

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hyung Joon Kim</td> <td>07/12/2012</td> </tr> <tr> <td>Minhua Zhou</td> <td>08/16/2012</td> </tr> <tr> <td>Akira Osamoto</td> <td>08/16/2012</td> </tr> <tr> <td>Hideo Tamama</td> <td>08/20/2012</td> </tr> </tbody> </table>		Name	Execution Date	Hyung Joon Kim	07/12/2012	Minhua Zhou	08/16/2012	Akira Osamoto	08/16/2012	Hideo Tamama	08/20/2012		
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<table border="1"> <tr> <td>Name:</td> <td>Texas Instruments Incorporated</td> </tr> <tr> <td>Street Address:</td> <td>12500 TI Boulevard</td> </tr> <tr> <td>Internal Address:</td> <td>MS 3999</td> </tr> <tr> <td>City:</td> <td>Dallas</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>75243</td> </tr> </table>		Name:	Texas Instruments Incorporated	Street Address:	12500 TI Boulevard	Internal Address:	MS 3999	City:	Dallas	State/Country:	TEXAS	Postal Code:	75243
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PROPERTY NUMBERS Total: 1													
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CORRESPONDENCE DATA													
<p>Fax Number: 2144791273</p> <p>Phone: 7139378823</p> <p>Email: ellen@lawspatents.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Texas Instruments Incorporated</p> <p>Address Line 1: P.O. Box 655474</p> <p>Address Line 2: MS 3999</p> <p>Address Line 4: Dallas, TEXAS 75265</p>													
ATTORNEY DOCKET NUMBER:	TI-72592												
NAME OF SUBMITTER:	Ellen Baker Laws												
<p>Total Attachments: 2</p> <p>source=TI-72592_ASG-fully_executed#page1.tif</p> <p>source=TI-72592_ASG-fully_executed#page2.tif</p>													

OP \$40.00 13548100

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made.

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 12500 TI Boulevard - M/S 3999, Dallas, Texas 75243, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon, as well as to U.S. Provisional Application No(s) : 61/506,838, filed July 12, 2011;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign unto the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in and to the said application(s) and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Patent and Trademark Office to issue all patents for said invention, or patents resulting therefrom, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

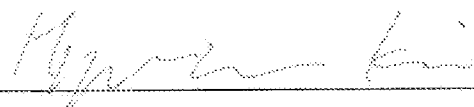
I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my corresponding rights to the invention disclosed in said application in all other countries of the world, including the right to claim priority, file applications and obtain patents under the terms of the Paris Convention for the Protection of Industrial Property, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such rights.



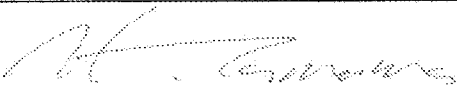
I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

I authorize the later insertion of the nonprovisional application number and filing date herein below.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE	Fast Motion Estimation For Hierarchical Coding Structures		
NONPROVISIONAL APPLICATION NO.	13/548,100	FILING DATE	2012-07-12

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Hyung Joon Kim
DATE	7-12-2012
RESIDENCE (CITY AND STATE)	McKinney, TX

SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Minhua Zhou
DATE	8-16-2012
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Akira Osamoto
DATE	8-16-2012
RESIDENCE (CITY AND STATE)	Plano, TX
SIGNATURE OF INVENTOR	
PRINTED NAME OF INVENTOR	Hideo Tamama
DATE	8-20-2012
RESIDENCE (CITY AND STATE)	The Colony, TX

After recording, return Assignment to:

Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, TX 75265