

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4616666

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JAYANT KOTALWAR	09/19/2017
FILIP MARTIN	09/20/2017
HOOMAN BIDGOLI	09/20/2017
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State/Country:	FINLAND
Postal Code:	02610
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15718210
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ATTORNEY DOCKET NUMBER:	102822-US-NP
NAME OF SUBMITTER:	DIANE V. LANE
SIGNATURE:	/Diane V. Lane/
DATE SIGNED:	09/28/2017
Total Attachments: 4	
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ASSIGNMENT AND AGREEMENT

For value received, we, **Jayant Kotalwar** of Cupertino, Santa Clara, California, U.S.A, **Filip Martin** of Antwerpen, Belgium and **Hooman Bidgoli** of Ottawa, Ontario, Canada, hereby sell, assign and transfer to Nokia Technologies OY (hereinafter "Nokia Technologies"), 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 "Multicast Based On Bit Indexed Explicit Replication" 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 we also concurrently hereby sell, assign and transfer to Nokia Technologies 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.

We authorize Nokia Technologies 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.

We 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 Technologies to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

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

102822-US-NP

We agree that, when requested, we shall, without charge to Nokia Technologies 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: Jayant Kotalwar

Signature: _____

Date: _____

Inventor: Filip Martin

Signature: 

Date: 9/20/2017

Inventor: Hooman Bidgoli

Signature: _____

Date: _____

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Inventor: Jayant Kotalwar

Signature: 

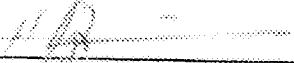
Date: 9/19/2017

Inventor: Filip Martin

Signature: _____

Date: _____

Inventor: Hooman Bidgoli

Signature: 

Date: 9/20/2017