

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6448306

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
GREGORY RALEIGH	08/02/2013
JAMES LAVINE	08/15/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HEADWATER PARTNERS I LLC
<b>Street Address:</b>	1011 PRUITT PLACE
<b>City:</b>	TYLER
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	75703
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17068019
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	RALEP118D1C1
<b>NAME OF SUBMITTER:</b>	JENNIFER SMITH
<b>SIGNATURE:</b>	/JENNIFER SMITH/
<b>DATE SIGNED:</b>	12/14/2020
<b>Total Attachments: 2</b>	
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**ASSIGNMENT**  
(Patent Application)

We/I, the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

**Virtualized Policy & Charging System**

the specification of which is provided with this Assignment and identified by the Attorney Docket No. above. (Serial No. 13/947,099, filed on July 21, 2013.)

For good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Headwater Partners I LLC, a Delaware Limited Liability Company, having a principal place of business at 350 Marine Parkway, #300, Redwood City, CA 94065 (“Assignee”), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
  - (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and

ASSIGNMENT

Attorney Docket No. RALEP118

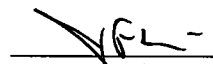
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- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
  3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
  4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon our/me, as well as our/my heirs, legal representatives, and assigns.
  5. Promise and affirm that we/I have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.

Signed on the dates indicated beside our/my signature.

Signature:   
Gregory G. Raleigh

Date: 8/2/2013

Signature:   
James Lavine

Date: 8/15/13