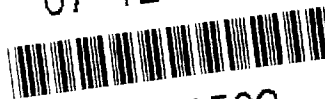


FORM PTO-1619A

Expires 06/30/99  
OMB 0651-0027U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

07-12-2002



102151502 SHEET

**PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

☒ **New**

☐ **Resubmission (Non-Recordation)**  
Document ID#

☐ **Correction of PTO Error**  
Reel #  Frame #

☐ **Corrective Document**  
Reel #  Frame #

**Conveyance Type**

☒ **Assignment** ☐ **Security Agreement**

☐ **License** ☐ **Change of Name**

☐ **Merger** ☐ **Other**

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

☐ **Departmental File** ☐ **Secret File**

**Conveying Party(ies)**

☒ **Mark if additional names of conveying parties attached**

Execution Date  
Month Day Year  
05/25/2002

Name (line 1) David Carroll

Name (line 2) **Second Party**

Name (line 1) John Ballato

Name (line 2) Execution Date  
Month Day Year  
05/23/2002**Receiving Party**

☐ **Mark if additional names of receiving parties attached**

Name (line 1) Clemson University

Name (line 2) 

Address (line 1) 300 Brackett Hall

Address (line 2) 

Address (line 3) Clemson

South Carolina

29634-5701

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) **FOR OFFICE USE ONLY**

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

**PATENT****REEL: 013065 FRAME: 0424**

**Correspondent Name and Address**

Area Code and Telephone Number (864) 271-1592

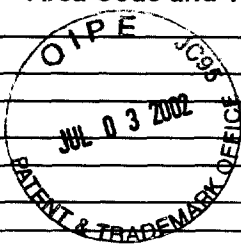
Name John E. Vick, Jr.

Address (line 1) Dority & Manning, P.A.

Address (line 2) P.O. Box 1449

Address (line 3)

Address (line 4) Greenville, South Carolina 29602



**Pages**

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

# 8

**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).

Patent Application Number(s)

Patent Number(s)

10/103,562

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number  
only if a U.S. Application Number  
has not been assigned.

PCT

PCT

PCT

PCT

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**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:  
Deposit Account

Enclosed ☒

Deposit Account ☐

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

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Yes ☒

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.

John E. Vick, Jr.

Name of Person Signing

Signature

06/26/2002

Date

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U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

Conveying Party(ies)

☒ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Stephen Foulger

Execution Date  
Month Day Year

05/23/2002

Name (line 2)

Execution Date  
Month Day Year

05/23/2002

Name (line 1) Richard Czerw

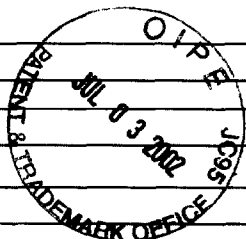
Name (line 2)

Execution Date  
Month Day Year

05/23/2002

Name (line 1) Dennis Smith

Name (line 2)



Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) Clemson University

Name (line 2)

Address (line 1) 300 Brackett Hall

Address (line 2)

Address (line 3) Clemson City South Carolina 29634-5701 Zip Code

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Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

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10/103,562

Patent Number(s)

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Hiren Shah

Execution Date  
Month Day Year

06/20/2002

Name (line 2)

Name (line 1) Earl Wagener

Execution Date  
Month Day Year

05/23/2002

Name (line 2)

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

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Name (line 2)

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Patent Application Number(s)

Patent Number(s)

10/103,562

**JOINT INVENTION ASSIGNMENT OF WORLDWIDE RIGHTS**

**WHEREAS**, I, David Carroll, a citizen of the United States of America, residing at 219 Juna Lane, Central, South Carolina 29634; John Ballato, a citizen of the United States of America, residing at 113 Grace Street, Clemson, South Carolina 29631; Stephen Foulger, a citizen of the United States of America, residing at 301 Monaco Circle, Clemson, South Carolina 29631; Richard Czerw, a citizen of the United States of America, residing at 102 Sedgfield Drive, Clemson, South Carolina 29631; Dennis Smith, a citizen of the United States of America, residing at 3010 North Bayshore Drive, Seneca, South Carolina 29672; Hiren Shah, a citizen of India, residing at 146 Folger Street, Clemson, South Carolina 29631; and Earl Wagener, a citizen of the United States of America, residing at 216 Strawberry Lane, Clemson, South Carolina 29631; and as assignor, have made an invention entitled Halogen Containing-Polymer Nanocomposite Compositions, Methods, and Products Employing Such Compositions as described in a patent application for U.S. Letters Patent, which is being filed in the U. S. Patent and Trademark Office herewith; and

**WHEREAS**, Clemson University, a body politic and corporate under the laws of the State of South Carolina, whose post office address is 300 Brackett Hall, Clemson South Carolina 29634-5701; as assignee, is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

**NOW THEREFORE**, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I, as assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and I hereby authorize and request the Commissioner of Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment.

