ATTORNEY DOCKET NO. 1016	- TOTAL A TOTAL AND TOTAL				
FORM PTO-1595 RECORDATION FORM	1 COVER SHEET U.S. DEPARTMENT OF COMMERCE				
PATENTS O	Patent and Trademark Office				
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
Name of conveying party(ies):	Name and address of receiving party(ies)				
Carl W. Garnaat; Keith S. Lowe; Bradley A. Roth	Pioneer Hi-Bred International, Inc. 800 Capital Square 400 Locust Street				
Additional name(s) of conveying party(ics) attached?   Yes   No	Des Moines, Iowa 50309  Additional name(s) and address(es) attached? Yes No				
	East 1				
3. Nature of conveyance;					
Assignment        Merger         Security Λgreement        Change of Name         Other        Other					
Execution Date: August 13, 2001; August 14, 2001; August	<u>t 8, 2001</u>				
Application number(s) or patent number(s):  If this document is being filed together with a new application, the second sec	he execution date of the application is:				
A. Patent Application No.(s) 09/905,558	B. Patent No.(s)				
Additional numbers attached	l d? □ Yes ⊠ No				
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1				
Karen K. Varley	7. Total fee (37 CFR 3.41) \$40.00				
Pioneer Hi-Bred International, Inc.	Enclosed				
Corporate Intellectual Property 7100 N.W. 62 <sup>nd</sup> Avenue	Authorized to be charged to deposit account				
P.O. Box 1000	Z				
Johnston, Iowa 50131-1000					
	8. Deposit account number: 16-1852.				
	(Attach a duplicate copy of this page if paying by deposit account)				
DO NOT USE T	HIS 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.					
Karen K. Varley Karlu k Name of Person Signing	Signature August 15, 2001 Date				
Total number of pages including cover sheet, attachments, and document: 4					

PATENT REEL: 011858 FRAME: 0774 0.1

**CASE NO. 1016** 

## ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in fulfillment of a pre-existing obligation of assignment, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, as indicated below, unto

PIONEER HI-BRED INTERNATIONAL, INC. 800 Capital Square 400 Locust Street Des Moines, Iowa 50309

its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in "ZmAXIG1 Polynucleotides and Methods of Use"

as set forth in this United States Patent Application

	executed concurrently herewith
1 1	executed on
冈	Serial No. 09/905,558 filed July 13, 2001

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent, said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be of said inventions, and to testify in any proceedings relating to said inventions, patent applications, Letters Patent.

> PATENT REEL: 011858 FRAME: 0775

The undersigned hereby grant an authorized representative of Assignce the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

August 13 2001  Date	Carl W. Garnaat
State of Jowa	ss.
	or have satisfactory evidence that Carl W. Garnaat is the
	said person acknowledged that he signed this instrument nd voluntary act for the uses and purposes mentioned in Dated
JACQUELINE WOLLENBURG COMMISSION # 168948 MY COMMISSION EXPIRES 4-2-0-2	Signature of Notary Public Jacqueline Wollenburg  Printed Name <u>Jacqueline</u> Wollenburg
	My appointment expires <u> </u>
<u>8/17/08</u> Date	Keith 5. Lowe
State of <u>Jowa</u>	ss.

I certify that I know or have satisfactory evidence that Keith S. Lowe is the person who appeared before me and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

STRIVE SE	JACQUELINE WOLLENBURG COMMISSION # 168948
TOWN	MY COMMISSION EXPIRES

Signature of
Notary Public Jacqueline Wollenburg

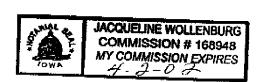
Printed Name Jacqueline Wollenburg

My appointment expires 4

PATENT REEL: 011858 FRAME: 0776

August 8,2001	Bradley a. Roll Bradley A. Roll
State of <u>Sowa</u>	
County of Pock	SS.

I certify that I know or have satisfactory evidence that Bradley A. Roth is the person who appeared before me and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.



**RECORDED: 08/15/2001** 

Dated	_ ungus	<u>r 0, 0</u>	<i><b>300</b></i>	
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Signati	are of	*	/ ) .	0
Notary	re of Public Jacque	elini	Wollen	rus
-	7_7			
Printed	Name <u>Jacqu</u>	eline	Wollenk	$g_{\mu\nu}$
My apt	pointment expires	4-	2-02	

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