

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Mieszko Chmiel</td> <td>09/20/2010</td> </tr> <tr> <td>Peter Skov</td> <td>10/27/2010</td> </tr> <tr> <td>Tommi Tapani Koivisto</td> <td>10/26/2010</td> </tr> <tr> <td>Xiangguang Che</td> <td>09/19/2010</td> </tr> <tr> <td>Timo Roman</td> <td>10/25/2010</td> </tr> </tbody> </table>		Name	Execution Date	Mieszko Chmiel	09/20/2010	Peter Skov	10/27/2010	Tommi Tapani Koivisto	10/26/2010	Xiangguang Che	09/19/2010	Timo Roman	10/25/2010
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<b>RECEIVING PARTY DATA</b>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">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>FIN-02150</td> </tr> </table>		Name:	Nokia Corporation	Street Address:	Keilalahdentie 4	City:	Espoo	State/Country:	FINLAND	Postal Code:	FIN-02150		
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<b>PROPERTY NUMBERS Total: 1</b>													
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<b>CORRESPONDENCE DATA</b>													
<p>Fax Number: (972)732-9218</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 972-732-1001</p> <p>Email: errera@slater-matsil.com</p> <p>Correspondent Name: Slater &amp; Matsil, L.L.P.</p> <p>Address Line 1: 17950 Preston Road</p> <p>Address Line 2: Suite 1000</p> <p>Address Line 4: Dallas, TEXAS 75252</p>													
ATTORNEY DOCKET NUMBER:	NOK-70169US												
NAME OF SUBMITTER:	Jill M. Errera												

CH \$40.00 12857383

**501335908**

**PATENT**  
**REEL: 025221 FRAME: 0037**

Total Attachments: 5

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# ASSIGNMENT

**WHEREAS**, we the undersigned inventors, of residences as listed below, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, and

**WHEREAS**, Nokia Corporation, having a principal place of business in Espoo, Finland ("Assignee") desires to acquire our entire right, title and interest in and to the invention, and in and to said application and any Letters Patent that may issue thereon;

**NOW, THEREFORE**, for and in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we assign to Assignee all right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all divisions, reissues, continuations, continuations-in-part and extensions thereof; and in and to any applications filed in any foreign country or group of countries based thereon, including the right to file said foreign applications and to claim priority under the provisions of the International convention and any other relevant convention or treaty; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our interest is concerned, to Assignee.

We also assign to Assignee, all right, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents and legal equivalents, including utility models, industrial models and designs for said inventions in its own name throughout the world including all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and 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 right, title and interest in Assignee.

We will communicate to Assignee any facts known to us respecting any improvements; and, at the expense of Assignee, we will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make lawful oaths and declarations and generally take all reasonable steps to vest title in Assignee and to aid Assignee to obtain and enforce proper protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year,			
TITLE OF INVENTION	Apparatus and Method for Initialization and Mapping of Reference Signals in a Communication System		
SIGNATURE OF INVENTOR AND NAME	(1) Mieszko Chmiel <i>M. Chmiel</i>	(2) Peter Skov	(3) Tommi Tapani Koivisto
DATE	20.09.2010		
RESIDENCE (CITY AND STATE)	Glucholazy, Poland	Beijing, China	Espoo, Finland

# ASSIGNMENT

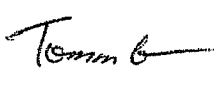
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SIGNATURE OF INVENTOR AND NAME	(1) Mieszko Chmiel	(2) Peter Skov	(3) Tommi Tapani Koivisto 
DATE			26/10/2010
RESIDENCE (CITY AND STATE)	Głucholazy, Poland	Beijing, China	Espoo, Finland

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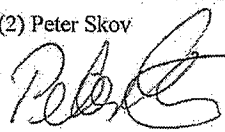
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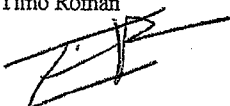
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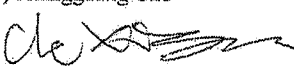
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SIGNATURE OF INVENTOR AND NAME	(1) Mieszko Chmiel	(2) Peter Skov 	(3) Tommi Tapani Koivisto
DATE		27 / 10 / 2010	
RESIDENCE (CITY AND STATE)	Glucholazy, Poland	Beijing, China	Espoo, Finland

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TITLE OF INVENTION	Apparatus and Method for Initialization and Mapping of Reference Signals in a Communication System		
SIGNATURE OF INVENTOR AND NAME	(4) Xiangguang Che	(5) Timo Roman 	
DATE		25/10/2010	
RESIDENCE (CITY AND STATE)	Beijing, China	Espoo, Finland	

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year.			
TITLE OF INVENTION	Apparatus and Method for Initialization and Mapping of Reference Signals in a Communication System		
SIGNATURE OF INVENTOR AND NAME	(4) Xiangguang Che 	(5) Timo Roman	
DATE	19. 9. 2010		
RESIDENCE (CITY AND STATE)	Beijing, China	Espoo, Finland	

Assignment of Invention  
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