

08-26-1999



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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Sadayuki Abeta, Mamoru Sawahashi and Fumiuyuki Adachi
Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies):
Name: NTT Mobile Communications Network Inc.
Internal Address: _____

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other _____
Execution Date: August 3, 1999

Street Address: 10-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8436 JAPAN
City: _____ State: _____ ZIP: _____
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 execution date of the application is: 8/3/99
A. Patent Application No.(s)
B. Patent No.(s)
Additional numbers attached? Yes No

6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 3.41):..... \$ 40.00
 Check enclosed
 Authorized to be charged to deposit account
8. Deposit account number: 02-4270
(Attach duplicate copy of this page by deposit account)
Please charge any additional fees required, or credit any overpayment, to the above deposit account

5. Name and address of party to whom correspondence concerning document should be mailed:
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP
120 West 45th Street
New York, New York 10036
(212) 944-1515

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.
Larry Liberchuk [Signature] Aug. 17, 1999
Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments and document: 3
Mail documents to be recorded with required cover sheet information to:
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08/25/1999 MTAI1 00000218 09375906

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Express Mail No. EJ593691565US

ASSIGNMENT

WHEREAS, we, 1) Sadayuki ABETA, 2) Mamoru SAWAHASHI and
3) Fumiyuki ADACHI

a citizen of Japan,

residing at 1) 18-4-102, Nobi 4-chome, Yokosuka-shi, Kanagawa 239-0841, Japan,
2) 59-17, Tomiokanishi 1-chome, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0052,
Japan, 3) 12-4, Tomiokanishi 6-chome, Kanazawa-ku, Yokohama-shi, Kanagawa 236-
0052, Japan

have invented one or more inventions (hereinafter referred to as "said invention(s)")
disclosed in an application for Letters Patent of the United States titled

**CHANNEL ESTIMATION UNIT, AND CDMA RECEIVER AND CDMA
TRANSCEIVER WITH CHANNEL ESTIMATION UNIT**

(hereinafter referred to as "said application"), said application having been executed on
even date herewith or filed on _____ and assigned application Serial
No. _____.

WHEREAS, NTT MOBILE COMMUNICATIONS NETWORK INC.,
(hereinafter together with its successors and assigns referred to as "the Assignee"), a
Japanese corporation, having a place of business at
10-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8436 JAPAN
is desirous of obtaining all right, title and interest in, to and under said invention(s)
and said application; and

NOW, THEREFORE, for good and valuable considerations, the receipt
and sufficiency of which we hereby acknowledge, we have sold, assigned, transferred
and set over, and by these presents hereby sell, assign, transfer and set over to the
Assignee all right, title and interest in, to and under said invention(s) and said
application, including the right to apply for any Letters Patent of the United States of
America and in any and all foreign countries on said invention(s), and any and all
other applications for Letters Patent on said invention(s), in whatsoever countries,
including all divisional, renewal, substitute, continuation, continuation-in-part and
convention applications based in whole or in part upon said invention(s) or upon said
application, and any and all Letters Patent which may issue thereon in the United
States and foreign countries, and any and all reissues, extensions, renewals, divisions,
continuations or continuations-in-part of Letters Patent granted for said invention(s)
or upon said applications, to the full term or terms for which said Letters Patent may
be issued, and every priority right that is or may be predicated upon or arise from said
invention(s), said application and said Letters Patent, the same to be held and enjoyed
by the Assignee for its own use and benefit fully and entirely as if the same would have
been held and enjoyed by us had this Assignment not been made. We hereby
authorize the Assignee to file patent applications in any and all countries on any or
all of said invention(s) in our names, or in its name, or otherwise as the Assignee may
deem advisable, under the International Convention or otherwise.

We hereby authorize the Commissioner of Patents and Trademarks of
the United States, and any official of any other country empowered to issue patents,
to record this Assignment, and to issue or transfer all said Letters Patent on said
invention(s) to the Assignee as owner of all right, title and interest therein, or
otherwise as the Assignee may direct, in accordance with the terms of this Assignment.

We hereby represent and warrant that we have the full right to convey the entire right and interest herein assigned, that there are no rights or interests outstanding inconsistent with the rights and interests granted herein, and that we will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interests granted herein.

We hereby covenant and agree that we will, upon request of the Assignee, communicate to the Assignee any facts known to us relating to said invention(s) and the history thereof, testify in any legal proceeding, execute all lawful papers including without limitation all divisional, continuing and reissue applications and all rightful oaths and declarations, and generally do all further acts which may be deemed necessary by the Assignee to obtain and enforce proper patent protection for said invention(s) in all countries.

IN TESTIMONY WHEREOF, we have executed this document on the date indicated below.

Date: August 3, 1999 *Sadayuki Abeta*
(Signature) Sadayuki ABETA

Date: August 3, 1999 *Mamoru Sawahashi*
(Signature) Mamoru SAWAHASHI

Date: August 3, 1999 *Fumiyuki Adachi*
(Signature) Fumiyuki ADACHI