

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3875750

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
THAD EUGENE STARNER	01/06/2012
IRFAN ESSA	03/08/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	GOOGLE INC.
<b>Street Address:</b>	1600 AMPHITHEATRE PARKWAY
<b>City:</b>	MOUNTAIN VIEW
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94043
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14724524
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)913-0002
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	312-913-0001
<b>Email:</b>	ellis@mbhb.com
<b>Correspondent Name:</b>	MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
<b>Address Line 1:</b>	300 SOUTH WACKER DRIVE
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60606
<b>ATTORNEY DOCKET NUMBER:</b>	11-1538-US-CON
<b>NAME OF SUBMITTER:</b>	MICHAEL D. CLIFFORD
<b>SIGNATURE:</b>	/Michael D. Clifford/
<b>DATE SIGNED:</b>	05/17/2016
<b>Total Attachments: 6</b>	
source=Thad_Starner_Assignment_06JAN2012#page1.tif	
source=Thad_Starner_Assignment_06JAN2012#page2.tif	
source=Thad_Starner_Assignment_06JAN2012#page3.tif	
source=Thad_Starner_Assignment_06JAN2012#page4.tif	
source=11-1538-US-CON_Assignment_from_parent#page1.tif	



## ASSIGNMENT

Inventor: Thad Eugene Starner

Date of Execution  
of Applications:

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**Google Inc.**

its successors and assigns, the entire right, title and interest in the inventions or improvements of the undersigned disclosed in both the provisional patent applications and the non-provisional applications for Letters Patent of the United States that are listed in Appendix A, and in any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said inventions or improvements, and in any and all Letters Patents of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

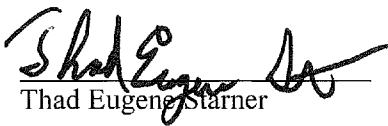
The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patents to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said applications when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said inventions or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said inventions or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said applications and any and all applications and other documents for Letters Patent in foreign countries on said inventions or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said inventions or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Signature:  
Name:

  
Thad Eugene Starnes

Date:

1/6/2012

## Appendix A

	<b>Title</b>	<b>Application No.</b>	<b>Filing Date</b>
1	<b>Determining Correlated Movements Associated with Movements Caused by Driving a Vehicle</b>	61/583,640	January 6, 2012
2	<b>User-Experience Customization</b>	13/345,493	January 6, 2012
3	<b>Hands-Free Selection Using a Ring-Based User Interface</b>	61/583,762	January 6, 2012
4	<b>Structured Light for Eye-Tracking</b>	61/583,685	January 6, 2012
5	<b>Chorded Input Device Configured for Behind-the-Ear Mounting</b>	61/583,002	January 4, 2012
6	<b>Determining Operations of a Wearable Computing Device using one or more Sensors</b>	13/345,475	January 6, 2012
7	<b>Intelligent Zoom and Image Capture</b>	61/584,100	January 6, 2012
8	<b>Text Input on Touch Sensitive Interface</b>	61/584,083	January 6, 2012
9	<b>Dynamic Control of Virtual Input Area</b>	13/345,190	January 6, 2012
10	<b>Resolution of Directional Ambiguity on Touch-Based Interface Based on Wake-Up Gesture</b>	13/344,643	January 6, 2012
11	<b>Circular Keyboard</b>	61/584,104	January 6, 2012
12	<b>Device Control Utilizing Optical Flow</b>	61/584,212	January 6, 2012
13	<b>Textured Linear Trackpad</b>	61/584,206	January 6, 2012
14	<b>Image Capture and Storage Based on Gaze Detection</b>	61/584,138	January 6, 2012
15	<b>Morse code on a Trackpad</b>	61/583,948	January 6, 2012
16	<b>Self-Powered Mouse</b>	61/583,944	January 6, 2012
17	<b>Automated Adjustment of Scaled Display within Eye-Box to Account for Movement of an HMD</b>	61/583,972	January 6, 2012
18	<b>Expectation Maximization to Determine Position of Light Sources Relative to Eye</b>	61/584,099	January 6, 2012
19	<b>Eye-Tracking Based on Ambient Glints</b>	61/584,176	January 6, 2012
20	<b>Gaze Tracking Utilizing Physical Characteristics of the Eye</b>	61/584,075	January 6, 2012
21	<b>Gaze Tracking Using Controlled Glints with Rotation of Switched-Off Light Source</b>	61/584,139	January 6, 2012
22	<b>HMD Image Source as Dual-Purpose Projector/Near-Eye Display</b>	61/582,889	January 4, 2012

23	<b>Dynamically Utilizing Multiple Eye-Tracking Processes</b>	61/584,169	January 6, 2012
24	<b>Life-Log Based on Retinal Image Analysis</b>	61/584,147	January 6, 2012
25	<b>Methods for Eye-Tracking on a Head Mountable Display</b>	61/584,152	January 6, 2012
26	<b>Motion-Sensed Mechanical Interface Features</b>	61/584,194	January 6, 2012
27	<b>Notification of Ambient-Light Interference with Eye-Tracking Data</b>	61/584,018	January 6, 2012
28	<b>Object Occlusion to Initiate a Visual Search</b>	61/583,968	January 6, 2012
29	<b>Object-Outlining to Initiate a Visual Search</b>	61/583,995	January 6, 2012
30	<b>Pattern Recognition Using a Combination of Motion and Audio Data</b>	61/584,200	January 6, 2012
31	<b>Proximity-Sensors Arrays for Three Dimensional (3D) Presence Sensing</b>	61/584,211	January 6, 2012
32	<b>Using Visual Layers to Aid in Initiating a Visual Search</b>	61/584,082	January 6, 2012
33	<b>Visual Completion</b>	61/584,205	January 6, 2012
34	<b>Visual Object Selection Utilizing Head and Eye Movement Data</b>	61/584,046	January 6, 2012
35	<b>Touch-Based Text Entry Using Hidden Markov Modeling</b>	61/584,213	January 6, 2012
36	<b>Dynamic Eyebow Adjustment Based on Eye-Tracking in a Head-Mounted Display AND Keystone Adjustment in a Display Based on the Relative Position of Head-Mounted Display</b>	61/584,026	January 6, 2012
37	<b>Assisted Speech Input</b>	61/584,135	January 6, 2012

ASSIGNMENT

Case No.: 11-1538-US

Serial No.:

Inventor: Irfan Essa

Date of Execution  
of Application:

Filing Date:

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**Google Inc.**

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

**USING VISUAL LAYERS TO AID IN INITIATING A VISUAL SEARCH**

and identified as:

**Case No. 11-1538-US**

in the offices of McDONNELL BOEHMEN HULBERT & BERGHOFF LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or

expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Signature:  
Name:

  
J. J. Essa

Date:

March 8, 1912