PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
Prometic Biosciences Ltd	08/24/2011

RECEIVING PARTY DATA

Name:	Department of Economic Development		
Street Address:	St George's Court, Upper Church Street		
City:	Douglas		
State/Country:	ISLE OF MAN		
Postal Code:	IM1 1EX		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	11503659	

CORRESPONDENCE DATA

Fax Number: (410)666-7274 Phone: 410-628-7770

Email: jgalbreath@galbreath-law.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: John A. Galbreath

Address Line 1: 2516 Chestnut Woods Ct.

Address Line 4: Reisterstown, MARYLAND 21136

NAME OF SUBMITTER: John A. Galbreath

Total Attachments: 27

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DATED 24th Angust

2011

PROMETIC BIOSCIENCES LTD

and

DEPARTMENT OF ECONOMIC DEVELOPMENT

MORTGAGE DEBENTURE

(£500,000.00)





PROMETIC BIOSCIENCES LTD (incorporated under the Companies Acts 1931–2004 of the Isle of Man with Company Number 034251C MORTGAGE DEBENTURE FIVE HUNDRED THOUSAND POUNDS (£500,000.00)

MORTGAGE DEBENTURE

PROMETIC BIOSCIENCES LTD whose registered office is situate at Freeport, Ballasalla, in the Isle of Man (hereinafter called "the Company" together with its successors and permitted assigns) in consideration of the financial assistance granted by the DEPARTMENT OF ECONOMIC DEVELOPMENT (a Department of the Isle of Man Government) of St Georges Court Upper Church Street Douglas Isle of Man IM1 1EX (hereinafter called "the Department", which expression, unless inconsistent with the context, shall include its successors and assigns) to the Company of a working capital loan not exceeding in aggregate FIVE HUNDRED THOUSAND POUNDS (£500,000.00) repayable monthly in the following manner: 31 August 2011, £67,588; 30 September 2011, £67,588; 31 October 2011, £67,588; 30 November 2011, £135,135; 31 December 2011 £162,101 ("the Repayments") together with Interest at five percent (5%) per annum accrued on a daily basis such interest to be paid together with the loan repayment. AND subject to Clause 8 of the Conditions endorsed on this Debenture, together with any interest and costs due (hereinafter called "the secured sum") HEREBY CHARGES unto the Department from the date of this Debenture until a period ending on the date on which the secured sum is repaid in full by the Company, or by another person on its behalf or for its benefit but in any event no later than the 31st day of January 2012:-

- by way of a fixed charge secured on the Company's property land buildings plant machinery equipment fixtures and fittings and intellectual property rights ("the Company's property");
- by way of a floating charge (only ranking behind the Department's first and second charges already secured on the Company's assets) the Company's property if and insofar as the charge on the property described in sub-paragraph 1.1 of this Clause, or on any part or parts of such property shall for any reason be ineffective as a fixed charge; and

the property described in sub-paragraphs 1.1 and 1.2 above being hereinafter called ("the property hereby charged"),

TO HOLD the property hereby charged unto the Department in security for the secured sum until the repayment thereof if the conditions applicable thereto or any of them shall not be fulfilled.

2. This Debenture is issued subject to and with the benefit of the Conditions endorsed thereon which are deemed to be part of it.

IN WITNESS WHEREOF the Company hath executed these presents as a Deed this day of August 2011.

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CONDITIONS

- 1. This Debenture is to rank as a fixed charge on the property described in sub-paragraph 1.1 of Clause 0 above and a floating charge on all the property described in sub-paragraph 1.2 of Clause 0 above so that the Company is not to be at liberty to create any other mortgage debenture grant or charge on the property hereby charged or any part thereof in priority to or pari passu with this Debenture except with the prior consent in writing of the Department.
- 2. The Company will not without the prior written consent of the Department:-
 - (1) Seil part with or otherwise grant or dispose of the property hereby charged by sub-paragraph 1.1 of Clause 0 above or any part thereof or any interest therein or in any part thereof; or
 - (2) Sell part with or otherwise grant or dispose of the property hereby charged by sub-paragraph 1.2 of Clause 0 above or any part thereof or any interest therein or in any part thereof other than in the ordinary course of business.
- 3. A register of debentures and mortgages shall be kept at the Company's registered office wherein there will be entered the name and address and description of the registered holders of the debentures issued by the Company and particularly this Debenture and such register will at all reasonable times during the Company's normal business hours be open, upon at least two days' notice and without unreasonable disruption of the Company's business, to the inspection of the Department and any person authorised in writing by the Department.

