503209028 03/09/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3255644

		NEW ASSIGN	MENT		
NATURE OF CONVEYA	NCE:	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ				
		Name			Execution Date
JUSTIN M LIRA					02/11/2013
HOLLY J BUTLER					02/14/2013
KENNETH A NARVA					02/11/2013
THOMAS MEADE					02/18/2013
DOUG A SMITH					02/15/2013
RECEIVING PARTY DA	ТА				
Name:		GROSCIENCES LLO)		
Street Address:		ONSVILLE ROAD			
City:		APOLIS			
State/Country:		A			
Postal Code:	46268				
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ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, effective as of the 5th day of November, 2012, by Justin M. Lira; Holly J. Butler; Doug A. Smith; Kenneth Narva; and Thomas Meade (hereinafter referred to as Assignors), residing at 8974 Windpointe Pass, Zionsville, Indiana 46077; 1106 Fairway Drive, Indianapolis, Indiana 46260; 19038 Edwards Grove Drive, Noblesville, Indiana 46060; 4372 Creekside Pass, Zionsville, Indiana 46077; and 1141 Huntington Woods Pointe, Zionsville, Indiana 46077, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in DIG-3 INSECTICIDAL CRY TOXINS, set forth in a Patent application for Letters Patent of the United States, already filed on November 5, 2012 as U.S. Application No. 13/669,130; and

WHEREAS, Dow AgroSciences LLC, a Limited Liability Company organized under and pursuant to the laws of Delaware having its principal place of business at 9330 Zionsville Road, Indianapolis, Indiana 46268 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and valuable consideration and/or the remuneration received for my/our work and/or other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and to any and all priority applications, direct and indirect divisions, continuations, continuations-in-part related to said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

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same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner for Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply

87321-083-DW

PATENT REEL: 035110 FRAME: 0327

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with the rules of the United States Patent and Trademark Office for recordation of this document:

DOW AGROSCIENCES LLC

All practitioners at Customer Number 25212

AND Assignors acknowledge an obligation of assignment of this invention to Assignce at the time the invention was made.

67323-US-ON

Date: <u>Feb || 2013</u> United States of America) State of Indiana) ss.:

County of Marion

On this $\underline{1^{M}}_{\text{day of}}$ day of $\underline{46444}_{\text{daga}}$, $\underline{3013}_{\text{o}}$, before me personally came $\underline{1}_{\text{ustin M. Lira}}$, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

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Notary Public

DENA H. TUCHMAN Notery Public, State of Indiana Marton County Seat Commission & 638139 My Commission Expires November 02, 2020 SEAL /

Holly J. Butler

2/14/2013 Date:

United States of Ame	rica)
State of	Indiana) ss.:
County of	Marion)

On this $1/4^{h}$ day of 3/6h day $2/3^{h}$, before me personally came Holly J. Butler (), to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

DENA H. TUCHMAN
State of Indiana &
Marion County * Commission # 538138
📲 😤 🐨 🖉 Mu Commission Expires 💈
November 02, 2020
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Doug A. Smith

Date:			
United States of Am	erica)	
State of	Indiana) ss.:	
County of	Marion)	
On this	day of	, <u>, , , , , , , , , , , , , , , , , , </u>	, before me
personally came	Doug A. S	mith , to me kr	nown to be the individual
described in and who of the same.	o executed the foregoi	ng instrument, and ackno	wledged execution

Kennetz 27m Kenneth Narva

Date:	2/11	/13	
	ates of Ameri	ica)
State of		Indiana) ss.:
County of		Marion)
	5.8	JA I	

 10^{44} day of 40^{444} , 3013, before me y came Kenneth Narva, to me known to be the individual On this personally came described in and who executed the foregoing instrument, and acknowledged execution

of the same.

Dena W Jack

DENA H. TUCHMAN Notery Public, State of Indiana Merion County Commission # 638138 My Commission Expires November 02, 2020

Comes

Thomas Meade

2/18/13 Date:

United States of An	nerica)
State of	Indiana) ss.:
County of	Marion)
	· · · · · · · · · · · · · · · · · · ·	

day of <u>Jelg Wang</u> Thomas Meade On this personally came

described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

DENA H. TUCHMAN Notery Public, State of Indiana Marian County Commission # 83B139 My Commission Expires November 02, 2020 SFAL

ASSIGNMENT BY INVENTORS

Star Star

THIS ASSIGNMENT, effective as of the 5th day of November, 2012, by Justin M. Lira; Holly J. Butler; Doug A. Smith; Kenneth Narva; and Thomas Meade (hereinafter referred to as Assignors), residing at 8974 Windpointe Pass, Zionsville, Indiana 46077; 1106 Fairway Drive, Indianapolis, Indiana 46260; 19038 Edwards Grove Drive, Noblesville, Indiana 46060; 4372 Creekside Pass, Zionsville, Indiana 46077; and 1141 Huntington Woods Pointe, Zionsville, Indiana 46077, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in DIG-3 INSECTICIDAL CRY TOXINS, set forth in a Patent application for Letters Patent of the United States, already filed on November 5, 2012 as U.S. Application No. 13/669,130; and

WHEREAS, Dow AgroSciences LLC, a Limited Liability Company organized under and pursuant to the laws of Delaware having its principal place of business at 9330 Zionsville Road, Indianapolis, Indiana 46268 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and valuable consideration and/or the remumeration received for my/our work and/or other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and to any and all priority applications, direct and indirect divisions, continuations, continuations-in-part related to said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

67323-US-OV

PATENT REEL: 035110 FRAME: 0334

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same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

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AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner for Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply

87321 US-ON

PATENT REEL: 035110 FRAME: 0335

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with the rules of the United States Patent and Trademark Office for recordation of this document:

DOW AGROSCIENCES LLC

All practitioners at Customer Number 25212

2 g (k. k. k.

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

67321-08-OXV

United States of Am	erica)	
State of	Indiana) ss.:	
County of	Marion		
On this	day of	,	, before me
personally came	Justin M.		nown to be the individual

* ₅ 4 .

Holly J. I	Butler
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United States of Ame	erica)	
State of	Indiana) ss.:	
County of	Marion		
On this	day of	۶	, before me
personally came	Holly J. B	utler , to me	known to be the individual

1 (s. 16

Doug A. Smith

2/15/13 Date:

United States of Ame	rica)
State of	Indiana) ss.:
County of	Marion)

On this	15	day of	FLBRUARY	, ,	2017)	, before me
personally	came		Doug A. Smith		, to me known	to be the individual
described	in and	who executed	the foregoing instru	nent, s	ind acknowled	ged execution

of the same.

 $2 - \frac{1}{2} = - \frac{1}{2}$

Notáry Public

seal

RUSSELL B. CATE MY COMMISSION EXPIRES: 05-23-2018 MY COMMISSION NUMBER IS: 618078 MY COUNTY OF RESIDENCE IS: MAINTON

> PATENT REEL: 035110 FRAME: 0339

Kenned	Morere
NCHECO	2 X N 683 N 68

Date:			
United States of An	ierica)	
State of	Indiana) ss.:	
County of	Marion)	
On this	day of	\$, before me
personally came Kennet		Varva	, to me known to be the individual
described in and wh	o executed the forego	ing instrument,	and acknowledged execution
of the same.			

8 5.

Thomas Meade

United States of Air	nerica)	
State of	Indiana) ss.:	
County of	Marion		
On this	day of	*	, before me
personally came	Thomas M	leade , to	me known to be the individual