508722846 08/23/2024

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI450555

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
BIOSURFACE ENGINEERING TECHNOLOGIES, INC.	02/16/2015

# **RECEIVING PARTY DATA**

Company Name:	FERRING INTERNATIONAL CENTER S.A.
Street Address:	CH. DE LA VERGOGNAUSAZ 50
City:	SAINT-PREX
State/Country:	SWEDEN
Postal Code:	1162

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17443012

## **CORRESPONDENCE DATA**

**Fax Number:** 2026725399

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:** (202)672-5300

**Email:** ipdocketing@foley.com,kjaskulski@foley.com

Correspondent Name: Foley & Lardner

Address Line 1: 3000 K STREET N.W.

Address Line 2: SUITE 600

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20007

ATTORNEY DOCKET NUMBER:	052209-0473
NAME OF SUBMITTER:	Kylie Seidler
SIGNATURE:	Kylie Seidler
DATE SIGNED:	08/23/2024

# **Total Attachments: 54**

source=Assignment 3#page1.tiff source=Assignment 3#page2.tiff source=Assignment 3#page3.tiff source=Assignment 3#page4.tiff source=Assignment 3#page5.tiff

> PATENT REEL: 068763 FRAME: 0001

508722846

Assistant Assistant College and College	
source=Assignment 3#page6.tiff	
source=Assignment 3#page7.tiff	
source=Assignment 3#page8.tiff	
source=Assignment 3#page9.tiff	
source=Assignment 3#page10.tiff	
source=Assignment 3#page11.tiff	
source=Assignment 3#page12.tiff	
source=Assignment 3#page13.tiff	
source=Assignment 3#page14.tiff	
source=Assignment 3#page15.tiff	
source=Assignment 3#page16.tiff	
source=Assignment 3#page17.tiff	
source=Assignment 3#page18.tiff	
source=Assignment 3#page19.tiff	
source=Assignment 3#page20.tiff	
source=Assignment 3#page21.tiff	
source=Assignment 3#page22.tiff	
source=Assignment 3#page23.tiff	
source=Assignment 3#page24.tiff	
source=Assignment 3#page25.tiff	
source=Assignment 3#page26.tiff	
source=Assignment 3#page27.tiff	
source=Assignment 3#page28.tiff	
source=Assignment 3#page29.tiff	
source=Assignment 3#page30.tiff	
source=Assignment 3#page31.tiff	
source=Assignment 3#page32.tiff	
source=Assignment 3#page33.tiff	
source=Assignment 3#page34.tiff	
source=Assignment 3#page35.tiff	
source=Assignment 3#page36.tiff	
source=Assignment 3#page37.tiff	
source=Assignment 3#page38.tiff	
source=Assignment 3#page39.tiff	
source=Assignment 3#page40.tiff	
source=Assignment 3#page41.tiff	
source=Assignment 3#page42.tiff	
source=Assignment 3#page43.tiff	
source=Assignment 3#page44.tiff	
source=Assignment 3#page45.tiff	
source=Assignment 3#page46.tiff	
source=Assignment 3#page47.tiff	
source=Assignment 3#page48.tiff	
source=Assignment 3#page49.tiff	
source=Assignment 3#page50.tiff	
source=Assignment 3#page51.tiff	
source=Assignment 3#page52.tiff	
source=Assignment 3#page53.tiff	
- Country - Congression - Cong	

source=Assignment 3#page54.tiff

## **RECORDABLE PATENT ASSIGNMENT**

This RECORDABLE PATENT ASSIGNMENT (this "<u>Patent Assignment</u>") is made as of February 16, 2015 (the "<u>Effective Date</u>") by and between BioSurface Engineering Technologies, Inc., a Delaware corporation ("<u>Assignor</u>") and Ferring International Center S.A., a Swiss Société Anonyme ("<u>Assignee</u>"). Each of Assignor and Assignee are referred to as a "<u>Party</u>" and together as the "<u>Parties</u>".

WHEREAS, Assignor and Assignee have entered into a certain Asset Purchase Agreement, dated as of February 16, 2015 (the "<u>Purchase Agreement</u>"), pursuant to which Assignee has acquired certain assets of Assignor and its Affiliates (as defined in the Purchase Agreement), including without limitation the Assigned Patent Rights (defined below); and

WHEREAS, Assignor wishes to confirm, memorialize and record the assignment of the Assigned Patent Rights to Assignee as set forth in the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual representations, warranties and covenants set forth herein and in the Purchase Agreement, and for certain monetary consideration and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned parties agree as follows:

1. Assignor on behalf of itself and its Affiliates does hereby confirm that it has irrevocably sold, transferred, assigned and delivered, and hereby does sell, transfer, assign and deliver unto Assignee, and Assignee hereby assumes and accepts, all of Assignor's and its Affiliates' worldwide rights, title, and interest in and to: (i) the patents listed on Annex A hereto, together with all registrations and applications for the foregoing; and all rights to request, apply for, file and register patent rights in any of the foregoing; (ii) all provisional applications, continuation and continuation-in-part applications, continued prosecution applications, and substitute and divisional applications claiming the benefit of the filing date of or priority to the foregoing; all patents of addition of the foregoing; all continued examinations, re-examinations, inter partes review and post-grant review certificates of the foregoing; all amendments, reissues, and extensions of the foregoing; all divisional, validations, supplementary perfection certifications and extensions of the foregoing; all patents or patent applications that claim priority to or from the foregoing; and all inventions claimed by any of the foregoing; (iii) all rights to claim priority to the foregoing under any of the International Convention for the Protection of Industrial Property ("Paris Convention"), the Patent Cooperation Treaty ("PCT"), and applicable bilateral or multilateral treaties; (v) all rights to request, apply for, file and register the foregoing; (vi) all patents issuing from any of the foregoing; (vii) all defenses relating to or arising from any of the foregoing, and all rights of action arising from the foregoing, including without limitation all claims for damages by reason of present, past and future infringement or violation of the foregoing and all present, past and future rights to sue and collect damages or seek injunctive relief for any such infringement or violation of the foregoing; and (viii) all income, royalties and any other payments now and hereafter due and/or payable to Assignor and its Affiliates in respect of the foregoing, in each case of (i) – (viii), to be held and enjoyed by Assignee for its own use and benefit and for its successors legal representatives and assigns as the same would have been held as fully and entirely by Assignor and its Affiliates had this assignment not been made (collectively, the "Assigned Patent Rights")

