# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Amended and Restated Patent Security Agreement

### **CONVEYING PARTY DATA**

Name	Execution Date
BioHorizons Implant Systems, Inc.	02/07/2008
BioLok International Inc.	02/07/2008
Orthogen Corporation	02/07/2008

### **RECEIVING PARTY DATA**

Name:	Merrill Lynch Business Financial
Street Address:	222 N. LaSalle Street
Internal Address:	16th Floor
City:	Chicago
State/Country:	ILLINOIS
Postal Code:	60601

## PROPERTY NUMBERS Total: 26

Property Type	Number
Patent Number:	D351908
Patent Number:	5415545
Patent Number:	5447434
Patent Number:	5622499
Patent Number:	5823777
Patent Number:	5927979
Patent Number:	5954504
Patent Number:	5964766
Patent Number:	6045361
Patent Number:	6068480
Patent Number:	6083004
Patent Number:	6106292
	PATENT

PATENT " REEL: 020582 FRAME: 0096

500475873

) 1040 K

Patent Number:	6149432
Patent Number:	6162053
Patent Number:	6224635
Patent Number:	6319005
Patent Number:	6375464
Patent Number:	6402759
Patent Number:	6406296
Patent Number:	6419491
Patent Number:	6454569
Patent Number:	6582228
Patent Number:	6648643
Patent Number:	6830573
Patent Number:	6863529
Application Number:	10630478

#### **CORRESPONDENCE DATA**

Fax Number: (202)756-9299

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 8002210770

Email: matthew.mayer@thomson.com
Correspondent Name: Corporation Service Company
Address Line 1: 1133 Avenue of the Americas

Address Line 2: Suite 3100

Address Line 4: New York, NEW YORK 10036

ATTORNEY DOCKET NUMBER:	CSC # 438140
NAME OF SUBMITTER:	Matthew Mayer

### Total Attachments: 13

source=Biohorizons\_Merrill\_pat26#page2.tif source=Biohorizons\_Merrill\_pat26#page3.tif source=Biohorizons\_Merrill\_pat26#page4.tif source=Biohorizons\_Merrill\_pat26#page5.tif source=Biohorizons\_Merrill\_pat26#page6.tif source=Biohorizons\_Merrill\_pat26#page7.tif source=Biohorizons\_Merrill\_pat26#page8.tif source=Biohorizons\_Merrill\_pat26#page9.tif source=Biohorizons\_Merrill\_pat26#page10.tif source=Biohorizons\_Merrill\_pat26#page11.tif source=Biohorizons\_Merrill\_pat26#page12.tif source=Biohorizons\_Merrill\_pat26#page13.tif source=Biohorizons\_Merrill\_pat26#page13.tif source=Biohorizons\_Merrill\_pat26#page14.tif

PATENT REEL: 020582 FRAME: 0097

#### AMENDED AND RESTATED PATENT SECURITY AGREEMENT

THIS AMENDED AND RESTATED PATENT SECURITY AGREEMENT (the "Agreement") made as of this 7th day of February, 2008, by **BioHorizons Implant Systems, Inc.**, a Delaware corporation, **BioLok International Inc.**, a Delaware corporation, and **Orthogen Corporation**, a New Jersey corporation (collectively, "Grantors" and each a "Grantor"), in favor of Merrill Lynch Business Financial Services Inc., in its capacity as Administrative Agent for the Lenders party to the Credit Agreement (defined below) ("Grantee"):

### WITNESSETH

WHEREAS, Grantors, certain affiliates and subsidiaries of Grantors, Grantee and Lenders are parties to a certain Amended and Restated Credit and Security Agreement of even date herewith (as the same may be amended or otherwise modified from time to time, the "Credit Agreement"), providing for extensions of credit to be made to Grantors by Lenders;

WHEREAS, this Agreement amends and restates that certain Patent Security Agreement dated as of April 18, 2007 among certain of the Grantors, Grantee and Lenders; and

WHEREAS, pursuant to the terms of the Credit Agreement and certain other Security Documents now and/or hereafter executed by each Grantor in favor of Grantee, each Grantor has granted to Grantee, for the benefit of Lenders, a security interest in substantially all of the assets of such Grantor including all right, title and interest of such Grantor in, to and under all now owned and hereafter issued, registered or acquired patents, pending, newly filed or acquired pending patent applications, including divisions, continuations, continuations-in-part, renewals, reissues, reexaminations, and extensions thereof, the same belonging to each Grantor (collectively, the "Patents"), and all products and proceeds thereof, to secure the payment of all amounts owing by each Grantor under the Credit Agreement;

NOW, THEREFORE, in consideration of the premises set forth herein and for other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

