RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Assistant Commissioner for Patents: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Robert A. Cohen; Osman Gokhan Sezer; Name: Mitsubishi Electric Research Anthony Vetro Laboratories, Inc. Additional name(s) of conveying party(ies) attached? [] Yes [X] No 3. Nature of Conveyance: Street Address: 201 Broadway City: Cambridge State: MA Zip: 02139 [X] Assignment []Merger Additional name(s) and address(es) []Security Agreement []Change of Name attached? []Yes [X]No Execution Dates: February 7, 2011; March 10, 2011; and February 9, 2011 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) 13/007,394 Additional numbers attached? []Yes [X]No Name and address of party to whom 6. Total number of applications and correspondence concerning document patents involved: [1]should be mailed: 7. Total fee (37CFR 3.41): \$40.00 Name: Mitsubishi Electric Research Laboratories, Inc. [] Enclosed [X] Authorized to be charged to Street Address: 201 Broadway deposit account City: Cambridge State: MA Zip: 02139 Deposit account number: 50-0749

DO NOT USE THIS SPACE

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/ June 16, 2011 Name of Person Signing Signature Total number of pages comprising cover sheet: [1]

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PATENT REEL: 026732 FRAME: 0573

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 for Training and Utilizing Separable Transforms for Video Coding," the specification of which:

- was executed by us on the date indicated below;
- x was filed on January 14, 2011 as Application
 Serial No. 13/007,394
- __ 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;
- 5. 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 : Let A Cohen

Robert A. Cohen

Today's Date: Fel 7, Lou

Date Inventor Signed Declaration: January 14, 2011

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County of Middlesex

Subscribed and sworn to before me by the above-named Robert A. Cohen this

Euka Cherko-Soykan Notary Public

My Commission Expires:

September 22, 2017

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NOTARY PUBLIC

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IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: February 5, 2010

Date: 03/10/2011

Witnessed: Aysun Goban
Pribted Name

Witnessed: Bige ALSU Printed Name

Shin

IN WITNESS WHEREOF:

Inventor Signature:

Anthony Vetro

Today's Date: 2/9/2011

Date Inventor Signed Declaration: January 14, 2011

County of Middlesex

Subscribed and sworn to before me by the above-named Anthony Vetro this _____

_____, 2011.

Notary Public Saykan

My Commission Expires:

September 22, 2017



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> PATENT REEL: 026732 FRAME: 0578