504164493 01/05/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOUD KHOURY	12/15/2016
CHRISTOPHER PAUL VANDER VALK	12/16/2016
MICHAEL BRANDON KREMER	12/19/2016
SUBRAMANIAN RAMANATHAN	12/19/2016

RECEIVING PARTY DATA

Name:	RAYTHEON BBN TECHNOLOGIES CORP.
Street Address:	10 MOULTON STREET
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02138

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15385821

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	3547.038US1
NAME OF SUBMITTER:	KASIE A. BOSMA
SIGNATURE:	/Kasie A. Bosma/
DATE SIGNED:	01/05/2017

Total Attachments: 7

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RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 16-8633-US-NP (3547.038US1) Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Joud Khoury, Christopher Paul Vander Valk, Michael Name: Raytheon BBN Technologies Corp. Brandon Kremer, Subramanian Ramanathan Street Address: 10 Moulton Street Additional name(s) of conveying party(ies) attached? City: Cambridge State: MA Zip: 02138 []Yes [X]No Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: December 15, 2016, December 16, 2016, December 19, 2016, December 19, 2016 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 15/385,821 Additional numbers attached? []Yes [X]No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 Name: Rigel J. Menard [[Enclosed Address: [Authorized to be charged to deposit account 19-Schwegman Lundberg & Woessner, P.A. 0743 P.O. Box 2938 Minneapolis, MN 55402--0938 Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Rigel J. Menard/Reg. No. 66,520 'Rigel J Menard/ 2016 Name of Person Signing Signature Date Total number of pages including cover sheet: 7

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

ASSIGNMENT and DECLARATION

//we, the under	signed, <u>Joud Kh</u>	oury. Christo	pher Paul	Vander Valk,	Michae
Brandon Kremer, Sub					
inventions or discove					
SCHEDULING ACCES	<u>'S TO A SHARE</u>	<u>O MEDIUM, </u>	identified as	Attorney Do	cket No.
16-8633-US-NP (3547	038US1), which	application	was filed or	1	
and assigned Application	on No.	in :	the event th	at the executi	on date.
filing date and/or Applic	ation No. are not	entered or a	re incorrect a	at the time Ass	signor(s)
executed this docume	nt, Assignor(s) h	nereby autho	rize and re	quest an atto	omey of
Assignee to insert the in					. *

RAYTHEON BBN TECHNOLOGIES CORP. is a Delaware Corporation having a place of business at 10 Moulton Street, Cambridge, MA 02138, and which, together with its successors and assigns ("Assignee"), is desirous of acquiring the title, rights, benefits and privileges hereinafter recited.

For valuable consideration furnished by Assignee to Assignor(s), receipt and sufficiency of which Assignor(s) hereby acknowledge, Assignor(s) hereby, without reservation:

- 1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application, any and all other patent applications (including without limitation utility models, provisionals, designs, plants and any other such intellectual property) on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, reexamination and convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent and any provisional applications from which priority is claimed in said patent applications and said Letters Patent and all rights to claim or sue for prior damages;
- 2. Authorize Assignee to file said patent applications in any or all countries on any or all of said inventions and discoveries in the name of Assigner(s) or in the name of Assignee or otherwise as Assignee may deem advisable, under any international conventions, international treaties, or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct:

- 4. Confirm that Assignor(s) have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and
- 5. Bind heirs, legal representatives and assigns of Assignor(s), as well as Assignor(s), to do, upon Assignee's request, all acts reasonable to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by Assignor(s) or heirs, legal representatives and assigns of Assignor(s) if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to Assignor(s) relating to said inventions and discoveries or the history thereof; and to furnish Assignee, upon request, with any and all relevant documents, photographs, models, samples and other physical exhibits in control of Assignor(s) or in the control of heirs, legal representatives or assigns of Assignor(s).

Assignor(s) accept the terms of this Assignment as indicated by their signature below.

Further, each Assignor individually, as a named inventor, hereby declares:

- a) The above-identified application was made or authorized to be made by me;
- b) I believe I am the original inventor or an original joint inventor of a claimed invention in the above-identified application; and
- c) I hereby acknowledge that any willful false statement made in this declaration is punishable under § 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) years, or both.

Each Assignor individually, as a named inventor, also states:

I have reviewed and understand the contents of the above-identified application.

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to the patentability of the above-identified application.

[Signatures on following pages]

Accepted by:	
Dated: <u>DCC 15, 2016</u>	Joud Khoury
Witnessed by:	
Dated:	[Witness' Signature]
	[Witness' Printed Name]
Dated:	[Witness' Signature]
	[Witness' Printed Name]

Accepted by:	
Dated: <u>Rec /6 , 20/6</u>	Christopher Paul Vander Valk
Witnessed by:	
Daied:	[Witness' Signature]
	[Witness' Printed Name]
Dated:	[Witness' Signature]
	[Witness' Printed Name]

Accepted by:	
Dated: 12/19/16	Michael Brandon Kremer
Witnessed by:	
Dated:	[Witness' Signature]
	[Witness' Printed Name]
Dated:	[Witness' Signature]
	(Witness' Printed Name)

Accepted by:	
Dated: 12 / 19 / 2016	Subramanian Ramanathan
Witnessed by:	
Dated:	[Witness' Signature]
	[Witness' Printed Name]
Dated:	[Witness' Signature]
	[Witness' Printed Name]

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