506438352 01/07/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6485120

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
HUAWEI DEVICE CO., LTD.	06/30/2020

RECEIVING PARTY DATA

Name:	PCMS HOLDINGS, INC.		
Street Address:	200 BELLEVUE PARKWAY		
Internal Address:	SUITE 300		
City:	WILMINGTON		
State/Country: DELAWARE			
Postal Code:	19809		

PROPERTY NUMBERS Total: 7

Property Type	Number
Patent Number:	8743146
Patent Number:	9584972
Patent Number:	9690536
Patent Number:	9699050
Patent Number:	9848234
Patent Number:	10019087
Patent Number:	10069671

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: 3022813600

Email: portfolio.ops@interdigital.com

Correspondent Name: PATENT DOCKETING

Address Line 1: 200 BELLEVUE PARKWAY

Address Line 2: SUITE 300

Address Line 4: WILMINGTON, DELAWARE 19809

NAME OF SUBMITTER:	DAMIAN HAMME		
SIGNATURE:	/Damian Hamme, Reg. No.71,729/		
DATE SIGNED:	01/07/2021		

506438352 REEL: 054848 FRAME: 0047

PAIENI

Total Attachments: 4

source=2020_06_30 - Huawei - Patent Assignment -Huawei Device to PCMS#page1.tif source=2020_06_30 - Huawei - Patent Assignment -Huawei Device to PCMS#page2.tif

source=2020_06_30 - Huawei - Patent Assignment -Huawei Device to PCMS#page3.tif

source=2020_06_30 - Huawei - Patent Assignment - Huawei Device to PCMS#page4.tif

PATENT REEL: 054848 FRAME: 0048

PATENT ASSIGNMENT

This PATENT ASSIGNMENT, effective as of June 30, 2020, is made by and between **Huawei Device Co.**, **Ltd.**, a Chinese corporation having a place of business at No.2 of Xincheng Road, Songshan Lake Zone, Dongguan, Guangdong, 523808, P.R. China (hereinafter "Assignor"), and **PCMS Holdings, Inc.**, a Delaware corporation having a place of business at 200 Bellevue Parkway, Suite 300, Wilmington, Delaware 19809 (hereinafter "Assignee").

WHEREAS:

Assignor is the sole owner of the patents and patent applications listed in the attached Exhibit A (hereinafter "Patents"); and

Assignee is desirous of acquiring all of Assignor's right, title and interest in and to the Patents.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound hereby, Assignor has sold, assigned and transferred, and does hereby sell, assign and transfer to Assignee the entire right, title and interest in and to any and all of the following:

- (i) the Patents, including any and all inventions disclosed or claimed therein (hereinafter "Inventions"), for the United States, its possessions and territories and all foreign countries, regions and territories;
- (ii) the rights of priority created by the Patents under any treaty relating thereto, including the rights to apply for patents and patent applications covering the Inventions in any and all countries, regions and territories;
- (iii) any and all patents and patent applications, certificates of invention, utility models and any other grants by any governmental entity for the protection of inventions resulting from the Patents, in any and all countries, regions and territories, including any and all patents and patent applications disclosing the Inventions and any patents issuing from such applications, including provisionals, non-provisionals, divisionals, continuations, continuations-in-part, reissues, extensions, renewalsand re-examinations of the Patents; and
- (iv) all past, present and future causes of action and enforcement rights, whether currently pending, filed or otherwise, in connection with the Patents, the patents and patent applications resulting from the Patents and the Inventions, including without limitation, all rights to sue for any past, present or future infringement thereof, including the rights to license and to collect and receive any damages, royalties, injunctive relief, and/or any other settlements or remedies for such infringements, and including any provisional rights having arisen from any publication of any of the Patents or any patent application resulting therefrom,

the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor, if this Assignment and sale had not been made.

AND, this Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment.

PATENT REEL: 054848 FRAME: 0049 Patent Assignment: Huawei Device Co., Ltd. to PCMS Holdings, Inc.

IN WITNESS WHEREOF, Assignor and Assignee, by and through their respective authorized representative, have executed this instrument on the date indicated below.

SIGNED for and on behalf of Huawei Device Co., Ltd.

Ву	(Signature)	(Date)	
	<u>Jian Yu</u>	Supervisor of Process & Operations Dept.	
	(Print Name)	(Print Title)	

SIGNED for and on behalf of PCMS Holdings, Inc.

Ву	C omuile	June 30, 2020	
•	(Signature)4D334150F5EE41E	(Date)	
	Christos Ioannidi	Senior Patent Executive	
	(Print Name)	(Print Title)	

Patent Assignment: Huawei Device Co., Ltd. to PCMS Holdings, Inc.

EXHIBIT A

Country	Application No.	Patent or Publication No.	Filing Date	Title
CN	201180001452	102292707	2011-05-11	Method and system for implementing augmented reality applications
US	13/705,324	8743146	2012-12-05	Method and system for implementing augmented reality application
CN	201110447765	103188791	2011-12-28	Positioning method, client and positioning system
US	14/317,287	9584972	2014-06-27	Positioning method, client and positioning system
CN	201210222149	103152374	2012-06-29	Method and device for learning terminal online state
DE	12856098	2775755	2012-09-17	Acquiring an online state of a terminal
EP	12856098	2775755	2012-09-17	Acquiring an online state of a terminal
FR	12856098	2775755	2012-09-17	Acquiring an online state of a terminal
GB	12856098	2775755	2012-09-17	Acquiring an online state of a terminal
US	14/296,977	9699050	2014-06-05	Method and apparatus for learning online state of terminal
CN	201210201580	103517250	2012-06-15	A method and an apparatus used for dealing with abnormities of an application agent client
DE	13804333	2854430	2013-06-17	Method and device for processing abnormality of application proxy client terminal
EP	13804333	2854430	2013-06-17	Method and device for processing abnormality of application proxy client terminal
FR	13804333	2854430	2013-06-17	Method and device for processing abnormality of application proxy client terminal
GB	13804333	2854430	2013-06-17	Method and device for processing abnormality of application proxy client terminal

Patent Assignment: Huawei Device Co., Ltd. to PCMS Holdings, Inc.

Country	Application No.	Patent or Publication No.	Filing Date	Title
US	14/569,082	10069671	2014-12-12	Method and apparatus for processing abnormality of application proxy client
EP	13834851	2894556	2013-09-10	Terminal device, and method and system for display in one screen
US	14/643,664	9690536	2015-03-10	Terminal device, and screen-sharing display method and system
CN	201711433336	108089789	2013-01-28	Icon display adjusting method and terminal
CN	201380000279	103649895	2013-01-28	Adjusting method of icon display and terminal
CN	201711433342		2013-01-28	Adjusting method of icon display and terminal
CN	201210433456	103796081	2012-11-02	Method, controller and media player for picture display
EP	13850641	2858376	2013-11-04	Method for displaying picture, control device and media player
US	14/586,209	9848234	2014-12-30	Method, control point, and media renderer for displaying picture
CN	201310557225	103744550	2013-11-08	Touch type input method and device
US	14/980,586	10019087	2015-12-28	Touch input method and apparatus