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## RECORDATION FORM COVER SHEET PATENTS ONLY

Patent and Trademark Office Atty Ref/Docket No.: 2413.062US1 To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof Name and address of receiving party(ies): 1. Name of conveying party(ics): Name: The Trustees of Columbia University in the City of New York Hassan Haider Malik, John Ronald Kender Street Address: 535 West 116th Street Additional name(s) of conveying party(ies) attached? 412 Low Memorial Library [ ]Yes [X]No State: New York Zip: 10027 City: <u>New York</u> State: <u>New York</u> Country: <u>United States of America</u> 3. Nature of conveyance: Additional name(s) & address(es) attached? [ ]Yes [X] Assignment [] Merger [X]No [] Security Agreement[] Change of Name [] Other Execution Date: January 19, 2010, March 4, 2010 Application number(s) or patent number(s); If this document is being filed together with a new application, the execution date of the application is: B. Pateni No.(s) A. Patent Application No.(\$) Serial No. 12/602,908, filed December 3, 2009 Additional numbers attached? [ ]Yes [X]No 6. Total number of applications and patents involved: 1 Name and address of party to whom correspondence 7. Total fee (37 CFR 3.41):\$ 40.00 concerning document should be mailed: Name: John I. Fischer [[Enclosed [X]Authorized to be charged to deposit account Address: 19-0743 Schwegman, Lundberg & Woessner, P.A. P.O. Box 2938 8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743 Minneapolis, MN 55402--0938 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 18 Mar 2010 John I. Fischer/Reg. No. 60.900 Date Name of Person Signing Total number of pages including cover sheet: 5

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

Attorney Docket No. 2413.062US1 Client Ref. No. M07-091/2413.062US1/J\$/CC

## ASSIGNMENT

WHEREAS, We, <u>Hassan Haider Malik</u>, residing at 402 Pheasant Run, Monmouth Junction, New Jersey 08852, and <u>John Ronald Kender</u>, residing at 169 Ames Avenue, Leonia, New Jersey 07605, made certain new and useful inventions and improvements which are described in an application for U.S. Letters Patent on <u>December 3, 2009</u>, which application was assigned U.S. patent application serial number <u>12/602.908</u>, and is entitled <u>DATA CLASSIFICATION AND HIERARCHICAL CLUSTERING</u>;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to <u>The Trustees of Columbia University in the</u> <u>City of New York</u> (the "Assignee"), a corporation of the State of <u>New York</u>, having a place of business at <u>535 West 116th Street</u>, <u>412 Low Memorial Library</u>, <u>New York</u>, <u>New York</u> <u>10027</u>, the entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below; such applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions and/or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based on the identified application;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. <u>68836</u> may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

## Additional Application Information

U.S. Provisional Application Serial No. 60/943,218, filed on June 11, 2007.

U.S. Provisional Application Serial No. 60/950,134, filed on July 17, 2007.

U.S. Provisional Application Serial No. 60/963,600, filed on August 6, 2007.

International Application Serial No. PCT/US2008/007308, filed on June 11, 2008.

ASSIGNMENT	Decket No: 2413.062US1
Client Ref. No. M07-091/2413.062US1/JS/CC Assignors: Hassen Haider Malik et al. Title: DATA CLASSIFICATION AND HIERARCHICAL CLUSTERING	Serial Number: 12/602,908
Page 2 of 4	<b>_</b>

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

PATENT REEL: 024102 FRAME: 0349

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ASSIGNMENT Client Ref. No. M07-091/2413.062US1/JS/CC Assignors: Hassan Haider Malik et al. Title: DATA CLASSIFICATION AND HIERARCHICAL CLUSTERIN Page 3 of 4	Docker No: 2413.062US1 Serial Number: 12/602,908
IN TESTIMONY WHEREOF, I have he	reunto set my hand this $\frac{9}{100}$ day of
January_ 20/10	Alan
	Hassan Haider Malik
STATE OF)	
COUNTY OF $(1)$	
On this day of <u>Hassan Haider Malik</u> , to me known and known to me executed the foregoing instrument, and he/she duly a same for the uses and purposes therein set forth.	e to be the person described in and who
[SEAL]	LOVELYN SAFMHENTO Nolery Public - Sistert Now York No. 01945163597 Qualified in Kingo Causty My Commission Expires March 17, 2912
-	Notary Public

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ASSIGNMENT	Docket No: 2413.062US1
Client Ref. No. M07-091/2413.062US1/JS/CC Assignors: Hassan Haider Malik et al. Title: DATA CLASSIFICATION AND HIERARCHICAL CLUSTERING Page 4 of 4	Serial Number. 12/602.908
IN TESTIMONY WHEREOF, I have hereunto se	t my hand this $\mathcal{Y}$ day of
March , 2010_	· · · · · · · · · · · · · · · · · · ·
	Jan
	John Ronald Kender
STATE OF	
COUNTY OF	
On this <u>4</u> day of <u>MMCL</u> , 20 <u>10</u> <u>Ronald Kender</u> , to me known and known to me to be the pers the foregoing instrument, and he/she duly acknowledged to m the uses and purposes therein set forth.	before me personally appeared <u>John</u> on described in and who executed he that he/she executed the same for
[SEAL]	In Mm
CARMEN NIEVES Notery Public, State of New York Not No. 01N16081998 Qualified in Westchester County Commission Expires October 21, 2012	ary Public
Commission Expires October 21, Ada	and a second



P.O. Box 2938 Minneapolis, MN 55402 Telephone (612) 373-6900 Facsimile (612) 339-3061

Date: March 18, 2010

Time: (Minneapolis, Minn.)

TO: Commissioner for Patents

 Attn: <u>Assignment Recordation Services</u>
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 Facsimile Center
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 Alexandria, VA 22313-1450

FROM: John I. Fischer

OUR REF: 2413.062US1

FAX NUMBER 571-273-0140

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Document(s) Transmitted: Assignment (4 pgs.), Recordation Form Cover Sheet (1 pg.), Authorization to charge Deposit Account 19-0743 in the amount of \$40.00 to cover the recordation fee.

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In re. Patent Application of: Hassan Haider Malik et al.

Examiner: <u>Unknown</u>

Serial No.: <u>12/602,908</u>

Group Art Unit: <u>Unknown</u>

Filed: December 3, 2009

Docket No.: 2413.062U<u>\$1</u>

Title: DATA CLASSIFICATION AND HIERARCHICAL CLUSTERING

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Ву: /

Name: John I. Fischer USPTO Reg. No. 60,900

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

Servekemitz heena Dovine-Remitz

<u>3-18-2010</u> Date of Transmission

PATENT REEL: 024102 FRAME: 0352

**RECORDED: 03/18/2010**