506066719 05/19/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARK RANGER	05/18/2020
MICHAEL FRANK	05/17/2020
DAVID T LEIMBACH	05/15/2020
RAYMOND RAMSDEN	05/19/2020

RECEIVING PARTY DATA

Name:	EMC IP HOLDING COMPANY LLC	
Street Address:	176 SOUTH STREET	
City:	HOPKINTON	
State/Country:	MASSACHUSETTS	
Postal Code:	01748	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16878062

CORRESPONDENCE DATA

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

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Email: epas@thepatentattorneys.com AMIN, TUROCY & WATSON, LLP **Correspondent Name:**

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ATTORNEY DOCKET NUMBER:	119665.01/DELLP376US
NAME OF SUBMITTER:	RICHARD BRADLEY ALMON
SIGNATURE:	/Richard Bradley Almon/
DATE SIGNED:	05/19/2020

Total Attachments: 6

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> **PATENT REEL: 052701 FRAME: 0869**

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PATENT REEL: 052701 FRAME: 0870

ASSIGNMENT

WHEREAS, we, Mark Ranger, Michael Frank, David T Leimbach, and Raymond Ramsden have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled MAINTAINING COMPONENTS OF NETWORKED NODES WITH DISTRIBUTED DATA
DEPENDENCIES, the specification of which:

[X]	is being executed on even date he States Patent Office;	erewith and is about to be filed in the United
[]	was filed on	as U.S. Application No;
[]	was patented under U.S. Patent N	Voon

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein:

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution,

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reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

	Mark Ranger
Print full name of first inventor:	Mark Ranger
Residence:	Seattle, Washington, United States of America
Citizenship:	United States of America
Mailing Address:	3905 4th Ave NE, Apt 301
	Seattle, Washington 98105
	(name) whose residential address is
was personally present and did see	(name of person signing own to me, execute the above assignment.
	(signature of first witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)
I	(name) whose residential address is
was personally present and did see the assignment) who is personally kno	(name of person signing own to me, execute the above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)

Date: May 18, 2020

Date: 17 May 2020	And Control of Section 1997
	Michael Frank
Print full name of second inventor:	Michael Frank
Residence:	Seattle, Washington, United States of America
Citizenship:	United States of America
Mailing Address:	114 Nw 74th Street
	Seattle, Washington 98117
the assignment) who is personally known to	(signature of first witness) _(location of witness signature)
was personally present and did see	(name) whose residential address is ATTIFICATION (name of person signing o me, execute the above assignment. (signature of second witness) (location of witness signature)

Date: May 15,202	o Soil Think
,	David T Leimbach
Print full name of third inventor:	David T Leimbach
Residence:	Lynnwood, Washington, United States of
	America
Citizenship:	United States of America
Mailing Address:	2018 142nd Pl Sw
-	Lynnwood, Washington 98087
I	(name) whose residential address is
was personally present and did see (name of person signing the assignment) who is personally known to me, execute the above assignment.	
	(signature of first witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)
I	(name) whose residential address is
was personally present and did see the assignment) who is personally known	(name of person signing own to me, execute the above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)

Date: <u>5/19/7073</u>	PSTENT Assignment ESIC Booker Soc. 119865-01 A A A A A A A A A A A A A A A A A A A
Print full many of fourth invento Residence Concerning Mailing Address:	Raymond Ramsden Seattle, Washington, United States of America United States of America 11 N. 59th Street Seattle, Washington 98117
sees personally present and did the assignment) who is persona	(matter) whose residential address is (matter) whose residential address is
On this day	of 23 (date of signature) (name) whose residential address is: (name) person signing
Squal #	(i) carren to me, execute the are we assignment (equation of second witness) (location of second signature)
or that the	

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