

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT4981765

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MICHAEL WARNOCK	05/29/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	RIPPLE LABS INC.
<b>Street Address:</b>	300 MONTGOMERY STREET
<b>City:</b>	SAN FRANCISCO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94104
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15991820
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)787-5520
<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>	202 787 5523
<b>Email:</b>	docket@morriskamlay.com
<b>Correspondent Name:</b>	MORRIS & KAMLAY LLP
<b>Address Line 1:</b>	1911 FORT MYER DRIVE
<b>Address Line 2:</b>	SUITE 1050
<b>Address Line 4:</b>	ARLINGTON, VIRGINIA 22209
<b>ATTORNEY DOCKET NUMBER:</b>	030900-000910US
<b>NAME OF SUBMITTER:</b>	ILONA WORMACK
<b>SIGNATURE:</b>	/Ilona Wormack/
<b>DATE SIGNED:</b>	05/29/2018
<b>Total Attachments: 1</b>	
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ASSIGNMENT OF PATENT APPLICATION

WHEREAS, each of the following:

**Michael Warnock**, a resident of **San Francisco, CA, US**

hereinafter referred to as "Assignor," is an inventor of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: **MULTI-HOP PATH FINDING**

Filing Date:

Application No.:

WHEREAS **Ripple Labs Inc.**, a corporation located at **300 Montgomery Street, San Francisco, CA, 94104, US**, hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by each Assignor, each Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, including any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by each and all Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Each Assignor further agrees that he/she will, without charge to each Assignor, and at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Each Assignor hereby authorizes and requests Morris & Kamlay LLP, 1911 Fort Myer Drive, Suite 1050, Arlington, VA 22209, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Each Assignor has signed on the date indicated.

Dated: 5/29/18



Michael Warnock