11/13/2014 503060115

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT3106717 Electronic Version v1.1

Stylesheet Version v1.2

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| JUSSI HAAPOLA | 09/12/2014 |
| TUOMAS PASO | 09/12/2014 |
| RYUJI KOHNO | 09/16/2014 |

RECEIVING PARTY DATA

| Name: | OULUN YLIOPISTO | |
|-----------------|-----------------|--|
| Street Address: | PL 8000 | |
| City: | OULU | |
| State/Country: | FINLAND | |
| Postal Code: | FI-90014 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14472989 |

CORRESPONDENCE DATA

Fax Number: (703)685-0573

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: 7035212297

Email: agoode@young-thompson.com

YOUNG & THOMPSON **Correspondent Name:**

Address Line 1: 209 MADISON ST., SUITE 500 Address Line 4: ALEXANDRIA, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 3521-1026 |
|-------------------------|--|
| NAME OF SUBMITTER: | BENOIT CASTEL |
| SIGNATURE: | /BENOIT CASTEL/ |
| DATE SIGNED: | 11/13/2014 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 2

source=COMBINED_DECL_AND_ASSMT#page1.tif source=COMBINED DECL AND ASSMT#page2.tif

PATENT REEL: 034164 FRAME: 0081 503060115

ASSIGNMENT AND INVENTOR'S DECLARATION

WHEREAS I/we, the undersigned inventor(s), hereafter also referred to as "assignor(s)", have invented certain new and useful improvements described in the application identified below; and

WHEREAS, <u>Oulun yliopisto</u>, hereinafter referred to as "assignee(s)", whose address is <u>PL 8000 FI-90014</u> <u>OULU FINLAND</u>, is desirous of acquiring the entire right, title and interest in and to the application and invention, and to any United States patents to be obtained therefor;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the above-named assignor(s), hereby sell, assign and transfer to the above named assignee(s), its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, including any right to bring or maintain an action for infringement under the provisional rights granted pursuant to Title 35, Section 154 of the United States Code or any other cause of action for acts which would constitute infringement occurring prior to this assignment, and including the right to claim priority under the International Convention of Paris (1883), as amended, of or in any corresponding foreign patent application, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee(s), its successors and assigns.

| As a below named inventor, I hereby declare that: | | |
|---|-------------|--|
| This assignment and declaration is directed to: | | The attached application, or |
| addition is directed to. | \boxtimes | United States Application or PCT International Application Number <u>14/472,989</u> filed on <u>August 29, 2014</u> (Confirmation No. <u>3819</u>). |

The application is entitled: METHOD OF IMPROVING CHANNEL UTILIZATION

The above-identified application was made or was 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 this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

| Given Name(s) | Jussi | Family Name/Surname(s) HAAPOLA |
|--------------------------|--------|--------------------------------|
| Inventor's Signature: | Jun MM | Date 12.9.2014 |
| Given Name(s) | Tuomas | Family Name/Surname(s) PASO |
| Inventor's Signature: | Tun-Co | Date 12.9.2614 |
| Given Name(s) | Ryuji | Family Name/Surname(s) KOHNO |
| Inventor's | .3 | |
| Signature: | 200 | Date |

PATENT REEL: 034164 FRAME: 0082

ASSIGNMENT AND INVENTOR'S DECLARATION

WHEREAS I/we, the undersigned inventor(s), hereafter also referred to as "assignor(s)", have invented certain new and useful improvements described in the application identified below; and

WHEREAS, <u>Oulun yliopisto</u>, hereinafter referred to as "assignee(s)", whose address is <u>PL 8000 FI-90014</u> <u>OULU FINLAND</u>, is desirous of acquiring the entire right, title and interest in and to the application and invention, and to any United States patents to be obtained therefor;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the above-named assignor(s), hereby sell, assign and transfer to the above named assignee(s), its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, including any right to bring or maintain an action for infringement under the provisional rights granted pursuant to Title 35, Section 154 of the United States Code or any other cause of action for acts which would constitute infringement occurring prior to this assignment, and including the right to claim priority under the International Convention of Paris (1883), as amended, of or in any corresponding foreign patent application, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee(s), its successors and assigns.

| As a below named inventor, I he | ereby d | eclare that: |
|---|-------------|--|
| This assignment and declaration is directed to: | | The attached application, or |
| | \boxtimes | United States Application or PCT International Application Number <u>14/472,989</u> filed on <u>August 29, 2014</u> (Confirmation No. <u>3819</u>). |

The application is entitled: METHOD OF IMPROVING CHANNEL UTILIZATION

The above-identified application was made or was 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 this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

| Given Name(s) | Jussi | Family Name/Surname(s) HAAPOLA |
|--------------------------|--|--------------------------------|
| Inventor's Signature: | | Date |
| Given Name(s) | Tuomas | Family Name/Surname(s) PASO |
| Inventor's Signature: | | Date |
| Given Name(s) | Ryuji | Family Name/Surname(s) KOHNO |
| Inventor's Signature: | | Date 16 Sept 2014 |
| | A STATE OF THE STA | |

PATENT REEL: 034164 FRAME: 0083

RECORDED: 11/13/2014