#### 505796189 11/27/2019

# PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

### **CONVEYING PARTY DATA**

| Name             | Execution Date |
|------------------|----------------|
| JEROME BARTIER   | 10/11/2019     |
| KHALID MAALLEM   | 10/10/2019     |
| AZIZA BEN-MOSBAH | 10/14/2019     |
| YACINE KHALED    | 11/04/2019     |

# **RECEIVING PARTY DATA**

| Name:           | ITRON GLOBAL SARL |
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| State/Country:  | WASHINGTON        |
| Postal Code:    | 99019             |

### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 16599990 |

## **CORRESPONDENCE DATA**

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| ATTORNEY DOCKET NUMBER: | I017-0212US    |
|-------------------------|----------------|
| NAME OF SUBMITTER:      | SHANI HOKE     |
| SIGNATURE:              | /Shani D Hoke/ |
| DATE SIGNED:            | 11/27/2019     |

**Total Attachments: 4** source=26T6990#page1.tif source=26T6990#page2.tif source=26T6990#page3.tif

> **PATENT REEL: 051132 FRAME: 0785** 505796189

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PATENT REEL: 051132 FRAME: 0786

Attorney Docket No.: I017-0212US

ASSIGNMENT

Application No:

Filing Date:

Title: RELIABLE LINK QUALITY ESTIMATION IN MULTI-RATE NETWORKS

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to ITRON GLOBAL SARL, having a principal place of business at 2111 N. Molter Road, Liberty Lake, WA, 99019, USA (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest, including all rights to claim priority, in the invention or improvements of the undersigned disclosed in an application for Letters Patent and all other applications (including divisional applications, continuations, and continuations-in-part), whether in the United States or in any foreign jurisdiction, either

solely or jointly with others, on said invention or improvements, and in any and all Letters

Patent of the United States and foreign jurisdictions which may be obtained on any of said

applications, and in any reissue or extension thereof.

The undersigned hereby authorizes and requests the Commissioner of Patents and

Trademarks and any foreign patent office authorities to issue said Letters Patent to Assignee.

application to insert in this assignment the execution date and/or filing date and application

The undersigned hereby authorizes and requests the attorneys of record in said

number of said application when officially known.

The undersigned warrants himself/herself to be the owner of the interest herein assigned

and to have the right to make this assignment, and further warrants that there are no outstanding

prior assignments, licenses, or other rights in the interest herein assigned and that the

undersigned will not make or enter into any assignment, license or other right in conflict with

this assignment.

For said consideration the undersigned hereby agrees, upon the request and at the

expense of Assignee, its successors and assigns, to execute any and all divisional,

continuation, continuation-in-part and substitute applications for said invention or

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PATENT REEL: 051132 FRAME: 0787

Attorney Docket No.: I017-0212US

improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that Assignee, its successors or assigns, may deem necessary or expedient.

For said consideration the undersigned further agrees, to cooperate to the best of the ability of the undersigned with Assignee, its successors or assigns, and to perform all affirmative activities to obtain and enforce said Letters Patent, both United States and foreign, including but not limited to providing pertinent facts and documents related to the invention, reviewing, executing, and delivering affidavits, responses, and briefs, and giving and producing evidence by testimony, deposition or otherwise in support thereof.

All rights in said applications and Letters Patent hereby conveyed to Assignee, its successors and assigns, will be held and enjoyed by Assignee, its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Jerome Bartier

Khalid Maallem

Aziza Ben-Mosbah

October 11th 2019

101/0/2019

afoly 14°2

Attorney Docket No.: 1017-0212US

ASSIGNMENT

Application No:

Filing Date:

Title: RELIABLE LINK QUALITY ESTIMATION IN MULTI-RATE NETWORKS

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to ITRON GLOBAL SARL, having a principal place of business at 2111 N. Molter Road, Liberty Lake, WA, 99019, USA (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest, including all rights to claim priority, in the invention or improvements of the undersigned disclosed in an application for Letters Patent and all other applications (including divisional applications, continuations, and continuations-in-part), whether in the United States or in any foreign jurisdiction, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign jurisdictions which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks and any foreign patent office authorities to issue said. Letters Patent to Assignee.

The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the execution date and/or filing date and application number of said application when officially known.

The undersigned warrants himself/herself to be the owner of the interest herein assigned and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned and that the undersigned will not make or enter into any assignment, license or other right in conflict with this assignment.

For said consideration the undersigned hereby agrees, upon the request and at the expense of Assignce, its successors and assigns, to execute any and all divisional, continuation, continuation-in-part and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for

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Attorney Docket No.: 1017-0212US

the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that Assignee, its successors or assigns, may deem necessary or expedient.

For said consideration the undersigned further agrees, to cooperate to the best of the ability of the undersigned with Assignee, its successors or assigns, and to perform all affirmative activities to obtain and enforce said Letters Patent, both United States and foreign, including but not limited to providing pertinent facts and documents related to the invention, reviewing, executing, and delivering affidavits, responses, and briefs, and giving and producing evidence by testimony, deposition or otherwise in support thereof.

All rights in said applications and Letters Patent hereby conveyed to Assignee, its successors and assigns, will be held and enjoyed by Assignee, its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

| Jerome Bartier   | Date                           |
|------------------|--------------------------------|
| Khalid Maallem   | Date                           |
| Aziza Ben-Mosbah | Date                           |
| Yacine Khaled    | <u> 11 10 4 125 19</u><br>Date |

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