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. July 24, 2003 James W. Edmondson Signature Date	Executi	on Date: July 7, 2003			Addition	_	a Addi		icu :	1795
Additional numbers attached? Yes No	4.			nis document is bei	ng filed to	gether wit	h a new	application, t	he execution	n date of
5. Name and address of party to whom correspondence concerning document should be mailed: Name: James W. Edmondson	A.	Patent Application Numb	er(s): 1062 5	535	B.	Patent Nu	ımber(s)) :		
Concerning document should be mailed: Name: James W. Edmondson 7. Total fee (37 CFR 3.41): \$40 ☐ Enclosed (Please charge deficiency to deposit account) ☐ Authorized to be charged to deposit account City: Washington, D.C. State: Zip: 20005-3315 8. Deposit Account No.: 06-0916 9. Statement and signature. 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. July 24, 2003 James W. Edmondson Signature Date			Additional numbe	rs attached?	☐ Yes	٥	₫ No			
Enclosed (Please charge deficiency to deposit account) Authorized to be charged to deposit account Authorized to be charged to deposit account	5.			dence	6.		iber of a	applications ar	nd registrati	ons
Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P. Street Address: 1300 Street, N.W. City: Washington, D.C. State: Zip: 20005-3315 8. Deposit Account No.: 06-0916 9. Statement and signature. 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. July 24, 2003 James W. Edmondson Signature Date	Name:	James W. Edmondson		-	7.	Total fee	(37 CFF	R 3.41): \$40		
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State: Zip: 20005-3315 8. Deposit Account No.: 06-0916 9. Statement and signature. 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. July 24, 2003 James W. Edmondson Signature Date	Street A									
9. Statement and signature. 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. July 24, 2003 James W. Edmondson Signature Date	City:	Washington, D.C.								
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. July 24, 2003 James W. Edmondson Date	State:	Zip	o: 20005-3	3315	8.	Deposit A	ccount i	No.: <u>06-0916</u>		<u></u>
July 24, 2003 James W. Edmondson Signature Date	9.	Statement and signature.								
James W. Edmondson Signature Date	To the t	pest of my knowledge and lent.	belief, the foregoing in	formation is true an	d correct	and any a	ittached	copy is a true	copy of th	e original
James W. Edmondson Signature Date		TWEN		4 WEDM	Lnew			July 24, 2003		
•	e seeleg g	James W. Edmondson Reg. No. 33,871	, to	Signati	ure		_	Da	ate	_

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PATENT REEL: 014320 FRAME: 0442

SOLE/JOINT INVENTION (U.S. Rights Only)

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled: THERMOPHOTOVOLTAIC GENERATOR APPARATUS

for which I/WE executed an application for United States Letters Pate	nt concurrently
herewith or on or filed an application for Uni	ted States Letters
Patent on, 19(Serial No); and
racent on, 15, (octant not	,, and
WHEREAS, TOYOTA JIDOSHA KABUSHIKI KAISHA	_
	, whose post office
address is 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan	, many poor original
(hereinafter referred to as Assignee), is desirous of securing the en interest in and to this invention, the application for United States invention and the Letters Patent to be issued upon this application;	
NOW THEREFORE, be it known that, for good and valuable consider which from assignee is hereby acknowledged, I/WE, as assignor(s), hav transferred, and set over, and do hereby sell, assign, transfer, and assignee, its lawful successors and assigns, my/our entire right, tit and to this invention and this application, and all divisions, and contain all Letters Patent of the United States which may be granted therethereof; and I/WE hereby authorize and request the Commissioner of Patent for this invention to the United States to issue all Letters Patent for this invention to be sessors and assigns, in accordance with the terms of this Assignment;	e sold, assigned, set over unto the le, and interest in ntinuations thereof, eon, and all reissues tents and Trademarks
me/us respecting this invention and testify in any legal proceeding, when called upon to do so, execute and deliver all papers that may be desirable to perfect the title to this invention in said assignee, its assigns, execute all divisional, continuation, and reissue application baths and generally do everything possible to aid assignee, its successible and enforce proper patent protection for this invention in the being understood that any expense incident to the execution of such papers the assignee, its successors and assigns.	necessary or some souccessors and ns, make all rightful ssors and assigns, to United States, it
AND, I/WE HEREBY authorize and request the attorneys I/we have electration and Power of Attorney in this application, to insert here application No, filed) the filepplication number of said application when known.	in parentheses
IN TESTIMONY WHEREOF, I/We have hereunto set our hand(s).	
. Full Name of Sole or First Assignor: Assignor's Signature Kiyohito MURATA : Airphito Amusta	: Date : July 7, 2003
Address c/o TOYOTA JIDOSHA KABUSHIKI KAISHX of 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan	: Citizenship : Japan
. Full Name of Second Assignor : Assignor's Signature Hideki NAKAYAMA : Mideki Makayana	: Date : July 7, 2003
Address c/o TOYOTA JIDOSHA KABUSHIKI KAISHA of 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan	: Citizenship : Japan
Full Name of Third Assignor : Assignor's Signature	: Date
Address	: Citizenship

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER . WASHINGTON, D.C.

PATENT REEL: 014320 FRAME: 0443

RECORDED: 07/24/2003