## PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE:  |   | NEW ASSIGNMENT  |                |  |
|---|---|---|----------------|--|
| NATURE OF CONVEYANCE:   |   | ASSIGNMENT  |                |  |
| CONVEYING PARTY   | ' DATA  | ·   |                |  |
|   |   | Name  | Execution Date |  |
| The University of Uta   | ıh  |   | 08/03/2011     |  |
| RECEIVING PARTY   | DATA  |   |                |  |
| Name:   | University of Utah I  | University of Utah Research Foundation  |                |  |
| Street Address:   | 615 Arapeen Drive, Ste. 310   |   |                |  |
| City:   | Salt Lake City  |   |                |  |
| State/Country:  | HATU  |   |                |  |
| Postal Code:  | 84108   |   |                |  |
|   |   |   |                |  |
| Property Type   |   | Number  |                |  |
| Patent Number: 7848   |   | 3440  |                |  |
|   |   |   |                |  |
| CORRESPONDENCI  | E DATA  |   |                |  |
| CORRESPONDENCI<br>Fax Number:   | E DATA<br>(214)855-820  | 0   |                |  |
|   |   |   |                |  |
| Fax Number:<br>Phone:<br>Email:   | (214)855-820<br>(214) 855-716<br>nrees@fulbrig  | 64<br>ght.com   |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will</i>   | (214)855-820<br>(214) 855-716<br>nrees@fulbrig  | 64  | e sent via     |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will<br/>US Mail.</i>  | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br><i>be sent to the e-mail a</i>  | 64<br>ght.com<br>address first; if that is unsuccessful, it will be   |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will</i>   | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br><i>be sent to the e-mail a</i>  | 64<br>ght.com<br><i>address first; if that is unsuccessful, it will be</i><br>es  |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will<br/>US Mail.</i><br>Correspondent Name  | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br><i>be sent to the e-mail a</i><br>e: Nathan J. Ree  | 64<br>ght.com<br><i>address first; if that is unsuccessful, it will be</i><br>es<br>aworski, LLP  | e sent via     |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will<br/>US Mail.</i><br>Correspondent Name<br>Address Line 1:                                       | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br><i>be sent to the e-mail</i> a<br>e: Nathan J. Rea<br>Fulbright & Ja  | 64<br>ght.com<br><i>address first; if that is unsuccessful, it will be</i><br>es<br>aworski, LLP<br>ve, Ste. 2800                         |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will</i><br><i>US Mail.</i><br>Correspondent Name<br>Address Line 1:<br>Address Line 2:              | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br><i>be sent to the e-mail</i> a<br>e: Nathan J. Ree<br>Fulbright & Ja<br>2200 Ross Av<br>Dallas, TEXA              | 64<br>ght.com<br><i>address first; if that is unsuccessful, it will be</i><br>es<br>aworski, LLP<br>ve, Ste. 2800                         |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will<br/>US Mail.</i><br>Correspondent Name<br>Address Line 1:<br>Address Line 2:<br>Address Line 4: | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br>be sent to the e-mail a<br>e: Nathan J. Rea<br>Fulbright & Ja<br>2200 Ross Av<br>Dallas, TEXA                     | 64<br>ght.com<br><i>address first; if that is unsuccessful, it will be</i><br>es<br>aworski, LLP<br>ve, Ste. 2800<br>S 75201              |                |  |
| Fax Number:<br>Phone:<br>Email:<br><i>Correspondence will<br/>US Mail.</i><br>Correspondent Name<br>Address Line 1:<br>Address Line 2:<br>Address Line 4: | (214)855-820<br>(214) 855-716<br>nrees@fulbrig<br>be sent to the e-mail a<br>e: Nathan J. Rea<br>Fulbright & Ja<br>2200 Ross Av<br>Dallas, TEXA<br>T NUMBER:<br>ER: | 64<br>ght.com<br>address first; if that is unsuccessful, it will be<br>es<br>aworski, LLP<br>ve, Ste. 2800<br>S 75201<br>UTAH.P0024US.CP1 |                |  |

