Form PTO-1595 (Rev. 06/04)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office			
RECORDATION FORM COVER SHEET PATENTS ONLY				
To the Director of the U.S. Patent and Trademark Office. Please rec	cord the attached documents or the address(es) below			
Name of conveying party(ies)/Execution Date(s): Havish KOORAPATY May 29, 2012	2. Name and address of receiving party(ies):			
Robert BALDEMAIR May 19, 2012 Jung-Fu CHENG May 29, 2012 Mattias FRENNE May 11, 2012 Daniel LARSSON May 16, 2012 Additional name(s) of conveying party(ies) attached?	NAME: Telefonaktiebolaget L M Ericsson (publ) ADDRESS: Torshamnsgatan 23, Kista SE-164 83 Stockholm, Sweden			
attached? Yes X No 3. Name of Conveyance:	Additional name(s) & addresses(es) attached? Yes X No			
4. Application number(s) or patent number(s):	This document is being filed together with a new application			
A. Patent Application No.(s) 13/494, 040	B. Patent No.(s)			
Additional numbers attack	ned? Yes X No			
Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved:			
	7. Total fee (37 CFR 3.41): \$40.00			
Name: Martin M. Zoltick Address: Rothwell, Figg, Ernst & Manbeck Suite 800 Street Address: 607 14th St., N.W. City: Washington,	Enclosed Authorized to be charged to deposit account None required (government interest not affecting title)			
State: D.C. Zip: 20005 Telephone No.: 202/783-6040	8. Deposit account number: 02-2135			
Facsimile No.: 202/783-6031 Email Address: PTO-PAT-EMAIL@rfem.com Attorney Docket No.: 3602-352	Authorized User Name <u>Martin M. Zoltick</u>			
DO NOT USE THIS SPACE				
ΔM				
9. Signature	Date 2012-06-11			
Martin M. Zoltick, Reg. No.35,745 Total number of pages including cover sheet, attachments and documents: 9 Name of Person Signing				

70048758/IELL FIG 06/12/2012

Attorney Docket No. 3602-352

ASSIGNMENT

This Assignment is made by:

Havish KOORAPATY

13425 Kodiac Place Saratoga, CA 95070

Robert BALDEMAIR

Angkarrsgatan 3

SE-171 70, Solna, Sweden

Jung-Fu CHENG

1731 Mandan Place Fremont, CA 94539

Mattias FRENNE

Arkeologvagen 20

SE-754 43 Uppsala, Sweden

Daniel LARSSON

Birger Jarlsgatan 113C

SE-113 56 Stockholm, Sweden

(hereinafter referred to as "Assignor(s)") in favor, and for the benefit and behoof of, Telefonaktiebolaget L M Ericsson (publ), a corporation duly organized under and pursuant to the laws of Sweden and having its principal place of business at S-164 83 Stockholm, Sweden (hereinafter referred to as "Assignee").

For good, sufficient and adequate consideration, the receipt of which is hereby acknowledged, the Assignor(s) have, as of the Effective Date, sold, assigned, transferred, and set over, and by these presents, and to the extent any transferable or assignable rights still remain with the inventor, do hereby sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the following inventions, application(s) for Letters Patent, and any and all Letters Patent or Patents in all countries and pursuant to all multilateral treaty organizations, including Sweden, the United States of America, the Patent Cooperation Treaty and European Patent Convention, that may be granted therefor and thereon, and in and to any and all divisions, continuations, continuations-in-part, conversions and utility models of said application(s), and reissues and extensions of said Letters Patent or Patents, the same to be held and enjoyed by the Assignee, for its use and behoof and the use and the behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent, Patents and Utility Models may be granted as fully and entirely as the same would have been held and enjoyed by the Assignor(s) had this sale and assignment not been made:

FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION SYSTEM

including, but not limited to, the application(s) for Letters Patent and Utility Model filed in:

Country	Application No.	File Date
US	61523540	August 15, 2011

The Effective date is the earliest date of the above listed Filing Date(s).

Altomey Docket No. 3602-352

ASSIGNMENT

Assignor(s) hereby authorize and request Assignee's Attorneys to insert the serial number and filing date of said application(s) for Letter Patent or Utility Model, when known. The assignment of the above mentioned rights includes a transfer of the whole right to use a priority (including priority according to any convention, multilateral agreement, bilateral agreement and national law) of the above mentioned application(s) for Letter Patent and Utility Model in all countries and multilateral treaty organizations wherein no residual rights shall remain with the Assignor(s). Assignor(s) hereby request that said Letters Patent, Patent or Utility Model be issued to Assignee as the Assignee of said inventions, the Letters Patent, Patent or Utility Model to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns. Assignee alone hereinafter has the entire disposal of the invention and possesses entire ownership to any domestic and foreign patents or utility models granted thereinafter. The rights granted hereunder shall include all rights to institute legal actions, obtain remedies and recover and retain damages in respect to said Letters Patent, Patent or Utility Model.

The Assignor(s) and Assignee hereby understand and agree that with the execution of this Assignment, to the extent necessary or appropriate, national and/or regional applications may be filed by the Assignee as the applicant and on behalf of the assignor.