- 4. The Company will, at its own cost, at the Department's request execute any deed or document and take any action required by the Department to perfect this security or further to secure on the property hereby charged or any part thereof the Company's obligations to repay the secured sum to the Department.
- 5. The Company shall during the continuance of this Debenture at its own expense carry out or ensure that the following insurance provisions are carried out and fully complied with at all times:-
 - (a) The Company shall obtain and maintain insurance coverage with one or more reputable insurers in the joint names of the Company and the Department against loss or damage by fire, burglary, theft, flood, storm, tempest, lightning, civil commotion, explosion, aircraft, burst pipes to the full reinstatement value of such property hereby charged as is of an insurable nature (the same being hereinafter referred to as "the chattels"); and
 - (b) The Company shall ensure that all premiums and sums of money necessary for effecting and keeping up the insurances referred to in the above clause (a) are paid punctually, provide to the Department copies of such insurance policies and produce to the Department on demand, but no more than once per six-months period, certificates of insurance in respect of such insurance coverage.
- 6. The Company will, so long as any moneys shall remain on the security of these presents:-
 - (a) keep the property charged by sub-paragraph 1.1 of Clause 0 above and all the chattels in good repair and condition and not exercise over or in relation to any real estate of the Company or any part thereof comprised within the property charged by sub-paragraph 1.1 of Clause 0 without the consent in writing of the Department any of the powers of leasing or ancillary powers contained in or given by the Conveyancing (Leases and Tenancies) Act 1954;
 - (b) permit the Department and such person or persons as the Department shall from time to time appoint to enter into and upon the hereditaments and premises of the Company, during the Company's normal business hours, upon reasonable

- notice and without unreasonable disruption of the Company's business, to view the state and condition thereof and of the chattels;
- (c) conduct and carry on its manufacturing business in the Isle of Man and not change the nature of its business conducted at the date hereof in any material respect, PROVIDED THAT the Company shall only be deemed to cease conducting and carrying on such manufacture or using such buildings if such conduct, carrying on or use is terminated, interrupted or suspended for a continuous period in excess of six (6) months within any periods exceeding one (1) year in aggregate during the said period of ten (10) years;
- (d) give to the Department and/or the Department such information relating to the affairs, business and assets of the Company as the Department may from time to time reasonably require; and
- (e) not do, or cause, or permit to be done anything which may in any way prejudice the value to the Department of the property hereby charged by this deed.
- 7. Every transfer of this Debenture must be in writing and be effected by its registered holder at the relevant time.
- 8. During the term of this Debenture, the secured sum shall be reduced by the Repayments from the date of the payment of the secured sum by the Department to the Company or (if the secured sum is paid to the Company by instalments, from the date of the payment of such instalment by the Department to the Company) as described in and subject to the terms and conditions of the letter of offer dated the 21st day of October 2009 from the Department to the Company and a Loan Agreement of even date with this Debenture made between the Department and the Company and provided that the Company is in compliance with the provisions hereof on such date, or at any time upon final repayment in full of the secured sum to the Department by the Company, or by any other person on its behalf or for its benefit, the Company shall be free of any liability for the repayment of the secured sum or any part thereof, this Debenture shall be automatically terminated, and the Department or Debenture holder for the time being will then release and discharge the Company from any of its obligations under this Debenture and do all such other things and execute and deliver any

deed or instruments as may be necessary or useful to effect the foregoing and cancel the registration or recordal of any security granted hereby.

- 9. The secured sum outstanding as determined by Clause 8 hereof shall immediately become payable to the Department and the floating charge shall become fixed and immediately enforceable and the security shall become enforceable and the powers conferred by this Debenture shall be immediately exercisable:-
 - (a) if an order is made or an effective resolution is passed for the winding up of the Company; or
 - (b) if any execution or other process of law of a similar nature be granted against the Company and which execution or other process of law is not satisfied or contested in good faith by the Company within sixty (60) days after service or notification thereof to the Company; or
 - (c) If a receiver be appointed under any other debenture or other charge issued by the Company; or
 - (d) if the Company ceases to carry on all or a material part of the business conducted by it at the date of this Debenture as described in Clause 6(c) or threatens to cease to carry on the same or a material part thereof as described in Clause 6(c); or
 - (e) if default be made by the Company in any of the Repayments of the secured sum or in the performance or observance of any covenant, condition or obligation binding on the Company under this Debenture and the default is not remedied within 14 days of such default to the satisfaction of the Department or the default is not capable of remedy; or
 - (f) if the Company is in breach of any agreement, covenant, condition or other provision, express or implied, in or under any other agreement, deed or document from time to time entered into between the Company and the Department in connection with this Debenture, or any representation, warranty or undertaking made by the Company relative to the application under the

