Atty. Docket No. I-2-0232.1US									
FORM PTO-1619A Expires 06/30/99 OMB 0851-0027	U.S. Department of Commerce Patent and Trademark Office PATENT								
RECORDATION FORM COVER SHEET									
PATENTS ONLY									
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).									
Submission Type	Conveyance Type X Assignment Security Agreement								
X New	Assignment county rights many								
Resubmission (Non-Recordation) Document ID#	License Change of Name								
Correction of PTO Error	Merger Other								
Reel # Frame # Corrective Document	U.S. Government (For Use ONLY by U.S. Government Agencies)								
Reel # Frame #	Departmental File Secret File								
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date								
Name (line 1) SHIN, SUNG-HYUK	09232002								
Name (line 2)	Execution Date								
Second Party Name (line 1) OZLUTURK, FATIH	Month Day Year 09232002								
Name (line 2)									
Receiving Party Mark if additional names of receiving parties attached									
Name (line 1) INTERDIGITAL TECHNOLOGY CORPORATION If document to be recorded is an assignment and the receiving party is not									
Name (line 2)	domiciled in the United States, an appointment								
Address (line 1) 300 DELAWARE AVENUE	of a domestic representative is attached.								
Address (line 2)	(Designation must be a separate document from Assignment.)								
	DE 10004								
Address (line 3) WILMINGTON City	DE 19801 Zip Code								
Domestic Representative Name and A	ddress Enter for the first Receiving Party only.								
Name									
Address (line 1)									
Address (line 2)									
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Address (line 4)									
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Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:

Commissioner of Patents and Trademarks, Box Assignments, Washington, PAPENT

FORM PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT					
Correspondent Name and Address	Area Code and Telephone Number	(215) 568-6400					
Name JEFFREY M. GLABICKI							
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 pagincluding any attachments.	ges of the attached conveyance documen	nt # 8					
Application Number(s) or Patent Num		itional numbers attached					
t ·	atent Number (DO NOT ENTER BOTH numbers for Patent N						
Patent Application Number(s) 10/266,882	Tatent N						
If this document is being filed together with a <u>new</u> Pater signed by the first named executing inventor.	nt Application, enter the date the patent application v	was Month Day Year					
Patent Cooperation Treaty (PCT)							
Enter PCT application number	PCT PCT	PCT					
only if a U.S. Application Number has not been assigned.	PCT PCT PCT	PCT					
Number of Properties Enter the tot	al number of properties involved. #	1					
Fee Amount Fee Amount to	for Properties Listed (37 CFR 3.41): \$	40.00					
Method of Payment: Enclosed Deposit Account							
Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.) InterDigital Patent Corporation's Deposit Account Number: # 09-0435							
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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.	Call. Mr. Malaul	1/0/0-					
Jeffrey M. Glabicki	Willow May May L	117103					
Name of Person Signing Reg. No. 42,584	Signature	Date					

PATENT REEL: 013346 FRAME: 0980

FORM PTO-16 Expires 06/30/99 OMB 0651-0027	9C RECORDATION FORM COVER SHEET ONLY PATENTS ONLY				U.S. Department of Commerce Patent and Trademark Office PATENT
Conveying Par		Mark if addition	al names of conveying pa	rties attache	d Execution Date Month Day Year
	EIRA, ARIELA				10012002
Name (fine 2)					Execution Date Month Day Year
Name (line 1)	OO, CHANG-SOO				09232002
Name (line 2)					Execution Date
Name (line 1)					Month Day Year
Name (line 2)				<u> </u>	
Receiving Par	ty(ies)		lark if additional names o	of receiving pa	arties attached
Enter additional R	eceiving Party(les)				If document to be recorded
Name (line 1)			<u>. </u>		is an assignment and the
Name (line 2)					receiving party is not domicited in the United States, an appointment of a domestic representative
Address (line 1)					is attached. (Designation must be a separate document from
Address (line 2)					Assignment)
Address (line 3)	City		State/Country	Zip	Code
Name (line 1)					If document to be recorded is an assignment and the receiving party is not
Name (line 2)					domiciled in the United States, an appointment of a
Address (line 1)					domestic representative is attached. (Designation must
Address (line 2)				•	be a separate document from Assignment.)
Address (line 3)					Tin Code
	umber(s) or Patent	Number(s)	State/Country Mark if additional nu		Žip Code
Enter either the	Patent Application Number	or the Patent Number (DO NOT ENTER BOTH I	umbers for th	e same property).
Pa	tent Application Numb	er(s)		Patent Nu	ımber(s)
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		<u> </u>		· - ·	

PATENT REEL: 013346 FRAME: 0981

Attorney's Docket No. I-2-0232.1US

ASSIGNMENT

Sung-Hyuk Shin, residing at 1531 8th Street, Fort Lee, NJ 07024, a citizen of the United States of America; Fatih Ozluturk, residing at 70 Willowdale Avenue, Port Washington, NY 11050, a citizen of Turkey; Ariela Zeira, residing at 239 West Neck Road, Huntington, NY 11743, a citizen of the United States of America; and Chang-Soo Koo, residing at 15 Zoranne Drive, East Northport, NY 11731, a citizen of the United States of America, (hereafter jointly and severally referred to as the undersigned), are the inventors of PATHLOSS AIDED CLOSED LOOP POWER CONTROL for which the undersigned have executed an application for United States Letters Patent, U.S. Patent Application No. 10/266,882, filed 10/7/2002, 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 corporation organized and existing under the laws of the State of Delaware and having its principal place of business at 300 Delaware Avenue, Suite 527, Wilmington, Delaware, (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, does 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 thereof, throughout the world, including the right to claim priority under the Paris Convention.

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.

PATENT REEL: 013346 FRAME: 0982 EXECUTED under seal on this <u>3</u> day of September, 2002.

Witness:

Suna Hyuk Shin

State of New York

ss. Melville

County of Suffolk

On this <u>33</u> day of September, 2002, before me personally appeared Sung-Hyuk Shin, 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.

Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/ 5

EXECUTED under seal on this 23 day of September, 2002.

Witness:

Falih Ozluturk

State of New York

ss. Melville

County of Suffolk

On this 22 day of September, 2002, before me personally appeared Fatih Ozluturk, 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.

Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/ 6/ >>

EXECUTED under seal on this 15 day of September, 2002.

Witness:

riela Zeira

State of New York

ss. Melville

County of Suffolk

On this 15th day of September, 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.

Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/5-3

EXECUTED under seal on this 2 day of September, 2002.

Witness:

Chang-Soo Kop

State of New York

ss. Melville

County of Suffolk

On this <u>Da</u> day of September, 2002, before me personally appeared Chang-Soo Koo, 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.

Notary Public

My Commission Expires:

PATRICIA MCDONNELL
NOTARY PUBLIC, STATE OF NEW YORK
No. 5007034
QUALIFIED IN SUFFOLK COUNTY
TERM EXPIRES 1/19/0~