

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																												
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT																												
EFFECTIVE DATE:	10/01/2012																												
CONVEYING PARTY DATA																													
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PATENT

**CORRESPONDENCE DATA**

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

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**ATTORNEY DOCKET NUMBER:**

0960.

**NAME OF SUBMITTER:**

Stuart B. Shapiro

**Signature:**

/Stuart B. Shapiro/

**Date:**

04/18/2013

**Total Attachments: 3**

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## PATENT ASSIGNMENT

WHEREAS, Algorithmics Software LLC, a Delaware corporation (referred to as "Company"), whose full post office address is The Corporation Trust Company, Corporation Trust Center, 1209 Orange St., Wilmington, Delaware 19801, has ownership of the patent applications listed on Schedule A hereto, all patents which may issue therefrom, and all divisionals, reissues, substitutions, continuations, re-examinations and extensions thereof which may be pending in or granted by any patent office or forum throughout the world (referred to as the "Patents") and whereas Company owns all inventions disclosed and claimed in the Patents ("Inventions");

WHEREAS, Algorithmics (U.S.) Inc., a Delaware corporation whose full post office address is The Corporation Trust Company, Corporation Trust Center, 1209 Orange St., Wilmington, Delaware 19801, United States of America (referred to as "Algorithmics (U.S.)", desires to acquire the entire right, title and interest in and to the Inventions and Patents; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Company hereby transfers and assigns to Algorithmics (U.S.) free and clear of all liens or other encumbrances, and Algorithmics (U.S.) hereby accepts the transfer and assignment of, the entire right, title, and interest of Company in and to the Patents and Inventions, and all rights of priority resulting from the filing of the Patents; and Company hereby authorizes and requests the Commissioner of Patents and any other relevant authority to issue all patents related to the Patents to Algorithmics (U.S.) as assignee of Company's entire right, title and interest therein.

Company also hereby transfers and assigns to Algorithmics (U.S.) and Algorithmics (U.S.) hereby accepts the transfer and assignment of, any foreign rights to the Inventions and Patents, in all countries of the world, including the right to file applications, prosecute, and obtain patents under any treaty including the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and of the European Patent Convention. Company agrees that this executed document is recordable evidence of such transfer and assignment and further agrees to perform at Algorithmics (U.S.) Inc. expense, upon reasonable notice, such lawful acts and to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such foreign patent rights.

Upon the written request of Algorithmics (U.S.), Company hereby further agrees that Company will sign all lawful papers, execute all divisional, continuation, reissue, re-examination, and substitute applications, make all lawful oaths, and provide reasonable assistance to aid IBM, its successors, assigns and nominees to facilitate the prosecution and maintenance of the Patents in all countries of the world.

This transfer and assignment is effective as October 1, 2012.

IN WITNESS WHEREOF, the parties hereto have executed this Patent Assignment by its respective duly authorized officer in their respective corporate names.

**Algorithmics Software LLC**

By: William A. Behan, Jr.

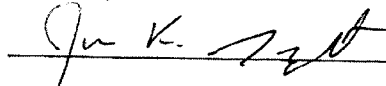


Title: Assistant Secretary

Date: 1 Apr. 1 2013

**Algorithmics (U.S.) Inc.**

By: Joe K. Suyemoto



Title: Secretary

Date: 4/2/13

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ALGORITHMICS SOFTWARE LLC TO ALGORITHMICS (U.S.) INC.

Schedule A

ISSUED PATENTS						
Patent Number	Issue Date	Application No.	Filing Date	Title	Country	Owner
7395236	7/1/2008	10/828269	4/21/2004	Risk Management System and Method Providing Rule-Based Evolution of a Portfolio of Instruments	US	Algorithmics Software LLC
7171385	1/30/2007	09/718500	11/24/2000	System and Method for Trading Off Upside and Downside Values of a Portfolio	US	Algorithmics Software LLC
7756770	7/13/2010	11/612375	12/18/2006	System and Method for Trading Off Upside and Downside Values of a Portfolio	US	Algorithmics Software LLC
7778856	8/17/2010	12/365961	2/5/2009	System and Method for Measuring and Managing Operational Risk	US	Algorithmics Software LLC
7392213	6/24/2008	10/084650	2/28/2002	Generator Libraries	US	Algorithmics Software LLC
7599870	6/24/2008	10/120795	2/28/2002	Generator Libraries	US	Algorithmics Software LLC
8204813	6/19/2012	12/547068	8/25/2009	System, Method and Framework for Generating Scenarios	US	Algorithmics Software LLC
7908197	3/15/2011	12/026781	2/6/2008	Systems and Methods for Compound Risk Factor Sampling with Integrated Market and Credit Risk	US	Algorithmics Software LLC
8036975	10/11/2011	13/011553	1/21/2011	Systems and Methods for Compound Risk Factor Sampling with Integrated Market and Credit Risk	US	Algorithmics Software LLC
8036974	10/11/2011	13/011411	1/21/2011	Systems and Methods for Compound Risk Factor Sampling with Integrated Market and Credit Risk	US	Algorithmics Software LLC

6278981	8/21/2001	09/084923	5/28/1998	Computer-Implemented Method and Apparatus for Portfolio Compression	US	Algorithmics Software LLC
5799287	8/25/1998	08/866303	5/30/1997	Method and Apparatus for Optimal Portfolio Replication	US	Algorithmics Software LLC
5148365	9/15/1992	07/394081	8/15/1989	Scenario Optimization	US	Algorithmics Software LLC -