FORM PTO-1595 (REV 6-93)

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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.			
Name of conveying party(ies): Palei: Parkethers	Name and address of receiving party(ies):		
Balaji Raghothaman	Name: Nokia Corporation		
Additional name(s) of conveying marty(in) attacks 42	Internal Address: Keilalahdentie 4		
Additional name(s) of conveying party(ies) attached? Yes No	02150 Espoo Finland		
	Post Office Address: Same as above		
3. Nature of conveyance: ☐ Assignment ☐ Merger			
Security Agreement Change of Name	Additional name(s) & address(es) attached? Yes No		
Other			
Execution Date: May 21, 2002			
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is:			
A. Patent Application No. 10/146,159			
Filed: May 15, 2002	B. Patent No.(s)		
Filed. May 15, 2002			
Additional numbers attached?			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1		
Name: Docket Clerk	7. Total fee (37 CFR 3.41): 40.00		
Internal Address: P. O. Box 802432 Dallas, Texas 75380	Enclosed.		
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9. Statement and signature.			
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document			
Signature The State OZ			
Total number of pages including cover sheet, attachments, and document: 3			
OMB No. 0651-0011			

08/07/2002 TDIAZ1 00000023 10146159

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ASSIGNMENT

WHEREAS, I, Balaji Raghothaman, a citizen of India, and resident of Allen, Collin County, Texas, have invented certain new and useful improvements in "APPARATUS, AND ASSOCIATED METHOD, FOR FACILITATING ANTENNA WEIGHT SELECTION UTILIZING DETERMINISTIC PERTURBATION GRADIENT APPROXIMATION" disclosed in an application for United States Letters Patent (Application No. 10/146,159, filed May 15, 2002);

WHEREAS, NOKIA CORPORATION, a corporation organized under the laws of Finland, having a place of business at Keilalahdentie 4, 02150 Espoo, Finland, (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring my entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive 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, substitutions, continuations, continuations-in-part and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as my interest is concerned, to the said ASSIGNEE of my entire right, title and interest.

I also 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 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; 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 rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

I hereby further agree that I will communicate to said ASSIGNEE, or to its successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

-1-

PATENT REEL: 013147 FRAME: 0412

IN WITNESS WHEN 2002.	REOF, we have hereunto set our ha	ands and seal this $\frac{2100}{2}$ day of
Inventor:	Witnesses:	
Balaji Raghothaman	(Signature of witness)	(Signature of witness)
5/21/2002 Date	Beverly Sparkman (Printed name)	(Printed name)
	(Address)	(Address)