#### 05/11/2018 504910434

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4957178

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
NICHOLAS ADAM CROWLEY	03/01/2018
CHARLES THOMAS CUNNYNGHAM	02/19/2018
MARK JACOB GADLAGE	02/20/2018
THOMAS RUSSELL HENRY	02/20/2018
RANDALL NEWTON HOLLEY	02/24/2018
DANIEL JOSEPH POHL	03/05/2018
JENNIFER ANN STEINKE	02/26/2018

# **RECEIVING PARTY DATA**

Name:	PIONEER HI-BRED INTERNATIONAL, INC.
Street Address:	7100 N.W. 62ND AVENUE
Internal Address:	P.O. BOX 1014
City:	JOHNSTON
State/Country:	IOWA
Postal Code:	50131-1014

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15924646

### **CORRESPONDENCE DATA**

(515)535-6883 Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 515-535-5859

Email: **IPSUPPORT@PIONEER.COM** 

**Correspondent Name:** PIONEER HI-BRED INTERNATIONAL, INC.

Address Line 1: 7250 N.W. 62ND AVENUE

Address Line 2: P.O. BOX 552

Address Line 4: JOHNSTON, IOWA 50131-0552

ATTORNEY DOCKET NUMBER:	7648-US-NP
NAME OF SUBMITTER:	LYNDA M. FITZPATRICK
SIGNATURE:	/Imfitzpatrick/

PAIENI **REEL: 045777 FRAME: 0491** 504910434

DATE SIGNED:	05/11/2018		
Total Attachments: 7			
source=7648USNP_X13M606_ExecutedAssignments#page1.tif			
source=7648USNP_X13M606_ExecutedAssignments#page2.tif			
source=7648USNP_X13M606_Execute	dAssignments#page3.tif		
source=7648USNP_X13M606_Execute	dAssignments#page4.tif		
source=7648USNP_X13M606_Execute	dAssignments#page5.tif		
source=7648USNP_X13M606_Execute	dAssignments#page6.tif		
source=7648USNP_X13M606_Execute	dAssignments#page7.tif		

PATENT REEL: 045777 FRAME: 0492

	WORLDWIDE ASSIGNA		
, the undersigned <u>NICHOLAS ADAM CROW</u> <u>K13M606</u> the subject matter of which is descr			
declaration executed on			
United States Of America	Patent Application Serial No.	15/924646 , filed o	on 03/19/2018
PCT Application Serial No.	filed on		
which claim(s) its earliest priority to Applicat		, fil	ed on
For valuable consideration, the receip	ot and adequacy of which is he	reby acknowledged, and i	n fulfillment of my pre-existing
obligation of assignment to assignee, which is	hereby acknowledged, I hereb	ıy:	
. Sell, assign, and transfer unto PIONEER HI-B	RED INTERNATIONAL, INC., a o	corporation organized and	existing under the laws of the
State of Iowa In the United States of Americ			
lohnston, Iowa 50131-1014, herein referred to			
(A) the entire right, title, and interest in			
ights derived from such aforesald application			
Property ("International Convention") and a			
countries of the International Convention or			
<ul><li>(3) any and all of my inventions, whether journing out of such aforesaid application(s) for</li></ul>			
n any country whatsoever, including all provi			
part, international and convention application			
nventions, (5) any and all patents for any su			
extensions of any patent based in whole or in			
the entire right to (1) file such applications in			
Convention or any other treaty or understand			
and Trademarks of the United States of Amer	ica and any counterpart in any	y other patent office being	thereby authorized to issue or
transfer all of said patents to said assignee in			
and damages for any and all infringements th			
sald patents may be granted, as fully and ent	irely as the same would have	been held and enjoyed by	the undersigned without this
assignment;			
I. Agree, whenever assignee asks, without ful			
(A) to communicate to said assignee, its	· •	•	•
nventions or the rights described above, (B)			
above, the location of that testimony to be in should my country of residence prohibit such			
by said assignee, its successors, assigns and			
ncluding petitions, specifications, oaths, ass		-	
requested by said assignee and (D) general			
epresentatives to obtain, maintain, defend a			
vith assignee;		•	
II. Represent, warrant and covenant that I ha	eve the full right and lawful aut	thority to make this assign	ment, that such assigned right
s not pre-dated by any grant, license, or other	right heretofore given by me	to any party other than th	e assignee hereto;
V. Agree that my grants and obligations here	in shall also bind all of my he	irs, executors, administrat	ors, legal representatives, and
issigns; and			
/. Agree that an authorized representative			
dentification which may be necessary or desi			
office of any other country for recordation		g the power to insert or	this assignment information
egarding application number and filing date v			
n Witness Whereof, I have executed this Wo			
Assignment shall be effective as of the earliest	priority date for the aforesaid	application(s) for Letters	Patent.
	11110	/_	11/19
NICHOLAS ADAM CROWLEY	Notels & Card Signature of Inventor	10g _0:	1/01/18
Name of Inventor 1	Signature of Inventor	Date	,

