

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Tao CHEN</td> <td>04/11/2012</td> </tr> <tr> <td>Gilles CHARBIT</td> <td>04/13/2012</td> </tr> <tr> <td>Timo Kalevi KOSKELA</td> <td>04/12/2012</td> </tr> <tr> <td>Sami-Jukka HAKOLA</td> <td>04/12/2012</td> </tr> <tr> <td>Mikko Juhana RINNE</td> <td>04/18/2012</td> </tr> <tr> <td>Yrjo Olavi KAIPAINEN</td> <td>05/10/2012</td> </tr> </tbody> </table>		Name	Execution Date	Tao CHEN	04/11/2012	Gilles CHARBIT	04/13/2012	Timo Kalevi KOSKELA	04/12/2012	Sami-Jukka HAKOLA	04/12/2012	Mikko Juhana RINNE	04/18/2012	Yrjo Olavi KAIPAINEN	05/10/2012
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RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>Nokia Corporation</td> </tr> <tr> <td>Street Address:</td> <td>Keilalahdentie 4</td> </tr> <tr> <td>City:</td> <td>Espoo</td> </tr> <tr> <td>State/Country:</td> <td>FINLAND</td> </tr> <tr> <td>Postal Code:</td> <td>02150</td> </tr> </table>		Name:	Nokia Corporation	Street Address:	Keilalahdentie 4	City:	Espoo	State/Country:	FINLAND	Postal Code:	02150				
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CORRESPONDENCE DATA															
<p>Fax Number:</p> <p>Phone: 781-219-8760</p> <p>Email: IPR.Inhouse@nokia.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Nokia, Inc. Attn: Intellectual Property</p> <p>Address Line 1: 200 South Mathilda Ave</p> <p>Address Line 4: Sunnyvale, CALIFORNIA 94086</p>															
ATTORNEY DOCKET NUMBER:	NC70421-US-PCT														

NAME OF SUBMITTER:

Thomas J. Arria

**Total Attachments: 7**

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**ASSIGNMENT**

Title of Invention	SCHEDULING OF DIRECT TO DIRECT COMMUNICATION
This Assignment is directed to (check all that apply): <input type="checkbox"/> U.S. Provisional No. _____ filed on _____ <input checked="" type="checkbox"/> U.S. Application No. 13/501,749 filed on April 12, 2012 <input checked="" type="checkbox"/> which is a 371 National Stage of PCT/IB2009/007277 filed on 30 October 2009	

As the below named inventor(s), I/we have invented certain improvements in the patent application for which I/we have filed an application for Letters Patent of the United States of America as identified above;

WHEREAS, I/we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, NOKIA CORPORATION, a corporation organized under the laws of Finland, having its principal office in Espoo, Finland (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and under the said invention and the said application, and in and to any and all Letters Patent which shall be granted therefore in the United States of America and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we have sold and do hereby sell, assign, transfer and convey unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and to said invention and application, and in all divisionals, reissues, substitutions, continuations, continuation-in-part and, in any and all Letters Patents of the United States of America and all foreign countries or reissues, reexaminations, or extensions thereof which may be granted therefore or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

I/WE ALSO HEREBY authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom to the said ASSIGNEE of my/our entire right, title and interest.

I/WE FURTHER HEREBY sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including, without limitation, the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries. I/we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

I/WE HEREBY covenant that I/we have not and I/we will not execute any agreement in conflict herewith.

**ASSIGNMENT**

I/WE HEREBY further covenant, and agree to bind my/our heirs, legal representatives, and assigns, promptly to communicate to said ASSIGNEE or its representatives any facts known to me relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said ASSIGNEE, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.


Inventor: Tao CHEN Date: 11/04/2012  
Signature: *Tao Chen* Residence: ESPOO  
Salo, Finland CHEN TAO  
Witness Signature: *Wang Min*  
Printed Name: WANG MIN Date: 11.04.2012

**ASSIGNMENT**

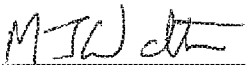
IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.

Inventor: Gilles CHARBIT

Date: 13-04-2012

Signature: 

Residence: Farnborough Hampshire, GB

Witness Signature: 


Printed Name: MARK WALTON

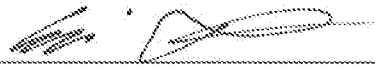
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**ASSIGNMENT**

IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.

Inventor: Timo Kalevi KOSKELA Date: 12.4.2012

Signature:  Residence: Oulu, Finland

Witness Signature: 

Printed Name: JAMMI TURJONEN Date: 12-04-2012

**ASSIGNMENT**

IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.

Inventor: Sami-Jukka HAKOLA

Date: April 12 2012

Signature: 

Residence: Kempele, Finland

Witness Signature: 

Printed Name: SAMULI TURJANE

Date: 12-04-2012

**ASSIGNMENT**

IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.

Inventor: Mikko Juhana RINNE

Date: Apr 18<sup>th</sup> 2012

Signature: Mikko Rinne

Residence: Espoo, Finland

Witness Signature: 

Printed Name: WOONHEE HWANG

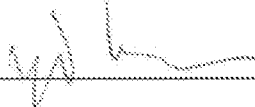
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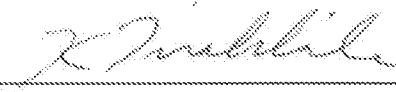


**ASSIGNMENT**

IN WITNESS WHEREOF, I/we have hereunto set my/our hand and seal on the date indicated below.

Inventor: Yrjö Olavi KAIPAINEN Date: 10.5.2012

Signature:  Residence: Espoo, Finland

Witness Signature: 

Printed Name: Kaisu Iisakkita Date: 11.5.2012