FORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp.

07-12-2001



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

Attorney Docket No. 5531

101774450 To the Honorable Commissional of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) Bruce W. Wessels, Brent H. Hoerman and Feng Niu Name: Northwestern University Internal Address: 633 Clark Street Additional name(s) of conveying party(ies) attached? [] Yes [X] No Evanston, IL 60208 United States 3. Nature of conveyance: Street Address: 633 Clark Street [X] Assignment [] Merger City: Evanston, IL 60208 Security Agreement [] Change of Name United States [] Other _ Additional name(s) & address(es) attached? [] Yes [X] No Execution Date: <u>5/23/01</u>, 5/25/01 and 6/18/01 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: __ B. Patent No.(s) A. Patent Application No.(s): 09/726,238 Additional Numbers attached? [] Yes [X] No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: [1] concerning document should be mailed: Leonard J. Kalinowski 7. Total fee (37 CFR 3.41) \$40.00 Internal Address: Reinhart, Boerner, Van Deuren, [] Enclosed Norris & Rieselbach, s.c. [X] Authorized to be charged to deposit account 1000 North Water Street, Suite 2100 [X] Any deficiencies in enclosed fee should be charged to Deposit Account. Milwaukee, WI 53202-3186 Reinhart, Boerner, Van Deuren, Street Address: 8. Deposit account number: Norris & Rieselbach, s.c. 18-0882 1000 North Water Street, Suite 2100 (Attach duplicate copy of this page if paying by deposit account) City: Milwaukee State: WI ZIP: 53202-3186 DO NOT USE THIS SPACE To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true 9. Statement and signature. copy of the original document. Lemme J. Vilmanshi Leonard J. Kalinowski Name of Person Signing Total number of pages including cover sheet, attachments, and document: Mail documents to be recorded with required cover sheet information to:

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MW\754240LJK:DMM

PATENT

REEL: 011957 FRAME: 0779

PATENT

Attorney Docket No. 5531

For: [X] U.S. and/or [X] Foreign Rights For: [X] U.S. Application or [] U.S. Patent By: [X] Inventor(s) or [] Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

	D W W 1
(inventor(s) or _	Bruce W. Wessels
person(s) or entity(ies)	(Type or print name(s) of ASSIGNOR(S))
who own the invention)	
,	1054 Miami Road
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	(Nationality)
(inventor(s) or _	Brent H. Hoerman
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who own the invention)	800 Custer Avenue, Apt. 2D
	Evanston, IL 60202
	(Address)
	US
	(Nationality)
(inventor(s) or	Feng Niu
(IIIVentor(s) si	(Type or print name(s) of ASSIGNOR(S))
person(s) or entity(ies)	
who own the invention)	704 Stewart Street, Apt. 2D
	Evanston, IL 60202
	(Address)
	(Nationality)

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ASSIGNOR:

(Nationality)

(If assignment is by person or entity to whom invention was previously assigned and this was recorded in PTO add the following)

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Frame	
hereby sells, assign	ns and transfers to
ASSIGNEE:	
	Northwestern University
	(Type or print name of ASSIGNEE)
	633 Clark Street
	(Address)
	Evanston, IL 60208
	United States
	(Nationality)
and the successors	, assigns and legal representatives of the ASSIGNEE (complete one of the following)
[] an undivide	right, title and interest dpercent (%) interest ed States and its territorial possessions
(check the	e following box if foreign rights are also to be assigned)
[X] and in all in and to any and a	foreign countries, including all rights to claim priority, all improvements which are disclosed in the invention entitled:
OXIDE THIN F	TILMS AND COMPOSITES AND RELATED METHODS OF DEPOSITION
	(check and complete (a), (b), (c) or (d))
and which is foun	d in
(b) [] U.S. pater [] To compl ASSIGNO	at application executed on even date herewith application executed on

[] A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.
(also check (e) if foreign application(s) is also being assigned) (e) [X] and any legal equivalent thereof in a foreign country, including the right to
claim priority
and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof
ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;
ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.
IN WITNESS WHEREOF, I/We have hereunto set hand the date indicated below.
WARNING: Date of signing must be the same as the date of execution of the application if item (a) was checked above.
Signature of ASSIGNOR(S) Bruce W. Wessels Wy 23-01 (Date)
Brent H. Hoerman (Date) Feng Niu (Date) (Date)
Feng Niu NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized then it will only be prima facie evidence of execution 35 USC 261. Use next page if notarization is desired. [] Notarization or Legalization Page Added.
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(d) [] U.S. patent no. _____issued _____

PATENT

Attorney Docket No. 5531

For: [X] U.S. and/or [X] Foreign Rights For: [X] U.S. Application or [] U.S. Patent By: [X] Inventor(s) or [] Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:	
(inventor(s) or	Bruce W. Wessels
	(Type or print name(s) of ASSIGNOR(S))
person(s) or entity(ies)	
who own the invention)	1054 Miami Bood
	1054 Miami Road
	Wilmette, IL 60091
	(Address)
-	U.S.
	(Nationality)
(inventor(s) or _	Brent H. Hoerman
	(Type or print name(s) of ASSIGNOR(S))
person(s) or entity(ies)	al dar mad
who own the invention)	800 Custer Avenue, Apt. 2D
	Evanston, IL 60202
	(Address) Breinigsville, PA 18031
	US
	(Nationality)
(inscentor(s) or	Feng Niu
(inventor(s) or	(Type or print name(s) of ASSIGNOR(S))
person(s) or entity(ies)	
who own the invention)	704 Stewart Street, Apt. 2D
	Evanston, IL 60202
	(Address)

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(If assignment is by person or entity to whom invention was previously assigned and this was recorded in PTO add the following)

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hereby sells, assig	ns and transfers to
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	(Type or print name of ASSIGNEE)
	633 Clark Street
	(Address)
	Evanston, IL 60208
	United States
	(Nationality)
and the successor	s, assigns and legal representatives of the ASSIGNEE (complete one of the following)
[X] the entire	right, title and interest
[] an undivide	ed percent (%) interest
for the Uni	edpercent (%) interest ted States and its territorial possessions
(check th	e following box if foreign rights are also to be assigned)
[X] and in all in and to any and	foreign countries, including all rights to claim priority, all improvements which are disclosed in the invention entitled:
OXIDE THIN	FILMS AND COMPOSITES AND RELATED METHODS OF <u>DEPOSITION</u>
	(check and complete (a), (b), (c) or (d))
and which is four	ıd in
(b) [] U.S. pate [] To comp ASSIGN named in invention	nt application executed on even date herewith nt application executed on

filing date and application number when it becomes known. (c) [X] U.S. application serial no. <u>09/726,238</u> on <u>November 29, 2000</u> .
(d) [] U.S. patent noissued
[] A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.
(also check (e) if foreign application(s) is also being assigned) (e) [X] and any legal equivalent thereof in a foreign country, including the right o
claim priority
and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof
ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;
ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will estify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.
IN WITNESS WHEREOF, I/We have hereunto set hand the date indicated below.
WARNING: Date of signing must be the same as the date of execution of the application if item (a) was checked above.
Signature of ASSIGNOR(S)
Bruce W. Wessels (Date)
Brent H. Hoen 6/18/01
Brent H. Hoerman (Date)
Feng Niu (Date)
NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or

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RECORDED: 07/02/2001

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