

FORM PTO-1619A
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OMB 0651-0027

12-11-2002

U.S. Department of Commerce
Patent and Trademark Office
PATENT

102307726

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Conveyance Type

- ☒ Assignment ☐ Security Agreement
- ☐ License ☐ Change of Name
- ☐ Merger ☐ Other
- U.S. Government**
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- ☐ Departmental File ☐ Secret File

Conveying Party(ies)☒ Mark if additional names of conveying parties attachedExecution Date
Month Day Year
11 18 2002

Name (line 1) PAN, JUNG LIN

Name (line 2)

Second PartyExecution Date
Month Day Year
11 18 2002

Name (line 1) KIM, YOUNGLOK

Name (line 2)

Receiving Party☐ Mark if additional names of receiving parties attached

☐ If document to be recorded
is an assignment and the
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Name (line 1) INTERDIGITAL TECHNOLOGY CORPORATION

Name (line 2)

Address (line 1) 300 DELAWARE AVENUE, SUITE 527

Address (line 2)

Address (line 3) WILMINGTON

City

DE

State/Country

19801

Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

12/10/2002 LMUELLER 00000147 090435 10308473

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Mail documents to be recorded with required cover sheet(s) information to:
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PATENT
REEL: 013551 FRAME: 0699

Correspondent Name and Address

Area Code and Telephone Number (215) 568-6400

Name JEFFREY M. GLANICKI

Address (line 1) VOLPE AND KOENIG, P.C.

Address (line 2) SUITE 400, ONE PENN CENTER

Address (line 3) 1617 JOHN F. KENNEDY BOULEVARD

Address (line 4) PHILADELPHIA, PA 19103

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

3

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/308473

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number

only if a U.S. Application Number has not been assigned.

PCT

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Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment:
Deposit Account

Enclosed ☐

Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

InterDigital Communications Corporation's Deposit Account Number: # 09-0435

Authorization to charge additional fees:

Yes

☒

No

☐

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. Charges to deposit account are authorized, as indicated herein.

Jeffrey M. Glabicki

Name of Person Signing

Reg. No. 42,584

Signature

December 3, 2002

Date

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

10/30/02
12/03/02

Conveying Party(ies)

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Enter additional Conveying Parties

Name (line 1) ZEIRA, ARIELA

Execution Date
Month Day Year
11222002

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Receiving Party(ies)

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Enter additional Receiving Party(ies)

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Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

ASSIGNMENT

Jung Lin Pan, residing at 15 Court Street, Selden, New York, 11784, a citizen of Taiwan; Younglok Kim, residing at 1090 Kingsland Lane, Fort Lee, New Jersey, 07024 a citizen of Korea; and Ariela Zeira, residing at 239 West Neck Road, Huntington, New York, 11743, a citizen of the United States, are the inventors of

CHANNEL ESTIMATION IN A WIRELESS COMMUNICATION SYSTEM

for which the undersigned have executed an application for United States Letters Patent, U.S. Patent Application No. _____, filed _____, 2002.

The undersigned hereby authorize assignee or assignee's representative to insert the Application Number and the filing date of this application if they are unknown at the time of execution of this assignment.

InterDigital Technology Corporation, a Delaware corporation, having a place of business at 300 Delaware Avenue, Suite 527, Wilmington, DE 19801, (hereafter referred to as the assignee), is desirous of acquiring the entire right, title and interest in said invention, all applications for and all letters patent issued on said invention.

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to the assignee and assignee's successors, assigns and legal representatives the entire right, title and interest in said invention and all patent applications thereon, including, but not limited to, the application for United States Letters Patent entitled as above, and all divisions and continuations thereof, and in all letters patent, including all reissues and reexaminations thereof, throughout the world, including the right to claim priority under the Paris Convention or other treaty.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention throughout the world for the benefit of

the assignee, and to execute all instruments proper to carry out the intent of this instrument.

The undersigned warrant that the rights and property herein conveyed are free and clear of any encumbrance.

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this 18th day of November, 2002 at
Melville, NY
(Place)

Witness:

Jennifer Ouellet

Jung Lin Pan (L.S.)
Jung Lin Pan

State of New York

ss.

County of Suffolk

On this 18th day of November, 2002 before me personally appeared Jung Lin Pan, to me known to be the person described herein and who executed the foregoing instrument, and acknowledged that he executed the same knowingly and willingly and for the purposes therein contained.

Witness my hand and Notarial seal the day and year immediately above written.

Patricia McDonnell
Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/03

EXECUTED under seal on this 18th day of November, 2002
at Melville, NY.
(Place)

Witness:

Jennifer Olmeda

Kim Young (L.S.)
Younglok Kim

State of New York

ss.

County of Suffolk

On this 18th day of November, 2002 before me personally appeared Younglok Kim, to me known to be the person described herein and who executed the foregoing instrument, and acknowledged that he executed the same knowingly and willingly and for the purposes therein contained.

Witness my hand and Notarial seal the day and year immediately above written.

Patricia McDonnell
Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/03

EXECUTED under seal on this 22 day of November, 2002
at Melville, NY.
(Place)

Witness:

Jennifer Oneda

Ariela Zeira (L.S.)

State of New York

ss.

County of Suffolk

On this 22 day of November, 2002 before me personally appeared Ariela Zeira, to me known to be the person described herein and who executed the foregoing instrument, and acknowledged that she executed the same knowingly and willingly and for the purposes therein contained.

Witness my hand and Notarial seal the day and year immediately above written.

Patricia McDonnell
Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/03