RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Assistant Commissioner for Patents: documents or copy thereof.	Please record the attached original					
1. Name of conveying party(ies): Srikumar Ramalingam Yuichi Taguchi	2. Name and address of receiving party(ies): Name: Mitsubishi Electric Research Laboratories, Inc. Street Address: 201 Broadway City: Cambridge State: MA Zip: 02139					
Menglong Zhu Additional name(s) of conveying party(ies) attached? []Yes [X]No 3. Nature of Conveyance:						
[X]Assignment []Merger []Security Agreement []Change of Name Execution Dates: September 6, 2012; August 9, 2012; and September 6, 2012	Additional name(s) and address(es) attached? []Yes [X]No					
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 is:						
A. Patent Application No.(s)	B. Patent No.(s)					
13/563,925						
Additional numbers at	tached? []Yes [X]No					
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [1]					
Name: Mitsubishi Electric Research Laboratories, Inc.	7.Total fee (37CFR 3.41): \$40.00 [] Enclosed					
Street Address: 201 Broadway	[X] Authorized to be charged to deposit account					
City: Cambridge State: MA Zip: 02139	8. Deposit account number: 50-0749					
DO NOT USE THIS SPACE						
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.						
Erika J. Cherko-Soykan/Erika J. Cherko-Soykan/ Sept 21, 2012 Name of Person Signing Signature Date Total number of pages comprising cover sheet: [1]						

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PATENT REEL: 029046 FRAME: 0901

ASSIGNMENT

WHEREAS, We, <u>LISTED INVENTORS</u>, have made certain inventions or discoveries (or both) set forth in an Application for Utility Patent of the United States of America entitled "Method and System for Determining Poses of Vehicle-Mounted Cameras for In-Road Obstacle Detection," the specification of which:

	was	executea	by us	on	tne	date	indicated be	e⊥ow;
<u> </u>		filed on 13/563,92		t 1,	201	.2_as	Application	Serial

was	patented	under	U.S.	Patent	No.	on	;
						-	-

WHEREAS, Mitsubishi Electric Research Laboratories, Inc., a corporation of the State of Delaware, whose address is 201 Broadway, Cambridge, Massachusetts 02139, and who, together with its successors and assigns is hereinafter called "Assignee", is desirous of acquiring the entire right, title, and interest together with the benefits and privileges hereinafter recited;

NOW, THEREFORE, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation;

- Assign, transfer and convey to Assignee the entire right, title and interest together with the benefits and privileges in and to said inventions and discoveries, said Application for Letters Patent or similar forms of protection of the United States of America, and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said application, and any and all Letters Patent, reissues and extensions of Letters Patent or similar forms of protection granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
 - 2. Authorize Assignee to file patent applications in

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PLG 10/94 ASSIGNTE.FRM

any or all countries or groups of countries on any or all of said inventions and discoveries in our name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or any other relevant convention or treaty or otherwise;

- 3. Authorize and request the Assistant Commissioner for Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as Assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any rights in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonable serving to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing any facts of our conceptions, disclosures, and reduction to practice of said inventions or discoveries.

IN WITNESS WHEREOF:

Inventor Signature : Reference Srikumar Ramalingam

Today's Date: 9/6/2012

Date Inventor Signed Declaration: July 31, 2012

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County of Middlesex

Subscribed and swom to before me by the above-named Srikumar Ramalingam this 6th Day of September, 2012.

My Commission Expires:

July 1, 2019





IN WITNESS WHEREOF:

Inventor Signature : Tuil Jagel.
Yuichi Taguchi

Today's Date: 9 Any 20/2

Date Inventor Signed Declaration: July 31, 2012

County of Middlesex

Subscribed and sworn to before me by the above-named Yuichi Taguchi this _9 Day of

)ss

Enka Cherko-Svylen Notary Public

My Commission Expires:

September 22, 2017

ERIKA CHERKO-SOYKAN NOTARY PUBLIC

MERL~2497

IN WITNESS WHEREOF:

Inventor Signature : Mew

Today's Date: Sept 6th

Date Inventor Signed Declaration: July 31, 2012

MERL-2497

Witnessed: Yinfei Young
Printed Name

Witnessed: Roy Anat;

Date

PATENT

REEL: 029046 FRAME: 0906