

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Yukihiko Okumura	11/22/2000
Hidehiro Ando	11/22/2000
Masafumi Usuda	11/22/2000
Yoshihiro Ishikawa	11/22/2000
Seizo Onoe	11/22/2000
RECEIVING PARTY DATA	
Name:	NTT DoCOMo, Inc.
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City:	Tokyo
State/Country:	JAPAN
Postal Code:	100-6150
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13033035
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NAME OF SUBMITTER:	Thomas M. Bonacci

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**PATENT
 REEL: 025850 FRAME: 0542**

Total Attachments: 2
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ASSIGNMENT

WHEREAS, we, Yukihiro OKUMURA, a citizen of Japan, residing at 9-2-3-405, Sugita, Isogo-ku, Yokohama-shi, Kanagawa 235-0033, Japan; Hidehiro ANDO, a citizen of Japan, residing at 3-16-5-101, Serigaya, Konan-ku, Yokohama-shi, Kanagawa 233-0006, Japan; Masafumi USUDA, a citizen of Japan, residing at 18-11-102, Noukendaideri, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0053, Japan; Yoshihiro ISHIKAWA, a citizen of Japan, residing at 4-18-4-503, Nobi, Yokosuka-shi, Kanagawa 239-0841, Japan and Seizo ONOE, a citizen of Japan, residing at 1974-21, Mitsuura-cho, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0032, Japan have invented one or more inventions disclosed in an application for Letters Patent of the United States titled

CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD

(hereinafter referred to as "said application"), said application having been filed herewith.

WHEREAS, NTT DoCoMo, Inc., (hereinafter referred to as "the Assignee"), a Japanese corporation, having a place of business at 11-1, Nagatacho 2-chome, Chiyoda-ku, Tokyo 100-6150, 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. 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.

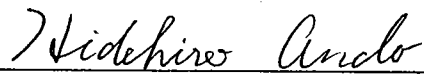
IN TESTIMONY WHEREOF, we have executed this document on the date indicated below.

Date: November 22, 2000



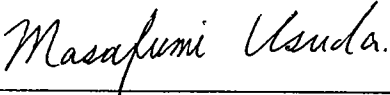
(Signature) Yukihiro OKUMURA

Date: November 22, 2000




(Signature) Hidehiro ANDO

Date: November 22, 2000



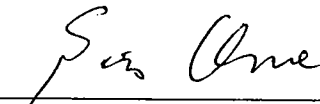
(Signature) Masafumi USUDA

Date: November 22, 2000



(Signature) Yoshihiro ISHIKAWA

Date: November 22, 2000



(Signature) Seizo ONOE