PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7698559

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANDREW MARK CIGAN	03/29/2017
HUIRONG GAO	03/21/2017
ZHAN-BIN LIU	03/21/2017
JASDEEP MUTTI	03/21/2017
DEAN PODLICH	03/21/2017
CHRISTOPHER SCELONGE	03/21/2017

RECEIVING PARTY DATA

Name:	PIONEER HI-BRED INTERNATIONAL, INC.
Street Address:	7100 NW 62ND AVENUE
Internal Address:	PO BOX 1014
City:	JOHNSTON
State/Country:	IOWA
Postal Code:	50131-1014
Name:	E. I. DU PONT DE NEMOURS AND COMPANY
Street Address:	CHESTNUT RUN PLAZA 974 CENTRE ROAD PO BOX 2915
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19805

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18066607

CORRESPONDENCE DATA

Fax Number: (515)535-6883

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: 5152703200

Email: IPSUPPORT@CORTEVA.COM

Correspondent Name: JEROD KUBLY

Address Line 1: 7250 NW 62ND AVENUE

Address Line 2: PO BOX 552

PATENT

REEL: 062120 FRAME: 0234 507651424

Address Line 4: JC	OHNSTON, IOWA 50131-0552
ATTORNEY DOCKET NUMBER:	BB2355-US-PCN
NAME OF SUBMITTER:	JEROD KUBLY
SIGNATURE:	/JEROD KUBLY/
DATE SIGNED:	12/16/2022
Total Attachments: 6	

source=20221215_BB2355USPCT_ExecutedAssignments#page1.tif source=20221215_BB2355USPCT_ExecutedAssignments#page2.tif source=20221215_BB2355USPCT_ExecutedAssignments#page3.tif source=20221215_BB2355USPCT_ExecutedAssignments#page4.tif source=20221215_BB2355USPCT_ExecutedAssignments#page5.tif source=20221215_BB2355USPCT_ExecutedAssignments#page6.tif

I, the undersigned <u>ANDREW MARK CIGAN</u> , hereby dec	clare that I am an inver		titled GENERATION OF SITE SPECIFIC
INTEGRATION SITES FOR COMPLEX TRAIT LOCI IN COR		METHODS OF USE the	subject matter of which is described
in the application for patent (Attorney Docket No: BE	2355-US-PCT_)		
declaration executed on			
United States Of America Patent	Application Serial No.	<u>15/510037</u> , t	filed on March 9, 2017 ,
PCT Application Serial No.	filed on		
which claim(s) its earliest priority to Application Ser			, filed on
For valuable consideration, the receipt and a			and in fulfillment of my pre-existing
obligation of assignment to assignee, which is hereby	_		
I. Sell, assign, and transfer unto PIONEER HI-BRED IN			
State of Iowa in the United States of America and h			
Johnston, Iowa 50131-1014, herein referred to as the	-		_
(A) the entire right, title, and interest in and to: (1			
derived from such aforesaid application(s) for Patent b			
("International Convention") and any other treaty or			
International Convention or other treaty or understa my inventions, whether joint or sole, disclosed in su		-	
aforesaid application(s) for Patent ("Inventions"),	, ,		
whatsoever, including all provisional, non-provis			
international and convention applications based in			
Inventions, (5) any and all patents for any such Inve			
extensions of any patent based in whole or in part up			
the entire right to (1) file such applications in its nar			
Convention or any other treaty or understanding, (3)	· · · · · · · · · · · · · · · · · · ·		
Trademarks of the United States of America and any co			
all of said patents to said assignee in accordance herev			
for any and all infringements thereof, whether past, p			
be granted, as fully and entirely as the same would ha			
II. Agree, whenever assignee asks, without further co	mpensation but at ass	signee's expense for a	ctual and reasonable costs incurred,
(A) to communicate to said assignee, its success	ors, assigns, and legal	representatives, any	facts known to me respecting such
Inventions or the rights described above, (B) to testify	in any legal proceedin	g respecting such Inve	ntions or the rights described above,
the location of that testimony to be in the country in			
my country of residence prohibit such testimony, (C)			
assignee, its successors, assigns and legal represent			
petitions, specifications, oaths, assignments, disclaiments, disclaiment			
assignee and (D) generally to do everything possible			
maintain, defend and enforce patent protection for su			
III. Represent, warrant and covenant that I have the			
is not pre-dated by any grant, license, or other right h			
IV. Agree that my grants and obligations herein shal	l also bind all of my h	eirs, executors, admir	listrators, legal representatives, and
assigns; and	:		and in this position was not any frombour
V. Agree that an authorized representative of assidentification which may be necessary or desirable to			
office of any other country for recordation of this Assi			
•	giinient, including the	power to msert on th	is assignment information regarding
application number and filing date when known.	. A - si - u - u - u - u - u - u - u - u - u -	loto indianted by way b	and and agree that this Warldwide
In Witness Whereof, I have executed this Worldwide			
Assignment shall be effective as of the earliest priorit	y date for the aforesal	d application(s) for Le	tters Patent.
	, , ,	√*	
ANDREW MARK CIGAN	An Link	nd 6"	March 29, 2017
	Signature of Inventor		Date
Manie of inventor 1	Signature of inventor	1	Dutt

