505121348 10/02/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5168109

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
UT-BATTELLE, LLC	09/14/2018

RECEIVING PARTY DATA

Name:	U.S. DEPARTMENT OF ENERGY	
Street Address:	1000 INDEPENDENCE AVE., SW	
City:	WASHINGTON	
State/Country:	D.C.	
Postal Code:	20585	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16057345

CORRESPONDENCE DATA

Fax Number: (202)586-7127

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2025862802

Email: brenda.banks@hq.doe.gov

Correspondent Name: BRENDA K. BANKS

Address Line 1: 1000 INDEPENDENCE AVE.
Address Line 4: WASHINGTON, D.C. 20585

NAME OF SUBMITTER:	BRENDA K. BANKS	
SIGNATURE:	/Brenda K. Banks/	
DATE SIGNED:	10/02/2018	

Total Attachments: 1

source=3806.1_Confirmatory License Completed (002) 2#page1.tif

PATENT 505121348 REEL: 047028 FRAME: 0472

CONFIRMATORY LICENSE

Title: Quantum Random Number Generator

Inventor(s): Bing Qi
Serial No.: 16/057,345
Filing Date (U.S.) August 7, 2018
Contractor: UT-Battelle, LLC

DOE Contract No.: DE-AC05-00OR22725

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provision of the above-numbered contract (certified on 04-13-00) governing patent rights in the Subject Invention at the time the invention was made, has been submitted to the U. S. Department of Energy.

The Contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

It is understood and agreed that this document does not preclude the Government from asserting rights under the provisions of said contract or any other agent between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Contractor hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

By

UT-Battelle, LLC

Michael J. Paulus

Director, Office of Technology Transfer

When I I Park

PATENT REEL: 047028 FRAME: 0473

RECORDED: 10/02/2018