To the extent Assignee is entitled to receive the rights hereunder pursuant to this Assignment, each of the Assignor(s) hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of the Effective Date, the Assignor(s) were the sole and lawful owners of the entire right, title, and interest in and to the inventions and application(s) for Letters Patent or Utility Models above-mentioned, and that the same are unencumbered, and that the Assignor(s) have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

Further, and for the same consideration, the Assignor(s) hereby covenant(s) and agree(s) to and with the Assignee, its successors, legal representatives, and assigns that the Assignor(s) will, whenever counsel of the Assignee, or the counsel of its successors. legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said application(s) for Letters Patent, or any proceeding in connection with Letters Patent or Utility Model for said inventions, in any country and any multilateral treaty organization, including interference proceedings, is lawful and desirable, or that any division, continuation, continuation-in-part, conversion or Utility Model of any application(s) for Letters Patent or Utility Model, or any reissue or extension of any Letters Patent to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Utility Model for said inventions, without charge to Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns, If any of the Assignor(s) is prevented by any obstacles from signing said documents in person, this Assignment shall be valid as a Power of Attorney for the Assignee to sign these documents on behalf of any such Assignor(s) or, in the event of the death of the latter, the estate thereof.

This Assignment shall be governed by and construed under, and any dispute, controversy or claim related hereto shall be decided in accordance with, the laws of: SWEDEN

PATENT REEL: 028389 FRAME: 0661

Attorney Docket No. 3602-352

ASSIGNMENT

wilhout regard to the conflicts of laws provisions thereof. Any dispute, controversy or claim arising under, out of or relating to this Assignment and any subsequent amendments of this Assignment, including, without limitation, its formation, validity, binding effect, interpretation, performance, breach or termination, as well as non-contractual claims, shall be referred to and finally determined by arbitration in accordance with the WIPO Arbitration Rules. The arbitral tribunal shall consist of a sole arbitrator. The place of arbitration shall be in the country of the inventor's residence. The language to be used in the arbitral proceedings shall be English.

No modifications shall be made to this Assignment unless in writing and signed by each of the Assignor(s) and Assignee. If any of the provisions of this Assignment shall be deemed invalid or unenforceable, then the entire Assignment shall be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligations of Assignee and Assignor(s) shall be construed and enforced accordingly. Assignee's failure to exercise any option made available as a result hereof, shall not be construed as a waiver of such provisions, rights, or options, or affect the validity of this Assignment. Assignor covenants and agrees that it will not take any actions in violation of this Assignment.

Subsequent assignment from any of the assignors to the assignee purporting to convey the subject matter specified herein for a particular country, patent office, or jurisdiction shall not invalidate any provision of this assignment and any such subsequent assignment shall act as a further confirmation of the assignment herein.

(0-4-201) Signature on behalf of

Attorney Docket No. 3602-352

ASSIGNMENT

Title: FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION SYSTEM

Date May 29, 2012	Signature of Assignor	Havish KOORAPATY
Date	Witnessed by Name: Address:	Aci Khayrallah Ali Khayrallah 1124 Boranda Ave Mountain View, CA 94040
Date May 29, 2012	Witnessed by Name: Address:	(P22) Chester Park #2303.60 Descons D. Dr. San Jose, CA95134

Attorney Docket No. 3602-352

ASSIGNMENT

Title: FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION

Date 2012-05-17

Line 1Rothwell Fig

Name:

Address:

Date 2012-05-14

Witnessed by

Name:

Address:

ROTHWELL FIGG

06:25:36 06-12-2012

8/10

Attorney Docket No. 3602-352

ASSIGNMENT

Title: FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION SYSTEM

Date $05/29/20/2$	Signature of Assignor	Jung-Fu CHENG
Date05/29/2012	Witnessed by Name: Address:	Ali Khayrallah 1124 Boranda Ave
Date 5/29/2012	Witnessed by Name: Address:	Mountain View, CA 94040 DENNIS HUI 1019 HAVRE CT. SHNNYVALE, CA 94087

Attorney Docket No. 3602-352

ASSIGNMENT

Title: FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION SYSTEM

Signature of Assignor	Hotas Frenne
Witnessed by	Com Caller Wenn Stra
Name:	Ann-letkin henrylüh
Address:	Verlandelds v. 32
	74142 Kn/vota
	Swedon
Witnessed by	ManuFour
Name:	Marianne Frome
Address:	Arkealego. 20
	75743 Vapralis
	Sweden
	Witnessed by Name: Address: Witnessed by Name:

Attorney Docket No. 3602-352

ASSIGNMENT

Title: FLEXIBLE TRANSMISSION OF MESSAGES IN A WIRELESS COMMUNICATION SYSTEM

Date 21 17 - 05 - 16	Signature of Assignor	Daniel LARSSON
Date 2321-25-16	Witnessed by	Managhe
	Name:	Marie Eduardsson
	Address:	Sic booggood 14
		1720 Justella
		Swedery
Date 2512-05-15	Witnessed by	11/12 / Les
	Name:	David Astely
	Address:	- 5.7.6.6.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
		16856 Billinge
		Spreden

PATENT

REEL: 028389 FRAME: 0667