506075455 05/26/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
OWEN MARTIN	05/22/2020
VLADIMIR DESYATOV	05/21/2020
MARK D. MOREAU	05/21/2020
DUSTIN H. ZENTZ	05/26/2020
ANOOP RAGHUNATHAN	05/26/2020
SEAN B. REILLY	05/21/2020

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:	16883215	

CORRESPONDENCE DATA

Fax Number:

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ATTORNEY DOCKET NUMBER:	EMS-853US
NAME OF SUBMITTER:	ANNE E. SATURNELLI
SIGNATURE:	/Anne E. Saturnelli/
DATE SIGNED:	05/26/2020

Total Attachments: 7

PATENT REEL: 052750 FRAME: 0345

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PATENT REEL: 052750 FRAME: 0346

ASSIGNMENT

WHEREAS, we, Owen MARTIN, Vladimir DESYATOV, Mark D. MOREAU, Dustin H. ZENTZ, Anoop RAGHUNATHAN and Sean B. REILLY, 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 CACHING AND DATA PROMOTION TECHNIQUES, the specification of which:

X]	is being executed on even date herewith and is about to be filed in the United Sta				
	Patent Office;				
]	was filed on	as U.S. Application No.		;	
]	was patented under U.S. Pater	nt No	_on	_·	

WHEREAS, EMC IP HOLDING COMPANY LLC (hereinafter "ASSIGNEE"), which is a corporation organized and existing under the laws 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.

PATENT REEL: 052750 FRAME: 0347

AND, we hereby authorize attorneys of Muirhead and Saturnelli, LLC to insert here in parenthesis (16/883,215 filed May 26, 2020) the application number and filing date of said Application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

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

Date: 5/24/20

Inventor's Signature

Print full name of first inventor:

Residence:

10 Steel Road

Owen MARTIN

Hopedale, Massachusetts 01747

Citizenship:

USA

Mailing Address:

Date: 05/2//20

Print full name of second inventor:

Residence:

Citizenship:

Mailing Address:

Vladimir DESYATOV

53 Twiss Lane

Hollis, New Hampshire 03049

USA

Date:

5/21/2020

Inventor's Signature

Inventor's Signature

Print full name of third inventor:

Residence:

Citizenship:

Mailing Address:

Mark D. MOREAU

6 Magill Drive

Grafton, Massachusetts 01519

USA

Date

05 26 2020

Print full name of fourth inventor:

Residence:

Citizenship:

Mailing Address:

Dustin H. ZENTZ

200 Hudson Street

Northborough, Massachusetts 01532

Inventor's Signature

USA

Attorney Docket No.: EMS-853US

Dell Docket No.: 119592.01

Date: 05/26/2020

Inventor's Signature

Print full name of fifth inventor:

Residence:

Cítizenship:

Mailing Address:

Anoop RAGHUNATHAN

38 Meeting House Path

Ashland, MA 01721

India

Date:

Residence:

Citizenship:

Mailing Address:

5/21/2020

Print full name of sixth inventor:

Sean B. REILLY

5 Gayle Rd.

Hopedale, Massachusetts 01747-1141

USA

Same as above

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