Enterprise Act 2008 to which this Debenture relates or any other written representation warranty or undertaking made by the Company to the Department from time to time in connection with this Debenture is or becomes incorrect or misleading in any material respect and the Department, by notice in writing to the Company, declares the security constituted by this Debenture to be enforceable; or

- (g) if the Company shall not forward to the Department a copy of the balance sheet of the Company duly made out in accordance with the Company's Articles of Association within fourteen days of the Annual General Meeting of the Company or the adoption of resolutions in lieu thereof.
- 10. The Department may, at any time after the secured sum (as so determined) becomes payable, appoint by instrument in writing any person or persons to be receiver or receivers of the property hereby charged and may in like manner remove any such receivers and a receiver or receivers so appointed shall be deemed to be the agent of the Company and not the agent of the Department and the Company shall be wholly responsible for his/their acts or defaults (except where such acts and defaults are caused by the receiver's/receivers' own fraud, negligence or wilful misconduct) and for his/their remuneration costs charges and expenses to the exclusion of liability on the part of the Department and such receiver or receivers shall (in addition to all powers conferred on him or them by law) have power:-
 - to enter into and take possession of, collect and get in the property hereby charged and for that purpose to take any proceedings in the name of the Company or otherwise;
 - (b) to sell or concur in selling or exchanging (but where necessary with the leave of the court) and to let or concur in letting and to accept surrenders of leases or tenancies of all or any of the property hereby charged and to carry any such sale, exchange, letting or surrender into effect by conveying, leasing, letting or accepting surrenders in the name and on behalf of the Company or other estate owner. Any such sale may be for cash, debentures or other obligations, shares, stock or other valuable consideration and may be payable in a lump sum or by instalments spread over such period as he/they shall think fit. Plant, machinery

- and other fixtures may be severed and sold separately from the premises containing them without the consent of the Company being obtained thereto;
- (c) to make any arrangement or compromise with respect to the property hereby charged which he or they shall think expedient in the interests of the Department and in the name and on behalf of the Company;
- (d) to make and effect all such repairs, improvements and insurances with respect to the property hereby charged as he or they shall think fit and renew such of the property hereby charged as shall be worn out, lost or otherwise become unserviceable;
- (e) to appoint managers, accountants, servants, workmen and agents for the purposes referred to in this sub-clause upon such terms as to remuneration or otherwise as the receiver or receivers may determine; and
- (f) to sign any document, execute any deed and do all such other acts and things as may be considered to be incidental or conducive to any of the matters and powers referred to in this sub-clause and which the receiver or receivers may or can lawfully do as agent or agents for the Company.
- 11. All moneys received by such receiver or receivers shall (subject to any prior ranking claims arising by virtue of the legislation of the Isle of Man then in force) be applied as follows:-
 - (a) in the purchase of any goods which in his or their opinion shall be required for or incidental to the carrying on of any business of the Company or for the payment of such salaries and other expenses as he or they shall think fit;
 - (b) in the payment of his or their commission or other proper remuneration and costs and expenses of and incidental to this Debenture or the enforcement of the powers herein and the sale, realisation and distribution of the property hereby charged;

