12-20-2002



Form PTO-1595

OMB No. 0651-0027 (exp

(Rev. 03/01)

102318014

Reference: 367.41753X00

/ER SHEET

U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
Name of conveying party(ies): PIIRAINEN, OLLI Additional name(s) of conveying party(ies) attached? □ Yes ☒ No	2. Name and address of receiving party(ies) Name: NOKIA CORPORATION Internal Address: Keilalahdentie 4, 02150 Street Address;				
mrs 9/24/02	City: Espoo, FINLAND State: _Zip: ☐ Other				
3. Nature of conveyance:	_ Oute				
Execution Date: July 29, 2002.	Additional name(s) & address(es) attached? ☐ Yes ☒ No				
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the earth Application No.(s) 10/168,632 filed September 24, 2002	execution date of the application is: B. Patent Registration No.(s)				
Additional number(s) attached Yes No					
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved				
Name: Antonelli, Terry, Stout & Kraus, LLP	7. Total fee (37 CFR 3.41)\$40.00				
Internal Address:	Authorized to be charged to deposit account				
1300 North Seventeenth Street Suite 1800 Arlington, VA 22209	8. Deposit account number:				
USA	01-2135				
City: State: Zip:	(Attach duplicate copy of this page if paying by deposit account)				
DO NOT USE THIS SPACE					
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.					
Carl I. Brundidge, Reg# 29,621	09/24/2002				
Name of Person Signing Signature	e Date				
Total number of pages including cover sheet, attachments, and document: 2					

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patent & Trademarks, Box Assignments

Washington, D.C. 20231

PATENT REEL: 013584 FRAME: 0263

ASSIGNMENT

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to A Method and Apparatus for selecting an equalization algorithm depending on the used coding algorithm or on the channel quality

	for which an application for Letters Patent to	be filed in the Uni	ted States Patent and
	Trademark Office was executed on even date.		
\boxtimes	for which U.S. Application Serial No.10/1686	32for Letters Pate	ent was filed in the U.S. Patent
	and Trademark Office on 24 th June 2002		
	for which an International Application	as	, designating the
	United States, was filed on		

AND WHEREAS Nokia Corporation Keilalahdentie 4

02150 Espoo

Finland

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.

NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection

with filing said applications and securing Letters Patents thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a

Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

The undersigned hereby grant(s) the law firm of Antonneli, Terry, Stout, Kraus, LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

1	FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
	Olli PIIRAINEN		29.7.2002
2	FULL NAME OF SECOND NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
3	FULL NAME OF THIRD NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
4	FULL NAME OF FOURTH NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
5	FULL NAME OF FIFTH NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE

PATENT RECORDED: 09/24/2002 REEL: 013584 FRAME: 0264