I, the undersigned <u>HUIRONG GAO</u> , hereby declare <u>INTEGRATION SITES FOR COMPLEX TRAIT LOCI IN COR</u> in the application for patent (Attorney Docket No: <u>BI</u>	N AND SOYBEAN, AND	r of an invention en		
declaration executed on	,			
	Application Serial No.	15/510027	filed on	March 9, 2017 ,
	• •	13/31003/	illeu on	<u>ividi Cit 3, 2017</u> ,
PCT Application Serial No.	filed on		C:11	_
which claim(s) its earliest priority to Application Ser			, filed	
For valuable consideration, the receipt and a			i, and in t	ulfillment of my pre-existing
obligation of assignment to assignee, which is hereby			رم امممام	visting under the level of the
I. Sell, assign, and transfer unto PIONEER HI-BRED IN State of Iowa in the United States of America and H				
Johnston, Iowa 50131-1014, herein referred to as the				72 Avenue, F.O. DOX 1014,
(A) the entire right, title, and interest in and to: (1				tent") (2) any priority rights
derived from such aforesaid application(s) for Patent				
("International Convention") and any other treaty or				
International Convention or other treaty or understa				
my inventions, whether joint or sole, disclosed in su				
aforesaid application(s) for Patent ("Inventions"),				
whatsoever, including all provisional, non-provisional				
international and convention applications based in				
Inventions, (5) any and all patents for any such Inventions				
extensions of any patent based in whole or in part u				
the entire right to (1) file such applications in its na				
Convention or any other treaty or understanding, (3)	have said patents grar	nted in its name or m	ine, the C	Commissioner of Patents and
Trademarks of the United States of America and any c	ounterpart in any othe	r patent office being	hereby a	uthorized to issue or transfer
all of said patents to said assignee in accordance here	with, and (4) enforce s	aid patents and to su	e for and	recover profits and damages
for any and all infringements thereof, whether past, p	present or future, to th	e full end of the tern	n or term:	s for which said patents may
be granted, as fully and entirely as the same would h				
II. Agree, whenever assignee asks, without further co				
(A) to communicate to said assignee, its success				
Inventions or the rights described above, (B) to testify				
the location of that testimony to be in the country in				
my country of residence prohibit such testimony, (C)				
assignee, its successors, assigns and legal represent				
petitions, specifications, oaths, assignments, disclaim				
assignee and (D) generally to do everything possible				
maintain, defend and enforce patent protection for s III. Represent, warrant and covenant that I have the				
is not pre-dated by any grant, license, or other right				
IV. Agree that my grants and obligations herein sha				
assigns; and	ii aiso biila aii oi iiiy ii	ens, executors, aum	mstrator	s, legal representatives, and
V. Agree that an authorized representative of as:	signee is herehy gran	ted the power to in	sert in t	his assignment any further
identification which may be necessary or desirable t				
office of any other country for recordation of this Ass				
application number and filing date when known.			J	
In Witness Whereof, I have executed this Worldwid	e Assignment on the	date indicated by my	hand an	d agree that this Worldwide
Assignment shall be effective as of the earliest priorit	-			
Assignment shall be effective as of the earnest priority	y date for the aforesare	application(s) for 13	onois i an	ont.
			1	
HI IIDONG GAO	HM/1		3/	211201
HUIRONG GAO	Silver		-	1
Name of Inventor 2	Signature of Inventor		Date	

