

02/03/2011

Form PTO-1595 (Rev. 03-09)
OMB No. 0651-0027 (exp. 03/31/2009)U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

IT

103616900

To the Director of the U.S. Patent and Trademark Office, please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Tushar UDESHI
Emil PRAUNAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) 1/29/2011 and 1/31/2011

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Google Inc.

Internal Address: _____

Street Address: 1600 Amphitheatre ParkwayCity: Mountain ViewState: CaliforniaCountry: USA Zip: 94043Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

13/018,333

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.Internal Address: c/o Joseph E. MutschelknausStreet Address: 1100 New York Avenue, N.W.City: WashingtonState: D.C. Zip: 20005-3934Phone Number: 202 371-2600Fax Number: 202 371-2540Email Address: jmutsche@skgf.com6. Total number of applications and patents involved: 17. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

1005

08/2013

Deposit Account Number 19-0036

Authorized User Name

02/03/2011 HULLINS 00000029 13018333

01 FC:0021

1-31-2011

40.00

9. Signature:

Signature

Date

Joseph E. Mutschelknaus
Name of Person SigningTotal number of pages including cover sheet, attachments, and documents: 5Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1460, Alexandria, V.A. 22313-1460

1315449.1

PATENT
REEL: 025749 FRAME: 0211

Jan. 24. 2011 10:02AM Google

No. 0898 P. 11/16

Atty. Docket No. 2525.4680000

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Tushar UDESHI and Emil PRAUN, hereby sell and assign to Google Inc., a corporation formed under the laws of Delaware, whose mailing address is 1600 Amphitheatre Parkway, Mountain View, California 94043 (hereafter referred to as the Assignee), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as **Methods for Efficiently Querying Multiple Points in a Indexed Quadtree** for which application(s) for patent in the United States of America has a filing date or a 371(c) date of _____ (also known as United States Application No. To Be Assigned), in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

Jan. 24. 2011 10:02AM Google

No. 0898 P. 12/16

Appl. No. To Be Assigned
Atty. Docket No. 2525.4680000

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant the patent practitioners associated with CUSTOMER NUMBER 66777 the power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

The undersigned inventors hereby represent that he/she understands that the patent practitioners associated with CUSTOMER NUMBER 66777 are the legal representatives of, and attorneys for, the assignee, and are NOT the legal representatives of, and attorneys for, the inventors.

IN WITNESS WHEREOF, executed by the undersigned inventors on the date opposite his/her name,

Date: 1/24/2011 Signature of Inventor: 
Tushar UDESHI

Date: _____ Signature of Inventor: _____
Emil PRAUN

1310512_1.DOC

Jan. 31. 2011 4:07PM GOOGLE

No. 0168 P. 7

Atty. Docket No. 2525.4680000

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: **Tushar UDESHI and Emil PRAUN**, hereby sell and assign to Google Inc., a corporation formed under the laws of Delaware, whose mailing address is 1600 Amphitheatre Parkway, Mountain View, California 94043 (hereafter referred to as the Assignee), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as **Methods for Efficiently Querying Multiple Points in a Indexed Quadtree** for which application(s) for patent in the United States of America has a filing date or a 371(c) date of _____ (also known as United States Application No. To Be Assigned), in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

Jan. 31. 2011 4:07PM GOOGLE

No. 0168 P. 8

Appl. No. To Be Assigned
Atty. Docket No. 2525.4680000

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant the patent practitioners associated with CUSTOMER NUMBER 66777 the power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

The undersigned inventors hereby represent that he/she understands that the patent practitioners associated with CUSTOMER NUMBER 66777 are the legal representatives of, and attorneys for, the assignee, and are NOT the legal representatives of, and attorneys for, the inventors.

IN WITNESS WHEREOF, executed by the undersigned inventors on the date opposite his/her name.

Date: _____

Signature of Inventor: _____

Tushar UDESHI

Date: 1/31/2011

Signature of Inventor: _____

Emil Praun
Emil PRAUN

1310512_1.DOC

Page 2 of 2

1/31/11
JOSEPH E. MUTSCHELKNAUS
ATTORNEY
(202) 772-8874
JMUTSCHE@SKGF.COM

Fax☐ Urgent☒ Return reply requested☐ Original will be sent as confirmation

To: USPTO

Date: January 31, 2011

Attention: Assignment Branch

Re: Appl. No. 13/018,333; Filed: January 31, 2011

From: Joseph E. Mutschelknaus

For: **Methods for Efficiently Querying Multiple
Points in an Indexed Quadtree**Inventors: UDESHI *et al.*

Pages (including cover sheet): 7

Fax No: 703 756-1648

Our Reference: 2525.4680000

Message

1. Credit Card Payment Form (PTO-2038) in the amount of **\$40.00** to cover the recordation fee;
2. Recordation cover sheet (PTO-1595); and
3. Executed Assignment to Google Inc.

Certification of Facsimile Transmission

I hereby certify that the above documents are being facsimile transmitted
to the Patent and Trademark Office on the date shown below.

Date:

Name

31 January 2011

1315461_1.DOC

If any portion of this transmission is not received clearly or in full, contact us at the numbers below.

This message is intended for the exclusive use of the individual or entity to which it is addressed. The message may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, copying or use of this communication in any way is strictly prohibited. If you have received this communication in error, please call us collect immediately, and return the original message to us at the above address via the U.S. Postal Service.

[MIND + MUSCLE]