- (c) in discharge or payment of all rents, rates, taxes, premiums of insurance, repairs and outgoings whatever affecting or incidental to the property hereby charged or any part thereof;
- (d) in or towards satisfaction of this Debenture; and
- (e) the surplus (if any) shall be paid to the Company or any other creditor with prior entitlement to it.
- 12. In addition to the powers hereinbefore given, the Department may at any time enter into possession of and hold, or appoint a receiver to take possession of, any part of the property hereby charged which may at any time appear to the Department to be in jeopardy and when a receiver is appointed under this clause the provisions of the last preceding clause shall apply mutatis mutandis and the Department may at any time give up possession or withdraw the receivership.
- 13. Should any receiver or receivers appointed as aforesaid under this Debenture die or refuse or be unable on any account to fulfil the duties devolving upon a receiver appointed under this Debenture, or should any such receiver or receivers be removed by the Department in accordance with the terms of clause 10 hereof, the Department shall be at liberty to appoint in writing any other person or persons as receiver or receivers in the place of a person or persons so dying or becoming unwilling or incapable of acting as aforesaid and such substituted receiver or receivers shall have and exercise all the powers and authorities conferred upon a receiver or receivers under this Debenture.
- 14. No person or persons dealing with the Department or any receiver appointed by it shall be concerned to enquire whether any event has happened upon which any of the powers contained in this Debenture are or may be exercisable, or otherwise as to the propriety or regularity of any exercise of such powers, or of any act purporting or intended to be an exercise of such powers, or whether any money remains owing upon security of this Debenture.
- 15. After the secured sum has become repayable the Company shall do all such acts and things and shall execute all such assurances and instruments as any receiver(s) appointed under this Debenture in the exercise of any of the powers conferred by this Debenture upon

him/them shall reasonably require, and the Company irrevocably appoints any receiver(s) appointed under this Debenture to be the lawful attorney(s) of the Company to do any act or thing and to execute any assurance or instrument in the exercise of the powers conferred by this Debenture upon him/them, or which the Company ought to do or execute under this Debenture and to exercise all the powers of the Company in carrying out or effecting any of the powers conferred by this Debenture upon him/them.

16. The Company shall recognise and treat the registered holder of this Debenture as the sole absolute owner of this Debenture and as alone entitled to receive and give effectual discharges for the money secured by this Debenture. The Company shall not be affected by notice of any trust or any right, title or claim of any person other than the registered holder of this Debenture.

17. The money secured by this Debenture shall be paid and this Debenture shall be transferable, without regard to any set-off, cross-claim or equities between the Company and the original or any intermediate registered holder of this Debenture, and the receipt of the sole-holder or of joint holders shall be a good release and discharge to the Company.

18. No failure or delay by the Department or other holder of this Debenture in exercising any right or remedy hereunder shall operate as a waiver nor shall any single or any partial exercise or waiver of any such right or remedy preclude its further exercise or the exercise of any other right or remedy.

19. Each of the provisions of this Debenture is severable and distinct from the others and if at any time one or more of such provisions is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Debenture shall not in any way be affected or impaired.

20. The Company warrants that:

 (a) neither the execution of this Debenture nor the creation of the charges contained in this Debenture contravenes any of the provisions of the memorandum and articles of association of the Company;

(b) such of the property hereby charged as is now owned by the Company at the date hereof is held free from charges or encumbrances; and

(c) it does not know of any act, omission or event which, had it been brought to the notice of the Department prior to the date hereof, ought reasonably to have been considered by the Company as likely to affect the decision of the Department as to the provision of financial assistance to the Company under the Enterprise Act 2008.

21. Any notice or demand by a party under this Debenture may be given or made to the other party if delivered or sent to the following addresses, or such other address as may be notified in writing by a party to the other party in the same manner, and shall be deemed to have been received by the other party if: (i) delivered in person, on the date of such delivery; or (ii) sent by pre-paid recorded or registered mail with acknowledgment of receipt requested, on the date received by the other party; or (iii) sent by facsimile before 4:00 p.m. local time at the address of the receiving party on a Business Day, on the date so sent or if sent by facsimile after such time or on a day other than a Business Day, on the next following Business Day:

(a) to the Company:

Prometic BioSciences Ltd Unit 2 Freeport Ballasalla

Isle of Man IM9 2AP

Attention: Chief Financial Officer

Fax: +44 (1223) 420270

(b) to the Department

The Department of Economic Development St Georges Court Upper Church Street Douglas

Isle of Man IM1 1EX

Attention: Chief Executive +44 (1624) 687171 Fax:

Email: colin.kniveton@gov.im (c) with a copy to:

Attorney General's Chambers 3rd Floor St Mary's Court Hill Street Douglas Isle of Man IM1 1EU

(d) to another registered Debenture holder: at its last address as shown in the register of debenture holders of the Company or, in the case of joint holders, at the last address of the first-named of the joint holders as shown in the register of debenture holders of the Company.

For the purposes hereof, "Business Day" means any day on which banks are open for business during regular hours in the city of the receiving party's address. Notwithstanding the foregoing, any notice or demand by a party under this Debenture shall be deemed to have been properly served on the Company if served on any one of the directors or on the secretary of the Company or on the Department if served on the Attorney General of the Government of the Isle of Man.

