505091213 09/12/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5137972

CONVEYING PARTY DATA

Name	Execution Date
STEPHEN J. TODD	08/12/2018
ASSAF NATANZON	07/22/2018
DRAGAN SAVIC	09/07/2018
SAID TABET	08/28/2018

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:	16047718

CORRESPONDENCE DATA

Fax Number: (631)393-6271

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: (631) 393-6270

Email: nyoffice@rml-law.com
Correspondent Name: WILLIAM E. LEWIS

Address Line 1: RYAN, MASON & LEWIS, LLP

Address Line 2: 48 SOUTH SERVICE ROAD, SUITE 100

Address Line 4: MELVILLE, NEW YORK 11747

ATTORNEY DOCKET NUMBER: 111598.01

NAME OF SUBMITTER: WILLIAM E. LEWIS

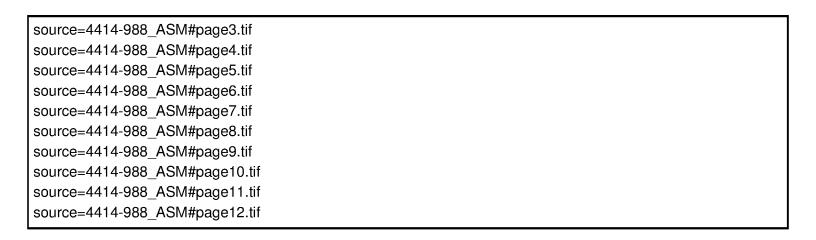
SIGNATURE: /William E. Lewis/

DATE SIGNED: 09/12/2018

Total Attachments: 12

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PATENT 505091213 REEL: 046856 FRAME: 0496



PATENT REEL: 046856 FRAME: 0497

ASSIGNMENT

WHEREAS, we, Stephen J. Todd, Assaf Natanzon, Dragan Savic and Said Tabet, 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 AD-HOC COMPUTATION SYSTEM FORMED IN MOBILE NETWORK, the specification of which:

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

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company 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, 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:

Date:	
	Inventor's Signature
Print full name of first inventor:	Stephen J. Todd
Residence:	Center Conway, New Hampshire
Citizenship:	United States of America
Mailing Address:	1857 White Mountain Highway, #301
	North Conway, New Hampshire 03860
I	(name) whose residential address is
was personally present and did see S who is personally known to me, exe	Stephen J. Todd (name of person signing the assignment) cute 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 S who is personally known to me, exe	Stephen J. Todd (name of person signing the assignment) cute the above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)

Date: 2007	
	Inventor's Signature
Print full name of second inventor:	Assaf Natanzon
Residence:	Tel Aviv, Israel
Citizenship:	Israel
Mailing Address:	Levanon 95
	Tel Aviv, Israel 69395
i ila Begon	(name) whose residential address is
Lauga A. L.	- Lan
was personally present and did see Assat in who is personally known to me, execute the	latanzon (name of person signing the assignment) e above assignment.
	(signature of first witness)
Signed at Her Dine	(location of witness signature)
on this day <u> </u>	f 20 15. (date of signature)
1_ Rad Que ()	(name) whose residential address is
1 Marga 19 Arones	
	latanzon (name of person signing the assignment)
who is personally known to me, execute th	e above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day <u> </u>	720 <u>12</u> . (date of signature)

.....

Date:	
	Inventor's Signature
Print full name of third inventor:	Dragan Savic
Residence:	Brookline, Massachusetts
Citizenship:	Canada
Mailing Address:	62 Cypress Street, Apt. #3
	Brookline, Massachusetts 02445
I	(name) whose residential address is
is personally known to me, execute	
	(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 I is personally known to me, execute	Oragan Savic (name of person signing the assignment) who the above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 . (date of signature)

Date:	
	Inventor's Signature
Print full name of fourth inventor:	Said Tabet
Residence:	Sherborn, Massachusetts
Citizenship:	United States of America
Mailing Address:	15 Peckham Hill Road
	Sherborn, Massachusetts 01770
I	(name) whose residential address is
personally known to me, execute the a	-
	(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 Sa personally known to me, execute the a	id Tabet (name of person signing the assignment) who is above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)

ASSIGNMENT

WHEREAS, we, Stephen J. Todd, Assaf Natanzon, Dragan Savic and Said Tabet, 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 AD-HOC COMPUTATION SYSTEM FORMED IN MOBILE NETWORK, the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;
[X]	was filed on <u>July 27, 2018</u> as U.S. Application No. <u>16/047,718</u> ;
г <u>1</u>	was patented under U.S. Patent No.

