Docket No.: CHOI 3-183 07-31-2000 FORM PTO-1595 (Modified) **IEET** U.S. DEPARTMENT OF COMMERCE (Rev. 6-93) OMB No. 0651-0011 (exp.4/94) Patent and Trademark Office Copyright 1994-97 Legal Star P08/REV02 Tab settings → → → 101418289 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): Name of conveying party(ies): CHOI, KYUNG MOON JIN, SUNGHO Name: LUCENT TECHNOLOGIES INC. Internal Address: POB 636 Additional names(s) of conveying party(ies) Nature of conveyance: ☐ Merger Assignment Street Address: 600-700 MOUNTAIN AVENUE Security Agreement Change of Name City: MURRAY HILL Other ZIP: 07974 State: NJ Execution Date: AUGUST 23, AUGUST 19, 1999 4. Application number(s) or registration numbers(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 09/354,928 /25/2000 VVAN22 00000087 09354928 2 FC:581 Additional numbers attached? ☐ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: GLEN E. BOOKS, ESQ. 7. Total fee (37 CFR 3.41):....\$ 40,00 Internal Address: MATHEWS, COLLINS, SHEPHERD Enclosed - Any excess or insufficiency should be credited or debited to deposit account & GOULD, P.A. Authorized to be charged to deposit account Street Address: 100 THANET CIRCLE, SUITE 306 8. Deposit account number: City: PRINCETON State: NJ ZIP: 08540 DO NOT USE THIS SPACE 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. Glen E. Books July 20, 2000 Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and document:

REEL: 010946 FRAME: 0731

## **ASSIGNMENT AND AGREEMENT**

For value received, we, Kyung Moon Choi of Scotch Plains in the County of Union and State of New Jersey, and Sungho Jin of Millington in the County of Morris and State of New Jersey, hereby sell, assign and transfer to Lucent Technologies Inc., a corporation of the State of Delaware, having an office at 600 Mountain Avenue, Murray Hill, New Jersey 07974-0636, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to NANOSCALE CONDUCTIVE CONNECTORS AND METHOD FOR MAKING SAME described in an application for Letters Patent of the United States, Serial No. 09/354,928, filed July 15, 1999, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Lucent Technologies Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize Lucent Technologies Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Lucent Technologies Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to Lucent Technologies Inc. in the United States and in all countries foreign to the United States, or to such nominees as Lucent Technologies Inc. they may designate.

PATENT REEL: 010946 FRAME: 0732

I agree that, when requested, I shall, without charge to Lucent Technologies Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Kyung Moon Choi

States of America

United States of America

State of New Jersey

) ss.:

County of UNION

On this \_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 19\_99\_, before me personally came Kyung Moon Choi, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

A NOTARY PUBLIC OF NEW JERSEY My Commission Expires 10/18/2000

REEL: 010946 FRAME: 0733

		Sungno Jin	`	
Date: 8/19/9	9			
United States of America	)			
State of New Jersey	) ss.:			
County of Union	)			
On this	o me know	n to be the individua cknowledged execut	al desc lion of	ribed in and who the same.
		Sheila	<u> </u>	tole
		Notary Pub	IC	

Lucent Technologies Inc. 600 Mountain Avenue (Room 3C-512) P. O. Box 636 Murray Hill, New Jersey 07974-0636

SHEILA R. COLE
A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires 10/18/2008