- 22. This Debenture shall be governed by and construed in accordance with the laws of the Isle of Man. The parties hereto irrevocably submit to the non-exclusive jurisdiction of the courts of the Isle of Man.
- 23. The Company will not be liable in any circumstances for any failure whatsoever to perform any of its covenants or obligations (other than the obligation to make any payment) where such failure is due to an act of God, governmental act, war, act of the public enemy, terrorism, fire, power failure, major explosion or other cause beyond the reasonable foresight and control of the Company and occurring without any fault or negligence, rendering impossible the performance of any of its covenants or obligations hereunder, including the covenants and obligations set out at Clause 6 hereof.
- 24. This Debenture is effective from the date of its execution.

IN WITNESS WHEREOF the parties hereto have executed this Debenture as a deed on the day, month and year first hereinbefore written.

EXECUTED AS A DEED under the Company's Common Seal for and on behalf of the PROMETIC BIOSCIENCES LIMITED By:-

Director/Company Secretary

EXECUTED and delivered by the Department under the hand of the Minister or a person duly authorised by the Minister for Economic Development in the presence of:-

Homa RAYDONY
FRANCISCON

: Print name: Arm Ben

: Position: Microster For Comment Development



Department of Economic Development

Rheynn Lhiasaghey Tarmaynagh
Chief Executive
Colin Kniveton

St. George's Court Upper Church Street

Douglas

Isle of Man IM1 1EX

Subject to Contract

Direct Dial No: (01624 687177)
Fax: (01624 687171)
Website: www.gov.im/ded
Email: dave.kelly@gov.im

Mr B. Pritchard Prometic Biosciences Ltd The Freeport Ballasalla Isle of Man IM5 2AP

Ref:

Date: 15 August 2011

Dear Mr Pritchard

Re; Repayable Grant to Support Working Capital of Prometic Biosciences Ltd (PBL)

Further to recent discussions regarding the above matters, I am pleased to inform you that the Department has agreed to offer PBL a repayable grant of £500,000 to assist with short term cashflow.

The company has indicated to the Department that the working capital loan will be utilised to provide cashflow to support the ongoing work being undertaken in relation to the \$4 million contract dated July 2011.

The Department is prepared to offer the £500,000 subject to the amount being repaid in the following manner:

	<u> </u>
31 August	67,588
30 September	67,588
31 October	67,588
30 November	135,135
31 December	162,101

Interest will be payable at a rate of 5% per annum, an amount being payable with each repayment. The actual amount payable with each repayment will be notified by the Department to Prometic Biosciences Limited once the drawdown date has been agreed.

The payment of the loan will be subject to:

Confirmation that the funding is to be used to pay costs relating to the Isle of Man operation and that no management fees or loan repayments will be made to the parent company. The Department understands that costs relating to the Cambridge operation are paid from the same bank account.

Conformation that the fourth charge ranks before all other charges except the first, second and third charges in favour of the Department.

A fixed charge being taken over the company's intellectual property such charge being registered in the jurisdictions required by the Department. The company working with the Department and their legal advisors to ensure this happens in a timely manner.

Execution of a mortgage debenture securing a fourth charge in favour of the Department over the Company's assets and compliance with the necessary terms.

Yours sincerely

Sheila Lowe Director of Finance and Development



Patent Portfolio

Last updated on July 21, 2011

ProMetic BioSciences Ltd

PA-0001-PBL

Title: Novel Affinity Ligands and Their Use

Country	<u>Serial No</u>	Filing date	Expiry date	Status
Australia	69242/96	September 19, 1996	September 19, 2016	Granted
Austria	96930037.5	September 19, 1996	September 19, 2016	Validated
Belgium	96930037.5	September 19, 1996	September 19, 2016	Validated
Canada	2,232,626	September 19, 1996	3	Pending
China	96197849	September 19, 1996	September 19, 2016	Granted
Denmark	96930037.5	September 19, 1996	September 19, 2016	Validated
European	96930037.5	September 19, 1996	September 19, 2016	National Phase
Finland	96930037.5	September 19, 1996	September 19, 2016	Validated
France	96930037.5	September 19, 1996	September 19, 2016	Validated
Germany	96930037.5	September 19, 1996	September 19, 2016	Validated
India	1654/MAS/96	September 19, 1996		Pending
Ireland	96930037.5	September 19, 1996	September 19, 2016	Validated
İtaly	96930037.5	September 19, 1996	September 19, 2016	Validated
Japan	1997-512335	September 19, 1996		Pending

