Form FTO-1595 1-31-92 U.S. PTO 10/582997 06/08/2007

U.S. Department of Commerce United States Patent and Trademark Office

(8-0)

06-25-2007

R SHEET

Our Ref.: 2483-53

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To the Director of the U.S. Patent and	2. Name and address of receiving party(ies):
1. Name of conveying party(ies):	2. Name and address of receiving party(les).
1 Peter LARSSON 5	1) Name: Telefonaktiebolaget LM Ericsson (publ)
2 Svante SIGNELL 6	Street Address:
β David ASTELY 7	City: Stockholm
4 8	City. Stockholm
	State/Country: Sweden Zip: S-164 83
Additional name/s of conveying party/ies attached?	
3. Nature of conveyance:	2) Name
	Street Address:
Security Assignment Change of Name	City:
Other	State: Zip:
Execution Date: June 28, 2006; September 20, 2006; July 18, 2006	Additional name/s & address/es attached? Yes No
4. Application number(s) or patent number(s): Thi	s assignment is being filed together with a new application.
A. Patent Application No(s).	B. Patent No(s). 1058 2997
(1) 10/582,997	1 (2)
(2)	(2)
(3)	(3)
	ttached Yes No
5. Name and address of party to whom correspondence	6. Total number of applications & patents involved:
concerning document should be mailed:	7 Total fee (37 CFR 3.41) \$ 40.00
	7. Total rec (37 Gr R 3.11)
Name: John R. Lastova	Enclosed
	Authorized to be charged to deposit account #14-1140
Internal Address:	8. The Commissioner is hereby authorized to charge any
	deficiency in the fee(s) filed, or asserted to be filed, or which
Street Address: Nixon & Vanderhye P.C.	should have been filed herewith (or with any paper thereafter
901 North Glebe Road	filed in this application by this firm) to our Account No.
11th Floor	14-1140.
City: Arlington State: VA Zip: 22203	14-1140.
/11/2007 MKAYPAGH 00000107 10582997 DO NOT US	E THIS SPACE
FC:8021 40.00 DP	
9. Statements and signature. To the best of my knowledge and belief, the foregoing information of the best of the best of the statements and signature.	ation is true and correct and any attached copy is a true copy
To the best of my knowledge and belief, the longoning interest	20
of the original document.	June 8, 2007
John R. Lastova	Date
Name of Person Signing Si	gnature
Reg. No. 33,149	in all cover sheet attachments, and document: [5]
Total number of pages including orig	ginal cover sheet, attachments, and document: [5]
	(571) 272 0140, or mailed to:

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Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

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ASSIGNMENT

WHEREAS, Peter LARSSON, Svante SIGNELL, and David ASTELY, (hereinafter ASSIGNORS) of Ballonggatan 2, 1 tr., Solna, Sweden S-169 71; Ängsullsvägen 170, Vällingby, Sweden S-162 46; and S:t Eriksgatan 19, 3 tr., Stockholm, Sweden S-112 39, respectively, have invented a certain improvement in METHOD AND APPARATUS IN A MIMO BASED COMMUNICATION SYSTEM for which a so-entitled application for Letters Patent of the United States was filed in the United States Patent and Trademark Office on June 14, 2006 under Serial No.

WHEREAS, Telefonaktiebolaget LM Ericsson (publ) (hereinafter ASSIGNEE), a corporation of the Country of Sweden, having an office and place of business at , Stockholm, Sweden S-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

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PATENT REEL: 019482 FRAME: 0891 interest as ASSIGNEE, for the sole use and behoof of ASSIGNEE, its successors, assigns, and legal representatives.

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 continuation, divisional, reissue, or foreign application claiming priority from the aforesaid application or 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. 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;

AGREED and executed as noted below:

Witnessed by:

Date: 2006-06-28

- 2 -

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Date	Svante SIGNELL
Witnessed by:	
Name:	Date:
18 July 2006	David ASTELY
Witnessed by:	David ASTELT
Name: Zuo Zu Ul-	Date: July 18 2006
TSAO-TSEN CHEN	

2006-09-20	Juande highell
Date	Svante SIGNELL
Witnessed both Name: Jug Berowys	Date: 06-09-20
Date	David ASTELY
Witnessed by:	
Nicona	Date:

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RECORDED: 06/08/2007