505163262 10/29/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5210029

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VENKATA CHANDRA SEKAR RAO	10/29/2018
NEERAJ KUMAR TIWARI	10/29/2018
NARAYAN S. KULKARNI	10/29/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16172991

CORRESPONDENCE DATA

Fax Number: (508)293-7189

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: 508-435-1000

Email: sandy.kulaga@dell.com

Correspondent Name: EMC IP HOLDING COMPANY LLC

Address Line 1: 176 SOUTH STREET

Address Line 4: HOPKINTON, MASSACHUSETTS 01748

ATTORNEY DOCKET NUMBER:	112837.01
NAME OF SUBMITTER:	LESLEY A. LEONESSA
SIGNATURE:	/Lesley A. Leonessa/
DATE SIGNED:	10/29/2018

Total Attachments: 5

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ASSIGNMENT

WHEREAS, we, Venkata Chandra Sekar Rao, Neeraj Kumar Tiwari and Narayan S.

Kulkarni, 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 AUTOMATED DESIGN TESTING THROUGH DEEP LEARNING, the specification of which:

[AA]	States Patent Office;	nerewith a	no is abc	out to b	e mea	in the	United	
[]	was filed on	as U.S.	Applica	tion N	o		;	
[]	was patented under U.S. Patent	t No		on_				

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, reissue, divisional or continuation applications and preliminary or other statements and the

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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;

AND, we hereby authorize our attorneys, EMC IP Holding Company LLC, to insert here in parenthesis (S/N 16/172991 filed October 29, 2018) 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: 24 10 2018	MVCS
	Inventor's Signature
Print full name of first inventor:	Venkata Chandra Sekar Rao
Residence:	G-04, Sri Sai Sarovar Resideny, Behind Bajaj
	Show Room, New Outer Ring Road Fly Over,
	Bangalore, Karnataka, India 560048
Citizenship:	India
Mailing Address:	Same as Above
-	
	(name of first witness), whose residential address is
	4 Stage, Madivala, Bangaloxe
	sta Chandra Sekar Rao (name of person signing the
assignment), who is personally known to	
1:111:42	(signature of first witness)
Signed at FM / Thuman	(location of witness signature)
on this day, 39 th ock	
	and the second of the second o
1, <u>Samit Gurta</u>	(name of second witness), whose residential address is
po. 209, peravors	Bower, Chinna Palahall, Harthabelil, Bangalore
	ata Chandra Sekar Rao (name of person signing the
assignment), who is personally known to	me, execute the above assignment.
<u> </u>	(signature of second witness)
Signed at EMC, Bouga	(location of witness signature)
on this day	20 19 (date of signature)

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Date:	29/10/2018	Marson King
	······································	Inventor's Signature
Print full n	ame of inventor	Neeraj Kumar Tiwari
Residence		#10 Elements Layout, Kaikondrahalli,
		Bangalore, India 560035
Citizenship	>	India
Mailing A	ddress	Same as above
		(name of first witness), whose residential address is
	7° 14th min, 13	m 1 st Stage, Yadirab, Garbaba
was persor	nally present and did see <u>Neer</u>	aj Kumar Tiwari (name of person signing the
assignmen	t), who is personally known t	o me, execute the above assignment.
<u> 4. W</u>		(signature of first witness)
Signed at	EMC, Bendo	(location of witness signature)
on this day	, gath oct	, 2018 (date of signature).
		_
1,	Shwit Gupta	(name of second witness), whose residential address is
		Bower, Chinnopanahall, Marthonall, Bougalow
	, *	raj Kumar Tiwari (name of person signing the
-	, <u>.</u>	o me, execute the above assignment.
	i, mo a personari, mo iii i	o silo, ottobalo lite about absignment.
·	Surfa	(signature of second witness)
Signed at _	EMC. Rougaba	(location of witness signature)
on this day	. 2ath oct	, 20 / 8 (date of signature).

Date: 29-10 -2	₹018	
	······································	Inventor's Signature
Print full name of inver	itor	Narayan Kulkarni
Residence		1184 Skanda Nivasa, Ground Floor, Hosakerehalli
•		2nd Cross Near Vittala Ey, Bangalore, Karnataka,
		India 560085
Citizenship		India
Mailing Address	٧.	Same as above
1, A Murali Kn 70, 34th Main,	ISMa (nam	ne of first witness), whose residential address is Madiuda, Bangalone
		ulkarni (name of person signing the assignment),
who is personally know		
4-WH-		(signature of first witness)
Signed at	: Cangalora	(location of witness signature)
on this day,	sight oct,	20_(g (date of signature).
	i i i i i i i i i i i i i i i i i i i	
		ne of second witness), whose residential address is
		er, Chihapanaballi, Marthahalli, Bangalor
	_	ulkarni (name of person signing the assignment),
who is personally know	n to me, execute the al	bove assignment.
farte	L	(signature of second witness)(location of witness signature)
Signed at	rc, Bargalox	(location of witness signature)
on this day.	th october .	20 18 (date of signature).

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