#### ASSIGNMENT

WHEREAS, The University of Utah, a University organized under and pursuant to the laws of Utah, having its principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108 (hereinafter referred to as Assignor), is the sole and exclusive owner, by assignment, of a Letters Patent of the United States entitled MULTI-CHANNEL COMMUNICATION METHOD AND APPARATUS USING PLURAL MARKOV CHAIN MONTE CARLO SIMULATIONS, issued December 7, 2010 and assigned patent no. 7,848,440; and

WHEREAS, University of Utah Research Foundation, a non-profit corporation organized under and pursuant to the laws of Utah having its principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108 (hereinafter referred to as Assignee), is desirous of acquiring the right, title and interest in, to and under said Patent application and the invention covered thereby;

NOW, THEREFORE, in consideration of and in exchange for the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, the said Assignor has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over to the said Assignee, the entire right, title and interest for the United States of America and all other countries in and to said application for all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefore in the United States of America and all other countries, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents to said assignee herein, as assignee of the entire interest therein; and the undersigned for itself and its legal representatives, heirs and assigns does hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said invention whenever requested, to testify in any interferences or other legal proceedings in which said application or patent may become involved, to sign all lawful papers, make all rightful oaths, and do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said invention in the United

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# PATENT REEL: 026917 FRAME: 0411

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States of America and all other countries, the expenses incident to said Patent application to be borne and paid by said assignee.

lug 3. 2011 Date:

### **ASSIGNOR:**

THE UNIVERSITY OF UTAH

By: Rajiv K. Kulkarni, its Associate Director

THE STATE OF UTAH

COUNTY OF SALT LAKE

This instrument was acknowledged before me on this  $3^{rd}$  day of  $\frac{Mgrs F}{Mrs}$ , 2011, by <u>Rajiv K. Kulkarni, Associate Director</u> of <u>THE UNIVERSITY OF UTAH</u>, a University, on behalf of said University.

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Notary Public, State of Utah My Commission Expires: <u>March 12, 20</u>12



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Date: <u>Ung 3, 2011</u>

**ASSIGNEE:** 

UNIVERSITY OF UTAH RESEARCH FOUNDATION

ulkarni

By: Rajiv K. Kulkarni, its Associate Director

THE STATE OF UTAH COUNTY OF SALT LAKE

This instrument was acknowledged before me on this <u>3<sup>rd</sup></u> day of <u>(uqust</u>, 2011, by <u>Rajiv K. Kulkarni, Associate Director</u> of <u>UNIVERSITY OF UTAM RESEARCH</u> <u>FOUNDATION</u>, a non-profit corporation, on behalf of said corporation.

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Notary Public LESLIE J. SMITH 615 Arapeen Drive, Suite 310 Sait Lake City, Utah 84108 My Commission Expires March 12, 2012 State of Utah

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Notary Public State of Utah My Commission Expires: <u>March 12</u> 2312

### MEMORANDUM

Date: 27 August 2003

To: Rajiv K. Kulkarni, Senior Technology Licensing Manager, Technology Transfer Office

From: Ray Gesteland, Vice President for Research, University of Utah President, University of Utah Research Foundation

Subject: Delegation of Signatory Authority

This Memorandum confirms the continuing authorization, granted you since 17 September 2001, to execute and sign documents on behalf of the University of Utah and the University of Utah Research Foundation for patent documents, confidential disclosure agreements and biological and materials transfer agreements.

Gesteland, Ph.D. Raymond

Vice President for Research University of Utah

President University of Utah Research Foundation

University of Utah Research Foundation 201 \$ PRESIDENTS CIRCLE RM 210 SALT LAKE CITY, UTAH 84112-9011

> (801) 581-7236 FAX (801) 585-6212

PATENT REEL: 026917 FRAME: 0414

# **RECORDED: 09/16/2011**