ARTMENT OF COMMERCE Patent and Trademark Offin ts or copy thereof. 101085765 2. Name and address of receiving party(ies) Pioneer Hi-Bred International, Inc. Corporate Intellectual Property 7100 N.W. 62 nd Avenue P.O. Box 1000 Johnston, Iowa 50131-1000 Additional name(s) and address(es) attached? Yes Notes arger range of Name
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Pioneer Hi-Bred International, Inc. Corporate Intellectual Property 7100 N.W. 62 nd Avenue P.O. Box 1000 Johnston, Iowa 50131-1000 Additional name(s) and address(es) attached?
Corporate Intellectual Property 7100 N.W. 62 nd Avenue P.O. Box 1000 Johnston, Iowa 50131-1000 Additional name(s) and address(es) attached?
nge of Name
nge of Name
B. Patent No.(s)
 d?
6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 3.41) \$\frac{40.00}{\text{ Enclosed}}\$ Authorized to be charged to deposit account
Deposit account number: 16-1852. (Attach a duplicate copy of this page if paying by deposit account)
THIS SPACE
on is true and correct and any attached copy is a true copy of Signature Date

PATENT REEL: 009988 FRAME: 0862

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, 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 "NUCLEOTIDE SEQUENCES ENCODING MAIZE RAD51"

executed concurrently herewith
executed on
Serial No. 09/246,963 filed February 9, 1999

as set forth in this United States Patent Application

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: 009988 FRAME: 0863

The undersigned hereby grant an authorized representative of Assignee 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.

5	13/99	Ben 1	ti Bowen	
Date		Benjamin A	Bowen	
) wa)	SS.		
County of \mathcal{L}	OLK)			
person who app	eared before me and so t to be his free and	aid person acknowl	evidence that Benjamin A. Eledged that he signed this inshe uses and purposes ment	strument and
	5	Signature of Notary Public	Genny Boesen	<u> </u>
	1	Printed Name	Finny Boesen	
	I	My appointment ex	cpires CHANCE BOILDING BOILDIN	ESFN NE HES DO /

5-5-95	Mark a. Clambeli			
Date	Mark A. Chamberlin			
State of <u>Jowa</u>)) ss.			
County of Polk)			
person who appeared before me and	or have satisfactory evidence that Mark A. Chamberlin is the said person acknowledged that he signed this instrument and voluntary act for the uses and purposes mentioned in the			
	Dated			
	Signature of Juney Boesen			
	Printed Name Ginny Boesen			
	My appointment expires GINNY BOESEN MY COMMISSION EXPIRES			
april 28,1999 Date	Bruce J. Drummond Bruce J. Drummond			
State of Jowa County of POLIC)) ss.)			
I certify that I know or have satisfactory evidence that Bruce J. Drummond 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.				
	Dated 4-28-99			
	Signature of Notary Public Luny Soesen			
	Printed Name Grany Bresen			

MY COMMISSION EXPIRES
8-18-2001

My appointment expires

April 14, 1999	John G. M. Elin
Date	John A. McElver
State of North Carolina	
County of Ducham	S\$.

I certify that I know or have satisfactory evidence that John A. McElver 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.

Dated Opvi	1 12+	1999
Signature of Notary Public	Tall	essBraners
		er 5 Branker
My appointment ex	nires 6	600617618

RECORDED: 05/14/1999