- 2. Assignor on behalf of itself and its Affiliates hereby authorizes and requests the competent authorities including without limitation an official of the United States Patent and Trademark Office, an official of any non-US governmental patent office and an official of any intergovernmental organization, whose duty is to issue patent registrations or other evidence or forms of intellectual property and/or industrial property protection on applications as aforesaid, to issue the same to the Assignee, its successors, legal representatives and assigns, in accordance with the terms of this Patent Assignment.
- 3. Assignor shall, and shall cause its Affiliates, and their respective officers, directors and employees to, promptly execute and deliver such documents, and do and perform such acts and things as Assignee, its successors, legal representatives and/or assigns may reasonably request to give effect to, document and record, perfect and enforce the assignment herein recited, including without limitation executing and delivering such other documents as may be required to give full effect to and to perfect the rights of Assignee, it successors, legal representatives and assigns under this Patent Assignment in and to the Assigned Patent Rights worldwide.
- 4. Assignor further agrees, at any time, upon the reasonable request of Assignee, it successors, legal representatives and/or assigns, to execute and deliver to Assignee, it successors, legal representatives and/or assigns, any additional applications for patent for said Assigned Patent Rights, or any part or parts thereof, including without limitation any provisional, utility, continuation, continuation-in-part, divisional, reissue, substitute, and extension applications to the foregoing; and all re-examination, inter partes, post-grant and opposition certifications or amendments or reissues of the foregoing and all patent applications claiming benefit of or priority from the foregoing; and all patents issues from the foregoing.
- 5. This Patent Assignment shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives and assigns. This Patent Assignment and any claim, controversy, dispute or cause of action (whether in contract, tort or otherwise) based upon, arising out of or relating to this Patent Assignment shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed entirely within the State of New York, without regard to the conflicts of laws principles thereof. This Patent Assignment may be executed in the original or by facsimile in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

[Signature page follows.]

The undersigned parties, by their Recordable Patent Assignment effective as of	authorized representatives, have executed this the Effective Date:
"ASSIGNEE":	FERRING INTERNATIONAL CENTER S.A.
	By: Name:
	Title:
	By:
W. LOCKETTOPIN	
"ASSIGNOR":	BIOSURFACE ENGINEERING TECHNOLOGIES, INC.
	By:Name:
	Title:

[Signature Page to Recordable Patent Assignment]

The undersigned parties, by their authorized representatives, have executed this Recordable Patent Assignment effective as of the Effective Date:

"ASSIGNEE":	FERRING INTERNATIONAL CENTER S.A.
	By:
	Name:
	Title:
	By:
	Name:
	Title:
"ASSIGNOR":	BIOSURFACE ENGINEERING TECHNOLOGIES, INC.
VANESSA KELLER DE SOUZA Notary Public Montgomery County Manyland My Commission Expires Oct. 30, 2018	By: Rouechi- Pille: President & CEU
STATE OF <u>MARYLAND</u> ) SS: COUNTY OF <u>MONTEONER</u> )	
COUNTY OF HONTGOKERY )	

Roueché, the President and Chief Executive Officer of BioSurface Engineering Technologies, Inc., a Delaware corporation, who, having been duly sworn, acknowledged the execution of the foregoing Recordable Patent Assignment for and on behalf of such corporation as such officer.

WITNESS my hand and Notarial Seal this 10 day of February, 2015.

VANESSA KELLER DE SOUSA

Notary Public (Printed)

My Commission Expires:

My County of Residence:

10/30/18

HONT GOKERY

[Signature Page to Recordable Patent Assignment]

# ANNEX A

SOLELY-OWNED ASSIGNED PATENT RIGHTS

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS PEACOCK MYERS, P.C. 30817-1001

Serial/ Patent#	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
5,338,770	Filed	Gas Permeable	CIP of 5,262,451	Suzanne	Assigned to	Large	Issued
	4/12/1990	Thrombo-	which is a CIP of	Winters,	BioSET		
07/509,063		Resistant	4,850,958	Kenneth A.			
	Issued	Coatings and		Solen, Clifton G.	Licensed to		
	8/16/1994	Methods of		Sanders, J.D.	InnerDyne		
		Manufacture		Mortensen, and	•		
				Gaylord Berry			
PCT/US91/0	Filed 4/9/91	Gas Permeable	5,338,770	Suzanne	Cardiopulmoni		Nat'l Phase
02415		Thrombo-		Winters,	CS		
	•	Resistant		Kenneth A.			
		Coatings and		Solen, Clifton			
		Methods of		G. Sanders,			
		Manufacture		J.D.			
				Mortensen,			
E 040 600		Multifunctional	CID of Cor No	Gaylord Berry	Applianced to	252	
5,342,693	Filed	Multifunctional	CIT OF VET. NO.	Suzanne	Assigned to	Large	Issued
	03/22/1993	Thrombo-	823,271	Winters,	BioSET		
08/035,426		Resistant Coating	(Abandoned)	Kenneth A.			
	Issued	and Methods of	which was a	Solen, Clifton G.	Licensed to		
	8/30/1994	Manufacture	divisional of	Sanders, J.D.	InnerDyne		
			5,262,451 which	Mortensen, and			
			was a CIP of	Gaylord Berry			
			4,850,958				
5,098,376	Filed	Apparatus and	No priority	Gaylord Berry,	Assigned to	Large	Issued
07/45/ 773	12/20/1909	Furling and		and Mitchell D	ָרַ בַּי		
0//404,//3	-	ruilly and		and Michell D.	:		
	Issued	Introducing an		Baldwin	Licensed to		
	3/24/1992	Extrapulmonary			InnerDyne		
		Blood Gas					
		Exchange Device					
PCT/US90/0	Filed	Apparatus and	5,098,376	Gaylord L. Berry	Cardiopulmoni		Nat'l Phase
0/165	0661/9/71	Methods for		J.D. Monensen	S		

PATENT 062676 FRAME: 0035

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS PEACOCK MYERS, P.C. 30817-1001

Serial/ Patent #	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
		Furling and		Mitchell D.			
		Introducing an		Baldwin			
		Extrapulmonary					
		Blood Gas					
		Exchange					
		Device					
5,125,902	Filed 3/2/1990	Sheath/Obturator	No priority	Gaylord Berry,	Assigned to	Large	Abandoned
		to Facilitate		J.D. Mortensen,	BioSET		
07/488,285	Issued	Insertion of		Mitchell D.			
	6/30/1992	Medical Devices		Baldwin, and	Licensed to		
		into a Patient's		Larry D. Rigby	InnerDyne		
		Venous System					
PCT/US91/0	2/26/1991	Sheath for	5,125,902	Gaylord Berry,	Cardiopulmoni		Nat'l Phase
01338		Intravenous		J.D. Mortensen,	cs		
		Insertion of		Mitchell D.			
		Medical Devices		Baldwin and			
5,125,915	Filed	Locking Y-	No priority	Gaylord Berry	Assigned to	Large	Abandoned
	3/2/1990	Connector for		and Lynn W.	InnderDyne		
07/488,742		Selective		Kerby			
	Issued	Attachment to			Licensed to		
	6/30/1992	Exterior of			InnerDyne		
		Medical Tubing				***************************************	
PCT/US91/0	Filed 2/26/91	Locking Y-	5,125,915	Gaylord Berry	Cardiopulmoni		Nat'l Phase
01341		Connector for		Lynn W. Kerby	CS		
		Selective					
		Attachment to					
		Exterior of					
		Medical I dolling					
5,158,553	Filed	Rotatably	No priority	Gaylord Berry	Assigned to	Large	Issued
	12/26/1990	Actuated		and Lynn W.	BioSET		
07/633,975	Issued	Constricting		Kerby	Licensed to		

