

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Eero NIKULA</td><td>05/10/2011</td></tr><tr><td>Padam Lal KAFLE</td><td>05/17/2011</td></tr><tr><td>Kyeongjin KIM</td><td>05/11/2011</td></tr><tr><td>Tuomas Valtteri LAINE</td><td>05/10/2011</td></tr></tbody></table>		Name	Execution Date	Eero NIKULA	05/10/2011	Padam Lal KAFLE	05/17/2011	Kyeongjin KIM	05/11/2011	Tuomas Valtteri LAINE	05/10/2011
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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>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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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number: (202)220-6945 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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Email: cpannell@lockelord.com											
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ATTORNEY DOCKET NUMBER:	1004289.395US (4208-4457)										
NAME OF SUBMITTER:	Elliot L. Frank										
Total Attachments: 4 source=4208-4457EXAssignment#page1.tif source=4208-4457EXAssignment#page2.tif source=4208-4457EXAssignment#page3.tif source=4208-4457EXAssignment#page4.tif											

CH \$40.00 13127495

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PATENT
REEL: 026337 FRAME: 0693

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

Eero NIKULA, Padam Lal KAFLE, Kyeongjin KIM, and Tuomas Valtteri LAINE

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

ASYMMETRIC BEAM STEERING PROTOCOL

- ☐ for which application for Letters Patent of the United States has been executed on even date herewith,
- ☐ for which application for Letters Patent of the United States has been filed on May 4, 2011, under Serial No. 13/127,495, and

WHEREAS:

Nokia Corporation, located at Keilalahdentie 4, Finland FIN-02150

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for valuable consideration by ASSIGNEE to ASSIGNOR(S), the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute, reissue or reexamination thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

I, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

I, SAID, ASSIGNOR(S), hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues or reexaminations of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called upon to do so by the ASSIGNEE its successors, legal representatives, or assigns, sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation, reissue and reexamination applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discovery in all countries, all without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

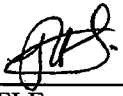
Signed:

- | | | | |
|-----|---|------|-----------------------------|
| (1) | <u>Eero Nikula</u>
Eero NIKULA | Date | <u>May 10, 2011</u> |
| (2) | <u>Padam Lal KAFLE</u> | Date | <u> </u> |
| (3) | <u>Kyeongjin KIM</u> | Date | <u> </u> |
| (4) | <u>Tuomas Valtteri LAINE</u> | Date | <u>May 10, 2011</u> |
| (5) | <u> </u> | Date | <u> </u> |

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AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues or reexaminations of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called upon to do so by the ASSIGNEE its successors, legal representatives, or assigns, sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation, reissue and reexamination applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discovery in all countries, all without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

Signed:

(1)	_____	Date	_____
	Eero NIKULA		
(2)	 _____	Date	<u>5/17/2011</u>
	Padam Lal KAFLE		
(3)	_____	Date	_____
	Kyeongjin KIM		
(4)	_____	Date	_____
	Tuomas Valtteri LAINE		
(5)	_____	Date	_____

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Signed:

(1)	_____	Date	_____
	Eero NIKULA		
(2)	_____	Date	_____
	Padam Lal KAFLE		
(3)	<u>Kyeongjin Kim</u>	Date	<u>5-11-2011</u>
	Kyeongjin KIM		
(4)	_____	Date	_____
	Tuomas Valtteri LAINE		
(5)	_____	Date	_____