PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|---|----------------|
| Her Majesty the Queen In Right of the Province of Nova Scotia | 02/04/2013 |

RECEIVING PARTY DATA

| Name: | Dalhousie University |
|-----------------|-----------------------------------|
| Street Address: | 6299 South Street, P.O. Box 15000 |
| City: | Halifax |
| State/Country: | CANADA |
| Postal Code: | B3H 4R2 |

PROPERTY NUMBERS Total: 8

| Property Type | Number |
|---------------------|----------|
| Patent Number: | 7868153 |
| Application Number: | 12808574 |
| Application Number: | 12936074 |
| Application Number: | 13017800 |
| Application Number: | 13699162 |
| Application Number: | 13320168 |
| Application Number: | 12402836 |
| Application Number: | 13808661 |

CORRESPONDENCE DATA

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Address Line 2: 100 QUEEN STREET SUITE 1100

PATENT

REEL: 029766 FRAME: 0474

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| Address Line 4: OTTAWA, CANADA K1P 1J9 | | | | |
|--|-----------------------|--|--|--|
| ATTORNEY DOCKET NUMBER: | GP 23892 | | | |
| NAME OF SUBMITTER: | Angie Armstrong-Baker | | | |
| Total Attachments: 6 source=Dalhousie_Assignment#page1.tif source=Dalhousie_Assignment#page2.tif source=Dalhousie_Assignment#page3.tif source=Dalhousie_Assignment#page4.tif source=Dalhousie_Assignment#page5.tif source=Dalhousie_Assignment#page6.tif | | | | |

ASSIGNMENT

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF NOVA SCOTIA

does hereby sell and assign all right, title and interest in the United States of America, Canada, and all countries foreign thereto, effective **September 1, 2012**, in and to the invention(s) disclosed in the attached Schedule A to.:

DALHOUSIE UNIVERSITY 6299 South Street PO Box 15000 Halifax, Nova Scotia B3H 4R2 CANADA

and to any application for patent claiming subject matter relating thereto, and to all my corresponding right, title and interest in and to any patent issued therefrom, and to any patent issued from a continuation, continuation-in-part, re-issue, divisional or re-examination application derived, or claiming priority, from the applications identified in the attached Schedule A.

I authorize the firm of Borden Ladner Gervais LLP to insert any further identification necessary to make this assignment suitable for recordation in the Patent Offices of any country as may be required.

Assignment From:

| Her Majesty the Queen in Right of the | Witness: |
|--|--|
| Province of Nova Scotia | * |
| Executed at Halfak | 1, Tracy Crowell |
| | Print Name |
| NS, CAN Province/State, Country | whose full post office address is |
| | 9 Burns Dr |
| This <u>34</u> day of <u>6/</u> , <u>203</u> . Day Month Year | Halifax NS B3P/V4 |
| By: John Mac Donell | was personally present and did see |
| Print Namo | John Mac Donell |
| Title: Minister of Agriculture | Name execute the within assignment and such |
| O Dava M M | execute the within assignment and such representative is personally known to me. |
| John Mark | |
| Signature | Tracylinuell |
| (on behalf of the Minister of Agriculture) | / Signature |

Assignment from HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF NOVA SCOTIA Page 1 of 6

<u>Assignment To:</u>

| Dalhousie University | Witness: |
|--|--|
| Executed at Habya City City Province/State, Country This U day of Honth, Year | I, Stephen Hartlen Print Name whose full post office address is 1344 Summer St, Suite 207 Halifax, NS |
| By: Martha Crago Print Name Title: YP Research Signature | was personally present and did see Martha Crago Name execute the within assignment and such representative is personally known to me. |

