FORM PTO-1619A Expires 06/30/99 OMB 0651-0027		U.S. Department of Commerce Patent and Trademark Office PATENT			
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Conveying Party(ies)					
		Execution Date Month Day Year			
Name (line 1) Anand KANNAN		5 30 2001			
		7			
Name (line 2)	-	Execution Date			
Second Party		Month Day Year 5 30 2001			
Name (line 1) Tamer KADOUS		<u> </u>			
Name (line 2)		7			
	Mark if additional names of receiving parties attached				
Receiving Party Name (line 1) NOKIA, INC.		If document to be recorded			
		is an assignment and the receiving party is not			
Name (line 2)		domiciled in the United States, an appointment of a domestic			
Address (line 1) 6000 Connection Dri	ive	representative is attached. (Designation must be a			
		separate document from Assignment.)			
Address (line 2)		75000			
Address (line 3) Irving	Texas, USA	75039 Zip Code			
	State/Country Ind Address Enter for the first Re				
Domestic Representative Name and Address Enter for the first Receiving Party only.					
Name					
Address (line 1)					
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	FORM PTO-161 Expires 06/30/99 OMB 0651-0027	9B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT	
OIPE	Correspondent	Name and Address	Area Code and Telephone Number	(202) 508-9100	
MAY 312	Name	Banner & Witcoff, LTD	)		
MAY 312	ddress (line 1)	1001 G Street, N.W.			
PINI -	Address (line 2)	11 <sup>th</sup> . Floor		]	
	Address (line 3)	Washington, D.C. 200	001-4597		
	Address (line 4)				
	Pages	Enter the total number including any attachme	of pages of the attached conveyance ents	e document # 6	
	Enter either		or the Patent Number (DO NOT ENTER BO		
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signed b Paten Numb					
	If this document is bein signed by the first name	g filed together with a <u>new</u> Pate ed executing inventor.	ent Application, enter the date the patent appl	ication was Month Day Year	
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	only if a	CT application number U.S. Application as not been assigned.	PCT PCT	PCT	
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	Deposit Ac Enter for pay	Deposit Account         Enter for payment by deposit account or if additional fees can be charged to the account.)         # 19-0733         Deposit Account Number:			
		Authoriza	ation to charge additional fees:	Yes 🛛 No 🗌	
	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. Charges to deposit account are authorized, as indicated herein.				
	Douglas W. Robins	son, Reg. No. 32,751 son Signing	Signature	Date	

Attorney Docket No. 05245.00001

## ASSIGNMENT

WHEREAS, we, Anand KANNAN, residing at 2700 Waterview Parkway, #4638, Richardson, Texas 75080 and Tamer KADOUS, residing at 6773 Schoeder Rd., #7, Madison, Wisconsin 53711 (ASSIGNORS), are the inventors of certain inventions and improvements described in a U.S. patent application identified by Attorney Docket No. 05245.00001 and having the title

## METHOD AND APPARATUS FOR ERROR REDUCTION IN AN ORTHOGONAL MODULATION SYSTEM

which application was

executed on \_\_\_\_\_ [Date or dates] or

filed on December 22, 2000 and assigned application serial number 09/745,301;

and WHEREAS

NOKIA, Inc. 6000 Connection Drive Irving, Texas 75039 A Texas Corporation.

ASSIGNEE, desires to acquire the entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assigns and legal representatives (NOMINEES) the entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

And we covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement or do anything in conflict herewith;

And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

Page 1 of 2

Joint Assignment Attorney Docket No. 05245.00001

And we authorize the ASSIGNEE or its NOMINEES to file in our names or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date: 30 Kay 2001

Inventor:

K. Mar.

Date: Inventor:

Tamer KADOUS

Note: No legalization or other witness required.

LAW OFFICES BANNER & WITCOFF, LTD. 1001 G STREET, N.W. WASHINGTON, D.C. 20001-4597 (202) 508-9100

Page 2 of 2

Attorney Docket No. 05245.00001

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Page 1 of 2

Joint Assignment Attorney Docket No. 05245.00001

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Date: 05/30/01 Inventor:

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Page 2 of 2

PATENT REEL: 011888 FRAME: 0315

**RECORDED: 05/31/2001**