

2/23/11



02/25/2011

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Our Ref.: HWB-2380-1



103618554

To the Director of the U S Patent and Trademark Office: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies)</p> <p>1 Magnus OLSSON 5</p> <p>2 Göran RUNE 6</p> <p>3 Per SYNNERGREN 7</p> <p>4 Erik WESTERBERG 8</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3 Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: February 22, 2011, January 25, 2011, January 17, 2011 and January 14, 2011, respectively</p>	<p>2. Name and address of receiving party(ies)</p> <p>1) Name: Telefonaktiebolaget LM Ericsson (publ) Street Address Torshamnsgatan 23 City. Stockholm</p> <p>State/Country: Sweden Zip SE-164 83</p> <p>2) Name Street Address: City: State/Country: Zip:</p> <p>Additional name/s & address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>4 Application number(s) or patent number(s): <input type="checkbox"/> This assignment is being filed together with a new application.</p> <p>A. Patent Application No(s)</p> <p>(1) 12/943,801</p> <p>(2)</p> <p>(3)</p> <p>B Patent No(s).</p> <p>(1)</p> <p>(2)</p> <p>(3)</p> <p>Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5 Name and address of party to whom correspondence concerning document should be mailed.</p> <p>Name <u>H Warren Burnam, Jr.</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>Nixon & Vanderhye P C.</u> <u>901 North Glebe Road</u> <u>11th Floor</u></p> <p>City <u>Arlington</u> State <u>VA</u> Zip <u>22203</u></p>	<p>6. Total number of applications & patents involved: <u>1</u></p> <p>7 Total fee (37 CFR 3 41) \$ <u>40 00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8 The Commissioner is hereby authorized to charge any <u>deficiency</u> in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</p>
DO NOT USE THIS SPACE	
<p>9 Statements and signature.</p> <p>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document</p> <p><u>H Warren Burnam, Jr</u> <u>[Signature]</u> <u>February 23, 2011</u></p> <p>Name of Person Signing Signature Date</p> <p>Reg No 29,366</p> <p>Total number of pages including original cover sheet, attachments, and document [6]</p>	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

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05 FC:0021 40.00 0P

ASSIGNMENT

WHEREAS, Magnus OLSSON, Göran RUNE, Per SYNNERGREN and Erik WESTERBERG (hereinafter ASSIGNORS) of Hantverkargatan 85, 1tr, Stockholm, Sweden SE-112 38; Sandgårdsgatan 5A, Linköping, Sweden SE-582 52; Höstvägen 106, Luleå, Sweden SE-976 33; and Hemmansvägen 7, Enskede, Sweden SE-122 38, respectively, have invented a certain improvement in **GSM AND LTE MULTIPLEXING** for which a so-entitled application for Letters Patent of the United States was filed in the United States Patent and Trademark Office as a provisional application on **December 17, 2009** and afforded Serial No. **61/287,575** and for which a so-entitled application for Letters Patent of the United States was filed in the United States Patent and Trademark Office on **November 10, 2010** and afforded Serial No. **12/943,801**;

WHEREAS, Telefonaktiebolaget LM Ericsson (publ) (hereinafter ASSIGNEE), a corporation of the Country of Sweden, having an office and place of business at Torshamnsgatan 23, Stockholm, Sweden, SE-164 83, is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the ASSIGNORS by these presents hereby sell, assign, and transfer unto the ASSIGNEE, its successors, assigns, and legal representatives, the aforesaid application(s) and the full and exclusive right to the invention and improvements therein in the United States and all foreign countries, as described in the aforesaid application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any Letters Patent or Patents claiming priority from the aforesaid application to ASSIGNEE, for its interest as ASSIGNEE, for the sole use and behoof of ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;

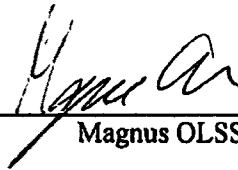
ASSIGNORS hereby agree to assist in the preparation of and hereby assign a like interest to said ASSIGNEE, its successors, assigns, and legal representatives, without further remuneration, any non-provisional applications or any continuation, divisional, reissue, or foreign application claiming priority from the aforesaid application, or any other patent application otherwise growing out of or related to the invention; and to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives necessary to ASSIGNEE's full protection and title in and to the invention hereby transferred.

ASSIGNORS specifically agree, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

2011-02-22

Date



Magnus OLSSON

Date: 2011-02-22 Witnessed by



Name:

SHARBNAM SULTANA

Address:

449 MOUNT PLEASANT
WESTMOUNT, QC, CANADA

Date

Göran RUNE

Date: _____ Witnessed by _____

Name: _____

Address: _____

Date

Per SYNNERGREN

Date: _____ Witnessed by _____

Name: _____

Address: _____

ASSIGNORS hereby agree to assist in the preparation of and hereby assign a like interest to said ASSIGNEE, its successors, assigns, and legal representatives, without further remuneration, any non-provisional applications or any continuation, divisional, reissue, or foreign application claiming priority from the aforesaid application, or any other patent application otherwise growing out of or related to the invention; and to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives necessary to ASSIGNEE's full protection and title in and to the invention hereby transferred.

ASSIGNORS specifically agree, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

Date Magnus OLSSON

Date: _____ Witnessed by _____

Name: _____
Address: _____
January 25, 2011
Date Goran RUNE

Date: 2011-01-25 Witnessed by _____

Name: JOKAN MOE LADUSÄILER
Address: 59017 MANORP

Date Per SYNNERGREN

Date: 2011-01-05 Witnessed by _____

Name: Mehdi Amirijev
Address: Lidsädesgatan 13
S-1336 Lidingö
Sweden

ASSIGNORS hereby agree to assist in the preparation of and hereby assign a like interest to said ASSIGNEE, its successors, assigns, and legal representatives, without further remuneration, any non-provisional applications or any continuation, divisional, reissue, or foreign application claiming priority from the aforesaid application, or any other patent application otherwise growing out of or related to the invention; and to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives necessary to ASSIGNEE's full protection and title in and to the invention hereby transferred.

ASSIGNORS specifically agree, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

Date Magnus OLSSON

Date: _____ Witnessed by _____

Name: _____
Address: _____

Date Göran RUNE

Date: _____ Witnessed by _____

Name: _____
Address: _____

2017-01-17

Date



Per SYNNERGREEN

Date: 2017-01-17 Witnessed by _____

Name: Mårten Ericson
Address: Regnvägen 55
47632 Luleå
Sweden

Jan 14, 2011
Date

Erik Westerberg
Erik WESTERBERG

Date: Jan 14, 2011 Witnessed by Michael Anehill

Name: Michael Anehill
Address: Hasselstigen 4
Solna
SWEDEN