PATENT REEL: 045777 FRAME: 0493

# **WORLDWIDE ASSIGNMENT** I, the undersigned CHARLES THOMAS CUNNYNGHAM, hereby declare that I am an inventor of an invention entitled MAIZE HYBRID

Patent Application Serial No. 15/924646 , filed on 03/19/2018

X13M606 the subject matter of which is described in the application for patent (Attorney Docket No: 7648-US-NP)

declaration executed on

**United States Of America** 

 $\boxtimes$ 

PCT Application Serial No.	filed on	
which claim(s) its earliest priority to Appli	cation Serial No.	, filed on
		acknowledged, and in fulfillment of my pre-existing
obligation of assignment to assignee, which		
State of Iowa in the United States of Ame	rica and having its principal place of	oration organized and existing under the laws of the business at 7100 NW 62 <sup>nd</sup> Avenue, P.O. Box 1014,
Johnston, Iowa 50131-1014, herein referred		
rights derived from such aforesaid application Property ("International Convention") and countries of the International Convention (3) any and all of my inventions, whether arising out of such aforesaid application(s) in any country whatsoever, including all propart, International and convention applications, (5) any and all patents for any extensions of any patent based in whole or the entire right to (1) file such applications Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of American Convention or any other treaty or understand Trademarks of the United States of Convention Office Co	ion(s) for Patent by virtue of the Inter I any other treaty or understanding or other treaty or understanding, income joint or sole, disclosed in such aford for Patent ("Inventions"), (4) any are ovisional, non-provisional, divisional, tions based in whole or in part upon a such Inventions in any country what in part upon such aforesaid application is in its name or in my name, (2) file anding, (3) have said patents granted perica and any counterpart in any other	ion(s) for Letters Patent ("Patent"), (2) any priority rnational Convention for the Protection of Industrial for intellectual property for any and all member cluding rights in any and all provisional applications, esaid application(s) for Patent, and/or related to or and all applications for Patent for any such Inventions renewal, substitute, continuation, continuations-insuch aforesaid application(s) for Patent and/or such isoever, including any and all reexams, reissues and ion(s) for Letters Patent and/or such Inventions; (B) such applications under the aforesaid International d in its name or mine, the Commissioner of Patents are patent office being hereby authorized to issue or force said patents and to sue for and recover profits
· · · · · · · · · · · · · · · · · · ·		iture, to the full end of the term or terms for which
		n held and enjoyed by the undersigned without this
(A) to communicate to said assignee, inventions or the rights described above, (above, the location of that testimony to be should my country of residence prohibit suby said assignee, its successors, assigns an including petitions, specifications, oaths, requested by said assignee and (D) general	its successors, assigns, and legal repricates to testify in any legal proceeding in the country in which I reside or in the testimony, (C) to execute all applicant legal representatives, to carry in assignments, disclaimers, and lawfurally to do everything possible to a	e's expense for actual and reasonable costs incurred, esentatives, any facts known to me respecting such respecting such inventions or the rights described the nearest country in which such testimony is legal cations, papers or instruments necessary or required to effect any of the provisions of this instrument, all affidavits in form and substance which may be aid said assignee, its successors, assigns, and legal uch inventions and/or secure title to such inventions
<ol> <li>Represent, warrant and covenant that I is not pre-dated by any grant, license, or otl</li> </ol>	her right heretofore given by me to a	ity to make this assignment, that such assigned right ny party other than the assignee hereto; executors, administrators, legal representatives, and
identification which may be necessary or d	lesirable to comply with the rules of on of this Assignment, including the	he power to insert in this assignment any further the U.S. Patent and Trademark Office or the patent e power to insert on this assignment information
In Witness Whereof, I have executed this	Worldwide Assignment on the date is	ndicated by my hand and agree that this Worldwide
Assignment shall be effective as of the earlie		
CHARLES THOMAS	M DTI I	
CUNNYNGHAM	Mark Chomes Jun	myn/ham 2-19-18
Name of Inventor 2	Signature of Inventor	/ Date

