O1 - 09 - 2002 Docket No.: 872.0108.U1(US) F0:M PTO-1545 (Modified) (Rev. 0.507) U.S. DEPARTMENT OF CO Patternt and Tradem Patternt and Tradem 101937308 Tab settings → → ↓ 101937308 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy th 1. Name of conveying party(ies): Antti Ruha Tarme Ruotsalainen Jussi-Pekka Tervaluoto Jani Kauppiten 2. Name and address of receiving party(ies): Name: Nokia Corporation Additional names(s) of conveying party(ies) Yes ⊠ No 3. Nature of conveyance: Ø ⊠ Assignment Merger Other Country: Finland Other Country: Finland Other Yes ⊠ No 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: December 20, 2001 4. Application No. Filing date B. Patent No.(s) 01/02/2002 HLE333 00000055 10029744	
Table Lonorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy the stacked original document is being filed together with a new application, the execution date of the application is: December 20, Patent Application No.	r
1. Name of conveying party(ies): Antti Ruha Tarmo Ruotsalainen Jussi-Pekka Tervaluoto Jussi-Pekka Tervaluoto JJJJJJJJJ Jani Kauppinen JJJJJJJJJ Additional names(s) of conveying party(ies) Yes ⊠ No 3. Nature of conveyance:	
Antti Ruha Tarmo Ruotsalainen Jari Kauppinen Jari Kauppinen Jari Kauppinen Address: Keilalahdentie 4 Address: Keilalahdentie 4 Additional names(s) of conveying party(ies) I Yes INO Address: Keilalahdentie 4 Address: Keilalahdentie 4 Additional names(s) of conveying party(ies) I Yes INO Address: Keilalahdentie 4 Address: Keilalahdentie 4 Additional names(s) of conveyance: I Merger I Change of Name City: Espoo State/Prov.: I Security Agreement Change of Name City: Espoo State/Prov.: Country: Finland ZIP: 02150 Execution Date: December 20, 2001 Additional name(s) & address(es) I Yes INO No 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: December 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	nereof.
3. Nature of conveyance: Image: Assignment Image: Security Agreement Image: Other Image: Othe	
Other Country: Finland ZIP: 02150 Execution Date: December 20, 2001 Additional name(s) & address(es) If Yes Notest to the secution date of the application is: 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: December 20, 2001 Patent Application No. Filing date B. Patent No.(s)	
Execution Date: December 20, 2001 Additional name(s) & address(es) If Yes No 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: December 20, 2001 Patent Application No. Filing date B. Patent No.(s)	
 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: December 20, Patent Application No. Filing date B. Patent No.(s) 	
If this document is being filed together with a new application, the execution date of the application is: <u>December 20,</u> Patent Application No. Filing date B. Patent No.(s)	>
04 FC:581 40.00 OP	
Additional numbers	
5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and patents involved:	1
Name: Harry F. Smith 7. Total fee (37 CFR 3.41):\$ 40.00	
Registration No. <u>32,493</u> X Enclosed - Any excess or insufficiency should be credited or debited to deposit account	e
Address: Harrington & Smith, LLP	
1809 Black Rock Turnpike 8. Deposit account number:	
City: Fairfield State/Prov.: CT 50-1924	
Country: ZIP: 06432 (Attach duplicate copy of this page if paying by deposit accounts)	
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 of the original document. Harry F. Smith Name of Person Signing	
Name of Person Signing Total number of pages including cover sheet, attachments, and Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments	е сору

Washington, D.C. 20231

PATENT REEL: 012419 FRAME: 0139 For \underline{X} U.S. and/or \underline{X} Foreign Rights For \underline{X} U.S. Application or _ U.S. Patent For _ PCT Application By Single or Multiple Inventors

ASSIGNMENT OF INVENTION

Docket No. NC35153

in accordance with an agreement between ASSIGNEE and ASSIGNOR, if one name be listed below, or ASSIGNORS, if more than one name be listed below, and for good and valuable consideration,

(1) ASSIGNOR (inventor):

FULL NAME	LAST NAME	FIRST NAME	MIDDLE INITIAL
OF INVENTOR	Ruha	Antti	
RESIDENCE & CITY	STATE OR COUNT	TRY CIT	IZENSHIP
CITIZENSHIP	Oulu, Finland		Finland

(2) ASSIGNOR (inventor):

FULL NAME	LAST NAME FIRST NAME	MIDDLE INITIAL
OF INVENTOR	Ruotsalainen Tarmo	
RESIDENCE & CITY	STATE OR COUNTRY	CITIZENSHIP
CITIZENSHIP	Oulu, Finland	Finland

(3) ASSIGNOR (inventor):

FULL NAME		FIRST NAME Jussi-Pekka	MIDDLE INITIAL
OF INVENTOR RESIDENCE & CITY CITIZENSHIP	Tervaluoto STATE OR COUNT Oulu, Finland		ITIZENSHIP Finland

(4) ASSIGNOR (inventor):

1

ام در در می می در در محمد این می در می در

(4) 1001011011011	-		
FULL NAME			MIDDLE INITIAL
OF INTENTOP	Kauppinen	Jani	CITIZENSHIP
RESIDENCE &	STATE OR COUNT	KI V	Finland
CITIZENSHIP	Oul u, Finland		

PATENT

REEL: 012419 FRAME: 0140

hereby sell(s), assign(s) and transfer(s) to

ASSIGNEE:

Nokia Corporation

<u>Keilalahdentie 4, 02150 Espoo , Finland</u>

and the successors, assigns and legal representatives of the ASSIGNEE

 \mathbf{X} the entire right, title and interest

for the United States and its territorial possessions

X and in all foreign countries, including all rights to claim priority

in and to any and all improvements which are disclosed in the invention entitled:

METHOD AND APPARATUS FOR MEASURING BATTERY CHARGE AND DISCHARGE CURRENT USING A DIRECT ANALOG-TO-DIGITAL CONVERSION OF A CHARGE/DISCHARGE REPLICA CURRENT

that is found in

2

.

 \mathbf{X} U.S. patent application executed on even date herewith

 \underline{X} and any legal equivalent thereof in a foreign country, including the right to claim priority

and, in and to, all Letters Patent to be obtained for said invention, the above application, or any continuation, division, renewal, or substitute thereof, and as to Letters Patent any reissue or re-examination thereof.

ASSIGNOR(S) hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR(S) further covenant(s) that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce

PATENT

REEL: 012419 FRAME: 0141

6.122001

ka 121

said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

20.12.2001

200

IN WITNESS WHEREOF, I (We) have hereunto set hand and seal this

Signature

Signature

Signature

Signature

Date

0

2.0.12. 2001 (Date of Signing).

(1) ANTT / Antii Ruha Assignor Name

Witnessed by

- Date
- (2) Tarmo Ruotsalainen Assignor Name

Witnessed by

Witnessed by

(4) Jani Kauppinen Assignor Name

Witnessed by

Śignature 20.12 2001 Date Signature Signature 20,12,2001

PATENT

REEL: 012419 FRAME: 0142

Date

i han w



3