503676222 02/02/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3722858

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KATSUMI AOYAGI	09/17/2010
RUTGER LJUNDQVIST	09/14/2010
HANS WACHTMEISTER	09/17/2010
HAEKAN PALM	09/14/2010
KENJI TAKAO	09/17/2010
MASAYA TAKAHASHI	09/17/2010
YOSHIYUKI HAMA	09/21/2010
YIMIN LI	09/27/2010
TOSHIHISA SANBOMMATSU	09/14/2010
TOMOHIRO ICHIKAWA	09/27/2010

RECEIVING PARTY DATA

Name:	SONY ERICSSON MOBILE COMMUNICATIONS JAPAN, INC.	
Street Address:	1-8-15, KONAN, MINATO-KU	
City:	TOKYO	
State/Country:	JAPAN	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13105538

CORRESPONDENCE DATA

Fax Number: (202)974-9555

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.

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Correspondent Name: L. SCOTT BLOEBAUM Address Line 1: ANDREWS KURTH LLP

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ATTORNEY DOCKET NUMBER: 227151 (13/105538)

PATENT REEL: 037647 FRAME: 0144 503676222

NAME OF SUBMITTER:	L. SCOTT BLOEBAUM	
SIGNATURE:	/l. scott bloebaum/	
DATE SIGNED: 02/02/2016		

Total Attachments: 3

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> PATENT REEL: 037647 FRAME: 0145

Docket Number: 366601US8PROV

ASSIGNMENT

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in

MEMORY MANAGEMENT METHODS AND DEVICE

for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address:

AND WHEREAS, Sony Ericsson Mobile Communications Japan, Inc., a Japanese corporation with offices at 1-8-15, Konan, Minato-ku, Tokyo, Japan (hereinafter referenced as "ASSIGNEE SEJP") is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

AND WHEREAS, Sony Ericsson Mobile Communications AB, a Swedish corporation with offices at Nya Vattentornet, 221 88 Lund, Sweden (hereinafter referenced as "ASSIGNEE SEAB") is desirous of acquiring all the interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries held by ASSIGNEE SEJP as the sole owner to the rights by this assignment;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. It as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE SEJP, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights 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 to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto; and

CONCURRENTLY HEREWITH in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNEE SEJP by these presents do hereby assign, sell and transfer unto the said ASSIGNEE SEAB, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights 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 to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto,

The undersigned inventor(s) and ASSIGNEE SEJP hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEE SEAB, as the assignee of the whole right, title and interest thereto;

The undersigned inventor(s) and ASSIGNEE SEJP further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE SEAB or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

The undersigned inventor(s) and ASSIGNEE SEJP further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

The undersigned inventor(s) and ASSIGNEE SEJP further agree that ASSIGNEE SEAB will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and

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will testify as to the same in any interference or litigation related thereto;

number

61/380.576

Signature of fifth inventor

The undersigned inventor(s) and ASSIGNEE SEJP hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

And I hereby authorize and request my attorney(s) of record in this application to insert the application

Filing Date: September 7, 2010 This assignment executed on the dates indicated below. Katsumi AOYAGI Name of first or sole inventor Execution date of U.S. Patent Application Tokyo, Japan Residence of first or sole inventor Rutger LJUNGQVIST Execution date of U.S. Patent Application Name of second inventor Lund, Sweden Residence of second inventor September 14 2010

Date of this assignment Hans WACHTMEISTER Name of third inventor Execution date of U.S. Patent Application Luid, Sweden Residence of third inventor Signature of third inventor Hacken PALM Name of fourth inventor Execution date of U.S. Patent Application Lund, Sweden Residence of fourth inventor Signature of fourth inventor Kenji TAKAO Name of fifth inventor Execution date of U.S. Patent Application Tokyo, Japan Residence of fifth inventor

Masaya TAKAHASHI	
Name of sixth or sole inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Tokyo, Japan Residence of sixth or sole inventor	
高橋 流也	•
to to see	Septent - 17 2010
Signature of sixth or sole inventor	Septem 7.200 Date of this assignment
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Yoshiyuki HAMA	
Name of seventh or sole inventor	Execution date of U.S. Patent Application
malara Jawan	,
Tokyo Japan Residence of seventh or sole inventor	
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源 善幸	September 21 2016
Signature of seventh or sole inventor	Date of this assignment
Signature of severith of sole inventor	Date of this assignment
Select P.	
Yimin LI Name of eighth or sole inventor	Execution date of U.S. Patent Application
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Tokyo, Japan	
Residence of eighth or sale inventor	
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12/213	Date of this assignment
Signature of eighth or sole inventor	Date of this assignment
Toshihisa SANBOMMATSU	
Name of ninth or sole inventor	Execution date of U.S. Patent Application
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Tokyo, Japan Residence of ninth or sole inventor	
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三本松 判由	Sontani a 14 300
Status of the sold invariant	September 14. 20/ Date of this assignment
Signature of ninth of sole inventor	Date of this assignment
Tomohiro ICHIKAWA	
Name of tenth or sole inventor	Execution date of U.S. Patent Application
Tokyo, Japan	
Residence of tenth or sole inventor	V.
	6 1 1 57 mm/m
七川 大りひ.	September 27, 20/0
Signature of tenth or sole inventor	Date of this assignment
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005/9 2.12 -	
Date: Ocf. / 9, 20/0 By: Name: H//	PASHI
Title:	VIII DAIL
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