**PATENT REEL: 045777 FRAME: 0494** 

#### WORLDWIDE ASSIGNMENT

**PATENT** 

**REEL: 045777 FRAME: 0495** 

# **WORLDWIDE ASSIGNMENT**

I, the undersigned THOMAS RUSSELL HENRY, hereby declare that I am an invent.	
the subject matter of which is described in the application for patent (Attorne	y Docket No: <u>7648-US-NP</u> )
declaration executed on	
	5/924646 , filed on $03/19/2018$ ,
PCT Application Serial Nofiled on	
which claim(s) its earliest priority to Application Serial No.	, filed on
For valuable consideration, the receipt and adequacy of which is here	• • • • • • • • • • • • • • • • • • • •
obligation of assignment to assignee, which is hereby acknowledged, I hereby:	
1. Sell, assign, and transfer unto PIONEER HI-BRED INTERNATIONAL, INC., a co	
State of lows in the United States of America and having its principal place	of business at 7100 NW 62 <sup>rd</sup> Avenue, P.O. Box 1014,
Johnston, lowa 50131-1014, herein referred to as the assignee, and to assignee (A) the entire right, title, and interest in and to: (1) the aforesaid applications.	
rights derived from such aforesaid application(s) for Patent by virtue of the In	
Property ("International Convention") and any other treaty or understandi	
countries of the International Convention or other treaty or understanding, i	
(3) any and all of my inventions, whether joint or sole, disclosed in such afe	
arising out of such aforesaid application(s) for Patent ("Inventions"), (4) any	
in any country whatsoever, including all provisional, non-provisional, divisional	
part, international and convention applications based in whole or in part upo	on such aforesaid application(s) for Patent and/or such
Inventions, (5) any and all patents for any such Inventions in any country wh	hatsoever, including any and all reexams, reissues and
extensions of any patent based in whole or in part upon such aforesaid applic	cation(s) for Letters Patent and/or such Inventions; (B)
the entire right to (1) file such applications in its name or in my name, (2) fi Convention or any other treaty or understanding, (3) have said patents grant	ile such applications under the aforesaid International
and Trademarks of the United States of America and any counterpart in any o	other natent office being boroby authorized to issue or
transfer all of said patents to said assignee in accordance herewith, and (4) e	enforce said patents and to sue for and recover profite
and damages for any and all infringements thereof, whether past, present or	future, to the full end of the term or terms for which
said patents may be granted, as fully and entirely as the same would have be	een held and enjoyed by the undersigned without this
assignment;	
II. Agree, whenever assignee asks, without further compensation but at assign	nee's expense for actual and reasonable costs incurred,
(A) to communicate to said assignee, its successors, assigns, and legal re	presentatives, any facts known to me respecting such
Inventions or the rights described above, (B) to testify in any legal proceedings	ng respecting such Inventions or the rights described
above, the location of that testimony to be in the country in which I reside or	in the nearest country in which such testimony is legal
should my country of residence prohibit such testimony, (C) to execute all app	Silications, papers or instruments necessary or required
by said assignee, its successors, assigns and legal representatives, to carry including petitions, specifications, oaths, assignments, disclaimers, and law	into effect any of the provisions of this instrument,
requested by said assignee and (D) generally to do everything possible to	and said assigned its successors assigns and least
representatives to obtain, maintain, defend and enforce patent protection for	c such inventions and/or secure title to such inventions
with assignee;	and inventions and or accure alle to aller inventions
III. Represent, warrant and covenant that I have the full right and lawful author	ority to make this assignment, that such assigned right
is not pre-dated by any grant, license, or other right heretofore given by me to	any party other than the assignee hereto:
V. Agree that my grants and obligations herein shall also bind all of my heirs	s, executors, administrators, legal representatives, and
assigns; and	
V. Agree that an authorized representative of assignee is hereby granted	the power to insert in this assignment any further
identification which may be necessary or desirable to comply with the rules of	of the U.S. Patent and Trademark Office or the patent
office of any other country for recordation of this Assignment, including tregarding application number and filing date when known.	the power to insert on this assignment information
	a ladinated has now haved a color of a color of the color
In Witness Whereof, I have executed this Worldwide Assignment on the date Assignment shall be effective as of the earliest priority date for the aforesaid ap	: mulcaled by my nand and agree that this Worldwide
residention summer of effective as of the earliest buotify date for the gioresaid abl	phoanon(s) for Letters Patent.
/	
THOMAS RUSSELL HENRY Thank Russe	1/1kg 2/20/18