# REEL: 052676 FRAME: 0036 **TN**3TA4

07374

Filed 8/14/92

Extracorporeal

Osaki, J.D

Mortensen

Blood

Oxygenation

PCT/US92/0

5,230,862

07/746,785

5,182,317

07/716,843

Filed 8/16/1991 Filed 6/17/1991 7/03/1990 Filing/Issue Issued Issued ssued 0/27/1992 Filed 12/23/91 10/27/1992 /27/1993 /26/1993 Filed 6/27/91 Apparatus for Extracorporeal Devices Blood Multifunctional for Blood Gas **Delivery System** Exchange Delivery System Method for Oxygenation Manufacture Methods of Coatings and Resistant Thrombo-Devices Exchange Automated Gas for Blood Gas **Automated Gas** Catheter Valve Constricting Actuated Rotatably Catheter Valve Apparatus and **BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS** DIV of Ω is a CIP of 5,158,553 **Priority Claim** 07/746,785 No priority 07/204,115 07/215,014 which No priority 158,534 PEACOCK MYERS, P.C. and Yansong Shan Winters, Berry; Yansong Shan Berry, Lynn 30817-1001 Shigemasa Shigemasa Kerby Osaki, and J.D Gaylord Berry, Mortensen, and Sanders, J.D. Solen, Clifton G. Kenneth A. Suzanne Gaylord L. Gaylord Berry Inventors Gaylord Berry, Mortensen Gaylord Berry Gaylord L. Assigned to BioSET BioSET Ownership InnerDyne Assigned to Licensed to Innerdyne Assigned to InnerDyne nnerDyne Licensed to nnerDyne icensed to Cardiopulmo Cardiopulmo Cardiopulmo Large Large Large Entity Status Nat'l phase **Current Status** Issued Abandoned Nat'l Phase Issued Nat'l phase

5,158,534

Filed

Patent # Serial/

Date

PCT/US91/0

07/548,290

PCT/US91/0

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

																			- 1				
Serial/ Patent#	5,955,588		09/159,276				09/399,119								6,342,591		09/629,059		6,596,699		10/054,091		
Filing/Issue Date	Filed	9/22/1998		Issued	9/21/1999		Filed	9/20/1888							Filed	7/31/2000	60.00	1/29/2002	Filed	1/22/2002		Issued	7/22/2003
Title	Non-	Thrombogenic	Coating	Composition and	Methods for	Using Same	Non-	ogenic	Coating	Compos	itions	Methods	for	Using Same	Amphipathic	Coating for	Modulating Cellular Adhesion	Composition and	Nucleic Acid	Coating	Compositions	and Methods	
Priority Claim	60/068,374						CON of	60/068,374							CIP of	09/399,119	(Abandoned)	5,955,588	CIP of 6,342,591	which is a CIP of	09/399,119	(Abandoned)	which was a CIP of 5,955,588
Inventors	Ray Tsang,	Shigemasa	Osaki				Ray Tsang	Osaki							Paul Zamora,	Shigemasa	Osaki; Ray	i i	Paul Zamora,	Ray Tsang and	Shigemasa	Osaki	
Ownership	Assigned to	TYCO		(exclusive	license to	Bioset)	Assigned to								Assigned to	BioSET	l icensed to	InnerDyne	Assigned to	BioSET			
Entity Status	Large						Sma	=							Large				Large	ı			
Current Status	Issued						Abandoned								Issued				Issued				

# REEL: 052676 FRAME: 0038 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

Serial/	Filing/Issue	Title	Priority Claim	Inventors	Ownership	Entity	Current Status
Patent #	Date		,			Status	
5,463,010	Filed	Hydrocyclosiloxan	No priority	Chen-Ze Hu,	Assigned to	Large	Issued
-	11/12/1993	e Membrane		Kric K. Dolence,	Surface		
152,176		Prepared by		Shigemasa	Engineering		
	Issued	Plasma		Osaki, Clifton G.			
	10/31/1995	Polymerization		Sanders	(InnerDyne		
		Process			owned,		
					exclusive		
					license to		
					BioSET)		
PCT/US94/1   11/10/1994	11/10/1994	Hydrocyclosiloxa	08/152,176	Chen-Ze Hu,			
2995		ne Membrane		Eric K. Dolence,	0		
		Prepared By		Shigemasa	Theirace		
		Plasma		Osaki, Clifron G.	Filhingering		
		Polymerization		Sanders			

PATENT PATENT PEEL: 062676 FRAME: 0039

08/304,656 5,650,234 Patent # Serial/ 11255 PCT/US95/ Issued 7/22/1997 Date Filed 9/9/1994 Filing/Issue 9/08/1995 (proteins) and Surfaces Title Polypeptides Polysaccharides, Modification of Polyethylene Electrophilic Oxides for the Polysaccharides Modification of Oxides for the Polyethylene Electrophilic Polypeptides No priority **Priority Claim** 08/304,656 Osaki Sanders, and Ray Tsang, Chen-Ze Hu, Inventors Dolence, Chen-Ze Hu, Ray Shigemasa Clifton G. Eric K. Dolence, Eric ㅈ. Osaki Shigemasa Sanders, and Tsang, Clifton record for 5650234 with the an ISI Norgen to Pfizer assignment assignment nc incorrectly link assignment Note: USPTO **BioSET** Assigned to Ownership Engineering Technologies records Sub-Licensed Nektar InnerDyne and Licensed to Surface nnerdyne Division of Large Entity Status Issued **Current Status** Phase Nat'i

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS PEACOCK MYERS, P.C.

30817-1001

PATENT 052676 FRAME: 0040

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

Serial/	Filing/Issue	Title	Priority Claim	Inventors	Ownership	Entity	<b>Current Status</b>
08/733.621	10/17/19960		08/304.656				Abandoned
Europe	Filed 9/8/1995	Electrophilic	PCT/US95/11255	Eric Dolence,	Assigned to	Large	Validated in
App. No.		Polyethylene		Chen-Ze Hu,	BioSET		Germany and
95931715.7	Published	Oxides for the	Related to	Ray Tsang,			Great Britain
Pub. No.	6/11/2003	Modification of	08/304,656	Clifton Sanders,	Licensed to		
0779894		Poylsaccharides		Shigemasa	InnerDyne and		
Pat. No.	Issued	Polypeptides		Osaki	Nektar		
69531057.7	6/11/2003	(Proteins) and					
		Surfaces			Sub-Licensed		
					to Pfizer		
Germany	Filed 9/8/1995	Electrophilic	PCT/US95/11255	Eric Dolence,	Assigned to	Large	
App. No.		Polyethylene		Chen-Ze Hu,	BioSET		
95931715.7	Published	Oxides for the	Related to	Ray Tsang,			
Pub. No.	6/11/2003	Modification of	08/304,656	Clifton Sanders,	Licensed to		
0779894		Poylsaccharides		Shigemasa	InnerDyne and		
Pat. No.	Issued	Polypeptides		Osaki	Nektar		
69531057.7	6/11/2003	(Proteins) and					
		Surfaces			Sub-Licensed		
					to Pfizer		
United	Filed 9/8/1995	Electrophilic	PCT/US95/11255	Eric Dolence,	Assigned to	Large	
Kingdom		Polyethylene		Chen-Ze Hu,	BioSET		
App. No.	Published	Oxides for the	Related to	Ray Tsang,			
95931715.7	6/11/2003	Modification of	08/304,656	Clifton Sanders,	Licensed to		
Pub. No.		Poylsaccharides		Shigemasa	InnerDyne and		
0779894	Issued	Polypeptides		Osaki	Nektar		
Pat. No.	6/11/2003	(Proteins) and			•		-
69531057.7		Surfaces			Sub-Licensed		
					to Pfizer		

