

02-24-2003

Form PTO 1595

RECORDATION F  
PATENTDEPARTMENT OF COMMERCE  
Patent and Trademark Office

102370387

To the Honorable Commissioner of Patents and Trademarks: Please

... documents or copy thereof.

## 1. Name of conveying party(ies)

Byun-jin CHUN  
Alexandr V. GARMONOV  
Vladimir B. MANELIS  
Andrew Yu. SAVINKOV  
Alexandr I. SERGIENKO  
Vitaly D. TABATSKY  
Soon-Young YOON

02.10.03

Additional name(s) of conveying party(ies) attached?

\_\_\_ Yes X No

## 2. Name and address of receiving party(ies)

Name: SAMSUNG ELECTRONICS CO., LTD.

Internal Address:

Street Address:

416, Maetan-dong, Paldal-gu,  
Suwon-city, Kyungki-do, KOREA

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional name(s) & address(es) attached? \_\_\_ Yes X NoJc715 U.S. PTO  
10/361650  
02/10/03

## 3. Nature of conveyance:

X Assignment

\_\_\_ Security Agreement

\_\_\_ Merger

\_\_\_ Change of Name

\_\_\_ Other \_\_\_\_\_

Execution Date: February 10, 2003

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: February 10, 2003

10361650

A. Patent Application No.(s)

Additional numbers attached? \_\_\_ Yes X No

B. Patent No.(s) \_\_\_\_\_

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Paul J. Farrell, Esq.Internal Address: DILWORTH & BARRESE, LLPStreet Address: 333 Earle Ovington BoulevardCity: Uniondale State: New York Zip: 11553

## 6. Total number of applications and patents involved . . . . .

1

7. Total fee (37 CFR 3.41) . . . . . \$ 40.00X Enclosed

\_\_\_ Authorized to be charged to deposit account

8. Deposit account number: 04-1121  
(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.

Paul J. Farrell, Reg. No. 33,494

Name of Person Signing

Signature

February 10, 2003

Date

Total number of pages including cover sheet, attachments and documents: 4Do not detach this portion  
Mail documents to be recorded with required cover sheet information to:

02/21/2003 LMUELLER 00000097 10361650

FC:8021

40.00 00

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

**ASSIGNMENT**DOCKET NO. 678-1086(P10592)

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that: IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged, I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 416, Maetan-dong, Paldal-gu, Suwon-city, Kyungki-do, KOREA

Who is my Assignee, and to the successes and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

TITLE: "PATTERN FORMING METHOD AND DEVICE FOR AN ADAPTIVE ANTENNA ARRAY OF A BASE SATAION"

Invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an attorney docket no 678-1096 (P10592), or is more particularly identified as:

☒ executed on even date herewith, or  
☐ Serial No. \_\_\_\_\_ filed in the U.S. Patent & Trademark Office on \_\_\_\_\_, or  
☐ executed on \_\_\_\_\_

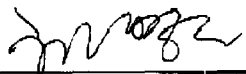

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, reissued and re-examined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said **SAMSUNG ELECTRONICS CO., LTD.**, my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I hereby covenant and agree to sign and execute any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of any certificate of correction, division, continuation, continuation-in-part, reissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee;

AND I do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request **Peter G. Dilworth, Reg. No. 28,450 and Paul J. Farrell, Reg. No. 33,494**, to insert on this Assignment any further identification or to complete such identification which may be either necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

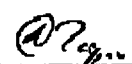
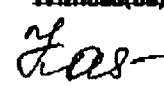



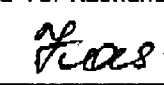

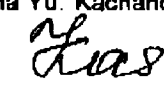
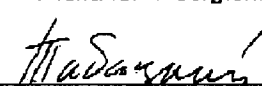

And I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation 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 said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

<u>INVENTOR(S)</u>	<u>Date Signed</u>	<u>Witness(es)</u>
1) _____ Alexandr V. Garmonov	(Seal) _____	_____
2) _____ Vladimir B. Manelis	(Seal) _____	_____
3) _____ Andrew Yu. Savinkov	(Seal) _____	_____
4) _____ Alexandr I. Sergienko	(Seal) _____	_____
5) _____ Vitaly D. Tabatsky	(Seal) _____	_____
6)  _____ Byung-jin-CHUN - first inventor	(Seal) Feb. 10, 2003	_____
7)  _____ Soon-Young YOON - seventh inventor	(Seal) February 10, 2003	_____

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

IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

	<u>INVENTOR(S)</u>		<u>Date Signed</u>		<u>Witness(es)</u>
second 1)	<u></u>	(Seal)	<u>Feb. 10, 2003</u>		<u></u>
inventor	Alexandr V. Garmonov				Galina Yu. Kachanova
Third 2)	<u></u>	(Seal)	<u>Feb. 10, 2003</u>		<u></u>
inventor	Vladimir B. Manelis				Galina Yu. Kachanova
Fourth 3)	<u></u>	(Seal)	<u>Feb. 10, 2003</u>		<u></u>
inventor	Andrew Yu. Savinkov				Galina Yu. Kachanova
Fifth 4)	<u></u>	(Seal)	<u>Feb. 10, 2003</u>		<u></u>
inventor	Alexandr Y. Sergienko				Galina Yu. Kachanova
Sixth 5)	<u></u>	(Seal)	<u>Feb. 10, 2003</u>		<u></u>
inventor	Vitaly D. Tabatsky				Galina Yu. Kachanova
first 6)	_____	(Seal)	_____		_____
inventor	Byung-jin-CHUN				
seventh 7)	_____	(Seal)	_____		_____
inventor	Soon-Young YOON				