	Response To Notice To File Missing Parts Of Application  Filing Date Granted (PTO-1533)(Large Entity)  Docket No. CHOI 3-183			
In Re	In Re Application Of: CHOI ET AL.			
	Serial No.	Filing Date	Examiner	Group Art Unit
	09/354,928	07/15/99	ТВА	1763
Inver	ntion: NANOSCAI	LE CONDUCTIVE CONNECTO	RS AND METHOD FOR MAK	ING THE SAME
		TO THE ASSISTANT COM	MMISSIONER FOR PATENTS:	
		Box Mis	ssing Parts	
	s a response to the GUST 11, 1999  Date	Notice to File Missing Parts of A	opplication - Filing Date Grante	d (PTO-1533) mailed on
Enclo		ing are the following:		
$\boxtimes$	A copy of the Noti	ce to File Missing Parts of Applic	cation - Filing Date Granted (P?	ΓΟ-1533). <b>(REQUIRED)</b>
	An oath or declar	ration in compliance with 37 CFF above Application Number and F	R 1.63, including residence inf	•
×		d oath or declaration in complia Number and Filing Date.	ance with 37 CFR 1.63, identi	ifying the application by the
J	An oath or declara omitted inventor(s	ation in compliance with 37 CFR s), identifying this application by the	₹ 1.63 listing the names of all i the above Application Number i	inventors and signed by the and Filing Date.
	□ A verified English translation of the non-English language application papers as originally filed. It is requested that this translation be used as the copy for examination purposes in the United States Patent and Trademark Office.			
☑ Other (list):				
	ASSIGNMENT TO	D LUCENT TECHNOLOGIES IN	₹C.	
				!

[Page 1 of 3]

Response To Notice To File Missing Parts Of Application Filing Date Granted (PTO-1533)(Large Entity)		Docket No. CHOI 3-183	
In Re Application Of: (	CHOI ET AL.		
Serial No. 09/354,928	Filing Date 07/15/99	Examiner TBA	Group Art Unit 1763
Invention: NANOSCA	LE CONDUCTIVE CONNECTO	RS AND METHOD FOR MA	AKING THE SAME
	TO THE ASSISTANT COM	MISSIONER FOR PATENT sing Parts	<u>'S:</u>
	blication fees as calculated below	-	
☐ Utility applica	ition filing fee		
☐ Design applic	cation filing fee		
☐ Total number	of independent claims =		
☐ Total number	of claims =		
☐ Multiple depe	ndent claims		
☑ Surcharge for	r late payment of filing fee and/or	late filing of original declar	ation or oath \$130.00
☐ Petition and f	ee for filing by other than all the	inventors or a person not the	e inventor
☐ Fee for proce	ssing an application filed with a r	non-English language specif	ication
☐ Fee for proce	ssing and retention of application	1	
		Total completion of ap	oplication fees \$130.00
above-identified Notice t	er the provisions of 37 CFR 1. o File Missing Parts of Applicatio time extension is required, pleas	n. The requested extension	od for filing a response to the n is as follows (check time period erefor.
☐ One month	☐ Two months ☐ Th	ree months 🔲 Four me	onths
from:	Date	until:	ate
		Total time	extension fees
			Total fees due \$130.00

[Page 2 of 3]

Filing Date Granted (PTO-1533) (Large Entity)		• •	Docket No. CHOI 3-183
In Re Application Of: CHOI ET AL.			
Serial No.	Filing Date	Examiner	Group Art Unit
09/354,928	07/15/99	TBA	1763
Invention: NANOSCAL	E CONDUCTIVE CONNECTO	ORS AND METHOD FOR MAKING	G THE SAME
	TO THE ASSISTANT COM	MMISSIONER FOR PATENTS:	
	<u>Box Mi</u>	ssing Parts	
<ul> <li>The Commissioner overpayment, to De A duplicate copy of</li> <li>If an additional external any additional fees</li> </ul>	eposit Account No. this sheet is enclosed.	any fees which may be required, one consider this a petition therefor a posit Account No.	•
GLEN E. BOOKS, ESQ. REG. NO. 24,950	Books	Dated: July 20, 2000	

100 THANET CIRCLE, SUITE 306 PRINCETON, NJ 08540

TEL. NO. (609) 924-8555 FAX NO. (609) 924-3036

certify that this document and fee is being deposited on with the U.S. Postal Service as first JULY 20, 2000 class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Signature of Person Mailing Correspondence

DELIA T. DRAKE

Typed or Printed Name of Person Mailing Correspondence

CC:

1 Choi 3-183

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## Declaration and Power of Attorney

As the below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled NANOSCALE CONDUCTIVE CONNECTORS AND METHOD FOR MAKING SAME the specification which was filed on July 15, 1999 under U.S. Serial No. 09/354,928.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

