505473164 05/13/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5519967

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT FITZGERALD	05/13/2019
RONAN DOWD	05/13/2019
MICHEAL WALSH	05/13/2019

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:	16410445

CORRESPONDENCE DATA

Fax Number:

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: 508-898-8601

Email:docketing@WESTBORO-IP.COMCorrespondent Name:MUIRHEAD AND SATURNELLI, LLCAddress Line 1:200 FRIBERG PARKWAY, SUITE 1001

Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	EMS-764US
NAME OF SUBMITTER:	ANNE E. SATURNELLI
SIGNATURE:	/Anne E. Saturnelli/
DATE SIGNED:	05/13/2019

Total Attachments: 4

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> PATENT REEL: 049160 FRAME: 0649

ASSIGNMENT

WHEREAS, we, Robert FITZGERALD, Ronan DOWD and Micheal WALSH, 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 TECHNIQUES FOR USER INTERFACE COMPONENTS, the specification of which:

[X]	is being executed on eve	en 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

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: 049160 FRAME: 0650

AND, we hereby authorize attorneys o parenthesis (_16/410,445 filed May 13, 2019	f Muirhead and Saturnelli, LLC to insert here in) the application number and	filing
•	t application) to facilitate the recording or other	_
IN TESTIMONY WHEREOF, we have he below:	reunto set our hands and affixed our seals as set	forth
Date: 13 05 2019	Robert Folgerald.	
	Inventor's Signature	
Print full name of first inventor:	Robert FITZGERALD	
Residence:	65 Millers Court, Old Quarter, Ballincollig	
	P38 F858, Cork, IRELAND	
Citizenship:	Ireland	
Mailing Address:	Same as above	
personally present and did see ROBERT assignment) who is personally known to me, expending the state of the s	xecute the above assignment.	was
Signed at Dell EMC, Owns, Cockilor		
on this day May 13th of 201		
NIOLETTA STEPNIAK (name) whose residential address is 318 RIVER TOWERS, CORK was		
personally present and did see <u>ROBERT F</u> assignment) who is personally known to me, e		
Violetta Stepmak (sign	nature of second witness)	
Signed at <u>DELL EMC, OVENS</u>	(location of witness signature)	
on this day MAY 13 th of 201	19. (date of signature)	

Date: 13/05/19			
	- In	ventor's Signature	
Print full name of second inventor:	Ronan DOWD		
Residence:	31 The Crescent, C	astierock, Midleton	
	Cork, IRELAND		
Citizenship:	Ireland		
Mailing Address:	Same as above		
LIAM DOWD BALLYANAN, MIDLETON, S	(name) whose residential るのと、I R (-しみがつ)		was
personally present and did see c l assignment) who is personally known to r	MWW TOWN lug	çament.	
Signed at 31 THE CRESCENT	(location of witness signi		
on this day 13tH c	of 20 <u>19</u> . (date of signature)	
ACD/CY プロジラ <u>スイドモスとのデスクタブ</u> personally present and did see <u>ドロ</u> assignment) who is personally known to	<u>k, 4k) DOWY</u> Ina	ime of person signing the	was
Signed at 31 THE CRESSEN	_(signature of second with	ess)	
Signed at <u>3 TH는 CREWEN</u>	T (location of	witness signature)	
on this day 13TH			

PATENT REEL: 049160 FRAME: 0652

Date: 13 05 2019	Micheal Walsh.	
Print full name of third inventor:	Inventor's Signature Micheal WALSH	
Residence:	2 Coolmaine Mews, Kinsale Manor, Kinsale	
	P17 HD25, Cork, IRELAND	
Citizenship:	Ireland	
Mailing Address:	Same as above	
NIDECTIA STERMAK (name 318 RIVER TONERS, CORK personally present and did see MT c H EAI assignment) who is personally known to me, exec	which the above assignment.	
Will the Speniak (signate	ure of first witness)	
Signed at <u>DELL EMC. OVENS</u> (locat	ion of witness signature)	
on this day MAY 13 th of 20 19. (date of signature)		
I PAUL BARRY (name) whose residential address is 38 Woodview, From Lavi, Bullicollico, Co. Cot was personally present and did see MICHEAL WALSH (name of person signing the assignment) who is personally known to me, execute the above assignment. Real Barry (signature of second witness) Signed at Dellema Overs, Cola (location of witness signature)		
on this day May 13th of 2019	. (date of signature)	