- 1. <u>Incorporation of Credit Agreement and Security Documents</u>. The Credit Agreement and the Security Documents and the terms and provisions thereof are hereby incorporated herein in their entirety by this reference thereto. All terms capitalized but not otherwise defined herein shall have the same meanings herein as in the Credit Agreement.
- 2. Grant and Reaffirmation of Grant of Security Interests. To secure the payment and performance of the Obligations, and without limiting any other grant of any security interest or lien in any assets of each Grantor provided for or created under any other Security Document, each Grantor hereby grants to Grantee, for its benefit and the benefit of Lenders, and hereby reaffirms its prior grant pursuant to the Credit Agreement and the other Security Documents of, a continuing security interest in each Grantor's entire right, title and interest in and to the following (all of the following items or types of property being herein collectively referred to as the "Patent Collateral"), whether now owned or existing and hereafter created, acquired or arising:

121647.01074/21647832v.1

PATENT REEL: 020582 FRAME: 0098

- (i) each Patent and application for Patent listed on Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof; and
- (ii) all products and proceeds of the foregoing, including, without limitation, any claim by any Grantor against third parties for past, present or future infringement of any Patent and also including all Accounts (including without limitation rights to receive license fees or royalties in connection with any licenses of the Patents (including each patent application)) and General Intangibles arising therefrom and/or constituting proceeds thereof.
- 3. Agreement to Deliver Supplements. Each Grantor hereby covenants and agrees that, in connection with the delivery by Grantors of the Compliance Certificate required to be delivered by Grantors under Section 4.1 of the Credit Agreement in connection with the financial statements of Grantors and their affiliates, Grantors shall (i) provide Grantee a listing of any new Patent (including any new patent application and any new patent issued or registered with respect to any patent application previously listed on Schedule 1 hereto or on Schedule A to any other supplement delivered to Grantee in accordance with this paragraph, "New Patents") acquired during the fiscal quarter corresponding to such financial statement and (ii) deliver to Grantee a duly executed supplement to this Agreement in the form of Exhibit A hereto, listing all such New Patents on Schedule A thereto, pursuant to which each Grantor shall grant and reconfirm the grant of a security interest in such New Patents and the proceeds thereof to Grantee to secure the Obligations, which such supplement may be and is intended by the parties to be filed with the United States Patent and Trademark Office.
- 4. <u>Representations and Warranties</u>. Each Grantor hereby represents and warrants to Grantee and to the Lenders that:
- (i) Schedule 1 sets forth a full, complete and correct list of all issued Patents and pending patent applications, owned by such Grantor as of the date hereof; and
- (ii) As of the date hereof, (i) all such issued or registered Patents listed on Schedule 1 are existing, in good standing, and to the best of such Grantor's knowledge, valid, subsisting and enforceable, and all filings necessary to maintain the effectiveness of all such issued or registered Patents have been made (including payment of any maintenance fees), (ii) all such filed patent applications listed on Schedule 1 have been properly filed with the United States Patent and Trademark Office and any and all applicable application or filing fees have been paid in connection therewith, and (iii) except as set forth on Schedule 1, each Grantor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to all such Grantor's Patents free and clear of any Liens other than Permitted Liens, including without limitation licenses and covenants by such Grantor not to sue third persons.
- 5. Events of Default and Remedies. The occurrence of any "Event of Default" as defined and provided for in the Credit Agreement shall constitute an "Event of Default" under this Agreement. Upon the occurrence of and during the continuance of any such Event of Default, Grantee, in addition to all other rights, options, and remedies granted to Grantee under the Credit Agreement or any other Security Document, or otherwise available to Grantee at law or in equity, may exercise, either directly or through one or more assignees or designees, with respect to the Patent Collateral all rights and remedies granted to it as a secured

creditor under the Uniform Commercial Code as in effect in the State of New York as in effect from time to time.

- 6. Power of Attorney. Without limiting the generality of any power of attorney granted to Grantee under the Credit Agreement or any other Security Document, each Grantor hereby authorizes Grantee, its successors and assigns, and any officer, employee, attorney or agent thereof, as such Grantor's true and lawful attorney-in-fact, with the power (i) to execute and endorse on behalf of and in the name of such Grantor any supplement to this Agreement or other security agreement or similar document or instrument which Administrative Agent may deem necessary or desirable in order to create, protect, perfect or enforce the security interest in the Patent Collateral provided for herein, and (ii) after the occurrence and during the continuance of an Event of Default as defined in Section 5 above, to execute and endorse on behalf of and in the name of such Grantor any assignment, bill of sale or similar document or instrument which Administrative Agent may deem necessary or desirable in order for Administrative Agent to assign, pledge, convey or otherwise, sell, transfer title in or dispose of the Patent Collateral, and in each case to file with the Assignment Branch of the United States Patent and Trademark Office in the name of and on behalf of each Grantor any such supplement, agreement, document, instrument, assignment or bill of sale executed by Grantee, its successors and assigns, and any officer, employee, attorney or agent thereof under this power of attorney. Each Grantor hereby unconditionally ratifies all that any person authorized under this power of attorney shall lawfully do or cause to be done by virtue hereof and in accordance with the terms of hereof and of the Credit Agreement. This power of attorney is coupled with an interest and is and shall be irrevocable.
- 7. <u>Governing Law</u>. THIS AGREEMENT AND ALL MATTERS RELATING HERETO OR ARISING HEREFROM (WHETHER SOUNDING IN CONTRACT LAW, TORT LAW OR OTHERWISE), SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES.