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company 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, 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:

Date: A 66 12 2018	Inventor's Signature	
Print full name of first inventor:	Stephen J. Todd	
Residence:	Center Conway, New Hampshire	
Citizenship:	United States of America	
Mailing Address:	1857 White Mountain Highway, #301	
	North Conway, New Hampshire 03860	
I THOMS HOUT	(name) whose residential address is	
was personally present and did see Stephen who is personally known to me, execute the	J. Todd (name of person signing the assignment)	
	(signature of first witness)	
Signed at 28 Cottage RD Discoy MA	(location of witness signature)	
on this day Av6 12 of	20 <u>/8</u> . (date of signature)	
I PANU HOUT (name) whose residential address is 28 COTTAGE RS DOLLY MA was personally present and did see Stephen J. Todd (name of person signing the assignment) who is personally known to me, execute the above assignment. (signature of second witness) Signed at 28 Cottage Rs Dolly MA (location of witness signature)		
on this day AU 12 of 2	20 / δ . (date of signature)	
012	20. 4. (auto of biginum)	

Date:	
	Inventor's Signature
Print full name of second inventor:	Assaf Natanzon
Residence:	Tel Aviv, Israel
Citizenship:	Israel
Mailing Address:	Levanon 95
	Tel Aviv, Israel 69395
I	(name) whose residential address is
who is personally known to me, exec	ssaf Natanzon (name of person signing the assignment) tute the above assignment. (signature of first witness)
	(Signature of first writiess)
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 A who is personally known to me, exec	ssaf Natanzon (name of person signing the assignment) tute the above assignment.
	(signature of second witness)
Signed at	(location of witness signature)
on this day	of 20 (date of signature)

Date: 9/7/18	Cht 200
	Inventor's Signature
Print full name of third inventor:	Dragan Savic
Residence:	Brookline, Massachusetts
Citizenship:	Canada
Mailing Address:	62 Cypress Street, Apt. #3
	Brookline, Massachusetts 02445
1 Amoun Izhor	(name) whose residential address is
24 George st Newt	on MA
was personally présent and did see Dra is personally known to me, execute the	gan Savic (name of person signing the assignment) who
Amnon Fzhar	(signature of first witness)
Signed at Hopkinton M	4(location of witness signature)
on this day <u>September 7 th</u>	of 20 <u>48</u> . (date of signature)
I MUHARI ROBULAND	(name) whose residential address is
50 HEMMOURY ST	SHEMSBRY MA
was personally present and did see Dra is personally known to me, execute the	gan Savic (name of person signing the assignment) who above assignment.
bowshd_	(signature of second witness)
Signed at 176 Some St., 180911	<u>バルル/ クラス</u> (location of witness signature)
on this day 9/7	of 20 /7 (date of signature)

	PATENT/Joint Assignment Attorney Docket No.: 111398.01
Date: <u>8/28/18</u>	
`	Savemor's Signature
Print full name of fourth inventor:	Said Tabet
Residence:	Sherborn, Massachusetts
Citizenship:	United States of America
Mailing Address:	15 Peckham Hill Road
	Sherborn, Massachusetts 01770
1 LANGER MIRES	(name) whose residential address is
4 OVERLONE ALL M	11burg MA 01527
was personally present and did see Said Tabet (name of person signing the assignment) who is personally known to me, execute the above assignment.	
Jami A-Mnov	(signature of first witness)
Signed at Hopuston Hocu	(location of witness signature)
on this day Angust 28th	_ of 20 <u>/ &</u> . (date of signature)
1 Robert Uncovet	(name) whose residential address is
	, ttopkinten MA 01746
was personally present and did see Said personally known to me, execute the ab	Tabet (name of person signing the assignment) who is
444	(signature of second witness)
Signed at <u>HOKINK OFFICE</u>	(location of witness signature)
on this day Aug 2014	of 20 / . (date of signature)