Signature of Inventor

Name of Inventor 4

**REEL: 045777 FRAME: 0496** 

WORLDWIDE ASSIGNMENT				
I, the undersigned RANDALL NEWTON HOLLEY, It X13M606 the subject matter of which is described in	hereby declare that I a n the application for pat	am an inventor of a tent (Attorney Docket	n Invention entitled MAIZE HYBRID  No: 7648-US-NP	
declaration executed on	•			
	Application Serial No.	15/924646	filed on $03/19/2018$ ,	
PCT Application Serial No.	filed on			
which claim(s) its earliest priority to Application Se	erial No.		, filed on	
For valuable consideration, the receipt and	adequacy of which is h	ereby acknowledged,	and in fulfillment of my pre-existing	
obligation of assignment to assignee, which is hereb	y acknowledged, I here	eby:		
I. Sell, assign, and transfer unto PIONEER HI-BRED II	NTERNATIONAL, INC., a	corporation organize	d and existing under the laws of the	
State of Iowa in the United States of America and	having its principal pla	ce of business at 710	00 NW 62 <sup>rd</sup> Avenue, P.O. Box 1014,	
Johnston, Iowa 50131-1014, herein referred to as th	e assignee, and to assign	mee's successors and	assigns,	
(A) the entire right, title, and interest in and t	o: (1) the atoresaid app	plication(s) for Letter:	s Patent ( Patent ), (2) any priority	
rights derived from such aforesaid application(s) for Property ("International Convention") and any oti	has trants or understa	s international Conver	I property for any and all member	
countries of the International Convention or other	treaty or understandin	na including rights in	any and all provisional applications.	
(3) any and all of my inventions, whether joint or	sole disclosed in such	aforesaid application	n(s) for Patent, and/or related to or	
arising out of such aforesaid application(s) for Pater	nt ("Inventions"). (4) a	any and all application	ns for Patent for any such Inventions	
in any country whatsoever, including all provisional	, non-provisional, divisi	ional, renewal, substi	tute, continuation, continuations-in-	
part, international and convention applications bas-	ed in whole or in part (	upon such aforesaid a	pplication(s) for Patent and/or such	
inventions, (5) any and all patents for any such inv	entions in any country	whatsoever, including	ig any and all reexams, reissues and	
extensions of any patent based in whole or in part	upon such aforesaid app	plication(s) for Letter:	s Patent and/or such Inventions; (B)	
the entire right to (1) file such applications in its n	ame or in my name, (2	!) file such application	ns under the aforesaid international	
Convention or any other treaty or understanding, (	3) have said patents gr	anted in its name or	mine, the Commissioner of Patents	
and Trademarks of the United States of America an transfer all of said patents to said assignee in accor	o any counterpart in ar	ny otner patent omice A) enforce said naten	te and to sue for and recover profits	
and damages for any and all infringements thereof,	whother nest present	or future to the full	end of the term or terms for which	
said patents may be granted, as fully and entirely a	is the same would have	been held and enion	ved by the undersigned without this	
assignment;		·	, ,	
II. Agree, whenever assignee asks, without further of	compensation but at ass	signee's expense for a	ctual and reasonable costs incurred,	
(A) to communicate to said assignee, its success	ssors, assigns, and legal	l representatives, any	facts known to me respecting such	
Inventions or the rights described above, (B) to te				
above, the location of that testimony to be in the co				
should my country of residence prohibit such testing				
by said assignee, its successors, assigns and legal	representatives, to car	rry into effect any o	t the provisions of this instrument,	
including petitions, specifications, oaths, assignment requested by said assignee and (D) generally to				
representatives to obtain, maintain, defend and enf				
with assignee;	orac patent protection	TOT SOCIT INVESTIGATIONS O	na, or second dide to seen inventions	
III. Represent, warrant and covenant that I have the	e full right and lawful a	uthority to make this	assignment, that such assigned right	
is not pre-dated by any grant, license, or other right				
IV. Agree that my grants and obligations herein sha	all also bind all of my h	eirs, executors, admir	nistrators, legal representatives, and	
assigns; and		•		
V. Agree that an authorized representative of a				
identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office or the patent office of any other country for recordation of this Assignment, including the power to insert on this assignment information				
· · · · · · · · · · · · · · · · · · ·		ng the power to ins	ert on this assignment information	
regarding application number and filing date when l		d-1-1-1-1-1-1-1	1 7 7	
In Witness Whereof, I have executed this Worldwide Assignment on the date indicated by my hand and agree that this Worldwide Assignment shall be effective as of the earliest priority date for the aforesaid application(s) for Letters Patent.				
Assignment shall be effective as of the earnest priority date for the aforesaid application(s) for Letters Faterit.				
	111/2	1 01 11		
RANDALL NEWTON HOLLEY	Padel / nat	m Haller	2/2V/2014	
Name of Inventor 5	Signature of Inventor	·· A TANA	Date O	
p 100000 WA 000 T 1000 WA F	O	-		