I the undersigned 7HAN-RIN IIII hereby de	vortervibe Assignivieni	ention entitled GENERATION OF SITE SPECIFIC
		OF USE the subject matter of which is described
in the application for patent (Attorney Docket		are subject matter of which is described.
declaration executed on	· ·	
	Patent Application Serial No. 15/51003	7 , filed on March 9, 2017 ,
PCT Application Serial No.	filed on	
which claim(s) its earliest priority to Applicat		, flied on .
		owledged, and in fulfillment of my pre-existing
obligation of assignment to assignee, which is l		owiedged, and in familinent of my pre-existing
		n organized and existing under the laws of the
		ness at 7100 NW 62 nd Avenue, P.O. Box 1014,
Johnston, Iowa 50131-1014, herein referred to		
		Letters Patent ("Patent"), (2) any priority rights
		vention for the Protection of Industrial Property
("International Convention") and any other tre	aty or understanding for intellectual pro	operty for any and all member countries of the
International Convention or other treaty or un	iderstanding, including rights in any and	l all provisional applications, (3) any and all of
		atent, and/or related to or arising out of such
		Patent for any such Inventions in any country
		ostitute, continuation, continuations-in-part,
		oresaid application(s) for Patent and/or such
		er, including any and all reexams, reissues and
		for Letters Patent and/or such Inventions; (B)
		applications under the aforesaid International
·	•	ame or mine, the Commissioner of Patents and
		fice being hereby authorized to issue or transfer
		and to sue for and recover profits and damages of the term or terms for which said patents may
be granted, as fully and entirely as the same w	·	
		pense for actual and reasonable costs incurred,
·		atives, any facts known to me respecting such
Inventions or the rights described above, (B) to		
the location of that testimony to be in the cou		
		rs or instruments necessary or required by said
		of the provisions of this instrument, including
		and substance which may be requested by said
assignee and (D) generally to do everything po	ssible to aid said assignee, its successor	rs, assigns, and legal representatives to obtain,
maintain, defend and enforce patent protectlo	n for such inventions and/or secure title	e to such Inventions with assignee;
		make this assignment, that such assigned right
is not pre-dated by any grant, license, or other		
•	in shall also bind all of my heirs, execut	tors, administrators, legal representatives, and
assigns; and		
	_ ,	wer to Insert in this assignment any further
		S. Patent and Trademark Office or the patent
		nsert on this assignment information regarding
application number and filing date when know		
		ed by my hand and agree that this Worldwide
Assignment shall be effective as of the earliest	priority date for the aforesaid application	n(s) for Letters Patent,
	-11	• • •
	Thank!	
ZHAN-BIN LIU		
Name of Inventor 3	Signature of Inventor	Date

