504831124 03/22/2018

EPAS ID: PAT4877861

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PRANJAL DUTTA	03/20/2018

RECEIVING PARTY DATA

Name:	NOKIA SOLUTIONS AND NETWORKS OY
Street Address:	Karaportti 3
Internal Address:	
City:	Espoo
State/Country:	
Postal Code:	02610

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15927781

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 4100-NC105124-US		
NAME OF SUBMITTER:	JACQUI BRODSKY	
SIGNATURE:	/Jacqui Brodsky/	
DATE SIGNED:	03/22/2018	

Total Attachments: 1

source=105124-US-NP Executed Assignment Agreement - Dutta#page1.tif

PATENT 504831124 REEL: 045310 FRAME: 0291

ASSIGNMENT AND AGREEMENT

For value received, I, Pranjal Dutta, of Sunnyvale, California, United States Of America, hereby sell, assign and transfer to Nokia Solutions and Networks Oy, a corporation established and existing under the laws of Finland, and having its principal place of business at Karaportti 3, 02610 Espoo, Finland, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to "Hierarchical Bit Indexed Replication of Multicast Packets" described in an application for Letters Patent of the United States, executed by us of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign and transfer to Nokia Solutions and Networks Oy the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize Nokia Solutions and Networks Oy to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Nokia Solutions and Networks Oy to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to Nokia Solutions and Networks Oy in the United States and in all countries foreign to the United States, or to such nominees as Nokia Solutions and Networks Oy may designate.

I agree that, when requested, I shall, without charge to Nokia Solutions and Networks Oy but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Inventor: Pranjal Dutta

Signature: <u>Front of Comor Dulle</u>

Date: 20 - MARCH- 2018

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