505605831 08/05/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RICKARD LJUNG	01/25/2017

RECEIVING PARTY DATA

Name:	SONY MOBILE COMMUNICATIONS INC.	
Street Address:	4-12-3 HIGASHI-SHINAGAWA	
Internal Address:	SHINAGAWA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	140-0002	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16479653

CORRESPONDENCE DATA

Fax Number: (216)592-5009

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.

Phone: 2165925000

Email: patents@tuckerellis.com
Correspondent Name: TUCKER ELLIS LLP
Address Line 1: 950 MAIN AVENUE

Address Line 2: SUITE 1100

Address Line 4: CLEVELAND, OHIO 44113

ATTORNEY DOCKET NUMBER:	014524-062010
NAME OF SUBMITTER:	M. DAVID GALIN
SIGNATURE:	/M. David Galin/
DATE SIGNED:	08/05/2019

Total Attachments: 2

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PATENT 505605831 REEL: 049958 FRAME: 0836

ASSIGNMENT

(I) WHEREAS, the undersigned inventor(s) (hereinafter "Assignor") has(have) invented a new and useful invention entitled:

COVERAGE ENHANCEMENT AND FAST ACKNOWLEDGMENT

for which a full description is made in patent application number 17 152 676.7 filed herewith on January 23, 2017 in the European Patent Office (hereinafter "Application").

WHEREAS, Sony Mobile Communications Inc, a Japanese corporation having a principal office and place of business at, 4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, JAPAN (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said invention, the Application, and in, to, and under any patent that may be obtained for said invention, as more fully set forth hereinafter;

- (II) NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration from the Assignee, the receipt of which the Assignor hereby acknowledges, the Assignor has assigned and transferred, and hereby does assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the Application, and all patents that may issue for the invention, and all divisions, reissues, substitutions, continuations, continuations-in-part, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of Assignee, its successors and assigns for the full term, including any term extensions, of any and all of said patents that may issue, as fully and entirely as the same would have been held and enjoyed by Assignor had this assignment not been made.
- (III) FURTHER, be it known that the Assignor has assigned, and transferred, and hereby does assign, and transfer unto the Assignee, its successors and assigns: (1) the entire foreign rights to the invention disclosed in the Application, in all countries of the world, including the right to file applications and obtain patents under the terms of the Paris Convention for the Protection of Industrial Property, and of the European Patent Convention, and (2) the right to claim the benefit of priority from the Application in all foreign countries in accordance with Paris Convention Article 4A(1) or as otherwise required by any national or international authority.
- (IV) FURTHER, Assignor does hereby covenant and agree that: (1) they have full right to convey the entire right, title, and interest assigned herein; (2) they have not executed, and will not execute, any agreement(s) in conflict herewith; and (3) this assignment is binding on Assignor and Assignor's heirs, successors, assigns, and legal representatives.
- (V) FURTHER, Assignor does hereby covenant and agree that they will assist the Assignec in: (1) the prosecution of the application herein identified; (2) the making and/or prosecution of any other patent applications that the Assignee may elect to make covering the invention herein identified, including any applications for reissue, reexamination, or foreign patent rights, (3) any proceeding relating to the invention, including all applications and patents arising

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therefrom, in any patent office, including but not limited to interferences and derivation proceedings; and (4) all post-grant proceedings, both ex parte and inter partes, involving any patent arising from the application and all divisions, reissues, substitutions, continuations, continuations-in-part, and extensions thereof.

- (VI) FURTHER, Assignor does hereby covenant and agree to: (1) promptly execute and deliver to Assignee any and all patent applications, assignments, affidavits, and any other papers necessary to perfect patent rights assigned herewith; (2) promptly execute and deliver to Assignee any and all additional papers and to make all lawful oaths which may be requested by Assignee to fully carry out the terms of this assignment; (3) communicate to Assignee, or to its successors, assigns, and legal representatives, any facts known respecting said invention; (4) at the expense of Assignee, testify in any legal proceedings related to the invention; and (5) generally perform all affirmative acts necessary to aid Assignee, its successors, assigns, and nominees to obtain, maintain, and enforce patent protection for said invention in all countries.
- (VII) FURTHER, in the event that: (1) Assignor is unable to fulfill any of the obligations set forth hereinabove through incapacity or death; or (2) Assignee is unable, after reasonable efforts, to obtain Assignor's fulfillment of any of said obligations, Assignor does hereby agree that this Assignment shall be a valid Power of Attorney authorizing Assignee to take necessary actions on behalf of Assignor, or their estate in the event of Assignor's death, for fulfillment of said obligations.
- (VIII) **FURTHER**, Assignor authorizes and requests that: (1) a representative duly appointed by the Assignee, insert the filing date and application number in the above indicated spaces when known; and (2) all national and international authorities issue to the Assignee all patents relating to the invention in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the undersigned has(have) hereunto set their hand(s) and seal(s) on the date after his(their) signature(s).

Rickard LJUNG

Date