[Signatures on Following Page]
[Remainder of Page Left Intentionally Blank]

IN WITNESS WHEREOF, each Grantor has duly executed this Agreement as of the date first written above.

BIOHORIZONS IMPLANT SYSTEMS, INC.

Namo: W14

Titlo:

In the presence of and before me, Notary Public:

BIOLOK INTERNATIONAL INC.

Name:

Title: CFO

In the presence of and before me, Notary Public:

ORTHOGEN CORPORATION

Name: WILLIAM

Title: CFO

In the presence of and before me, Notary Public:

[SIGNATURE PAGE TO AAR PATENT SECURITY AGREEMENT]

**PATENT** 

Agreed and Accepted
As of the Date First Written Above

MERRILL LYNCH BUSINESS FINANCIAL

SERVICES INC.,

as Administrative Agent

By: \_\_\_ Name: Title:

Peter Gibson Vice President

In the presence of and before me,

Notary Public:

KRISTER KAY ANDERSON Notary Public Commonwealth of Virginia My Commission Expires December 31, 2011 Registration No. 7127270

[SIGNATURE PAGE TO A&R PATENT SECURITY AGREEMENT] 8-2

PATENT

# SCHEDULE 1

## **Issued US Patents**

Patent Title	Patent No.	Assignee	Issue Date	Expiration Date
Multi-Fluted Dental Irrigation Drill	D351908	BioLok International Inc.	10/25/1994	10/25/2008
Dental Implant System	5415545	BioLok International Inc.	05/16/1995	02/12/2013
Micromechanical Seal	5447434	BioLok International Inc.	09/05/1995	02/14/2014
Method of Manufacturing a Dental Abutment	5622499	BioLok International Inc.	04/22/1997	04/10/2015
Dental implants to optimize cellular response	5823777	BioHorizons Implant Systems, Inc.	10/20/1998	12/15/2014
Abutment-mount system for dental implants	5927979	BioHorizons Implant Systems, Inc.	07/27/1999	12/15/2014
Design process for skeletal implants to optimize cellular response	5954504	BioHorizons Implant Systems, Inc.	09/21/1999	03/31/2017
Buttress Thread Implant	5964766	BioLok International Inc.	10/12/1999	10/12/2016
Ball-topped screw for facilitating the making of an impression of a dental implant and method of using the same	6045361	BioHorizons Implant Systems, Inc.	04/04/2000	03/31/2017
Abutment-mount with square driving surface	6068480	BioHorizons Implant Systems, Inc.	05/30/2000	03/31/2017
Abutment-mount system for dental implants	6083004	BioHorizons Implant Systems, Inc.	07/04/2000	03/31/2017
Dental Irrigation drill with Internal Anti- backwash baffle	6106292	BioLok International Inc.	08/22/2000	08/02/2019
Buttress Thread Dental Implant	6149432	BioLok International Inc.	11/21/2000	12/27/2013
Analog Dental Wrench	6162053	BioLok International Inc.	12/19/2000	11/01/2019
Implantation of Surgical Implants with calcium sulfate	6224635	BioLok International Inc.	05/01/2001	11/06/2018
Dental Irrigation drill with Internal Anti- backwash baffle	6319005	BioLok International Inc.	11/20/2001	09/18/2020
Micromechanical Seal for Dental Implant Systems	6375464	BioLok International Inc.	04/23/2002	09/25/2020

121647.01074/21647832v.1

PATENT

Patent Title	Patent No.	Assignee	Issue Date	Expiration Date
Surgical fastener driver	6402759	BioHorizons Implant Systems, Inc.	06/11/2002	12/10/2019
Implant with Enlarged Proximal Segment	6406296	BioLok International Inc.	06/18/2002	12/27/2013
Dental Implant with Repeating Microgeometric Surface Patterns	6419491	BioLok International Inc.	07/16/2002	11/02/2013
Dental Implant having dual bio-affinity collar	6454569	BioLok International Inc.	09/24/2002	11/02/2013
Surgical Implant System, Article and Kit	6582228	BioLok International Inc.	06/24/2003	11/06/2018
Dental Implant/Abutment Interface and System having prong and Channel interconnections	6648643	BioLok International Inc.	11/18/2003	12/19/2021
Surgical Fastener system	6830573	BioHorizons Implant Systems, Inc.	12/14/2004	12/10/2019
Dental drill system and method of use	6863529	BioHorizons Implant Systems, Inc.	03/08/2005	05/20/2022