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PA-0001-PBL

Title: Novel Affinity Ligands and Their Use

Country	<u>Serial No</u>	Filing date	Expiry date	<u>Status</u>
Malaysia	9603852	September 18, 1996	September 18, 2016	Granted
Netherlands	96930037,5	September 19, 1996	September 19, 2016	Validated
PCT	PCT/DK96/00399	September 19, 1996	3	National Phase
Spain	96930037.5	September 19, 1996	September 19, 2016	Validated
Sweden	96930037.5	September 19, 1996	September 19, 2016	Validated
Switzerland	96930037.5	September 19, 1996	September 19, 2016	Validated
United Kingdom	96930037.5	September 19, 1996	September 19, 2016	Validated
United States	09/071,927	September 19, 1996	September 19, 2016	Granted

PA-0002-PBL

Title: Novel Triazine-Based Detoxification Agents and Their Use

Country	<u>Serial No</u>	Filing date	Expiry date	Status
European	00927543.9	May 09, 2000	May 09, 2020	National Phase
France	00927543.9	May 09, 2000	May 09, 2020	Validated
Germany'	0927543.9	May 09, 2000	May 09, 2020	Validated
Japan	2000-616919	May 09, 2000	May 09, 2020	Granted
PCT	PCT/GB00/01759	May 09, 2000		National Phase
Sweden	0927543.9	May 09, 2000	May 09, 2020	Validated

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PA-0002-PBL

Title: Novel Triazine-Based Detoxification Agents and Their Use

Country	Serial No	Filing date	Expiry date	Status
Switzerland	927543.9	May 09, 2000	May 09, 2020	Validated
United Kingdom	00927543.9	May 09, 2000	May 09, 2020	Validated
United States	10/069,099	May 09, 2000	May 09, 2020	Granted

PA-0004-PBL

Title: Multidimensional Library

Country	<u>Serial No</u>	Filing date	Expiry date	<u>Status</u>
Australia	2003288447	December 09, 2003	December 09, 2023	Granted
Áustria	03780366.5	December 09, 2003		Validated
Canada	2,508,452	December 09, 2003		Pending
China	CN 200380105520.9	December 09, 2003	December 09, 2023	Granted
Denmark	03780366.5	December 09, 2003		Validated
European	03780366.5	December 09, 2003		Allowed
France	03780366.5	December 09, 2003		Validated
Germany	03780366,5	December 09, 2003		Validated
India	2990/DELNP/2005	December 09, 2003	December 09, 2023	Granted
Italy	03780366.5	December 09, 2003		Validated
Japan	2005-502337	December 09, 2003	December 09, 2023	Granted

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PA-0004-PBL

Title: Multidimensional Library

Country	Serial No	Filing date	Expiry date	Status
Mexico	PA/a/05006047	December 09, 2003	December 09, 2023	Granted
Netherlands	03780366.5	December 09, 2003		Validated
New Zealand	541088	December 09, 2003	December 09, 2023	Granted
PCT	PCT/GB03/05368	December 09, 2003		National Phase
Sweden	03780366.5	December 09, 2003		Validated
Switzerland	03780366.5	December 09, 2003		Validated
United Kingdom	03780366.5	December 09, 2003		Validated
United States	10/536.953	December 09, 2003	December 09, 2023	Granted

PA-0009-PBL

Title: Process for Making Fluorinated Polymer Adsorbent Particles

Country	Serial No	Filing date	Expiry date	<u>Status</u>
European	00938405.8	June 12, 2000		National Phase
PCT	PCT/CA00/00701	June 12, 2000		National Phase
Sweden	00938405.8	June 12, 2000	June 12, 2020	Validated
United Kingdom	00938405.8	June 12, 2000	June 12, 2020	Validated
United States	09/980,901	June 12, 2000	June 12, 2020	Granted