PATENT

REEL: 062120 FRAME: 0238

I, the undersigned <u>JASDEEP MUTTI</u> , hereby d <u>INTEGRATION SITES FOR COMPLEX TRAIT LOCI I</u>	N CORN AND SOYBEAN, AND			
in the application for patent (Attorney Docket I	No: <u>BB2355-US-PCT</u>)			
declaration executed on				
United States Of America P	atent Application Serial No.	15/510037	, filed on	March 9, 2017 ,
PCT Application Serial No.	filed on			
which claim(s) its earliest priority to Applicati	on Serial No.		, filed	on .
For valuable consideration, the receip		ereby acknowledge	d, and in f	ulfillment of my pre-existing
obligation of assignment to assignee, which is h				
I. Sell, assign, and transfer unto PIONEER HI-BR	RED INTERNATIONAL, INC., a	corporation organiz	ed and ex	isting under the laws of the
State of Iowa in the United States of America	and having its principal pla	ice of business at 7	100 NW 6	2 nd Avenue, P.O. Box 1014,
Johnston, Iowa 50131-1014, herein referred to	as the assignee, and to assig	gnee's successors an	d assigns,	
(A) the entire right, title, and interest in and	d to: (1) the aforesaid applica	ition(s) for Letters Pa	atent ("Pat	tent"), (2) any priority rights
derived from such aforesaid application(s) for Pa	atent by virtue of the Interna	itional Convention fo	or the Prot	ection of Industrial Property
("International Convention") and any other trea	aty or understanding for inte	ellectual property fo	r any and	all member countries of the
International Convention or other treaty or unc	derstanding, including rights	in any and all prov	isional app	olications, (3) any and all of
my inventions, whether joint or sole, disclosed	d in such aforesaid applicati	on(s) for Patent, an	d/or relat	ed to or arising out of such
aforesaid application(s) for Patent ("Invention	ns"), (4) any and all applic	ations for Patent fo	r any suc	h Inventions in any country
whatsoever, including all provisional, non-	-provisional, divisional, rei	newal, substitute,	continuat	tion, continuations-in-part,
international and convention applications bas	sed in whole or in part upo	on such aforesaid a	pplication	(s) for Patent and/or such
Inventions, (5) any and all patents for any suc	ch Inventions in any country	whatsoever, includ	ing any ar	nd all reexams, reissues and
extensions of any patent based in whole or in p	part upon such aforesaid ap _l	olication(s) for Lette	rs Patent	and/or such Inventions; (B)
the entire right to (1) file such applications in	its name or in my name, (2) file such application	ons under	the aforesaid International
Convention or any other treaty or understanding	ng, (3) have said patents gran	ited in its name or m	ine, the C	ommissioner of Patents and
Trademarks of the United States of America and	any counterpart in any othe	r patent office being	hereby au	ıthorized to issue or transfer
all of said patents to said assignee in accordance	herewith, and (4) enforce sa	aid patents and to su	ie for and i	recover profits and damages
for any and all infringements thereof, whether ;				
be granted, as fully and entirely as the same wo	ould have been held and enjo	oyed by the undersig	ned with	out this assignment;
II. Agree, whenever assignee asks, without furt				
(A) to communicate to said assignee, its su	uccessors, assigns, and legal	representatives, ar	y facts kn	own to me respecting such
Inventions or the rights described above, (B) to t	cestify in any legal proceeding	g respecting such Inv	entions or	the rights described above,
the location of that testimony to be in the cour	ntry in which I reside or in th	e nearest country ir	which su	ch testimony is legal should
my country of residence prohibit such testimon	y, (C) to execute all applicat	ions, papers or instr	uments ne	ecessary or required by said
assignee, its successors, assigns and legal repr		· · · · · · · · · · · · · · · · · · ·		= -
petitions, specifications, oaths, assignments, dis				
assignee and (D) generally to do everything pos		_	_	•
maintain, defend and enforce patent protection				-
III. Represent, warrant and covenant that I hav		•	_	
is not pre-dated by any grant, license, or other r				=
IV. Agree that my grants and obligations herei	n shall also bind all of my he	eirs, executors, adm	inistrators	, legal representatives, and
assigns; and				
V. Agree that an authorized representative of	- · · · · · · · · · · · · · · · · · · ·	•		_ ,
identification which may be necessary or desira				
office of any other country for recordation of the		power to insert on t	his assigni	ment information regarding
application number and filing date when known				
In Witness Whereof, I have executed this Worl	ldwide Assignment on the d	ate indicated by my	hand and	l agree that this Worldwide
Assignment shall be effective as of the earliest p	riority date for the aforesaid	application(s) for Lo	etters Pate	nt.
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	$\sim 10^{-1}$	A I	0	1 18 1 10
JASDEEP MUTTI	_ Losel	K/1 1	3,	121/17
Name of Inventor 4	Signature of Inventor		Date	
		was.		•

