

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5027114

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TODD KULICK	06/08/2018
IGOR PICHKOV	06/22/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ROVI GUIDES, INC.
<b>Street Address:</b>	2160 GOLD STREET
<b>City:</b>	SAN JOSE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95002
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16019234
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(646)219-6229
<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>	
<b>Phone:</b>	646-973-2500
<b>Email:</b>	Tracy.Chu@hglaw.com
<b>Correspondent Name:</b>	HALEY GUILIANO LLP
<b>Address Line 1:</b>	75 BROAD STREET
<b>Address Line 4:</b>	NEW YORK, NEW YORK 10004
<b>ATTORNEY DOCKET NUMBER:</b>	003597-1897-101
<b>NAME OF SUBMITTER:</b>	TRACY W. CHU
<b>SIGNATURE:</b>	/Tracy W. Chu/
<b>DATE SIGNED:</b>	06/27/2018
<b>Total Attachments: 6</b>	
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A S S I G N M E N T

Whereas we,

- (1) Todd Kulick; and
- (2) Igor Pichkov;

residing, respectively at:

- (1) 350 Eunice Avenue  
Mountain View, CA 94040; and
- (2) 49 Showers Drive, Building "N" Apt 165  
Mountain View, CA 94043;

have made an invention in:

**SYSTEM AND METHOD FOR DETECTION OF, PREVENTION OF,  
AND RECOVERY FROM SOFTWARE EXECUTION FAILURE**

and are about to make application for United States Letters Patent therefor, the same having been executed by each of us on even date or dates herewith; and

WHEREAS, ROVI GUIDES, INC., a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 2160 Gold Street, San Jose, CA 95002, is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) to each of us paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of us hereby sells, assigns and transfers unto the said ROVI GUIDES, INC., its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said

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United States patent application, including any continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same; and each of us hereby authorizes and requests competent authorities to grant and issue any and all patents on said invention to the said ROVI GUIDES, INC. as the assignee of the entire interest therein; and each of us further agrees to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

As the inventor, we each declare as follows:

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 application. I hereby acknowledge that any willful false statement made in the declaration set forth in this paragraph is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, we have hereunto signed our names on the date indicated hereinafter.

6/8/18

\_\_\_\_\_  
Date



\_\_\_\_\_  
Todd Kulick

\_\_\_\_\_  
Date

\_\_\_\_\_  
Igor Eichkov

A S S I G N M E N T

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WHEREAS, ROVI GUIDES, INC., a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 2160 Gold Street, San Jose, CA 95002, is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) to each of us paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of us hereby sells, assigns and transfers unto the said ROVI GUIDES, INC., its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said

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United States patent application, including any continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same; and each of us hereby authorizes and requests competent authorities to grant and issue any and all patents on said invention to the said ROVI GUIDES, INC. as the assignee of the entire interest therein; and each of us further agrees to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

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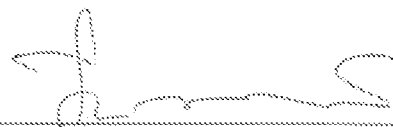
IN TESTIMONY WHEREOF, we have hereunto signed our names on the date indicated hereinafter.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Todd Kulick

6/22/2018

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Igor Pichkov