

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5352372

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST

**CONVEYING PARTY DATA**

Name	Execution Date
AGRISOMA BIOSCIENCES INC.	12/21/2018

**RECEIVING PARTY DATA**

<b>Name:</b>	BDC CAPITAL INC.
<b>Street Address:</b>	5, PLACE VILLE-MARIE
<b>Internal Address:</b>	BUREAU 300
<b>City:</b>	MONTREAL
<b>State/Country:</b>	CANADA
<b>Postal Code:</b>	H3B 5E7

**PROPERTY NUMBERS Total: 23**

Property Type	Number
Patent Number:	8546645
Application Number:	14024220
Application Number:	15256244
Application Number:	62556575
Application Number:	62262032
Application Number:	15558153
Application Number:	62326111
Application Number:	62677241
Application Number:	62677243
Application Number:	62677244
Application Number:	62677250
Application Number:	62683709
Application Number:	62683719
Application Number:	62683728
Application Number:	62683774
Application Number:	62683829
Application Number:	62684290
Application Number:	62684292
Application Number:	62684293

PATENT

Property Type	Number
Application Number:	62689402
Application Number:	62689406
Application Number:	62689410
Application Number:	62689413

**CORRESPONDENCE DATA**

**Fax Number:** (514)288-8389

*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:** 514.847.4747

**Email:** ashley.mutombo@nortonrosefulbright.com

**Correspondent Name:** NORTON ROSE FULBRIGHT CANADA LLP/ ASM

**Address Line 1:** 1, PLACE VILLE-MARIE

**Address Line 2:** SUITE 2500

**Address Line 4:** MONTREAL, CANADA H3B 1R1

<b>ATTORNEY DOCKET NUMBER:</b>	1000145213
<b>NAME OF SUBMITTER:</b>	A. SASHA MANDY
<b>SIGNATURE:</b>	/A. Sasha Mandy/
<b>DATE SIGNED:</b>	01/31/2019

**Total Attachments: 9**

- source=BDC Short-Form IP Security Agreement#page1.tif
- source=BDC Short-Form IP Security Agreement#page2.tif
- source=BDC Short-Form IP Security Agreement#page3.tif
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- source=BDC Short-Form IP Security Agreement#page8.tif
- source=BDC Short-Form IP Security Agreement#page9.tif

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this “**Agreement**”), dated as of December 21, 2018, is made by Agrisoma Biosciences Inc. (the “**Grantor**”) in favour of BDC Capital Inc. (the “**Secured Party**”).

### WITNESSETH:

**WHEREAS** the Grantor, as borrower, Capital régional et coopératif Desjardins, Cycle Capital Fund III, L.P. and the Secured Party, as lenders, and Agrisoma USA Inc., 9875166 Canada Inc. and Agrisoma Australia Pty Ltd., as guarantors, entered into or will enter into, on or about the date hereof, a convertible loan agreement (as amended, restated, supplemented, replaced or otherwise modified from time to time, the “**Loan Agreement**”) pursuant to which, *inter alia*, the Secured Party agreed or will agree to make a loan to the Grantor, subject to the terms and conditions set forth therein, in an aggregate principal amount of \$1,100,000;

**WHEREAS**, in accordance with the Loan Agreement, the Grantor has granted in favour of the Secured Party a hypothec on, and a security interest in, all of its assets, including, the IP Collateral (as defined below) (the “**Security**”) pursuant to certain security documents (including a movable hypothec and a general security agreement) entered into between the Grantor and the Secured Party on or about the date hereof (collectively and as amended, restated, supplemented, replaced and otherwise modified from time to time, the “**Security Documents**”);

**WHEREAS** the Grantor has agreed to execute and deliver in favour of the Secured Party this Agreement for purposes of recording the Security at the Canadian Intellectual Property Office (the “**CIPO**”) and the United States Patent and Trademark Office (the “**USPTO**”), as applicable;

**WHEREAS** all capitalized terms used but not defined herein shall have the meanings set forth in the Loan Agreement;

**NOW, THEREFORE**, in consideration of the premises and to induce the Secured Party to enter into the Loan Agreement and to advance the Loan, the Grantor hereby agrees with the Secured Party as follows:

Section 1. Grant of Security Interest in IP Collateral. The Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of all of its indebtedness, liabilities and obligations to the Secured Party under or pursuant to the Transaction Agreements (other than the Warrants), hereby assigns, mortgages, charges, pledges, grants in favour of the Secured Party a hypothec on, for a principal amount of \$1,980,000 with interest thereon from the date of this Agreement at the rate of 25% per annum, and grants to the Secured Party a security interest in, all of its right, title and interest in, to and under the following property of the Grantor (the “**IP Collateral**”):

- (i) all of its trademarks, patents and other intellectual property rights, including, without limitation, all intellectual property licenses providing for the grant by or to the Grantor of any right under any trademark, patent

or other intellectual property rights, including, without limitation, those referred to on Schedule 1 hereto;