I, the undersigned <u>DEAN PODLICH</u> , hereby declar INTEGRATION SITES FOR COMPLEX TRAIT LOCI IN CO				
in the application for patent (Attorney Docket No:		WIETHODS OF O.	or the subject i	natter of winem's described
declaration executed on	<u> </u>			
	nt Application Serial No.	15/510037	filed on	March 9, 2017 ,
	filed on	13/31003/	, mea on .	,
PCT Application Serial No.			, filed o	nn
which claim(s) its earliest priority to Application S For valuable consideration, the receipt an	d a dagua ay a fuubiab ia b	oroby colepaydo		
			ugeu, anu in iu	illillinent of my pre-existing
obligation of assignment to assignee, which is here	by acknowledged, I here	Dy:	المحاجمة المحاجبة	esting under the laws of the
I. Sell, assign, and transfer unto PIONEER HI-BRED	INTERNATIONAL, INC., a	corporation org	anized and exi	sting under the laws of the
State of Iowa in the United States of America and	naving its principal pla	ice of business a	3t \ TOO IVW 67	Z Avenue, P.O. Box 1014,
Johnston, Iowa 50131-1014, herein referred to as t	ne assignee, and to assig	gnee's successor:	s and assigns,	ant"\ /2\ any mulanity viahta
(A) the entire right, title, and interest in and to	(1) the aforesaid applica	ition(s) for Lette	rs Patent (Pate	ent), (2) any priority rights
derived from such aforesaid application(s) for Pater	it by virtue of the interna	itional Conventio	on for the Prote	ection of industrial Property
("International Convention") and any other treaty				
International Convention or other treaty or under				
my inventions, whether joint or sole, disclosed in	such aforesaid applicati	on(s) for Patent	, and/or relate	ed to or arising out of such
aforesaid application(s) for Patent ("Inventions")	, (4) any and all applic	ations for Pater	it for any sucr	inventions in any country
whatsoever, including all provisional, non-pro	visional, divisional, re	newai, substitu	te, continuat	ion, continuations-in-part,
international and convention applications based	in whole or in part up	on such aforesa	ild application	(s) for Patent and/or such
Inventions, (5) any and all patents for any such Ir				
extensions of any patent based in whole or in part	upon such aforesaid ap	plication(s) for L	etters Patent a	the eferencial international
the entire right to (1) file such applications in its	name or in my name, (2	z) file such appli	cations under	the aloresald international
Convention or any other treaty or understanding, (3) nave said patents gran	nted in its name	or mine, the Co	therized to issue entransfor
Trademarks of the United States of America and an	y counterpart in any othe	er patent office b	eing nereby au	thorized to issue or transfer
all of said patents to said assignee in accordance he	rewith, and (4) enforce s	aid patents and	to sue for and f	for which said natents may
for any and all infringements thereof, whether pas				
be granted, as fully and entirely as the same would	nave been neid and enj	oyed by the und	ersigned witht	transanable costs incurred
II. Agree, whenever assignee asks, without further	compensation but at as	signee's expense	e ioi actual alic	own to me respecting such
(A) to communicate to said assignee, its succ	essors, assigns, and lega	a recreating cue	s, ally lacts kil	the rights described above
Inventions or the rights described above, (B) to test the location of that testimony to be in the country	ily ili aliy legal proceedili in which tracida ar in th	ng respecting suc	n inventions of	ch testimony is legal should
the location of that testimony to be in the country	C) to execute all applica	tions papers or	inetrumente ne	ecessary or required by said
my country of residence prohibit such testimony,	c) to execute all applica	offect any of the	o provisions o	f this instrument including
assignee, its successors, assigns and legal representations, specifications, oaths, assignments, disclarations, oaths, assignments, oaths, assignments, disclarations, oaths, assignments, oaths, assignments, oaths, assignments, oaths,	imare and lowful affiday	effect any of the	e provisions o	h may be requested by said
assignee and (D) generally to do everything possib	liniers, and idwidi amudi	te cuccoccore ac	signs and logs	ol representatives to obtain
maintain, defend and enforce patent protection for				
III. Represent, warrant and covenant that I have t				
is not pre-dated by any grant, license, or other right. Agree that my grants and obligations herein s	hall also bind all of my h	e to any party of	administrators	signee hereto,
	nan also bind an or my i	ieirs, executors,	aummistrators	s, legal representatives, and
assigns; and V. Agree that an authorized representative of	accionos is hereby gran	ated the nower	to insert in t	his assignment any further
identification which may be necessary or desirable	e to comply with the ru	les of the U.S. P	atent and Trac	lemark Office or the patent
office of any other country for recordation of this				
application number and filing date when known.	assignments including an	e power to macr	con tino doolen	ment ment and a second
In Witness Whereof, I have executed this Worldw	wide Assignment on the	date indicated b	v mv hand an	d agree that this Worldwide
Assignment shall be effective as of the earliest price				
rassignment shan be effective as of the earnest price	and for the arolesan	a appirounion(s)	or nonois i an	·····
	N 0 11	•	-1	1
DEAN PODLICH	_ Dr Palle	sh	3/2	1/2017
Name of Inventor 5	Signature of Inventor		Date	

