

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

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>Thomas Edward Horlander</td> <td>02/23/2011</td> </tr> <tr> <td>Brian Joseph Dorini</td> <td>02/23/2011</td> </tr> </tbody> </table>		Name	Execution Date	Thomas Edward Horlander	02/23/2011	Brian Joseph Dorini	02/23/2011				
Name	Execution Date										
Thomas Edward Horlander	02/23/2011										
Brian Joseph Dorini	02/23/2011										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Thomson Licensing</td> </tr> <tr> <td>Street Address:</td> <td>1-5 rue Jeanne d'Arc</td> </tr> <tr> <td>City:</td> <td>Issy Les Moulineaux</td> </tr> <tr> <td>State/Country:</td> <td>FRANCE</td> </tr> <tr> <td>Postal Code:</td> <td>92130</td> </tr> </table>		Name:	Thomson Licensing	Street Address:	1-5 rue Jeanne d'Arc	City:	Issy Les Moulineaux	State/Country:	FRANCE	Postal Code:	92130
Name:	Thomson Licensing										
Street Address:	1-5 rue Jeanne d'Arc										
City:	Issy Les Moulineaux										
State/Country:	FRANCE										
Postal Code:	92130										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13575803</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13575803						
Property Type	Number										
Application Number:	13575803										
CORRESPONDENCE DATA											
<p>Fax Number: 6097346888 Phone: 609-734-6828 Email: filiz.crandall@technicolor.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> Correspondent Name: Robert D. shedd, Patent Operations THOMS Address Line 1: P.O. Box 5312 Address Line 4: Princeton, NEW JERSEY 08543-5312</p>											
ATTORNEY DOCKET NUMBER:	PU100018										
NAME OF SUBMITTER:	Brian J. Dorini										
<p>Total Attachments: 3 source=PU100018Assignment#page1.tif source=PU100018Assignment#page2.tif source=PU100018Assignment#page3.tif</p>											

CH \$40.00 13575803

PATENT

**ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR
LETTERS PATENT OF THE UNITED STATES OF AMERICA**

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of 1 joint inventors (if plural inventors are named below) of the inventions relating to MACROBLOCK INTERLEAVING FOR IMPROVED 3D COMPRESSION

described in an Application for Patent filed on January 29, 2010 under Serial No. 61/337,060 and described in the file associated with Docket No. PU100018 listed above or, if not identified here by filing date and serial number or by the Docket Number listed above, executed by me on even date with my execution of this Assignment/Agreement.

For valuable consideration received, I hereby sell, assign and transfer to THOMSON LICENSING, a corporation duly organized and existing under the laws of the country of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions, and all the rights and privileges under any and all Letters Patent that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with THOMSON LICENSING, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at <u>Indianapolis, IN USA</u>		Date <u>5/19/2010</u>
Inventor (1) <u>Thomas Edward Horlander</u> (Type or Print)		<u>Thomas Edward Horlander</u> (Signature in Full. No initials.)
Post Office Address <u>6234 Haverford Avenue, Indianapolis, IN 46220 USA</u>		
1st Witness <u>MICHAEL J. McLANE</u> (Type or Print)	<u>Michael J. McLane</u> (Signature in Full. No initials.)	
2nd Witness <u>MATHEW ABRAHAM</u> (Type or Print)	<u>Mathew Abraham</u> (Signature in Full. No initials.)	
Signed at _____		Date _____
Inventor (2) _____ (Type or Print)		_____ (Signature in Full. No initials.)
Post Office Address _____		
1st Witness _____ (Type or Print)	_____ (Signature in Full. No initials.)	
2nd Witness _____ (Type or Print)	_____ (Signature in Full. No initials.)	
Signed at _____		Date _____
Inventor (3) _____ (Type or Print)		_____ (Signature in Full. No initials.)
Post Office Address _____		
1st Witness _____ (Type or Print)	_____ (Signature in Full. No initials.)	
2nd Witness _____ (Type or Print)	_____ (Signature in Full. No initials.)	

After this Assignment has been recorded please RETURN to:

Patent Operations
THOMSON Licensing LLC
PO Box 5312
Princeton, NJ 08543-5312

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of 2 joint inventors (if plural inventors are named below) of the inventions relating to BLOCK-BASED INTERLEAVING

described in an Application for Patent filed on January 28, 2011 under Serial No. PCT/US2011/00168 and described in the file associated with Docket No. PU100018, listed above or, if not identified here by filing date and serial number or by the Docket Number listed above, executed by me on even date with my execution of this Assignment/Agreement.