Schedule A

| Ctry. | Application No. | Filing Date (mm/dd/yy) | Patent No. | Issue Date | Title | BLG Ref. |
|-------|-----------------------|------------------------|---------------|------------|---|--------------------|
| US | 60/690,154 | 06/14/2005 | | | CINNAMIC ACID 4- HYDROXYLASE | PAT 7219P-2 |
| US | 11/452,342 | 06/14/2006 | 7,868,153 | 01/11/2011 | CINNAMIC ACID 4- HYDROXYLASE | PAT 7219-2 |
| CA | 2,510,950 | 06/14/2005 | 2,510,950 | 03/22/2011 | CINNAMIC ACID 4- HYDROXYLASE | PAT 7219-1 |
| US | 61/014,958 | 12/19/2007 | | | ANTIOXIDANT EXTRACT FROM FRUIT SKINS | PAT 7221P-2 |
| US | 12/808,574 | 02/28/2011 | | | ANTIOXIDANT EXTRACT FROM FRUIT SKINS | PAT 7221W-2 |
| CA | 2,747,741 | 06/17/2011 | | | ANTIOXIDANT EXTRACT FROM FRUIT SKINS | PAT 7221W-1 |
| wo | PCT/CA2008/002 261 | 12/19/2008 | | | ANTIOXIDANT EXTRACT FROM FRUIT SKINS | PAT 7221W-90 |
| EP | 08862365.7 | 10/25/2010 | | | ANTIOXIDANT EXTRACT FROM FRUIT SKINS | PAT 7221WEP- 81 |
| US | 61/041,369 | 04/01/2008 | | | BIOACTIVE COMPOUNDS OF ASCOPHYLLUM NODOSUM AND THEIR USE FOR ALLEVIATING SALT- INDUCED STRESS IN PLANTS | PAT 7223P-2 |
| wo | PCT/CA2009/000 419 | 04/01/2009 | | | BIOACTIVE COMPOUNDS OF ASCOPHYLLUM NODOSUM AND THEIR USE FOR ALLEVIATING SALT- INDUCED STRESS IN PLANTS | PAT 7223W-90 |
| US | 12/936,074 | 01/21/2011 | | | BIOACTIVE COMPOUNDS OF ASCOPHYLLUM NODOSUM AND THEIR USE FOR ALLEVIATING SALT- INDUCED STRESS IN PLANTS | PAT 7223W-2 |