**PATENT** 

**REEL: 045777 FRAME: 0497** 

# WORLDWIDE ASSIGNMENT

	WORLDWIDE ASSIGN	<del></del>			
I, the undersigned <u>DANIEL JOSEPH POHL</u> , he subject matter of which is described in the ap				MAIZE HYBRID X13M60	<u>6</u> the
declaration executed on			<del>-</del>		
☐ United States Of America	Patent Application Serial No.	, 15/924646	filed on	03/19/2018	
PCT Application Serial No.		_13/724040	_,	03/17/2010	,
which claim(s) its earliest priority to Applica	filed on		, filed	nn	
For valuable consideration, the rece		prehv acknowleda			ictina
obligation of assignment to assignee, which is			cu, and in i	miniment of my pre-ext	Sung
I. Sell, assign, and transfer unto PIONEER HI-			ized and ex	isting under the laws o	of the
State of Iowa in the United States of Ameri					
Johnston, Iowa 50131-1014, herein referred				_ , <b>,</b> ,	
(A) the entire right, title, and interest in				("Patent"), (2) any pri	iority
rights derived from such aforesaid applicatio					
Property ("International Convention") and	any other treaty or understa	inding for intellect	ua! propert	y for any and all mer	mber
countries of the International Convention or	other treaty or understanding	ng, including rights	in any and	all provisional applicat	ions,
(3) any and all of my inventions, whether j					
arising out of such aforesaid application(s) for	or Patent ("Inventions"), (4)	any and all applicat	tions for Pat	ent for any such invent	tions
in any country whatsoever, including all prov	visional, non-provisional, divis	ional, renewal, sub	stitute, con	tinuation, continuation	ıs-in-
part, international and convention application					
Inventions, (5) any and all patents for any s	uch inventions in any country	whatsoever, inclu	ding any an	d all reexams, reissues	s and
extensions of any patent based in whole or i	n part upon such aforesaid ap	plication(s) for Lett	ters Patent	and/or such Inventions	; (B)
the entire right to (1) file such applications	in its name or in my name, (2	!) tile such applicat	tions under	the aforesaid internat	ional
Convention or any other treaty or understar	iding, (3) have said patents gi	ranted in its name	or mine, tr	e Commissioner of Pat	tents
and Trademarks of the United States of Ame transfer all of sald patents to said assignee in	rica and any counterpart in ar	ly other patent on	ice being ne	reby authorized to issu	ie or
and damages for any and all infringements t	hereof whether neet present	+) enforce said pat	ents and to	sue for and recover pr	OTITS
said patents may be granted, as fully and en	itirely as the same would have	. Or rulure, to the i	iuii ena oi t	ne term or terms for w	VIIICN
