

09-26-2000



PATENT

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Mark if additional names of conveying parties attached

Name	Execution Date		
	Month	Day	Year
David Felsenthal	05	24	2000
Chunghsin Lee	08	09	2000
Piero Sferlazzo	05	24	2000
	/	/	
	/	/	

**Receiving Party**

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PATENT  
REEL: 011094 FRAME: 0484

Correspondent Name and Address

Area Code and Telephone Number (617) 248-7000

Name Patent Administrator

Address (line 1) Testa, Hurwitz & Thibault, LLP

Address (line 2) High Street Tower

Address (line 3) 125 High Street

Address (line 4) Boston, MA 02110

Pages Enter the total number of pages of the attached conveyance document including any attachments. 4

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).

Table with 2 main columns: Patent Application Number(s) and Patent Number(s). Includes input fields for numbers like 09/401,754.

Patent Cooperation Treaty (PCT) Enter PCT application number only if a U.S. Application Number has not been assigned. PCT [ ] PCT [ ] PCT [ ]

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: Enclosed [X] Deposit Account [ ] Deposit Account Number # 20-0531 Authorization to charge additional fees: Yes [X] 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.

Jamie H. Rose Name of Person Signing [Signature] Signature 9/8/00 Date

rose473/34.1066512-1

Mail documents to be recorded with required cover sheet(s) information to: Box Assignment, Commissioner of Patents and Trademarks, Washington, D.C. 20231

**ASSIGNMENT**

WHEREAS, We, David Felsenthal, Chunghsin Lee and Piero Sferlazzo have invented one or more improvements in:

**A MULTI-LAYER SPUTTER DEPOSITION APPARATUS**

described in an application (or provisional application) for Letters Patent of the United States:

identified by Attorney Docket No. \_\_\_\_\_, and/or executed by us of even date herewith and about to be filed in the United States Patent Office;

Serial No. 09/401,754 filed in the United States Patent Office on September 23, 1999; and

WHEREAS, Applied Science and Technology, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 35 Cabot Road, Woburn, Massachusetts 01801 desires to acquire an interest therein, in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the inventions described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under international convention, including but not limited to continuations, divisionals, reissues, and reexaminations of said application of such Letters Patent; said inventions, applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all of our rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said inventions, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

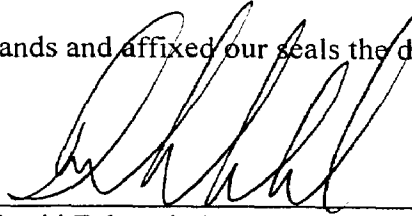
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including: the execution of applications for patents in foreign countries; the execution of substitution, reissue, divisional or continuation applications; and preliminary or other statements or the giving of testimony in any interference or other proceeding in which said inventions or any application or patent directed thereto may be involved; and

we further hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on that date of our execution of this assignment;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

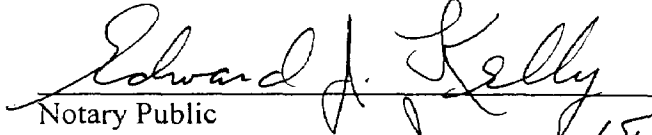
Inventor:



David Felsenthal

Commonwealth of Massachusetts )  
County of Middlesex ) ss

Subscribed and sworn to before me, by the above-named David Felsenthal this 24<sup>th</sup> day of May, 2000.



Notary Public

My Commission Expires: June 18, 2004.

Inventor:

\_\_\_\_\_  
Chunghsin Lee

Commonwealth of Massachusetts )  
County of \_\_\_\_\_ ) ss

Subscribed and sworn to before me, by the above-named Chunghsin Lee this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

\_\_\_\_\_  
Notary Public

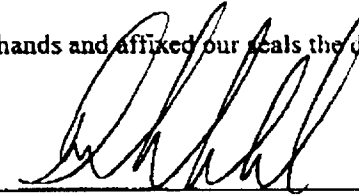
My Commission Expires: \_\_\_\_\_

**Joint Assignment**  
**Page 2**

we further hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on that date of our execution of this assignment;

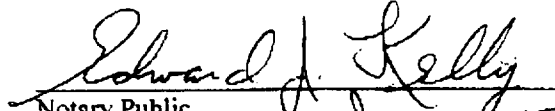
AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

*IN TESTIMONY WHEREOF*, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor:   
David Felsenthal

Commonwealth of Massachusetts )  
County of Middlesex ) ss

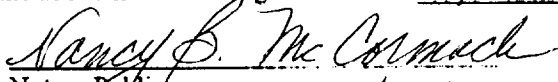
Subscribed and sworn to before me, by the above-named David Felsenthal this 24<sup>th</sup> day of May, 2000.

  
Notary Public  
My Commission Expires: June 18, 2004

Inventor:   
Chungsin Lee

Commonwealth of Massachusetts )  
County of Middlesex ) ss

Subscribed and sworn to before me, by the above-named Chungsin Lee this 9<sup>th</sup> day of August, 2000.

  
Notary Public  
My Commission Expires: 6/14/2007



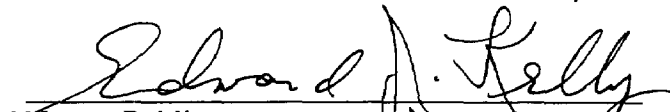
NANCY B. McCORMACK  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
June 14, 2007

Inventor:

  
Piero Sferlazzo

Commonwealth of Massachusetts )  
County of Worcester ) ss

Subscribed and sworn to before me, by the above-named Piero Sferlazzo this 24<sup>th</sup> day of May, 2000.

  
Notary Public  
My Commission Expires: June 15, 2004

rauschen473/34.860777v1