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| CA | 2,757,504 | 09/30/2011 | DIOACTIVE | DAT TOOMAL 4 |
|--------------|---------------|--------------|------------------------|-----------------------------------|
| ~ F1 | £,101,00% | UD/JU/LU 1 1 | BIOACTIVE COMPOUNDS OF | PAT 7223W-1 |
| | | | | , |
| | | | ASCOPHYLLUM | |
| | | | NODOSUM AND | |
| | | | THEIR USE FOR | |
| | | | ALLEVIATING SALT- | |
| | | | INDUCED STRESS IN | |
| | | | PLANTS | |
| US | 61/106,008 | 10/16/2008 | NON-FRIED APPLE | PAT 7224P-2 |
| | | | FOOD PRODUCTS | |
| | | | AND PROCESSES | |
| | | | FOR THEIR | |
| | | | PREPARATION | |
| US | 12/580,715 | 10/16/2009 | NON-FRIED APPLE | PAT 7224-2 |
| - | | | FOOD PRODUCTS | 2 3.4 5 5 90 50 45 50 |
| | | | AND PROCESSES | |
| | | | FOR THEIR | |
| | | | | |
| CA | 2,684,635 | 10/16/2009 | PREPARATION | DNO. 23 NOSE 8001 8/5 A/5 A/5 A/5 |
| 6 to 10-4 | 2,004,000 | 10/10/2009 | NON-FRIED APPLE | PAT 7224-1 |
| | | | FOOD PRODUCTS | |
| | | | AND PROCESSES | |
| | | | FOR THEIR | |
| | | | PREPARATION | |
| US | 13/017,800 | 01/31/2011 | VARIABLE RATE | PAT 7231-2 |
| | | | SPRAYER SYSTEM | |
| | | | AND METHOD OF | |
| | | | VARIABLY APPLYING | |
| | | | AGROCHEMICALS | |
| CA | 2,740,503 | 05/13/2011 | VARIABLE RATE | PAT 7231-1 |
| | | | SPRAYER SYSTEM | |
| | | | AND METHOD OF | |
| | | | VARIABLY APPLYING | |
| | | | AGROCHEMICALS | |
| US | 61/362,076 | 07/07/2010 | PROTEINS RELATED | DAT TOSON O |
| O. | 011302,010 | 0170772010 | TO THE | PAT 7228P-2 |
| | | | | |
| | | | SUPPRESSION OF | |
| | | | PHYTOPHTHORA | |
| | | | INFECTIONS IN | |
| | | | MEMBERS OF THE | |
| | | | SOLANACEAE | |
| ************ | | | FAMILY | |
| WO | PCT/ | 07/07/2011 | PROTEINS RELATED | PAT 7228W-90 |
| | CA2011/000770 | | TO THE | 1 |
| | | | SUPPRESSION OF | |
| | | | PHYTOPHTHORA | |
| | | | INFECTIONS IN | |
| | | | MEMBERS OF THE | |
| | | | SOLANACEAE | |
| | | | FAMILY | |
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| US | 61/349,177 | 05/27/2010 | APPLE SKIN | PAT 7229P-2 |
|---|-----------------------|---------------|---|--------------|
| oo oo W 1888 da ay ay ay ay ay ay ay ay | | | EXTRACTS FOR TREATING CARDIOVASCULAR DISEASE | |
| WO | PCT/ CA2011/000623 | 05/26/2011 | APPLE SKIN EXTRACTS FOR TREATING CARDIOVASCULAR DISEASE | PAT 7229W-90 |
| US | 61/178,562 | 05/15/2009 | STABLE FUNCTIONAL BEVERAGE COMPOSITIONS AND METHODS OF MAKING SAME | PAT 5958P2 |
| WO | PCT/CA2010/000 713 | 05/14/2010 | STABLE FUNCTIONAL BEVERAGE COMPOSITIONS AND PROCESSES FOR MAKING SAME | PAT 5958W-90 |
| US | 13/320,168 | 11/11/2011 | STABLE FUNCTIONAL BEVERAGE COMPOSITIONS AND METHODS OF MAKING SAME | PAT 5958W-2 |
| CA | | Not yet filed | STABLE FUNCTIONAL BEVERAGE COMPOSITIONS AND METHODS OF MAKING SAME | PAT 5958W-1 |
| US | 60/850,595 | 10/11/2006 | | PAT 7220P-2 |
| US | 60/915,987 | 05/04/2007 | | PAT 7220AP-2 |
| WO | PCT/CA2007/001 774 | 10/11/2007 | PROTEINS INVOLVED IN AFTER-COOKING DARKENING IN POTATOES | PAT 7220W-90 |
| CA | 2,666,019 | 04/08/2009 | PROTEINS INVOLVED IN AFTER-COOKING DARKENING IN POTATOES | PAT 7220W-1 |
| US | 12/402,836 | 03/12/2009 | PROTEINS INVOLVED IN AFTER-COOKING DARKENING IN POTATOES | PAT 7220AW-2 |

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| US | 61/129,075 | 06/03/2008 | | | PLANT WASTE BIO- PRODUCT POMACE EXTRACT CONCENTRATES AND PROCESSES OF PRODUCING SAME | PAT 7225P-2 |
|----|------------|------------|-----------|------------|---|-------------|
| US | 12/457,210 | 06/03/2009 | 8,216,627 | 07/10/2012 | PLANT WASTE BIO- PRODUCT POMACE EXTRACT CONCENTRATES AND PROCESSES OF PRODUCING SAME | PAT 7225-2 |
| CA | 2,668,253 | 06/03/2009 | | | PLANT WASTE BIO- PRODUCT POMACE EXTRACT CONCENTRATES AND PROCESSES OF PRODUCING SAME | PAT 7225-1 |

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PATENT REEL: 029766 FRAME: 0481

RECORDED: 02/06/2013