assignment;	the Same Would have	s Deen Heid and El	ijoyeu by ti	e nunciolignen without	r mi12
II. Agree, whenever assignee asks, without fu	urther compensation but at as	cianoo's ovnanco fr	r actual and	ł rozeonablo coete inew	-rod
(A) to communicate to said assignee, its	successors, assigns, and legal	l renresentatives	n actual and any farte kn	own to me recreating	euch
Inventions or the rights described above, (8	b) to testify in any legal proce	eding respecting s	uch inventi	own to me respecting	rihed
above, the location of that testimony to be in	n the country in which I reside	or in the nearest of	country in w	hich such testimony is	legal
should my country of residence prohibit such	testimony, (C) to execute all	applications, paper	s or instrun	nents necessary or real	uired
by said assignee, its successors, assigns and	d legal representatives, to ca	rry into effect any	of the pro	visions of this instrum	nent,
including petitions, specifications, oaths, assignments, disclaimers, and lawful affidavits in form and substance which may be					
requested by said assignee and (D) generally to do everything possible to aid said assignee, its successors, assigns, and legal					
representatives to obtain, maintain, defend a	and enforce patent protection	for such invention	s and/or se	cure title to such invent	tions
with assignee;					
III. Represent, warrant and covenant that I h	ave the full right and lawful a	uthority to make th	nis assignme	nt, that such assigned	right
is not pre-dated by any grant, license, or other	er right heretofore given by me	e to any party othe	r than the a	ssignee hereto;	
IV. Agree that my grants and obligations her	rein shall also bind all of my h	eirs, executors, adi	ministrators	, legal representatives,	, and
assigns; and	o of occionos is basely, such	And 16:			
V. Agree that an authorized representative identification which may be necessary or design.	e or assignee is nereby gran	ted the power to	insert in ti	his assignment any fur	rther
office of any other country for recordation	o of this Assignment including	es of the power to i	nt and Irac	emark Office or the pa	itent
regarding application number and filing date	when known	ig the power to i	nsert on tr	is assignment informa	ation
In Witness Whereof, I have executed this W	· ·	data indicated by	band an		
Assignment shall be affective as of the soulise	or award Assignment on the	late indicated by it	ny nand and	i agree that this world	wide
Assignment shall be effective as of the earliest priority date for the aforesaid application(s) for Letters Patent.					
				_	
DANIEL JOSEPH POHL	Il This	L	210	5/18	
Name of Inventor 6	Signature of Inventor		Date	7110	
	· · · · · · · · · · · · · · · · · · ·				