- (ii) all reissues, divisions, continuations, continuations-in-part, substitutes, renewals and extensions of the foregoing, all improvements thereon and all other rights of any kind whatsoever accruing thereunder or pertaining thereto; and
- (iii) all goodwill of the business connected with the use of, and symbolized by, any of the foregoing, and all income, royalties, damages and proceeds at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

Section 2. Attachment. The Grantor acknowledges that (i) value has been given, (ii) it has rights in the IP Collateral or the power to transfer rights in the IP Collateral to the Secured Party (other than after-acquired IP Collateral), (iii) it has not agreed to postpone the time of attachment of the security interest and lien created hereunder, and (iv) it has received a copy of this Agreement.

Section 3. Security Documents. The security granted pursuant to this Agreement is granted in conjunction with the Security, and the Grantor hereby acknowledges and agrees that the rights and remedies of the Secured Party with respect to the security in respect of the IP Collateral made and granted hereby are more fully set forth in the Security Documents, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event of a conflict between the provisions of this Agreement and the provisions of the Security Documents, the terms of the Security Documents shall control.

Section 4. Recordation. The Grantor authorizes and requests that the commissioner, registrar or any other applicable government officer of the CIPO and the USPTO, as applicable, record this Agreement.

Section 5. Counterparts. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

Section 6. Paramountcy. Notwithstanding anything herein to the contrary, the priority of the security interest and lien granted to the Secured Party in the IP Collateral pursuant to this Agreement, and the exercise of any right or remedy by the Secured Party with respect to the IP Collateral hereunder are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and this Agreement, the terms of the Intercreditor Agreement shall govern and control.

Section 7. Governing Law. This Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the laws of the Province of Quebec and the federal laws of Canada applicable therein, without regard to the conflict of law principles.

[Signature Pages Follow]

IN WITNESS WHEREOF, the Grantor has caused this Intellectual Property Security Agreement to be executed and delivered by its duly authorized officers as of the date first set forth above.

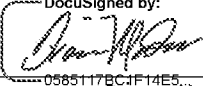
AGRISOMA BIOSCIENCES INC.,  
as Grantor

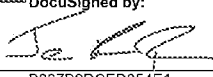
By: 

Name: Steven Fabijanski  
Title: President and CEO

ACCEPTED AND AGREED  
as of the date first above written:

**BDC CAPITAL INC.**

By:  DocuSigned by:  
Name: Dion Madsen  
Title: Partner, Amplitude Venture Capital

By:  DocuSigned by:  
Name: Jean Francois Pariseau  
Title: Partner

**SCHEDULE I  
TO INTELLECTUAL PROPERTY SECURITY AGREEMENT**

Granted Patents and Patent Applications Owned by the Corporation:

**US Patents/Applications**

- U.S. patent 8,546,645. Fabijanski; Steven; et al. PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS THROUGH RDNA TARGETED INTEGRATION OF HETEROLOGOUS GENES Filed September 30, 2009, U.S. patent 8,546,645 issued October 1, 2013.
- United States Patent Application 20140171668 Appl. No.: 14/024220 Fabijanski; Steven; et al. PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS THROUGH rDNA TARGETED INTEGRATION OF HETEROLOGOUS GENES
- United States Patent Application 20170051299 Appl. No.: 15/256244 Fabijanski; Steven ; et al. PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS THROUGH rDNA TARGETED INTEGRATION OF HETEROLOGOUS GENES
- United States Patent Application 20100186117 Appl. No.: 12/571012 Fabijanski; Steven ; et al. PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS
- United States of America Patent Application No. 62/556575 Inventor: FABIJANSKI, Steven et al. Title: METHODS OF LOW CARBON INTENSITY AGRICULTURAL PRODUCTION OF BRASSICA CARINATA OILSEED CROP
- United States Provisional Patent Application No. 62/262,032 (Inventors: M. Hetherington et al), filing date 12/02/2015; Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS
- United States Patent Application No. 15/558,153 Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS Inventor: HETHERINGTON, Mark et al.
- United States Provisional Patent Application No. 62/326,111, (Inventor: R. Bennett), filing date 22/04/2016; Title: BRASSICA CARINATA CULTIVARS AGR044-312D AND AGR044-3A22A
- United States Provisional Patent Application No. 62/677241, Filing Date: May 29, 2018, Title: PLANTS AND SEEDS OF BRASSICA CARINATA VARIETY DH146.047
- United States Provisional Patent Application No. 62/677243, Filing Date: May 29, 2018, Title: PLANTS AND SEEDS OF BRASSICA CARINATA VARIETY DH-146.194
- United States Provisional Patent Application No. 62/677244, Filing Date: May 29, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-146.214