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PA-0012-PBL

Title: Apparatus and Method for Producing Porous Polymer Particles

Country	Serial No	Filing date	Expiry date	<u>Status</u>
Australia	200181619	August 03, 2001	August 03, 2021	Granted
Austria	01960002.2	August 03, 2001	August 03, 2021	Validated
Belgium	01960002.2	August 03, 2001	August 03, 2021	Validated
Brazil	PE0112971-6	August 03, 2001		Allowed
Canada	2,417,285	August 03, 2001	August 03, 2021	Granted
Canada	2,314,921	August 03, 2000		Provisional - Formalized
China	01815146.9	August 03, 2001	August 03, 2021	Granted
Denmark	01960002.2	August 03, 2001	August 03, 2021	Validated
European	01960002.2	August 03, 2001	August 03, 2021	Granted
Finland	01960002.2	August 03, 2001	August 03, 2021	Vaildated
France	01960002.2	August 03, 2001	August 03, 2021	Validated
Germany	0196000232	August 03, 2001	August 03, 2021	Validated
Ireland	01960002.2	August 03, 2001	August 03, 2021	Validated.
Italy	01960002.2	August 03, 2001	August 03, 2021	Validated
Japan	2002-518341	August 03, 2001		Pending
Mexico	PA/a/2003/00946	August 03, 2001	August 03, 2021	Granted
Netherlands	01960002.2	August 03, 2001	August 03, 2021	Vaiidated
PCT	PCT/CA01/01126	August 03, 2001		National Phase

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PA-0012-PBL

Title: Apparatus and Method for Producing Porous Polymer Particles

Country	<u>Serial No</u>	Filing date	Expiry date	Status
Spain	01960002.2	August 03, 2001	August 03, 2021	Validated
Sweden	01960002.2	August 03, 2001	August 03, 2021	Validated
Switzerland	01960002.2	August 03, 2001	August 03, 2021	Validated
United Kingdom	01960002.2	August 03, 2001	August 03, 2021	Validated
United States	10/343,354	August 03, 2001	August 03, 2021	Granted

PA-0017-PBL

Title: Endotoxin-Binding Ligands and Their Use

Country	Serial No	Filing date	Expiry date	Status
Austria	03725432.3	May 22, 2003	May 22, 2023	Validated
Belgium	03725432.3	May 22, 2003	May 22, 2023	Validated
China	03813610.4	May 22, 2003	May 22, 2023	Granted
European	03725432.3	May 22, 2003	May 22, 2023	Granted
France	03725432.3	May 22, 2003	May 22, 2023	Validated
Germany	03725432.3	May 22, 2003	May 22, 2023	Validated
Netherlands	03725432,3	May 22, 2003	May 22, 2023	Validated
PCT	PCT/GB03/02209	May 22, 2003		National Phase
Sweden	03725432.3	May 22, 2003	May 22, 2023	Validated

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PA-0017-PBL

Title: Endotoxin-Binding Ligands and Their Use

Country	Serial No	Filing date	Expiry date	Status
Switzerland	03725432.2	May 22, 2003	May 22, 2023	Validated
United Kingdom	03725432.3	May 22, 2003	May 22, 2023	Validated
United States	11/503,659	August 14, 2006	August 14, 2026	Granted

PA-0027-PBL

Title: The Use of Adsorbent Polymer Particles in DNA Separation

Country	<u>Serial No</u>	Filing date	Expiry date	Status
United States	10/317,980	December 12, 2002	June 12, 2020	Granted

PA-0047-PBL

Title: Sequential Protein Isolation and Purification Schemes by Affinity Chromatography

Country	Serial No	Filing date	Expiry date	<u>Status</u>
Australia	.2005277190	August 19, 2005	August 19, 2025	Granted
Brazil	PI 0514435-3	August 19, 2005		Pending
Canada	2,576,963	August 19, 2005		Pending
China	200580027498.X	August 19, 2005		Pending
European	05791084.6	August 19, 2005		Pending
Gulf Coop Council	GCC/P/2005/5061	August 20, 2005		Pending

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PA-0047-PBL

Title: Sequential Protein Isolation and Purification Schemes by Affinity Chromatography

Country	Serial No	Filing date	Expiry date	Status
Iran	38405421	August 20, 2005	August 20, 2025	Granted
Japan	2007-528078	August 19, 2005		Pending
Malaysia	20053922	August 22, 2005		Pending
Mexico	PA/a/2007/002085	August 19, 2005		Published
Pakistan	772/2005	August 20, 2005		Pending
PCT	PCT/US2005/029739	August 19, 2005		National Phase
Taiwan	94128684	August 22, 2005		Published
United States	11/207,440	August 19, 2005		Pending
United States	US 60/602,868	August 20, 2004		Provisional - Formalized