REEL: 052676 FRAME: 0041 **TN3TA9** 

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

**PATENT** 

**REEL: 068763 FRAME: 0017** 

# PATENT 062676 FRAME: 0042

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1001

Serial/ Patent#	Filing/Issue Date	Title	<b>Priority Claim</b>	Inventors	Ownership	Entity Status	Current Status
Italy	Filed	Rotatably	PCT/US91/09699	Gaylord Berry,	Assigned to	Large	Issued
App. No.	12/23/1991	Actuated Valve		Lynn Kerby	BioSET	,	
92903523.6	•		Related to				
Pub. No.	Published		5,158,553		Licensed to		
1992/19	7/23/1992				InnerDyne		
Pat. No.							
0564578	Issued						
	3/17/1999						
Germany	Filed	Rotatably	PCT/US91/09699	Gaylord Berry,	Assigned to	Large	Issued
App. No.	12/23/1991	Actuated Valve		Lynn Kerby	BioSET		
92903523.6			Related to				
Pub. No.	Published		5,158,553		Licensed to		
1992/19	7/23/1992				InnerDyne		
Pat. No.							
69131018.1	Issued						
	3/17/1999						

10

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1002

09/845,035	<b>Europe</b> 99935974.8	PCT/US99 /17039	Patent # 6,248,057 09/361,553	Serial/
Filed 4/27/2001	Filed 7/27/1999	7/27/1999	Date Filed 7/27/1999 Issued 6/19/2001	Filing/Issue
Absorbable Brachytherapy and Chemotherapy Delivery Devices and Methods	Absorbable Brachytherapy and Chemotherapy Delivery Devices and Methods	Absorbable Brachytherapy and chemotherapy delivery devices and methods	Absorbable Brachytherapy and chemotherapy delivery devices and methods	Title
09/361,553	60/094,412	60/094,412	60/094,412	Priority Claim
William G. Mavity	William Mavity; Robert Stern; Shigemasa Osaki; Paul Zamora	Mavity, William G.; Stern, Robert A.; Osaki, Shigemasa, Zamora, Paul O.	Mavity, William G.; Stern, Robert A.; Osaki, Shigemasa; Zamora, Paul O.	Inventors
Assigned to BioSET  Licensed to Applied Biotherapeutics	Assigned to BioSET  Licensed to InnerDyne and Applied Biotherapeutics	Innerdyne Inc.	Assigned to BioSET  Licensed to InnerDyne and Applied Biotherapeutics	Ownership
Large	Large		Status Large	Entity
Abandoned	Abandoned	Nat'i Phase	Status Issued	Current

# PATENT 062676 FRAME: 0044

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1002

Serial/	Filing/Issue   Title	Title	Priority Claim	Inventors	Ownership		Current
Patent #	Date					Status	Status
6,575,888	Filed	Bioabsorbable	60/178,083	Paul O. Zamora	Assigned to		Issued
	1/24/2001	Brachytherapy		and Robert A.	BioSET	,	
09/769,194		Device		Stern			
	Issued			-	Licensed to		
	6/10/2003				InnerDyne and		
					Applied		
					Biotherapeutics		
PCT/US01/	Filed	Bioabsorbable	60/178,083	Paul O. Zamora	Assigned to	Large	Abandoned
02545	1/25/2001	Brachytherapy		and Robert A.	BioSET		
		Device		Stern			
Pub. No.	Published				Licensed to		
Wo	08/02/2001				innerDyne and		
01/54764					Applied		
					Biotherapeutics		

12

# REEL: 052676 FRAME: 0045 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.

			-	30817-1003			
Serial/ Patent #	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
6,630,580	Filed	Silyl and Heparin	Continuation of	Ray Tsang and	Assigned to	1	Issued
	01/14/2002	Compositions	09/629,059 which   Shigemasa	Shigemasa	BioSET		-
10/047,118			is a CIP of	Osaki			
	Issued		09/399,119		Licensed to		
	10/07/2003		(abandoned)		InnerDyne and		
			which is a		Celcus		
			Continuation of				

3

# REEL: 052676 FRAME: 0046 **TN3TA9**

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1005

Serial/	Filing/Issue	Title	<b>Priority Claim</b>	Inventors	Ownership	Entity	Current
Patent #	Date					Status	Status
PCT/US01/	Filed	Drug Diffusion	60/216,915	Shigemasa	Assigned to	Large	Abandoned
41281	7/06/2001	Coatings,		Osaki, Paul O.	BioSET		
		Applications and		Zamora and		_	
		Methods		Meng Chen	Licensed to		
					InnerDyne		
10/332,307	Filed	Drug Diffusion	PCT/US01/41281	Shigemasa	Assigned to	Large	Abandoned
	1/6/2003	Coatings,	60/216,915	Osaki, Paul O.	BioSET		
		Applications and		Zamora, Meng			
		Methods		Chen	Licensed to		
					InnerDyne		

# REEL: 052676 FRAME: 0047 **TN3TA9**

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1006

Serial/	Filing/Issue	Title		<b>Priority Claim</b>	Priority Claim Inventors	
Patent #	Date		2000		)	+
PCT/US01/	Filed	Bioactive Coating	09/629,059		Paul O. Zamora,	Paul O. Zamora,   Assigned to
24000	7/31/2001	Compositions and			Shigemasa	Shigemasa BioSET
		Medioda			Tsang	Tsang Licensed to
Japan	Filed	Bioactive Coating	PCT/US01/24000	ĕ	00 Paul O. Zamora	
App. No. 2002/515949	7/31/2001	Compositions and			Shigemasa	Shigemasa BioSET
	Published	INICELIOGS			Tsang	Tsang Licensed to
Pub. No. 2004/505124	2/19/2004				•	
Europe	Filed	Bioactive Coating	PCT/US01/24000	ő	00 Paul O. Zamora	_
App. No.	7/31/2001	Compositions and			Shigemasa	Shigemasa BioSET
01959358.1		Methods			Usaki and Kay	
2					I saily	
1311551	3/2/1/2003					ווויים באונים
6,921,811	Filed	Bioactive Coating	PCT/US01/24000	ĕ	)00 Paul O. Zamora	$\dashv$
	1/28/2003	Compositions and				Shigemasa
10/450,309		Methods	Claiming priority	₹		_
	Issued		to 09/629,059		Tsang	Tsang Licensed to
	7/26/2005					InnerDyne
6,765,069	Filed	Plasma Cross-	60/326,048		Ting-Ting Hsieh,	sieh,
	9/27/2002	Linked Hydrophilic			Meng Chen,	Meng Chen, BioSET
10/260,510	•	Coatings			Shigemasa	Shigemasa
	Issued				Osaki, Paul	Osaki, Paul
	7/20/2004				Zamora and Ray	Zamora and Ray
					Isang	Isang

