502627622 01/09/2014

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KEITH E. DENNELLY	09/16/2013
MIHIR S. SHAH	09/16/2013
MADHUSUDANA R. CHALAMANI	09/16/2013
VINEET VASANT NENE	09/16/2013

RECEIVING PARTY DATA

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City:	BOSTON	
State/Country:	MASSACHUSETTS	
Postal Code:	02109-3605	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14032140

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ATTORNEY DOCKET NUMBER:	FIDE-001/01US 270718-2003	
NAME OF SUBMITTER:	WALTER G. HANCHUK	

PATENT 502627622 REEL: 031928 FRAME: 0331

Signature:	/Walter G. Hanchuk/	
Date:	01/09/2014	
Total Attachments: 4 source=FIDE-001-01US-ExecAssign#page1.tif source=FIDE-001-01US-ExecAssign#page2.tif source=FIDE-001-01US-ExecAssign#page3.tif source=FIDE-001-01US-ExecAssign#page4.tif		

PATENT REEL: 031928 FRAME: 0332

ASSIGNMENT

WHEREAS:

Keith E. Dennelly
7 Dwiggins Path
Hingham MA 02043
U.S.A.
Citizenship: United States

Mihir S. Shah 7 Mulberry Lane Burlington, MA 01803 U.S.A. Citizenship: United States

Madhusudana R. Chalamani 34 Aspen Avenue South Grafton, MA 01560 U.S.A. Citizenship: India

Vineet Vasant Nene 51 School Street Hopkinton, MA 01748 U.S.A. Citizenship: United States

(hereafter referred to as ASSIGNOR(S)),

have made a discovery or invention(s) entitled:

"SECTOR-BASED PORTFOLIO CONSTRUCTION PLATFORM APPARATUSES, METHODS AND SYSTEMS"

for which utility application for Letters Patent of the United States is attached, and

PATENT REEL: 031928 FRAME: 0333 for which U.S. provisional application was filed on June 10, 2013, under Serial No. 61/833,425.

WHEREAS

FMR, LLC 82 Devonshire Street Boston, MA 02109-3605

(hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire interest in, to and under said invention(s) and in, to and under Letters Patent or similar legal protection to be obtained therefore in the United States and in any and all other countries

NOW THEREFORE, TO ALL IT MAY CONCERN:

Be it known that for valuable consideration from ASSIGNEE to ASSIGNOR(S) the receipt of which is hereby acknowledged I, said ASSIGNOR(S) hereby sell, assign and transfer to ASSIGNEE and its successors, other legal representatives and assigns the entire right, title and interest to said discovery, invention and/or industrial design in the United States and its territorial possessions and in all other countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all other countries to be obtained for said invention by said application or any continuation, continuation-in-part, division, renewal, substitute, reissue or reexamination thereof or any legal equivalent thereof in any other country for the full term or terms for which the same may be granted.

- I, said ASSIGNOR(S), hereby covenant that I (we) have the full right to convey the entire interest herein assigned and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;
- I, said ASSIGNOR(S), hereby agree to execute all papers necessary in connection with the application and any continuation, continuation in part, divisional, reissue, reexamination or corresponding applications thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient;
- I, said ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States and the empowered officials of all other governments to issue all said Letters Patent for said discovery or invention to the ASSIGNEE as assignee of the entire right, title and interest into and under the same, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns;
- I, said ASSIGNOR(S), hereby authorize the ASSIGNEE to apply for and obtain the recordation of this Assignment. I, said ASSIGNOR(S), also hereby agree that I (we) shall, without further consideration, promptly and duly cause to be performed such lawful acts and execution of any other documents as the ASSIGNEE may reasonably request in order for the

ASSIGNEE to obtain the full benefit of this Assignment and to permit the Assignment to be duly recorded in each office, bureau and tribunal in the appropriate jurisdiction as the registered owner or proprietor of each of the rights hereby assigned. Such instruments and documents shall include, without limitation, affidavits, including affidavits of use, and other documents for filing in such jurisdictions as the ASSIGNEE may from time to time reasonably request.

I, said ASSIGNOR(S), hereby declare that: The above-identified application was made or authorized to be made by me (us); I (we) believe that I (we) am (are) the original inventor(s) or original joint inventor(s) of a claimed invention in the application for which Letters Patent or similar legal protection is sought; I (we) have reviewed and understand the contents of the above-identified application, including the claims; I (we) hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C 1001 by fine or imprisonment of not more than five (5) years, or both; and I (we) acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me (us) to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

AND it is further covenanted and agreed that I, said ASSIGNOR(S), will, at any time upon request by the ASSIGNEE, its successors, legal representatives or assigns, communicate to said ASSIGNEE, its successors, assigns or other legal representatives, any facts relating to said invention(s) and the history thereof known to said ASSIGNOR(S) and testify as to same in any interference or any other legal proceeding when requested to do so, sign any and all lawful papers, execute any and all necessary assignment papers to cause any Letters Patent to be issued to ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain, perfect title in and enforce proper protection for said inventions in the United States and in any and all other countries, all without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

SIGNED:

Keith E. Dennelly

Date

2. Whit " While	Sept, 16 201
Mihir S. Shah	Date
3. a. Neduholbey	Supt, 16, 2013
Madhusudana R. Chalamani	Date
4. <u>2010</u> N	Sept 16, 2013
Vineet Vasant Nene	Date