PA-0051-PBL

Title: Affinity Adsorbents for Fibrinogen

Country	<u>Serial No</u>	Filing date	Expiry date	Status
Australia	2006 2 45482	May 09, 2006	May 08, 2026	Granted
Canada	2,607,863	May 09, 2006		Pending
China	200680015925.7	May 09, 2006	May 09, 2026	Granted
European	06727057.9	May 09, 2006		Pending
India	8574/DELNP/2007	May 09, 2006		Pending

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PA-0051-PBL

Title: Affinity Adsorbents for Fibrinogen

Country	<u>Serial No</u>	Filing date	Expiry date	<u>Status</u>
Japan	2008-510635	May 09, 2006		Allowed
Mexico	PA/a/2007013948	May 09, 2006		Pending
New Zealand	563164	May 09, 2006		Allowed
PCT	PCT/GB06/0165	May 09, 2006		National Phase
United Kingdom	GB 0509442.0	May 09, 2005		Provisional - Formalized
United States	11/913,528	May 09, 2006		Pending

PA-0057-PBL

Title: Prion Protein Ligands and Methods of Use

Country	<u>Serial No</u>	Filing date	Expiry date	Status
China	200680020721.2	June 08, 2006		Published
European	06744347.3	June 08, 2006		Published
Japan	2008-515296	June 08, 2006		Pending
PCT	PCT/GB2006/050146	June 08, 2006		National Phase
United Kingdom	GB 0511799.9	June 10, 2005		Provisional - Formalized
United States	11/917,053	June 08, 2006		Pending

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PA-0059-PBL

Title: Affinity Adsorbents for Factor VIII and von Willebrand's Factor

Country	Serial No	Filing date	Expiry date	<u>Status</u>
Australia	2006 2 45579	May 09, 2006	May 09, 2026	Granted
Canada	2,607,858	May 09, 2006		Pending
China	200680015918.7	May 09, 2006	May 09, 2026	Granted
European	06727055.3	May 09, 2006		Published
India	8573/DELNP/2007	May 09, 2006		Pending
Japan	2008-510633	May 09, 2006		Pending
Mexico	MX/2007/013949	May 09, 2006		Allowed
New Zealand	563166	May 09, 2006		Allowed
PCT	PCT/GB2006/001693	May 09, 2006		National Phase
United Kingdom	0509443.8	May 09, 2005		Provisional - Formalized
United States	11/913,508	May 09, 2006	November 19, 2026	Granted

PA-0060-PBL

Title: Affinity Adsorbents for Plasminogen

Country	<u>Serial No</u>	Filing date	Expiry date	<u>Status</u>
Australia	2006245575	May 09, 2006	May 09, 2026	Granted
Canada	2,607,851	May 09, 2006		Pending
China	200680016008.0	May 09, 2006		Allowed

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PA-0060-PBL

Title: Affinity Adsorbents for Plasminogen

Country	<u>Serial No</u>	Filing date	Expiry date	Status
European	06727050,4	May 09, 2006		Published
India	8572/DELNP/2007	May 09, 2006		Pending
Japan	2008-510632	May 09, 2006		Pending
Mexico	PA/a/2007/013947	May 09, 2006		Aflowed
New Zealand	563165	May 09, 2006		Pending
PCT	PCT/GB2006/001686	May 09, 2006		National Phase
United Kingdom	GB 0509438.8	May 09, 2005		Provisional - Formalized
United States	11/913,514	May 09, 2006		Allowed

PA-0066-PBL

Title: Adsorbents for Protein Purification (A3P)

Country	Serial No	Filing date	Expiry date	Status
Australia	2007220260	March 02, 2007		Pending
Brazil	P10708451-0	March 02, 2007		Pending
Canada	2,645,675	March 02, 2007		Pending
China	200780011865.6	September 02, 2007	7	Pending
European	07712978.1	March 02, 2007		Published
Japan	2008-556860	March 02, 2007		Pending

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PA-0066-PBL

Title: Adsorbents for Protein Purification (A3P)

Country	<u>Serial No</u>	Filing date	Expiry date	<u>Status</u>
PCT	PCT/GB2007/050095	March 02, 2007		National Phase
Singapore	200806431-3	March 02, 2007		Pending
United States	12/281,346	March 02, 2007		Pending

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RECORDED: 10/14/2011

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