

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6108725

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE	
CONVEYING PARTY DATA		
	Name	Execution Date
	UNIVERSITY OF MINNESOTA	11/16/2018
RECEIVING PARTY DATA		
Name:	NATIONAL SCIENCE FOUNDATION	
Street Address:	2415 EISENHOWER AVENUE	
Internal Address:	ROOM W 18000	
City:	ALEXANDRIA	
State/Country:	VIRGINIA	
Postal Code:	22314	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Application Number:	16165713
CORRESPONDENCE DATA		
Fax Number:	(703)292-9041	
<i>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.</i>		
Email:	nsfpatents@nsf.gov	
Correspondent Name:	NATIONAL SCIENCE FOUNDATION	
Address Line 1:	2415 EISENHOWER AVENUE	
Address Line 2:	ROOM W 18000	
Address Line 4:	ALEXANDRIA, VIRGINIA 22314	
NAME OF SUBMITTER:	DANA THIBODEAU	
SIGNATURE:	/DMT/	
DATE SIGNED:	05/15/2020	
Total Attachments: 1		
source=209#page1.tif		

License to the United States Government

Sign and submit the executed document to the appropriate funding agency (e.g. upload in iEdison).

Invention Title: Parallel Computing Using Stochastic Circuits and Deterministic Shuffling Networks

Inventor(s): Kiarash Bazargan, David J Lilia, Soheil Mohajer, Marc Riedel, Zhiheng Wang, Sayed Abdolrasoul Faraji

U.S. Filing/Issue Date: 10/19/2018

Patent or Application Serial No.: 16/165,713

Grant/Contract Number(s): CCF1408123

Foreign Applications filed/intended in (countries): _____

The invention identified above is a Subject Invention under **35 U.S.C. 200, et seq.**, and the Standard Patent Rights clause at **37 CFR 401.14, FAR 52.227-11** or **FAR 52.227-12** (if applicable) which are included among the terms of the above identified grant or contract award from the United States Government. This document is confirmatory of:

1. The nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention described in any patent application and in any and all divisions, continuations, and continuations in part, and in any and all patents and re-issues granted thereon throughout the world; and
2. All other rights acquired by the Government by reason of the above identified grant/contract award and the laws and regulations that are applicable to the award.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this 16th day of November, 2018

By Rebecca Gerber
(Institutional Business Official)


(Signature)

Title Associate Director

REGENTS OF THE TECHNOLOGY COMMERCIALIZATION
For UNIVERSITY OF MINNESOTA
(Grantee/Contractor Organization)

At McNamara Alumni Center, Suite 280 200 Oak Street S.E. Minneapolis, MN 55455
(Business Address)