#### None

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

#### None

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

PATENT REEL: 010946 FRAME: 0738 2 Choi 3-183

I hereby appoint the following attorney(s) with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

o cominected therewith.	
Lester H. Birnbaum	(Reg. No. 25830)
Richard J. Botos	(Reg. No. 32016)
Jeffery J. Brosemer	(Reg. No. 36096)
Kenneth M. Brown	(Reg. No. 37590)
Craig J. Cox	(Reg. No. 39643)
Donald P. Dinella	(Reg. No. 39961)
Guy Eriksen	(Reg. No. 41736)
Martin I. Finston	(Reg. No. 31613)
James H. Fox	(Reg. No. 29379)
William S. Francos	(Reg. No. 38456)
Barry H. Freedman	(Reg. No. 26166)
Julio A. Garceran	(Reg. No. 37138)
Mony R. Ghose	(Reg. No. 38159)
Jimmy Goo	(Reg. No. 36528)
Anthony Grillo	(Reg. No. 36535)
Stephen M. Gurey	(Reg. No. 27336)
John M. Harman	(Reg. No. 38173)
Michael B. Johannesen	(Reg. No. 35557)
Mark A. Kurisko	(Reg. No. 38944)
Irena Lager	(Reg. No. 39260)
Christopher N. Malvone	(Reg. No. 34866)
Scott W. McLellan	(Reg. No. 30776)
Martin G. Meder	(Reg. No. 34674)
John C. Moran	(Reg. No. 30782)
Michael A. Morra	(Reg. No. 28975)
Gregory J. Murgia	(Reg. No. 41209)
Claude R. Narcisse	(Reg. No. 38979)
Joseph J. Opalach	(Reg. No. 36229)
Neil R. Ormos	(Reg. No. 35309)
Eugen E. Pacher	(Reg. No. 29964)
Jack R. Penrod	(Reg. No. 31864)
Daniel J. Piotrowski	(Reg. No. 42079)
Gregory C. Ranieri	(Reg. No. 29695)
Scott J. Rittman	(Reg. No. 39010)
Eugene J. Rosenthal	(Reg. No. 36658)
Bruce S. Schneider	(Reg. No. 27949)
Ronald D. Slusky	(Reg. No. 26585)
David L. Smith	(Reg. No. 30592)
Patricia A. Verlangieri	(Reg. No. 42201)
John P. Veschi	(Reg. No. 39058)
David Volejnicek	(Reg. No. 29355)
Charles L. Warren	(Reg. No. 27407)
Jeffrey M. Weinick	(Reg. No. 36304)
	`g

PATENT REEL: 010946 FRAME: 0739 3

Eli Weiss

(Reg. No. 17765)

Kyang M. Char Date Aug 23/99

I hereby appoint the attorney(s) on ATTACHMENT A as associate attorney(s) in the aforementioned application, with full power solely to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected with the prosecution of said application. No other powers are granted to such associate attorney(s) and such associate attorney(s) are specifically denied any power of substitution or revocation.

Full name of 1st joint inventor: Kyung Moon Choi

Inventor's signature\_

Residence: Scotch Plains, County of Union and State of New Jersey

Citizenship: Korea

Post Office Address: 50 Spruce Mill Lane

Scotch Plains, New Jersey 07076

Full name of 2nd joint inventor: Sungho Jin

Inventor's

signature

Residence: Millington, County of Morris and State of New Jersey

Citizenship: United States of America

Post Office Address: 145 Skyline Drive

Millington, New Jersey 07946

REEL: 010946 FRAME: 0740

# **ATTACHMENT A**

Attorney Name(s): Bruce M. Collins Reg. No.: 20,066

Ronald Gould Reg. No.: 28,299
Diane Dunn McKay Reg. No.: 34,586
Glen E. Books Reg. No.: 24,950
Anastasia P. Winslow Reg. No.: 40,875
Charles J. Brumlik Reg. No.: 42,367

Telephone calls should be made to Glen E. Books at:

Phone No.: 609-924-8555 Fax No.: 609-924-3036

All written communications are to be addressed to:

Glen E. Books, Esq.

Mathews, Collins, Shepherd & Gould, P.A.

100 Thanet Circle, Suite 306

Princeton, NJ 08540

PATENT
RECORDED: 07/24/2000 REEL: 010946 FRAME: 0741