- United States Provisional Patent Application No. 62/677250, Filing Date: May 29, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-146.842
- United States Provisional Patent Application No. 62/683709, Filing Date: June 6, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-069.485
- United States Provisional Patent Application No. 62/683719, Filing Date: June 6, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-153.113
- United States Provisional Patent Application No. 62/683728, Filing Date: June 6, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-156.090D
- United States Provisional Patent Application No. 62/683774, Filing Date: June 6, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-140.251
- United States Provisional Patent Application No. 62/683829, Filing Date: June 6, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-140.356
- United States Provisional Patent Application No. 62/684292, Filing Date: June 13, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY AGR044-M01
- United States Provisional Patent Application No. 62/684290, Filing Date: June 13, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY AGR044-M06
- United States Provisional Patent Application No. 62/684293, Filing Date: June 13, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY AGR044-312E
- United States Provisional Patent Application No. 62/689402, Filing Date: June 25, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-40.008
- United States Provisional Patent Application No. 62/689406, Filing Date: June 25, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-56.149
- United States Provisional Patent Application No. 62/689410, Filing Date: June 25, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY DH-157.715
- United States Provisional Patent Application No. 62/689413, Filing Date: June 25, 2018, Title: PLANTS AND SEEDS OF *BRASSICA CARINATA* VARIETY AGR868-22B2

**Canadian Patents/Applications:**

- Canadian Patent Application 2,738,575 Fabijanski; et al. PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS THROUGH RDNA TARGETED INTEGRATION OF HETEROLOGOUS GENES Application Priority: US 61/102,509 filed Oct 03 2008.
- Canadian Patent Application No.: 2979103 Inventor(s): Hetherington, Mark et al Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS

- Canadian Patent Application No. 2738575 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS BY RDNA TARGETED INTEGRATION OF HETEROLOGOUS NUCLEIC ACIDS Inventor: FABIJANSKI, Steven et al.

**International Patents:**

- Malaysia Patent No. MY-161855-A Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: Fabijanski, Steven et al
- German Validation of European Patent No. 2340311 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: FABIJANSKI, Steven et al. National filing date: September 20, 2017 International filing date: September 30, 2009 Expiry date: September 30, 2029
- Great Britain Validation of European Patent No. 2340311 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: FABIJANSKI, Steven et al. National filing date: September 20, 2017 International filing date: September 30, 2009 Expiry date: September 30, 2029
- French Validation of European Patent No. 2340311 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: FABIJANSKI, Steven et al. National filing date: September 12, 2017 International filing date: September 30, 2009 Expiry date: September 30, 2029
- Singapore Issued Patent Pat. No: 170194 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: Fabijanski, Steven et al
- European Patent No. 2340311 European Patent Application No.: 09817129.1 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: FABIJANSKI, Steven et al.
- New Zealand Patent 591972 Issued July 30, 2013 Fabijanski; et al PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS.
- Australian Patent: 2009299075 Production of modified fatty acids in plants Granting date 2017-05-04 Inventor: Fabijanski, Steven et al
- Brazilian Patent Application No. PI0913818-8 Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Inventor: Fabijanski, Steven et al
- Australian Patent Application No. 2016363687 Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS Inventor: HETHERINGTON, Mark et al.
- European Patent Application No. 16869436.2 Inventor(s): Hetherington, Mark et al. Applicant(s): AGRISOMA BIOSCIENCES INC. Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS

- India Patent Application No. 2471/CHENP/2011 Inventor: Fabijanski, Steven et al Title: PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS
- Uruguay Patent Application No.: 37.001 Filed on: November 30, 2016 Inventor(s): Hetherington, Mark et al. Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS
- Paraguay Patent Application No.: 16/78592 Filed on: November 30, 2016 Inventor(s): Hetherington, Mark et al Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS
- Argentine Patent Application No. P160103681 Filed on: December 1, 2016 Inventor(s): Hetherington, Mark et al Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS
- Indian Patent Application 2471/CHENP/2011 Fabijanski; et al PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS.
- Israeli Patent Application 212112 Fabijanski; et al PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS.
- Malaysian Patent Application PI 2011001434 Fabijanski; et al PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS.
- Singapore Patent Application 201102196-1 Fabijanski; et al PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS.

**Patent Cooperation Treaty (PCT):**

- PCT/CA2009/001341 PRODUCTION OF MODIFIED FATTY ACIDS IN PLANTS Fabijanski; et al. Pub. No.: WO/2010/037209, Publication Date: April 8, 2010; International Filing Date: Sept 30, 2009.
- PCT International Application No: PCT/CA2017/050474 (claiming priority from U.S. 62/326,111 filed April 22, 2016) Title: BRASSICA CARINATA CULTIVARS AGR044-312D AND AGR044-3A22 Inventor: BENNETT, Rick Allen
- PCT Patent Application No. PCT/CA2016/051401 Title: METHOD FOR REMOVING GLUCOSINOLATES FROM OILSEED MEALS Inventor: HETHERINGTON, Mark et al.