## 504978273 06/26/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5025019

### **CONVEYING PARTY DATA**

Name	Execution Date	
HARKEERAT SINGH BEDI	05/11/2016	
AMIR REZA KHAKPOUR	05/11/2016	
ROBERT J. PETERS	05/12/2016	

## **RECEIVING PARTY DATA**

Name:	VERIZON DIGITAL MEDIA SERVICES INC.
Street Address:	13031 W. JEFFERSON BLVD., BUILDING 900
City:	PLAYA VISTA
State/Country:	CALIFORNIA
Postal Code:	90094

## **PROPERTY NUMBERS Total: 1**

Property Type	Number			
Application Number:	16019056			

## **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:** 424-250-0051

**Email:** arman@lapatentgroup.com

Correspondent Name: AOL INC./LOS ANGELES PATENT GROUP

Address Line 1: 8200 WILSHIRE BLVD., SUITE 200
Address Line 4: BEVERLY HILLS, CALIFORNIA 90211

ATTORNEY DOCKET NUMBER:	20160074C1
NAME OF SUBMITTER:	ARMAN KATIRAEI
SIGNATURE:	/Arman Katiraei/
DATE SIGNED:	06/26/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

### **Total Attachments: 3**

504978273

source=20160074C1\_CombinedDeclarationAssignment#page1.tif source=20160074C1\_CombinedDeclarationAssignment#page2.tif

 $source = 20160074C1\_Combined Declaration Assignment \#page 3.t if$ 

PATENT REEL: 046206 FRAME: 0598

VZ Docket No.: 20160074

## DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Talent Application Title. DETERMINISTIC MULTIFACTUR CACHE REPLACEMENT
the patent application for which:
Sis being filed concurrently herewith, Application Number to be assigned by the USPTO, or
was filed onas United States Application Numberor PCT International Application Number
radificel ** * *
Declaration of Inventor
As the below named inventor, I hereby declare that:
<ul> <li>the above-identified application was made or authorized to be made by me;</li> </ul>
<ul> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced</li> </ul>
application; and
• I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.
or inspiration for item invo their invo (b) years, or noting
Inventor Assignment Acknowledgement
For good and valuable consideration the social field in the latest the social field in
For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:
A. I hereby assign to Verizon Digital Media Services Inc. identified below ("Assignee"), including its successors and assigns, mentire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified pater application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and a foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to a original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of sai applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requester by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense); (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filling of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns representatives and agents, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally deeverything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.  C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting
the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE Verizon Digital Media Services Inc., a California Corporation with a place of business at 13031 W.  Jefferson Blvd., Building 900, Playa Vista, CA 90094 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Harkeerat Singh Bedi
마이트 마이트 마이트 마이트 마이트 HEART NEW TRANSPORT CONTROL CO
Address: 12031 West Jefferson Chid. Los Angeles CA, 90094
Signature: Date: 5/11/16

**PATENT REEL: 046206 FRAME: 0599** 

VZ Docket No.: 20160074

## DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

raicht Approauon Thie: DETERMINISTIC MULTIFACTOR CACHE REPLACEMENT
the patent application for which:  Sis being filed concurrently herewith, Application Number to be assigned by the USPTO, or  was filed on as United States Application Number or PCT International Application Number
Declaration of Inventor
As the below named inventor, I hereby declare that:
<ul> <li>the above-identified application was made or authorized to be made by me;</li> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and</li> <li>I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.</li> </ul>
Inventor Assignment Acknowledgement
For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:
A. I hereby assign to Verizon Digital Media Services Inc. identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense); (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filing of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns representatives and agents, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally deeverything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.  C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been and the adventigation of the Patent Rights has been and the agreement affecting
the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE Verizon Digital Media Services Inc., a California Corporation with a place of business at 13031 W. Jefferson Blvd., Building 900, Playa Vista, CA 90094 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Amir Reza Khakpour
Address: 1228 14th St. #205 South Monica, CA 90404 Signature: 1
Signature: / Date: - 7 } }

**PATENT REEL: 046206 FRAME: 0600**  1

VZ Docket No.: 20160074

## DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

# Patent Application Title: DETERMINISTIC MULTIFACTOR CACHE REPLACEMENT

the patent application						
⊠is being filed cor	ncurrently here	with, Applica	ition Number to be	issigned by the H	SPTO or	
was filed on	as U	nited States A	application Number		CT International	anitentian
Number			• •	mmannan, wa a	~ x x x x x x x x x x x x x x x x x x x	x-ppm-mmm;

### Declaration of Inventor

As the below named inventor, I hereby declare that:

- the above-identified application was made or authorized to be made by me;
- I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced
- I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

## Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

- A. I hereby assign to Verizon Digital Media Services Inc. identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
- I agree (i) that Assignce may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense); (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filing of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, representatives and agents, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.
- I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.

ASSIGNEE Verizon Digital Media Services Inc., a California Corporation with a place of business at 13031 W. Jefferson Blvd., Building 900, Playa Vista, CA 90094 US

IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:

Full legal name of Inventor: Robert J. Peters

Address: 15031 W. Jestkos. Bl.d Pld 900 Plays Vista, CA 90094

Signature: 15031 W. Jestkos. Bl.d Pld 900 Plays Vista, CA 90094

Į