# REEL: 052676 FRAME: 0048 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1006

Serial/	Filing/Issue Title	Title	Priority Claim	Inventors	Ownership		Current
Patent #	Date					Status	Status
7,217,769	Filed	Medical Device	60/326,048	Ting-Ting Hsieh,	Assigned to		Issued
	7/16/2004	with Plasma			BioSET		
10/893,603		Cross-Linked	Continuation of	Shigemasa			
	Issued	Hydrophilic	10/260,510	Osaki, Paul			
	5/15/2007	Coatings		Zamora and Ray			
		(continuation app.)		Tsang			
PCT/US02/	Filed	Plasma Cross-	60/326,048	Ting-Ting Hsieh,	Assigned to	Small	Completed
31252	9/30/2002	Linked Hydrophilic	10/260,510	Meng Chen,	BioSET		
		Coatings		Shigemasa			
				Osaki, Paul			
				Zamora and Ray			
				Tsang			

6

# REEL: 052676 FRAME: 0049 **TN3TA9**

Filing/Issue Date Cross Linked Heparin Coatings and Methods  $\overline{\Omega}$ 60/432,504 **Priority Claim** Paul Zamora Inventors Assigned to BioSET Ownership Entity Status Small Current Status Issued

Serial/ Patent # 7,468,210

10/733,208

Issued 12/23/2008

Filed 12/10/2003

30817-1007	Peacock Myers, P.C.	SIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
------------	---------------------	--

17

PATENT 052676 FRAME: 0050

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
PEACOCK MYERS, P.C.
30817-1010

Serial/	Filing/Issue	Title	Priority Claim	Inventors	Ownership	Entity	Current
Patent #	Date		•		•	Status	Status
6,613,432	Filed 12/21/2000	Plasma-Deposited Coatings, Devices	60/171,844 filed 12/22/99 and	Paul O. Zamora, Shiqemasa	Assigned to BioSET	Large	Issued
App. No.		and Methods	60/221,646 filed	Osaki and Meng			
09/746,234	Issued 9/2/2003		7/28/00	Chen	Licensed to InnerDyne		
PCT/US00/	Filed	Plasma-Deposited	60/171.844 filed	Paul O. Zamora.	Assigned to	Large	Completed
34945	12/22/2000	Coatings, Devices and Methods	12/22/99 and 60/221.646 filed	Shigemasa Osaki and Meno	BioSET	•	
			7/28/00	Chen	Licensed to		
					InnerDyne		
10/653,655	Filed	Plasma-Deposited	Continuation of	Paul Zamora,	Not Assigned	Large	Abandoned
	09/02/2003	Coatings, Devices	6,613,432	Ray Tsang,			
		and Methods	60/171,844 60/221,646	Meng Chen			
Europe	Filed	Plasma-Deposited	PCT/US00/34945	Paul O. Zamora,	Assigned to	Large	Abandoned
00989399.1	6/18/2002	Coatings, Devices	filed 12/22/2000;	Shigemasa	BioSET		
		and Methods	60/171,844 filed	Osaki and Meng			
			12/22/99 and	Chen			
			60/221,646 filed				
			7/28/00				

18

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1008

rial/	Filing/Issue	Title	Priority Claim	Inventors	Ownership	Entity	Current
tent#	Date		,			Status	Status
362,137	Filed	Cysteine-	60/656,713	Kazuyuki	_	Small	Abandoned
	2/23/2006	Branched		Takahashi	BioSET	-	
		Heparin-			•		
		Binding					
		Growth					
		Factor					
		Analogs					

19

PATENT 052676 FRAME: 0052

\*assignment to Bioset pursuant to an independent consulting agreement

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1011

			1			
		Sarah Albright		Coatings		
		Zamora,	11/167,636	Peptide	6/28/2005	PC1/0809/0231/2
			60/543,616	7	7:1	DOT#1005/000470
			priority to			
			claims			
			which			
			11/055,428			
			CIP of			
		Albright	-	_		
		Sarah	60/656,174	Coatings		
		Zamora,	60/655,570	Peptide	6/27/2005	
		Paul O.	60/583,566	Bioactive	Filed	11/167,636
				Analogs		
				Factor		
		Takahashi		Growth		
		Kazuyuki		Binding	5/5/2009	
		Xinhua Lin*		Heparin-	Issued	11/055,428
		Zamora,		Synthetic		App. No.
	BioSET	Pena*, Paul		Chain	2/10/2005	
Small	Assigned to	Louis A.	60/543,616	Heterodimeric	Filed	7,528,105
Status			Claim		Date	Patent #
Entity	Ownership	Inventors	Priority	Title	Filing/Issue	Serial/
						The state of the s

20

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1012

Serial/ Patent #	Filing/Issue Title	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
7,297,343	Filed	Bioactive	60/418,127	Paul Zamora	Assigned to	Small	issued
	10/10/2003	Medical Films			BioSET		
App. No.			CIP of				
10/684,022	Issued		10/450,309				
	11/20/2007						

# REEL: 052676 FRAME: 0054 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1015

*assignment to
ö
Bioset p
pursuant to a
ಠ
an
independent
consulting
agreement

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim			Status	Status
7,820,172	Filed	Laminin	60/803,682	Paul Zamora,	Assigned to	Small	Issued
	6/01/2007	Derived Multi-		Xinhua Lin*,	BioSET		
App. No.		Domain		Kazuyuki			
11/757,242	Issued	Peptides		Takahashi			
	10/26/2010						

22

PATENT 062676 FRAME: 0055

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1019

Serial/ Patent#	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
11/359,173	Filed	Single Branch	60/655,570	Paul O.	Assigned to	Small	Abandoned
	2/2 1/2000	Binding Growth Factor		Kazuyuki Takahashi	Di CO		U
PCT/US06/00	Filed	Single Branch	60/655,570	Paul O.	Assigned to	Small	Completed
6397 WO06091727	2/22/2006	Heparin- Binding		Zamora, Kazuyuki	BioSET		
		Growth Factor		Takahashi			
<b>Australia</b> 2006216676	Filed 2/22/2006	Single Branch Heparin	PCT/US06/ 06397	Paul O. Zamora	Assigned to BioSET	Small	Abandoned
		Growth Factor		Kazuyuki Takahashi			
<b>Canada</b> 2,598,688	Filed 2/22/2006	Single Branch Heparin	PCT/US06/ 06397	Paul O. Zamora	Assigned to BioSET	Large	Pending
		Growth Factor		Kazuyuki Takahashi			
<b>Europe</b> 06735882.0	Filed 2/22/2006	Single Branch Heparin	PCT/US06/ 06397	Paul O. Zamora	Assigned to BioSET	Small	Noting Loss of Rights
Pub. No.	Publication	Growth Factor		Kazuyuki Takahashi			deadline 2/12/15
1855706	11/21/2007						

23

REEL: 052676 FRAME: 0056 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1019

