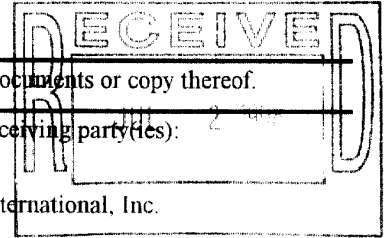


07-13-1998

T U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office



To the Honorable Commissioner of Patents

100761830

original documents or copy thereof.

1. Name of conveying party(ies):

John G.K. Williams

Additional name(s) of conveying party(ies) attached? ☐ Yes ☐ No

2. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: June 26, 1998

*MRD 7-8-98*

2. Name and address of receiving party(ies):

Name: Pioneer-Hybrid International, Inc.

Street Address: 7100 NW 62<sup>nd</sup> Avenue

City: Johnston State: IA ZIP: 50131

Additional name(s) & address(es) attached? ☐ Yes ☒ No

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: \_\_\_\_\_

A. Patent Application No.(s)

B. Patent No.(s)

U.S. Appln. Serial No. 09/049,726

Title: **OLIGONUCLEOTIDES WITH CATIONIC PHOSPHORAMIDATE  
INTERNUCLEOSIDE LINKAGES AND METHODS OF USE**

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ann M. Mueting  
Address: MUETING, RAASCH & GEBHARDT, P.A.  
P.O. Box 581415  
Minneapolis, MN 55458-1415

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

☒ Enclosed  
☐ Authorized to be charged to deposit account

8. Please charge any additional fees or credit any overpayments to our Deposit account number: 13-4895

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DO NOT USE THIS SPACE

9. 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.*

Ann M. Mueting/Reg. No. 33,977  
Name of Person Signing

*Ann M. Mueting*  
Signature

June 29, 1998  
Date

Total number of pages including cover sheet, attachments, and document(s): 2

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments  
Washington, D.C. 20231

PATENT  
REEL: 9292 FRAME: 0938

## ASSIGNMENT

Whereas I, John G.K. Williams, with residence and citizenship as indicated below; have made an invention in

**OLIGONUCLEOTIDES WITH CATIONIC PHOSPHORAMIDATE  
INTERNUCLEOSIDE LINKAGES AND METHODS OF USE**

Filed: March 27, 1998

Serial No.: 09/049,726

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto Pioneer Hybrid International, Inc. ("Company"), a corporation of Iowa, having its principal office at 7100 NW 62<sup>nd</sup> Avenue, Johnston, Iowa 50131, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made;

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to Pioneer Hybrid International, Inc. as the assignee of the entire right, title, and interest therein.

In witness whereof, I have hereunto signed my name on the day and year set forth below.

Name: John G. K. Williams  
Address: 3202 NW 87<sup>th</sup> Lane, Ankeny, IA 50021  
Citizenship: United States of America

Date

STATE OF IOWA )  
 ) ss  
COUNTY OF POLK )

On this 26 day of JUNE 1998 before me personally appeared John G. K. Williams to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

Melissa Johnson  
Notary Public

# ASSIGNMENT

Whereas We, Daniel L. Weeks, and John Dagle, with residences and citizenships as indicated below; have made an invention in

## OLIGONUCLEOTIDES WITH CATIONIC PHOSPHORAMIDATE INTERNUCLEOSIDE LINKAGES AND METHODS OF USE

Filed: March 27, 1998

Serial No.: 09/049,726

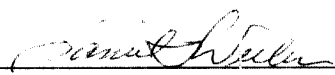
and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto University of Iowa Research Foundation ("Company"), a corporation of Iowa, having its principal office at Oakdale Research Campus, 100 Oakdale Campus #214 TIC, Iowa City, Iowa, 52242-5000, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

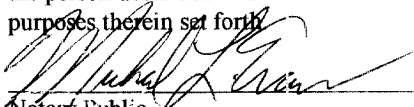
And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to University of Iowa Research Foundation as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

 6/24/98  
 Name: Daniel L. Weeks Date  
 Address: 5 Gilmore Court, Iowa City, IA 52246  
 Citizenship: United States of America

STATE OF IOWA )  
 ) ss.  
 COUNTY OF JOHNSON )

On this 24th day of JUNE, 1998 before me personally appeared Daniel L. Weeks to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

  
 Notary Public

Assignment

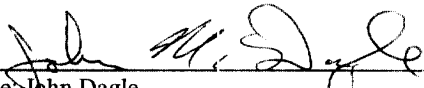
Page 2 of 2

Serial No. 09/049,726

Filed: March 27, 1998

For: OLIGONUCLEOTIDES WITH CATIONIC PHOSPHORAMIDATE INTERNUCLEOSIDE LINKAGES AND METHODS OF USE

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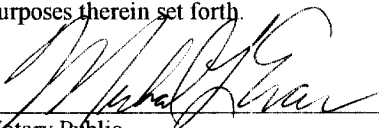
  
Name: John Dagle  
Address: 1333 Coll Drive, Iowa City, IA 52246  
Citizenship: United States of America

6-24-98

Date

STATE OF IOWA )  
 ) ss.  
COUNTY OF JOHNSON )

On this 24<sup>TH</sup> day of JUNE 1998 before me personally appeared John Dagle to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

  
Notary Public