For valuable consideration received, I hereby sell, assign and transfer to Thomson Licensing, a corporation duly organized and existing under the laws of the country of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions, and all the rights and privileges under any and all Letters Patent that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with Thomson Licensing, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at	<u>Indianapolis</u>	Date	<u>2/23/2011</u>
Inventor (1)	<u>Thomas Edward Horlander</u> (Type or Print)	<u>Thomas Edward Horlander</u> (Signature in Full. No initials.)	
Post Office Address	<u>6234 Haverford Avenue, Indianapolis, Indiana 46220 US</u>		
1st Witness	<u>RICHARD R. PHIPPS</u> (Type or Print)	<u>Richard R. Phipps</u> (Signature in Full. No initials.)	
2nd Witness	<u>MARK W. GYSIN</u> (Type or Print)	<u>Mark W. Gysin</u> (Signature in Full. No initials.)	
Signed at		Date	
Inventor (2)	<u>Brian Joseph Dorini</u> (Type or Print)	<u>Brian Joseph Dorini</u> (Signature in Full. No initials.)	
Post Office Address	<u>168 Loomis Court, Princeton, New Jersey 08540 US</u>		
1st Witness		<u></u> (Signature in Full. No initials.)	
2nd Witness		<u></u> (Signature in Full. No initials.)	
Signed at		Date	
Inventor (3)		<u></u> (Signature in Full. No initials.)	
Post Office Address			
1st Witness		<u></u> (Signature in Full. No initials.)	
2nd Witness		<u></u> (Signature in Full. No initials.)	

After this Assignment has been recorded please RETURN to: Patent Operations
THOMSON Licensing LLC
PO Box 5312
Princeton, NJ 08543-5312

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

I hereby declare that I am the sole inventor (if only one inventor is named below) or one of 2 joint inventors (if plural inventors are named below) of the inventions relating to BLOCK-BASED INTERLEAVING

described in an Application for Patent filed on January 28, 2011 under Serial No. PCT/US11/00165 and described in the file associated with Docket No. PU100018, listed above or, if not identified here by filing date and serial number or by the Docket Number listed above, executed by me on even date with my execution of this Assignment/Agreement.

For valuable consideration received, I hereby sell, assign and transfer to Thomson Licensing, a corporation duly organized and existing under the laws of the country of France, its successors, and assigns my entire right, title and interest, for all countries in and to said inventions, and all the rights and privileges under any and all Letters Patent that may be granted therefor, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said corporation but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said corporation, its successors, assigns or nominees.

I agree that I will communicate to said corporation or its representatives any facts known to me respecting said inventions and when requested by said corporation and at its expense will testify in any legal proceedings, and generally do everything possible to aid said corporation, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said corporation, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries and to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said corporation or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with Thomson Licensing, its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at	Date
Inventor (1) <u>Thomas Edward Horlander</u> (Type or Print)	(Signature in Full. No initials.)
Post Office Address <u>6234 Haverford Avenue, Indianapolis, Indiana 46220 US</u>	
1st Witness (Type or Print)	(Signature in Full. No initials.)
2nd Witness (Type or Print)	(Signature in Full. No initials.)
Signed at <u>Princeton, NJ</u>	Date <u>FEB. 23, 2011</u>
Inventor (2) <u>Brian Joseph Dorini</u> (Type or Print)	(Signature in Full. No initials.)
Post Office Address <u>168 Loomis Court, Princeton, New Jersey 08540 US</u>	
1st Witness <u>Dele Fran</u> (Type or Print)	(Signature in Full. No initials.)
2nd Witness <u>Lars GREENE</u> (Type or Print)	(Signature in Full. No initials.)
Signed at	Date
Inventor (3) (Type or Print)	(Signature in Full. No initials.)
Post Office Address	
1st Witness (Type or Print)	(Signature in Full. No initials.)
2nd Witness (Type or Print)	(Signature in Full. No initials.)

After this Assignment has been recorded please RETURN to:

Patent Operations
THOMSON Licensing LLC
PO Box 5312
Princeton, NJ 08543-5312