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim			Status	Status
Japan	Issued	Single Branch	PCT/US06/	Paul O.	Assigned to	Small	Issued
4897708	1/6/2012	Heparin	06397	Zamora	BioSET		
App No.	Filed	Factor		Takahashi			
2007-556427	2/22/2006						
Pub. No.	Publication						
2008-531505	8/14/2008	,					
8,101,570	Filed	Single Branch	CON of	Kazuyuki	Assigned to	Small	Issued
	5/24/2010	Heparin-	11/359,173	Takahashi	BioSET		
App. No.		Binding	which claims	Paul O.			
12/786,256	Issued	Growth	priority to	Zamora			
	1/24/2012	Factor	60/655,570	Louis A.			
		Analogs		Pena*			
				Xinhua Lin*			
*ancionment to Bio	*confirmment to Discost principant to an independent consulting agreement	ndent consulting agree	ment				

# REEL: 052676 FRAME: 0057 **TN**3TA9

**BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS** 30817-1023

Serial/ Patent # 7,598,224	Filing/Issue Date Filed 2/24/2005	٦	Priority Claim 60/547,626	Inventors Paul Zamora, Louis A. Pena*	Ownership Assigned to BioSET	Status Small	Current Status Issued
App. No.		Heparin-	CIP of	Pena*,			
11/065,970			11/064,039	Xinhua Lin*			
	10/6/2009	Growth	which claims				
		Factor	priority to				
		Analogs	60/547,012				
			which is a				-
			CIP of				
			10/644,703				
			which is a				
			CIP of				
			10/224,268				

25

REEL: 052676 FRAME: 0058 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1024

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim			Status	Status
7,414,028	Filed	Growth	60/542,272	Paul Zamora,	Assigned to	Small	Issued
	2/4/2005	Factor		Louis A.	BioSET		
App. No.		Analogs		Pena*,			
11/051,292	Issued			Xinhua Lin*			
	8/19/2008						
*assignment to Bio	*assignment to Bioset pursuant to an independent consulting agreement	endent consulting agre	ement				

26

# PATENT 052676 FRAME: 0059

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1025

	Filing/Issue Title	Title	Priority Claim	Inventors	Ownership	Entity	Current
Patent #	Date					Status	Status
11/927,118 Filed	Filed	Growth Factor	DIV of	Paul Zamora,	Not Assigned	Small	Abandoned
	10/29/2007	Analogs	11/051,292 which   Louis A. Pena	Louis A. Pena*,			
			claims priority to	Xinhua Lin*			
			60/542,727				

\*assignment to Bioset pursuant to an independent consulting agreement

# PATENT 062676 FRAME: 0060

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1026

ial/	Filing/Issue	Title	<b>Priority Claim</b>	Inventors	Ownership	Entity	Current
ent#	Date					Status	Status
63,677	Filed	Coating Device	CIP of	Paul Zamora,	Assigned to	Small	Abandoned
	12/21/2007	and Method for	11/767,391 which	Brent Atkinson	BioSET		
		Coating Medical	claims priority				
		Device with	60/805,594				
		Bioactive Peptide		:			

28

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1027

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim			Status	Status
8,163,717	Filed	Dual Chain	CON of	Paul Zamora,	Assigned to	Small	Issued
	10/06/2009	Synthetic	11/065,970	Louis A.	BioSET		
App No.		Heparin-	which claims	Pena*,			
12/574,484	issued	Binding	priority to	Xinhua Lin*			
	4/24/2012	Growth	60/547,626;				
		Factor	'970 is a CIP			-	
		Analogs	of 11/064,039				
			which claims				
	_		priority to				
			60/547,012;				
			'039 is a CIP				
			of 10/644,703				-
			which is a				
			CIP of			_	
			10/224,268				
*accomment to Biocet pursuent to an independent consulting acrossment							The second secon

29

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1028

Serial/	Filing/Issue	Title	<b>Priority Claim</b>	Inventors	Ownership		Current
Patent #	Date		•			Status	Status
61/259,423	Filed	Delivery System	,	Brent Lee	Assigned to		Expired
	11/09/2009	and Method for		Atkinson, Jeff	BioSET		,
		Bone Graft		Kaigan		•	
		Delivery to					
		Vertebral Interbody					
		Sites					
61/411,879	Filed	Delivery System		Brent Lee		Small	Expired
	11/09/2010	and Method for		Atkinson, Jeff			
		Bone Graft		Kaigan			
		Delivery to					
		Vertebral Interbody					
		Sites					

### REEL: 052676 FRAME: 0063 **TN**3TA9

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1031

Serial/	Filing/Issue   Title	Title	Priority Claim	Inventors	Ownership	Entity	Current
	1 5 6					0.55.000	0.55.55
13/357,461 1/24/2012	1/24/2012	Single Branch	CON of	Kazuyuki		Small	Abandoned
		Heparin-Binding	12/786,256 which Takahashi, Paul	Takahashi, Paul			
*		Growth Factor	is a CON of	O. Zamora,			
		Analogs	which	Louis A. Pena*,			
			claims priority to Xinhua Lin*	Xinhua Lin*			
			60/655,570				
-		The second secon					

 $\frac{\omega}{2}$ 

PATENT 062676 FRAME: 0064

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1032

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim			Status	Status
13/454,933	Filed	Dual Chain	CON of	Paul Zamora,	Assigned to	Small	Abandoned
	4/24/2012	Synthetic	12/574,484	Louis A.	Bioset		
		Heparin-	which is a	Pena*,			
		Binding	CON of	Xinhua Lin*			
		Growth	11/065,970				
		Factor	which claims				
		Analogs	priority to				
			60/547,626;				
			'970 is a CIP				
			of 11/064,039				
			which claims				
			priority to				
			60/547,012;				
			'039 is a CIP				
			of 10/644,703				
			which is a				
			CIP of				_
			10/224,268				
*assignment to Bios	*assignment to Bioset pursuant to an independent consulting agreement	ndent consulting agree	ment				

32

PATENT PEEL: 052676 FRAME: 0065

### JOINTLY-OWNED ASSIGNED PATENT RIGHTS

PATENT 062676 FRAME: 0067

**Japan** 2010-262096 **Japan** 2004-529777 **Canada** 2,496,732 App. No. 10/224,268 Patent # Serial/ Pat. No. 4,712,383 Pub. No. 1539801 Europe 03793219.1 7,166,574 Pat. No. 5,346,911 Filed 8/20/2003 4/1/2011 Published 7/15/2005 Issued 8/23/2013 Filed Filed Filed Date Filed 8/20/2003 Issued 8/20/2002 8/20/2003 1/23/2007 Filing/Issue Issued 11/10/2010 Binding Factor Factor Heparin-Binding Factor Binding Growth Growth Growth Factor Heparin-Synthetic Binding Synthetic Binding Heparin-Synthetic Analogs Growth Analogs Synthetic Analogs Factor Growth Heparin-Analogs Heparin-Synthetic 10/224,268 10/644,703 2004-529777 Japan PCT/US03/26189 10/224,268 PCT/US03/26189 10/224,268 PCT/US03/26189 No priority **Priority Claim** Louis Pena, Paul Lin; John D. Glass Zamora, Xinhua Louis Xinhua Louis Lin; John D. Glass Xinhua Louis Xinhua Lin; John D. Glass Pena, Paul Zamora, Pena, Paul D. Glass Pena, Paul D. Glass Pena, Paul Inventors Xinhua Lin; John Zamora, Zamora, Lin; John Zamora, Assigned to BioSET and Assigned to BioSET and Assigned to BioSET and Brookhaven Ownership BioSET and Brookhaven Brookhaven Brookhaven BioSET and Brookhaven Assigned to Assigned to Entity Status Small Small Small Small Large Status Pending Pending Current Issued Issued Issued

### BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1008

PATENT 052676 FRAME: 0068

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1008

Serial/	Filing/Issue	Title	Priority Claim	Inventors	Ownership	Entity	Current
Patent #	Date		,			Status	Status
Israel 166995	Filed	Synthetic	PCT/US03/26189	Louis	Assigned to	Small	Abandoned
	8/20/2003	Heparin-	10/224,268	Pena, Paul	BioSET and		
		Binding		Zamora,	Brookhaven		
		Growth		Xinhua			
		Factor		Lin; John			
		Analogs		D. Glass			
New Zealand	Filed	Synthetic	PCT/US03/26189	Louis	Assigned to	Small	Abandoned
538,646	8/20/2003	Heparin-	10/224,268	Pena, Paul	BioSET and		
		Binding		Zamora,	Brookhaven		
	Published	Growth		Xinhua			
	2/28/2008	Factor		Lin; John			
		Analogs		D. Glass			
Australia	Filed	Synthetic	PCT/US03/26189	Louis	Assigned to	Small	Abandoned
2003262764	8/20/2003	Heparin-	10/224,268	Pena, Paul	BioSET and		
		Binding		Zamora,	Brookhaven		
		Growth	-	Xinhua			
		Factor		Lin; John			
		Analogs		D. Glass			
PCT/US2003/026189	Filed	Synthotic	10/224,268 filed	Louis A.	Named		Expired
	8/20/2003	Ugazia	8/20/2002;	Pena, Paul	applicants		
		Rinding	10/644,703 filed	0	are BioSET		
		Growth	08/19/2003	Zamora,	and		
-		Factor		Xinhua	Brookhaven		
		Analogs		Lin, John			
				Glass			

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1014

PATENT 052676 FRAME: 0070

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
30817-1014

Serial/ Patent#	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
Japan 2000-516753	Filed	Composition	PCT/US07/71946	Paul	Assigned to	Small	Abandoned
2009-516753	6/22/2007	and Method For Delivery		Zamora, Brent	BioSET		
		of BMP-2		Atkinson			
		Amplifier/Co-	_				
		Activator for				_	
		Enhancement					
		<b>으</b>					
		Osteogenesis					
Europe	Filed	Composition	PCT/US07/71946	Paul	Assigned to	Small	<b>Abandoned</b>
07798963.0	6/22/2007	and Method		Zamora,	BioSET		
		For Delivery		Brent			
		of BMP-2		Atkinson			
		Amplifier/Co-					
	-	Activator for					
		Enhancement					
		<b></b>					
		Osteogenesis					

PATENT 052676 FRAME: 0071

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1017

Serial/	Filing/Issue	Title	<b>Priority Claim</b>	Inventors	Ownership	Entity	Current
Patent #	Date					Status	Status
7,482,427	Filed	Positive	60/547,012	Louis	Assigned to	Small	Issued
	2/22/2005	Modulator of		Pena, Paul	BioSET and		
App. No.		Bone	CIP of 10/644,703	Zamora,	Brookhaven		
11/064,039	Issued	Morphogenic	which is a CIP of	Xinhua			
	1/27/2009	Protein-2	10/224,268	Lin;			
				Kazuyuki			
				Takahashi			
PCT/US05/05880	Filed	Positive	60/547,012	Louis	Assigned to	Small	Completed
	2/22/2005	Modulator of		Pena, Paul	BioSET and		
		Bone		Zamora,	Brookhaven		
		Morphogenic		Xinhua			
		Protein-2		Lin;			
				Kazuyuki			
				lakahashi			
Europe	Filed	Positive	PCT/US05/05880	Louis	Assigned to	Small	Issued
05723656.4	2/22/2005	Modulator of		Pena, Paul	BioSET and		
		Bone		Zamora,	Brookhaven		
Pub. No.	Publication	Morphogenic		Xinhua			
1725576	11/29/2006	Protein-2		Lin;			
				Kazuyuki			
				Takahashi			
France	Issued	Positive	Europe	Louis	Assigned to	Small	Issued
App. No.	9/22/2010	Modulator of	05723656.4	Pena, Paul	BioSET and	,	
05723656.4		Bone	Validation	Zamora,	Brookhaven		
Pat. No.		Morphogenic		Xinhua			
1725576		Protein-2		Lin;			
				Kazuyuki			
				Takahashi			

Ŋ

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1017

Serial/ Patent#	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
Germany	Issued	Positive	Europe	Louis	Assigned to	Small	Issued
App. No.	9/22/2010	Modulator of	05723656.4	Pena, Paul	BioSET and		
05723656.4		Bone	Validation	Zamora,	Brookhaven		
Pat No.		Morphogenic		Xinhua			
602005023714.3		Protein-2		Lin;			
				Kazuyuki			
				Takahashi			
United Kingdom	Issued	Positive	Europe	Louis	Assigned to	Small	Issued
App. No.	9/22/2010	Modulator of	05723656.4	Pena, Paul	BioSET and		ě
05723656.4		Bone	Validation	Zamora,	Brookhaven		
Pat. No.		Morphogenic		Xinhua	-		
1/255/6		Protein-2		LIN:			
				Kazuyuki			
				Takahashi			
Japan	Issued	Positive	PCT/US05/05880	Louis	Assigned to	Small	issued
4895826	1/6/2012	Modulator of		Pena, Paul	BioSET and		
App. No.	Filed	Bone		Zamora,	Brookhaven		
2006-554324	2/22/2005	Morphogenic		Xinhua			
Pub. No.	Publication	Protein-2		Lin;			
2007-525499	9/6/2007			Kazuyuki		_	
				Takahashi			
Canada 2,555,583	Filed	Positive	PCT/US05/05880	Louis	Assigned to	Large	<b>Abandoned</b>
	8/04/2006	Modulator of		Pena, Paul	BioSET and		
		Bone		Zamora,	Brookhaven		
		Morphogenic		Xinhua			
		Protein-2		Lin;			
				Kazuyuki			
				Takahashi			

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1018

						9	12/023,801 Fi		Serial/ Fi
						01/31/2008	Filed	Date	g/Issue
			Protein-2	Morphogenic	Bone	Modulator of	Positive		Title
10/224,268	CIP of	which is a	10/644,703	CIP of	which is a	11/064,039	DIV of	Claim	Priority
			Takahashi	Kazuyuki	Xinhua Lin;	Paul Zamora,	Louis Pena,		Inventors
					Brookhaven	BioSET and	Assigned to		Ownership
		•					Small	Status	Entity
				•			Pending	Status	Current