PATENT REEL: 045777 FRAME: 0498

WORLDWIDE ASSIGNMENT	
I, the undersigned <u>JENNIFER ANN STEINKE</u> , hereby declare that I am an inventor of an invention entitled <u>MAIZE HYBRID X13M60</u> the subject matter of which is described in the application for patent (Attorney Docket No: <u>7648-US-NP</u> )	<u> </u>
declaration executed on	
United States Of America Patent Application Serial No. 15/924646 , filed on 03/19/2018 ,	
PCT Application Serial No. filed on	
which claim(s) its earliest priority to Application Serial No, filed on	
For valuable consideration, the receipt and adequacy of which is hereby acknowledged, and in fulfillment of my pre-existing	g
obligation of assignment to assignee, which is hereby acknowledged, I hereby:	
1. Sell, assign, and transfer unto PIONEER HI-BRED INTERNATIONAL, INC., a corporation organized and existing under the laws of th	2
State of Iowa in the United States of America and having its principal place of business at 7100 NW 62 <sup>nd</sup> Avenue, P.O. Box 1014	,
Johnston, Iowa 50131-1014, herein referred to as the assignee, and to assignee's successors and assigns,	
(A) the entire right, title, and interest in and to: (1) the aforesaid application(s) for Letters Patent ("Patent"), (2) any priorit	
rights derived from such aforesaid application(s) for Patent by virtue of the International Convention for the Protection of Industria	
Property ("International Convention") and any other treaty or understanding for intellectual property for any and all members	
countries of the International Convention or other treaty or understanding, including rights in any and all provisional applications	
(3) any and all of my inventions, whether joint or sole, disclosed in such aforesaid application(s) for Patent, and/or related to o	
arising out of such aforesaid application(s) for Patent ("Inventions"), (4) any and all applications for Patent for any such Inventions	
in any country whatsoever, including all provisional, non-provisional, divisional, renewal, substitute, continuation, continuations-in-	
part, International and convention applications based in whole or in part upon such aforesaid application(s) for Patent and/or suc Inventions, (5) any and all patents for any such Inventions in any country whatsoever, including any and all reexams, reissues an	
extensions of any patent based in whole or in part upon such aforesaid application(s) for Letters Patent and/or such inventions; (§	
the entire right to (1) file such applications in its name or in my name, (2) file such applications under the aforesaid internations	
Convention or any other treaty or understanding, (3) have said patents granted in its name or mine, the Commissioner of Patent	
and Trademarks of the United States of America and any counterpart in any other patent office being hereby authorized to issue of	
transfer all of said patents to said assignee in accordance herewith, and (4) enforce said patents and to sue for and recover profit	
and damages for any and all infringements thereof, whether past, present or future, to the full end of the term or terms for which	
said patents may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned without th	
assignment;	
II. Agree, whenever assignee asks, without further compensation but at assignee's expense for actual and reasonable costs incurred	,
(A) to communicate to said assignee, its successors, assigns, and legal representatives, any facts known to me respecting suc	
Inventions or the rights described above, (B) to testify in any legal proceeding respecting such Inventions or the rights describe	
above, the location of that testimony to be in the country in which I reside or in the nearest country in which such testimony is legal	
should my country of residence prohibit such testimony, (C) to execute all applications, papers or instruments necessary or require	
by said assignee, its successors, assigns and legal representatives, to carry into effect any of the provisions of this instrumen	
including petitions, specifications, oaths, assignments, disclaimers, and lawful affidavits in form and substance which may be requested by said assignee and (D) generally to do everything possible to aid said assignee, its successors, assigns, and legi	
representatives to obtain, maintain, defend and enforce patent protection for such inventions and/or secure title to such invention	
with assignee;	3
III. Represent, warrant and covenant that I have the full right and lawful authority to make this assignment, that such assigned right	t
is not pre-dated by any grant, license, or other right heretofore given by me to any party other than the assignee hereto;	•
IV. Agree that my grants and obligations herein shall also bind all of my heirs, executors, administrators, legal representatives, an	d
assigns; and	
V. Agree that an authorized representative of assignee is hereby granted the power to insert in this assignment any further	r
identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office or the pater	t
office of any other country for recordation of this Assignment, including the power to insert on this assignment informatio	1
regarding application number and filing date when known.	
In Witness Whereof, I have executed this Worldwide Assignment on the date indicated by my hand and agree that this Worldwide	е
Assignment shall be effective as of the earliest priority date for the aforesaid application(s) for Letters Patent.	
JENNIFER ANN STEINKE / Combon H. Jahr 2/36/18	
Name of Inventor 7 Signature of Inventor Date	

**PATENT** REEL: 045777 FRAME: 0499

**RECORDED: 05/11/2018**