

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Harish M. Manohara	08/01/2005
Michael H. Bronikowski	08/01/2005
RECEIVING PARTY DATA	
Name:	California Institute of Technology
Street Address:	1200 East California Blvd., Mail Stop 201-85
City:	Pasadena
State/Country:	CALIFORNIA
Postal Code:	91125
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	11137725
CORRESPONDENCE DATA	
Fax Number:	(626)577-8800
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	626.795.9900
Email:	pto@cph.com
Correspondent Name:	John W. Peck, Ph.D.
Address Line 1:	P.O. Box 7068
Address Line 4:	Pasadena, CALIFORNIA 91109
NAME OF SUBMITTER:	John W. Peck
Total Attachments: 4 source=assign#page1.tif source=assign#page2.tif source=poa#page1.tif source=poa#page2.tif	

CH \$40.00 11137725

500047991

PATENT
REEL: 016478 FRAME: 0978

ASSIGNMENT

WHEREAS, WE, Harish M. Manohara and Michael J. Bronikowski, residing at 642 West Huntington Drive, Unit 15, Arcadia, California 91007 and 689 E. Woodbury Road, Altadena, California 91001; respectively, have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled CARBON NANOTUBE HIGH-CURRENT-DENSITY FIELD EMITTER, filed May 24, 2005, Application No. 11/137,725 and with claim to the priority of United States Provisional Application No. 60/575,043, filed May 27, 2004; and

WHEREAS CALIFORNIA INSTITUTE OF TECHNOLOGY, a California nonprofit organization, having a place of business at 1200 East California Blvd., Mail Stop 201-85, Pasadena, California 91125 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.


NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we do hereby sell, assign, transfer and set over to **ASSIGNEE**:

- (i) the entire right, title and interest in and to **U.S. Patent Application No. 11/137,725** and all continuations, divisions, reexaminations, reissues, substitutes, extensions and counterparts thereof throughout the world, and all inventions disclosed and claimed therein; and
- (ii) any and all claims and demands that I may have against any firm, person or corporation which has heretofore infringed upon my right in said **U.S. Patent Application No. 11/137,725**, together with the right to retain for **ASSIGNEE** any and all sums that **ASSIGNEE** may obtain or recover as a result of the assertion or enforcement of any such claim or demand.

WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith; and

WE HEREBY further covenant and agree that we will communicate to **ASSIGNEE** any and all facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination, reissue, substitute and foreign counterpart applications, make all rightful oaths and generally do everything possible to aid **ASSIGNEE** to obtain and enforce proper patent protection for said improvements in all countries.

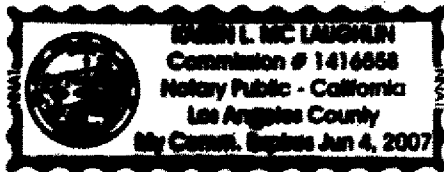
IN TESTIMONY WHEREOF, I hereunto set my hand this 1st day of AUGUST, 2005, 2005.




Harish M. Manohara

STATE OF California)
COUNTY OF Los Angeles)

On August 1, 2005, before me Karen L. McLaughlin,
Notary Public, personally appeared **Harish M. Manohara**, ~~personally known to me~~ (or proved
to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the
within instrument and acknowledged to me that he/she executed the same in his/her authorized
capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of
which the person acted, executed the instrument.

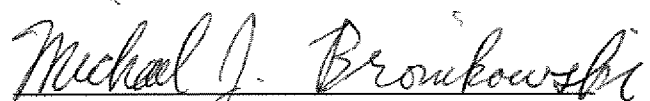


WITNESS my hand and official seal.



Signature of Notary

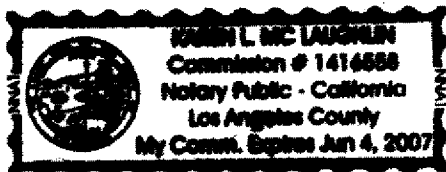
IN TESTIMONY WHEREOF, I hereunto set my hand this 1st day of August, 2005, 2005.




Michael J. Bronikowski

STATE OF California)
COUNTY OF Los Angeles)

On August 1, 2005, before me Karen L. McLaughlin, Notary Public, personally
appeared **Michael J. Bronikowski**, ~~personally known to me~~ (or proved to me on the basis of
satisfactory evidence) to be the person whose name is subscribed to the within instrument and
acknowledged to me that he/she executed the same in his/her authorized capacity, and that by
his/her signature on the instrument the person, or the entity upon behalf of which the person
acted, executed the instrument.



WITNESS my hand and official seal.



Signature of Notary

TXT IRV1088061.1-*07/19/05 2:03 PM

POWER OF ATTORNEY FROM ASSIGNEE**PATENT****Docket No.: 54831/JWP/C766****USSN 11/137,725**

CALIFORNIA INSTITUTE OF TECHNOLOGY, a California non-profit organization, having a place of business at 1200 East California Blvd., Mail Stop 201-85, Pasadena, California 91125, (Assignee) is assignee of the entire right, title and interest throughout the world, by reason of an Assignment to the Assignee executed on August 1, 2005 of an invention known as CARBON NANOTUBE HIGH-CURRENT-DENSITY FIELD EMITTER (Attorney Docket No. 54831/JWP/C766), which is disclosed and claimed in a patent application of the same title by the inventors HARISH M. MANOHARA and MICHAEL J. BRONIKOWSKI (said application executed on August 1, 2005). The Assignment of this application to California Institute of Technology is being submitted for recordation concurrently with this Power of Attorney.

The Assignee hereby appoints the U.S. attorneys associated with **CUSTOMER NUMBER 23363** as principal attorneys with the power to appoint associate attorneys to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith, such attorneys currently being:

D. Bruce Prout	(20,958)	Robert A. Green	(28,301)	Stephen D. Burbach	(40,285)
Richard J. Ward, Jr.	(24,187)	Richard A. Wallen	(22,671)	David J. Steele	(47,317)
Walter G. Maxwell	(25,355)	Michael J. MacDermott	(29,946)	John W. Peck	(44,284)
William P. Christie	(29,371)	Anne Wang	(36,045)	Tom H. Dao	(44,641)
David A. Dillard	(30,831)	Constantine Marantidis	(39,759)	Rose A. Hickman	(P-54,167)
Thomas J. Daly	(32,213)	Daniel R. Kimbell	(34,849)	Colin T. Dorrian	(P-54,658)
Edward R. Schwartz	(31,135)	Daniel M. Cavanagh	(41,661)	R. W. Johnston	(17,968)
John D. Carpenter	(34,133)	Gary J. Nelson	(44,257)	Hayden A. Carney	(22,653)
Wesley W. Monroe	(39,778)	Josephine E. Chang	(46,083)	Russell R. Palmer, Jr.	(22,994)
David A. Plumley	(37,208)	Joel A. Kauth	(41,886)	LeRoy T. Rahn	(20,356)
Gregory S. Lampert	(35,581)	Raymond R. Tabandeh	(43,945)	Richard D. Seibel	(22,134)
Mark Garscia	(31,953)	Cynthia A. Bonner	(44,548)	Richard J. Paciulan	(28,248)
Syed A. Hasan	(41,057)	Jun-Young E. Jeon	(43,693)		

The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

PATENT**RECORDED: 08/31/2005****REEL: 016478 FRAME: 0981**