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1020

Serial/ Patent#	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
7,671,012	Filed 2/23/2006	Formulations and Method	60/656,714 60/656,713	Paul O. Zamora,	Assigned to BioSET	Small	Issued
App. No. 11/361,090	Issued	for Delivery of Growth	60/656,174	Sarah Albright			
	3/2/2010	Factor	CIP of	(aka)			
		Analogs	11/167,636 which	Sarah			
		,	is a CIP of	Campion			
	`		11/055,428 which				
			claims priority to				
			60/543,616	Add Pena			
				and Lin as			
			CIP of	inventors			
			11/359,173 which	with			
			claims priority to 60/655,570	assignment to BNL			
PCT/US06/006472	Filed	Formulations	60/656,713	Paul O.	Assigned to	Small	Completed
!	2/24/2006	and Method	60/656,714	Zamora,	BioSET		
FUD. NO.	;	ioi Delivery	60/636,1/4	odiali			
2006/093808	Published	of Growth	11/361,090	Albright			
	9/8/2006	Factor Analogs					
Canada 2,599,134	Filed	Formulations	PCT/US06/06472	Paul O.	Assigned to	Large	Abandoned
	2/24/2006	and Method for Delivery		Zamora	BioSET		
		of Growth					
		Factor					
Europe	Filed	Formulations	PCT/06/006472	Paul O.	Assigned to	Small	Abandoned
06735934.9	2/24/2006	and Method		Zamora	BioSET		
Pub No 1855703	Diplished	of Growth					
1 db. 140. 1000700	11/21/2007	Factor					
		Analogs	A Parameter State of the State				

# BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1021

Serial/ Patent #	Filing/Issue Date	Title	Priority Claim	Inventors	Ownership	Entity Status	Current Status
8,227,411	Issued	FGF "	60/656,860	Paul O.	Assigned to	Small	Issued
App. No.	7/24/2012	Growth Factor	CIP of 11/064,039	Zamora, Xinhua Lin,	BioSET and Brookhaven		
11/361,565	Filed 2/23/2006	Analogs	which claims priority to 60/547,012: '039	Louis A. Pena			
			is a CIP of 10/644 703 which is	Kazuyuki Takahashi			
			a CIP of 10/224,268				
			CIP of 11/065,970	•			
			to 60/547,626				
PCT/US06/006488	Filed 2/24/2006	FGF Growth	60/656,860	Paul O. Zamora,	Assigned to BioSET and	Small	Completed
Pub. No.		Factor		Xinhua Lin,	Brookhaven		
2006/093814	Published 9/8/2006	Analogs		Louis A. Pena,			
				Kazuyuki Takahashi			
Canada 2,599,240	Filed	FGF	PCT/US06/06488	Paul O.	Assigned to	Large	Pending
	2/24/2006	Growth		Zamora,	BioSET and		
		Analogs		Louis A.	0.00		
				Pena,			
				Kazuyuki Takahashi			
Europe	Filed	FGF	PCT/US06/06488	Paul O.	Assigned to	Small	Pending
06735950.5	2/24/2006	Growth Factor		Zamora, Xinhua Lin.	Brookhaven		
Pub. No. 1856146	Published	Analogs		Louis A.			
	11/21/2007			Pena,			
				Kazuyuki			
				I divaliasi ii			

ဖ

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1022

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Small	Current
Patent #	Date		Claim			Entity	Status
7,700,563	Filed	Synthetic	CIP of	Louis Pena,	Assigned to	Small	Issued
	8/19/2003	Heparin-	10/224,268	Paul Zamora,	BioSET and		
App. No.		Binding		Xinhua Lin;	Brookhaven		
10/644,703	Issued	Growth	•	John D.			
	4/20/2010	Factor		Glass			
		Analogs					
							_

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS
30817-1029

			Pena and Lin		Factor Analogs		
			Campion Add		Delivery of Growth		
		BioSET	and Sarah	CIP of 11/167,636	Methods for	3/2/2010	
Abandoned	Small	Assigned to	Paul O. Zamora	Con of 11/361,090	Formulations and	Filed	12/716,145
Status	Status			Claim		Date	Patent # Date
Current	Entity	Ownership	Inventors	Priority	Title	Filing/Issue Title	Serial/

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1030

Serial/	Filing/issue little	litie	Priority	inventors	Ownership		CHrent
	•		•				( 2:: 6:::
Patent #	Date		Claim			Status	Status
8,796,212	Filed	Composition	DIV of	Paul Zamora,	Assigned to	Small	Issued
	7/19/2011	and Method for	11/767,391	Brent Lee	BioSET and		
App. No.		Delivery of a	which claims	Atkinson,	Brookhaven		•
13/186,165	Issued	Partial Agonist	priority to	Xinhua Lin,			
	8/5/2014	of BMP-2 for	60/805,594;	Louis A.			
		Enhancement	'391 is a CIP	Pena			
		of	of 11/064,039				
		Osteogenesis	which claims				
			priority to				
			60/547,012;				
			'039 is a CIP				
			of 10/644,703				
			which is a				
			CIP of				
			10/224,268				

12

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1033

Serial/	Filing/Issue	Title	Priority	Inventors	Ownership	Entity	Current
Patent #	Date		Claim		•	Status	Status
13/556,644	Filed	FGF Growth	DIV of	Paul O.	Assigned to	Small	Abandoned
	7/24/2012	Factor	11/361,565	Zamora,	BioSET and		
		Analogs	which claims	Xinhua Lin,	Brookhaven		
		,	priority to	Louis A.			
			60/656,860;	Pena,			
			'565 is a CIP	Kazuyuki			
			of 11/064,039	Takahashi			
			which claims				
			priority to				
			60/547,012;				
			'039 is a CIP				
			of 10/644,703				
			which is a				
			CIP of				
			10/224,268;				
•			'565 is a CIP				
			of 11/065,970				
			which claims				-
			priority to				
			60/547,626				

ವ

PATENT 052676 FRAME: 0080

BIOSURFACE ENGINEERING TECHNOLOGIES, INC. PATENT MATTERS 30817-1035

17702,004	14/4E2 204	Patent #	Serial/	
1	9/5/2017	Date	Filing/Issue	
and Method for Delivery of a Partial Agonist of BMP-2 for Enhancement of Osteogenesis	Composition		Title	
13/186, 165 which is a DIV of 11/767,391 which claims priority to 60/805,594; '391 is a CIP of 11/064,039 which claims priority to 60/547,012; '039 is a CIP of 10/644,703 which is a CIP of 10/224,268	CONT of	Claim	Priority	
Zamora, Zamora, Brent Lee Atkinson, Xinhua Lin, Louis A. Pena	Bail O		Inventors	
BioSET and Brookhaven	Assigned to		Ownership	
G G	Omo	Status	Entity	
G G G	Donding	Status	Current	

4

**KECOKDED: 02/14/5050** 

REEL: 052676 FRAME: 0081 **TN**3TA9

5

**PATENT** 

**REEL: 068763 FRAME: 0057** RECORDED: 08/23/2024