	WOKLDWIDE ASSIGNI	<u>VIEN I</u>		
I, the undersigned <u>CHRISTOPHER SCELONGE</u> ,	-			
SPECIFIC INTEGRATION SITES FOR COMPLEX TE			DS OF USE the subject	matter of which
is described in the application for patent (Attor	ney Docket No. <u>BBZ555-U5-I</u>	<u>-'Cl'</u>)		
declaration executed on		45/540007	file to a March o Di	04.7
	atent Application Serial No.	15/51003/	_, filed on _March 9, 20)17,
PCT Application Serial No.	filed on			
which claim(s) its earliest priority to Applicati			, filed on	
For valuable consideration, the receip		-	a, and in fulfillment of	my pre-existing
obligation of assignment to assignee, which is h I. Sell, assign, and transfer unto PIONEER HI-BR		•	ized and existing under	the laws of the
State of Iowa in the United States of America				
Johnston, Iowa 50131-1014, herein referred to				1.0. 50% 202 1,
(A) the entire right, title, and interest in and				y priority rights
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("International Convention") and any other tre				
International Convention or other treaty or un	derstanding, including rights	in any and all prov	visional applications, (3) any and all of
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aforesaid application(s) for Patent ("Inventior			•	•
whatsoever, including all provisional, non-				
international and convention applications bas				
Inventions, (5) any and all patents for any suc				
extensions of any patent based in whole or in p		• •		
the entire right to (1) file such applications in Convention or any other treaty or understandin				
Frademarks of the United States of America and				
all of said patents to said assignee in accordance	-	-	•	
for any and all infringements thereof, whether i	· ·			
be granted, as fully and entirely as the same wo	· · · · · ·			
II. Agree, whenever assignee asks, without furt				
(A) to communicate to said assignee, its su				
nventions or the rights described above, (B) to t	estify in any legal proceeding	respecting such In	ventions or the rights d	escribed above,
the location of that testimony to be in the cour	ntry in which I reside or in the	nearest country i	n which such testimony	/ is legal should
my country of residence prohibit such testimon		• •		
assignee, its successors, assigns and legal repr		•		
petitions, specifications, oaths, assignments, dis				
assignee and (D) generally to do everything pos				
maintain, defend and enforce patent protection			=	
II. Represent, warrant and covenant that I have	-	•	-	_
s not pre-dated by any grant, license, or other r V. Agree that my grants and obligations herei				
essigns; and	n shan also bind an or my ne	iis, executors, auri	illinistrators, regar repre	sentauves, and
7. Agree that an authorized representative of the control of th	of assignee is hereby grante	ed the power to	insert in this assignme	ent any further
dentification which may be necessary or desire		•		
office of any other country for recordation of th				-
application number and filing date when known			-	• •
in Witness Whereof, I have executed this World		ate indicated by m	y hand and agree that	this Worldwide
Assignment shall be effective as of the earliest p	·			
J		()	·	
	-A - A A			
CHRISTOPHER SCELONGE	Christopher L	celonge_	3/21/17	
Name of Inventor 6	Christopher of Signature of Inventor		<u>3/21/17</u> Date	_

PATENT REEL: 062120 FRAME: 0241

RECORDED: 12/16/2022