502172584 12/21/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Paul Rashidi	10/30/2012
Jeanne Mackin	10/31/2012
Mark Kelly	12/10/2012

RECEIVING PARTY DATA

Name:	FMR LLC
Street Address:	82 Devonshire Street
City:	Boston
State/Country:	MASSACHUSETTS
Postal Code:	02109

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	13623702
Application Number:	13675914

CORRESPONDENCE DATA

Fax Number: 6175269899

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 617.526.9600

Email: oandrews@proskauer.com
Correspondent Name: Proskauer Rose LLP
Address Line 1: One International Place

Address Line 4: Boston, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	FID-073/FID-073C1		
NAME OF SUBMITTER:	Brenda Flockhart-Shanks		

Total Attachments: 7 source=FID-073#page1.tif

PATENT REEL: 029515 FRAME: 0203 13623702

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ASSIGNMENT

WHEREAS, I, Paul Rashidi, have invented one or more inventions described in an application (or provisional application) for Letters Patent of the United States entitled:

METHOD AND SYSTEM ENABLING A FIRST COMPUTING DEVICE TO INSTRUCT A SECOND COMPUTING DEVICE TO DISPLAY DATA

and identified by

Attorney Docket No. FID-073;

Application No. 13/623,702 filed in the United States Patent Office on September 20, 2012; and

WHEREAS, FMR LLC (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State/Commonwealth of Delaware, and having a usual place of business at 82 Devonshire Street, Boston, Massachusetts 02109, desires to acquire an interest therein, in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional,

Sole Assignment Attorney Docket No. FID-073 U.S. Application No. 13/623,702 Page 2 of 2

substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

AND, I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, I hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of my execution of this assignment;

AND, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor: Paul Rashidi

NOTARIZATION

or attached document in may presence. Notary Public My Commission Expires: WITNESS Witness Signature:	State/Commonwealth of County of On this day of personally appeared Paul Ras	id, proved to me thr	ough satisfactory evid	ndersigned notary public, dence of identification, which name is signed on the preced	ı ling
WITNESS Witness Signature:	or attached document in thy f	esence.	Notary Public		
Witness Signature:			My Commissio	on Expires:	
·	WITNESS .		·		
Witness Date:	Witness Name:			-	

10/23/2012 3:57 pm

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT State of California personally appeared. who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/aré subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of C. ECKERMAN which the person(s) acted, executed the instrument. Commission # 1941657 Notary Public - California I certify under PENALTY OF PERJURY under the laws Santa Clara County My Comm. Expires Jul 17, 2015 of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Place Notary Seal Above OPTIONAL Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document. **Description of Attached Document** Title or Type of Document: Document Date: Signer(s) Other Than Named Above: __ Capacity(ies) Claimed by Signer(s) . Signer's Name:_ Signer's Name: _ ☐ Individual. M Individual ☐ Corporate Officer — Title(s): _ ☐ Corporate Officer — Title(s): ☐ Partner — ☐ Limited ☐ General □ Partner — □ Limited □ General

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☐ Attorney in Fact

☐ Guardian or Conservator

Signer Is Representing:

□ Trustee

☐ Other:__

☐ Attorney in Fact

☐ Guardian or Conservator

Signer Is Representing:_

☐ Trustee

☐ Other:_

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Anorney Docket No. FID-073

ASSIGNMENT

WHEREAS, I, Jeanne Mackin, have invented one or more inventions described in an application (or provisional application) for Letters Patent of the United States entitled:

METHOD AND SYSTEM ENABLING A FIRST COMPUTING DEVICE TO INSTRUCT A SECOND COMPUTING DEVICE TO DISPLAY DATA

and identified by

Attorney Docker No. FID-073;

Application No. 13/623,702 filed in the United States Patent Office on September 20, 2012; and

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NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and fransferred and by these presents do bereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives; my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries; in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties of laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accuring prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional,

REEL: 029515 FRAME: 0208

Sole Assignment
Attorney Docket No. FID-073
U.S. Application No. 13/623,702
Page 2 of 2

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IN TESTIMONY WHEREOF, I have hereinto set my hand-and affixed my seal on the date set forth below.

Inventor:

Jeanne Mackin

NOTARIZATION

State/Commonwealth of)
County of Nacho () 88

On this 3/ day of October 2012 before me, the undersigned notary public, personally appeared Jeanne Mackin, proved to me through satisfactory evidence of identification, which were VALIO MINESS DRIVELLO, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My Commission Expires: 2

WITNESS

Witness Signature:

Witness Name:

Witness Date:

10/23/2012 4:46 pm

7781/27992-166-current/32884268v1

Attorney Docket No. FID-073

<u>ASSIGNMENT</u>

WHEREAS, I, Mark Kelly, have invented one or more inventions described in an application (or provisional application) for Letters Patent of the United States entitled:

METHOD AND SYSTEM ENABLING A FIRST COMPUTING DEVICE TO INSTRUCT A SECOND COMPUTING DEVICE TO DISPLAY DATA

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NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein;

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Sole Assignment Attorney Docket No. FID-073 U.S. Application No. 13/623,702 Page 2 of 2

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IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor:

Mark Kelly

NOTARIZATION

State/Commonwealth of Texas)
County of Tayrant) ss

On this Oday of December, 2012 before me, the undersigned notary public, personally appeared Mark Kelly, proved to me through satisfactory evidence of identification, which were Mark Kelly, to be the person whose name is signed on the preceding or

attached document in my presence.

Notary Public

Mý Commission Expires:

WITNESS

Witness Signature:

Witness Name:

Witness Date:

SAMPATH

D 2012

PATENT REEL: 029515 FRAME: 0211

- KRISTLWEAVER
Notaty Public, State of Texas
My Commission Expires
September 26, 2014

RECORDED: 12/21/2012