

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Mohamed L. Barakat</td> <td>04/09/2013</td> </tr> <tr> <td>Ahmed Gomaa Ahmed Radwan</td> <td>04/01/2013</td> </tr> <tr> <td>Khaled Nabil Salama</td> <td>07/08/2013</td> </tr> </tbody> </table>		Name	Execution Date	Mohamed L. Barakat	04/09/2013	Ahmed Gomaa Ahmed Radwan	04/01/2013	Khaled Nabil Salama	07/08/2013		
Name	Execution Date										
Mohamed L. Barakat	04/09/2013										
Ahmed Gomaa Ahmed Radwan	04/01/2013										
Khaled Nabil Salama	07/08/2013										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>King Abdullah University of Science and Technology (KAUST)</td> </tr> <tr> <td>Street Address:</td> <td>4700 King Abdullah University of Science and Technology</td> </tr> <tr> <td>City:</td> <td>Thuwal</td> </tr> <tr> <td>State/Country:</td> <td>SAUDI ARABIA</td> </tr> <tr> <td>Postal Code:</td> <td>23955</td> </tr> </table>		Name:	King Abdullah University of Science and Technology (KAUST)	Street Address:	4700 King Abdullah University of Science and Technology	City:	Thuwal	State/Country:	SAUDI ARABIA	Postal Code:	23955
Name:	King Abdullah University of Science and Technology (KAUST)										
Street Address:	4700 King Abdullah University of Science and Technology										
City:	Thuwal										
State/Country:	SAUDI ARABIA										
Postal Code:	23955										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13826779</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13826779						
Property Type	Number										
Application Number:	13826779										
CORRESPONDENCE DATA											
Fax Number: 7709510933 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 7709339500 Email: amy.kwon@thomashorstemeyer.com Correspondent Name: Thomas Horstemeyer, LLP Address Line 1: 400 Interstate North Parkway SE Address Line 2: Suite 1500 Address Line 4: Atlanta, GEORGIA 30339											
ATTORNEY DOCKET NUMBER:	821109-1120										
NAME OF SUBMITTER:	Todd Deveau										
Signature:	/Todd Deveau/										

Date:

08/09/2013

Total Attachments: 6

source=01882419#page1.tif

source=01882419#page2.tif

source=01882419#page3.tif

source=01882419#page4.tif

source=01882419#page5.tif

source=01882419#page6.tif

**ASSIGNMENT
OF UTILITY PATENT APPLICATION**

WHEREAS, we, Mohamed L. Barakat, Abhinav S. Mansingka, Ahmed Gomaa Ahmed Radwan, and Khaled Nabil Salama, hereinafter referred to as ASSIGNORS, has/have invented certain new and useful improvements ("invention(s)") as described and set forth in the below-identified utility application for United States Letters Patent entitled:

CHAOS-BASED PSEUDO-RANDOM NUMBER GENERATION

which was:

- ☐ executed on even date herewith,
- ☒ filed with the United States Patent and Trademark Office (USPTO) on March 14, 2013, and assigned Serial No. 13/826,779, and
- ☒ further described in U.S. Provisional application entitled "**CHAOS-BASED PSEUDO-RANDOM NUMBER GENERATION**", filed with the USPTO on October 9, 2012, and assigned Serial No. 61/711,390 and co-pending U.S. provisional application entitled "**CHAOS-BASED PSEUDO-RANDOM NUMBER GENERATION**", filed with the USPTO December 31, 2012, and assigned Serial No. 61/747,647

WHEREAS, King Abdullah University of Science and Technology (KAUST), having a business at 4700 King Abdullah University of Science and Technology, Building 16, Room 4518, Thuwal, Kingdom of Saudi Arabia 23955-6900, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in said invention(s) and provisional application and in any and all U.S. and foreign patents which may be granted on the same.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNORS, ASSIGNORS have sold, assigned and transferred and does hereby sell, assign and transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said invention(s), said utility application, and said Provisional application and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for said inventions, including all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to said invention(s), said utility application, and said provisional application for all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them.

ASSIGNORS authorize ASSIGNEE to make application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from ASSIGNORS, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNORS hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of ASSIGNEE to apply for patent or other form of protection for said inventions, said utility application, or said provisional application and to claim the aforesaid benefit of the right of priority.

ASSIGNORS request that any and all patents for said inventions be issued to ASSIGNEE in the U.S. and to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNORS covenant and agree that, when requested, ASSIGNORS shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with the patent applications, patents, or other forms of protection of said invention(s), and for the defense and protection thereof if challenged in the court of law.

ASSIGNORS authorize ASSIGNEE or its agents to insert, on ASSIGNORS' behalf, the filing date and/or serial number above pertaining to the utility application and/or the provisional application, if not known as of the date of execution of this document.

Mohamed Loffy Barakat
Mohamed L. Barakat

Date: 9-4-2013

Tarek Adel Nasr
Witness

Date: 9-4-2013

Moetaz M. Abbas
Witness

Date: 9-4-2013

Abhinav S. Mansingka

Date: _____

Witness

Date: _____

Witness

Date: _____

Ahmed Gomaa Ahmed Radwan
Ahmed Gomaa Ahmed Radwan

Date: 1/4/2013

Salwa Abdel-El-Hafiz
Witness

Date: 1/4/2013

Mohamed El-Masoud Fouka
Witness

Date: 1/4/2013

Khaled Nabil Salama
Khaled Nabil Salama
Date: July 8th, 2013

/L'oui (Habuchi)
Witness Hiroshi Habuchi
Date: July 8, 2013

[Signature]
Witness Steven Masumoto
Date: July 8, 2013