**AND, I HEREBY** covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed, and will not execute any agreement in conflict with this Assignment;

**AND, I HEREBY** further covenant and agree that I will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or

desirable to perfect the title of this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

**IN TESTIMONY WHEREOF**, I have hereunto set our hands.

  
\_\_\_\_\_  
David Carroll

5/25/02  
\_\_\_\_\_  
DATE

  
\_\_\_\_\_  
John Ballato

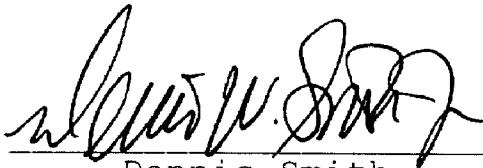
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DATE

  
\_\_\_\_\_  
Stephen Foulger

5/23/02  
\_\_\_\_\_  
DATE

  
\_\_\_\_\_  
Richard Czerw

5/23/02  
\_\_\_\_\_  
DATE



Dennis Smith

May 23, 2002  
DATE

Hiren Shah

DATE



Earl Wagener

23 May 2002  
DATE

STATE OF SC

COUNTY OF Pickens

SWORN TO AND SUBSCRIBED before me  
this 23<sup>rd</sup> day of May, 192002.

[SEAL]


  
NOTARY PUBLIC

My Comm Exp Aug 2, 2005



ATTORNEY DOCKET NO.: CXU-354

## JOINT INVENTION ASSIGNMENT OF WORLDWIDE RIGHTS

 WHEREAS, I, David Carroll, a citizen of the United States of America, residing at 219 Juna Lane, Central, South Carolina 29634; John Ballato, a citizen of the United States of America, residing at 113 Grace Street, Clemson, South Carolina 29631; Stephen Foulger, a citizen of the United States of America, residing at 301 Monaco Circle, Clemson, South Carolina 29631; Richard Czerw, a citizen of the United States of America, residing at 102 Sedgefield Drive, Clemson, South Carolina 29631; Dennis Smith, a citizen of the United States of America, residing at 3010 North Bayshore Drive, Seneca, South Carolina 29672; Hiren Shah, a citizen of India, residing at 146 Folger Street, Clemson, South Carolina 29631; and Earl Wagener, a citizen of the United States of America, residing at 216 Strawberry Lane, Clemson, South Carolina 29631; and as assignor, have made an invention entitled Halogen Containing-Polymer Nanocomposite Compositions, Methods, and Products Employing Such Compositions as described in a patent application for U.S. Letters Patent, which is being filed in the U. S. Patent and Trademark Office herewith; and

WHEREAS, Clemson University, a body politic and corporate under the laws of the State of South Carolina, whose post office address is 300 Brackett Hall, Clemson South Carolina 29634-5701; as assignee, is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

**NOW THEREFORE**, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I, as assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and I hereby authorize and request the Commissioner of Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment.

**AND, I HEREBY** covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed, and will not execute any agreement in conflict with this Assignment;

**AND, I HEREBY** further covenant and agree that I will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or

desirable to perfect the title of this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

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John Ballato

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\_\_\_\_\_  
Stephen Foulger

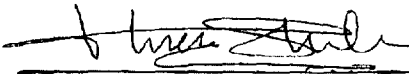
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Dennis Smith

\_\_\_\_\_  
DATE

  
\_\_\_\_\_  
Hiren Shah

6/26/02  
\_\_\_\_\_  
DATE

\_\_\_\_\_  
Earl Wagener

\_\_\_\_\_  
DATE

STATE OF )

COUNTY OF )

SWORN TO AND SUBSCRIBED before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

[SEAL]

NOTARY PUBLIC