

PATENT ASSIGNMENT

Electronic Version v1.1

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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>Hoang Nguyen</td><td>02/28/2007</td></tr><tr><td>Balaji Raghothaman</td><td>03/01/2007</td></tr></tbody></table>	Name	Execution Date	Hoang Nguyen	02/28/2007	Balaji Raghothaman	03/01/2007	
Name	Execution Date						
Hoang Nguyen	02/28/2007						
Balaji Raghothaman	03/01/2007						
RECEIVING PARTY DATA							
Name:	Nokia Corporation						
Street Address:	Keilalahdentie 4						
City:	Espoo						
State/Country:	FINLAND						
Postal Code:	FIN-02150						
PROPERTY NUMBERS Total: 1							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11713480</td></tr></tbody></table>	Property Type	Number	Application Number:	11713480			
Property Type	Number						
Application Number:	11713480						
CORRESPONDENCE DATA							
Fax Number:	(972)732-9218						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
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Email:	hunt@slater-matsil.com						
Correspondent Name:	Glenn W. Boisbrun						
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ATTORNEY DOCKET NUMBER:	NOK-46995US						
NAME OF SUBMITTER:	Dusty D. Hunt						
Total Attachments: 2 source=NOK-46995US Signed Assignment#page1.tif source=NOK-46995US Signed Assignment#page2.tif							

CH 11713480 \$40.00

PATENT

500254848

REEL: 019132 FRAME: 0794

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, 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	Adaptive Multi-Beamforming Systems and Methods for Communication Systems		
SIGNATURE OF INVENTOR AND NAME	(1) Hoang Nguyen 	(2) Balaji Raghothaman	
DATE	28 Feb. 2007		
RESIDENCE (CITY AND STATE)	Burlington, MA	Hollis, NH	

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, 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;

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IN WITNESS WHEREOF, I hereunto set hand and seal this day and year:			
TITLE OF INVENTION	Adaptive Multi-Beamforming Systems and Methods for Communication Systems		
SIGNATURE OF INVENTOR AND NAME	(1) Hoang Nguyen	(2) Balaji Raghoebarian 	
DATE		3/1/2007	
RESIDENCE (CITY AND STATE)	Burlington, MA	Hollis, NH	

Assignment of Invention
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RECORDED: 04/09/2007

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