

## PATENT ASSIGNMENT

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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>Anish Chandak</td> <td>12/18/2011</td> </tr> <tr> <td>Lakulish Shailesh Antani</td> <td>01/03/2012</td> </tr> <tr> <td>Micah Taylor</td> <td>01/03/2012</td> </tr> <tr> <td>Dinesh Manocha</td> <td>01/03/2012</td> </tr> </tbody> </table>		Name	Execution Date	Anish Chandak	12/18/2011	Lakulish Shailesh Antani	01/03/2012	Micah Taylor	01/03/2012	Dinesh Manocha	01/03/2012
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Anish Chandak	12/18/2011										
Lakulish Shailesh Antani	01/03/2012										
Micah Taylor	01/03/2012										
Dinesh Manocha	01/03/2012										
RECEIVING PARTY DATA											
Name:	The University of North Carolina at Chapel Hill										
Street Address:	308 Bynum Hall										
Internal Address:	Campus Box 4105										
City:	Chapel Hill										
State/Country:	NORTH CAROLINA										
Postal Code:	27599-4105										
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>13373901</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13373901						
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Application Number:	13373901										
CORRESPONDENCE DATA											
Fax Number:	(919)419-0383										
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ATTORNEY DOCKET NUMBER:	421/276/2										
NAME OF SUBMITTER:	Gregory A. Hunt										

PATENT

**Total Attachments: 4**

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PATENT

Atty. Docket No.: 421/276/2

ASSIGNMENT

WHEREAS, we, Anish Chandak of Carrboro, North Carolina; Lakulish Shailesh Antani of Chapel Hill, North Carolina; Micah Taylor of Pittsboro, North Carolina; and Dinesh Manocha of Chapel Hill, North Carolina (hereinafter "Assignors"), have invented certain new and useful improvements in METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR FAST GEOMETRIC SOUND PROPAGATION USING VISIBILITY COMPUTATIONS (hereinafter "Invention") for which application for a U.S. Patent was made on December 5, 2011 as Serial No. 13/373,901 (hereinafter "Application"). Assignors hereby authorize Jenkins, Wilson, Taylor & Hunt, P.A. to insert the filing date and Serial No. above.

AND, WHEREAS, The University of North Carolina at Chapel Hill, a non-profit organization located at Chapel Hill, North Carolina (hereinafter "Assignee"), is desirous of acquiring an interest therein.

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors have sold and by these presents do hereby sell, assign, transfer and convey unto the Assignee, its successors and assigns, their entire right, title and interest in and to the Invention and Application, and in and to any and all foreign patent applications filed on the Invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with their right to claim the priority of the Application in all countries in accordance with the Paris Convention, the Patent Cooperation Treaty, or other agreement or national law under which priority can be claimed, the same to be held and enjoyed by said Assignee, its successors and

**PATENT**

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assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made.

Assignors hereby request that said Letters Patent be issued in accordance with this Assignment.

Assignors further covenant and agree that, at the time of the execution and delivery of these presents, Assignors possess the unencumbered right and authority to make this Assignment.

Assignors further covenant and agree, and likewise bind their heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to them relating to the Invention, to testify in any interference or legal proceedings involving the Application or Invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the Invention in all countries and to vest in the Assignee complete title to the Invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

Executed this 18<sup>th</sup> day of December 2011.

Anish  
Anish Chandak

Witnessed by:

Ravish Mehra 12/18/2011  
Name Date

[Signature] 12/18/2011  
Name Date

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Atty. Docket No.: 421/276/2

Executed this 3<sup>rd</sup> day of January 2012

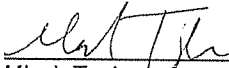
  
\_\_\_\_\_  
Lakulish Shaillesh Antani

Witnessed by:

<u>Ashman Gulra</u>	<u>1/3/2012</u>
Name	Date
<u>Ravish Mehra</u>	<u>1/3/2012</u>
Name	Date

\*\*\*\*\*

Executed this 3 day of January 2012

  
\_\_\_\_\_  
Micah Taylor

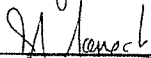
Witnessed by:

<u>Ravish Mehra</u>	<u>1/3/2012</u>
Name	Date
<u>Ashman Gulra</u>	<u>1/3/2012</u>
Name	Date

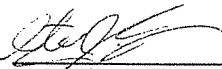
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Atty. Docket No.: 421/276/2

Executed this 3<sup>rd</sup> day of January 20112

  
Dinesh Manocha

Witnessed by:

 1/3/12  
Name Date

Parvish Mehra 1/3/12  
Name Date

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