# Pending U.S. Patent Applications

Title	Filing Date	Assignee	Appln. No.
Method of Bone Expansion and Compression for Receiving a Dental Implant Using Threaded Expanders	07/30/2003	BioLok International Inc.	10/630478

121647.01074/21647832v.1

PATENT

### **EXHIBIT A**

### SUPPLEMENT TO AMENDED AND RESTATED PATENT SECURITY AGREEMENT

THIS SUPPLEMENT TO AMENDED AND RESTATED PATENT SECURITY AGREEMENT (the "Supplement") made as of this day of , by BioHorizons Implant Systems, Inc., a Delaware corporation, BioLok International Inc., a Delaware corporation, and Orthogen Corporation, a New Jersey (collectively, the "Grantors" and individually, each a "Grantor") in favor of Merrill Lynch Capital, a division of Merrill Lynch Business Financial Services Inc., a Delaware corporation, in its capacity as Administrative Agent for the Lenders party to the Credit Agreement (as defined in the Patent Agreement) ("Grantee"):

## WITNESSETH

WHEREAS, Grantors and Grantee are parties to a certain Amended and Restated Credit and Security Agreement dated as of January \_\_\_\_, 2008 (as the same heretofore may have been and hereafter may be amended, supplemented, restated, replaced or otherwise modified from time to time, the "Credit Agreement");

WHEREAS, Grantors and Grantee are parties to a certain Amended and Restated Patent Security Agreement dated as of January \_\_\_\_\_, 2008 (as the same heretofore may have been and hereafter may be amended, supplemented, restated, replaced or otherwise modified from time to time, the "Patent Agreement"). Capitalized terms used herein but not otherwise defined shall have the meanings given thereto in the Patent Agreement;

WHEREAS, pursuant to the terms of the Patent Agreement, Grantors have granted to Grantee to secure the Obligations a security interest in and to all of Grantors' now existing and hereafter New Patents and all proceeds thereof; and

WHEREAS, also pursuant to the Patent Agreement, Grantors have agreed that in connection with the acquisition by Grantors of any New Patents, Grantors shall deliver to Grantee a Supplement to the Patent Agreement in the form of Exhibit A to such Patent Agreement pursuant to which Grantor shall grant and reconfirm the grant by them of a security interest in all such New Patents and the proceeds thereof, which such Supplement may be and is intended by the parties to be filed with the United States Patent and Trademark Office.

NOW, THEREFORE, in consideration of the premises set forth herein and for other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, and with the foregoing background and recitals incorporated by reference, each Grantor agrees as follows:

Grant and Reaffirmation of Grant of Security Interests. To secure the payment and performance of the Obligations, and without limiting any other grant of any security interest or lien in any assets of any Grantor provided for or created under the Credit Agreement or any other Security Document, each Grantor hereby grants to Grantee, for its benefit and the benefit of Lenders, and hereby reaffirms its prior grant pursuant to the Credit Agreement and the other

**EXHIBIT A** 

121647.01074/21647832v.1

REEL: 020582 FRAME: 0106.....

Security Documents, specifically including the Patent Agreement of, a continuing security interest in such Grantor's entire right, title and interest in and to the New Patents listed on Schedule A to this Supplement, including divisions, continuations, continuations-in-part, renewals, reissues, reexaminations, and extensions thereof; and all proceeds of the foregoing, including, without limitation, any claim by any Grantor against third parties for past, present or future infringement of any New Patent and also including any and all Accounts (including without limitation rights to receive license fees or royalties in connection with any licenses of the New Patents and General Intangibles arising therefrom and/or constituting proceeds thereof, and agrees that all such New Patents and the proceeds thereof shall be included in and be part of the Patent Collateral and otherwise subject to all of the terms and provisions of the Patent Agreement.

- 2. <u>Representations and Warranties</u>. Each Grantor hereby represents and warrants to Grantee and to the Lenders that:
- (i) Schedule A sets forth a full, complete and correct list of all issued New Patents and pending patent applications owned by such Grantor as of the date hereof that were not (i) listed on the Schedule 1 delivered in connection with the original Patent Agreement or (ii) listed on the Schedule A delivered in connection with any Supplement to the Patent Agreement delivered by such Grantor to Grantee prior to the date hereof; and
- (ii) As of the date hereof, (i) all such issued or registered New Patents listed on Schedule A are existing, in good standing, and to the best of such Grantor's knowledge, valid, subsisting and enforceable, and all filings necessary to maintain the effectiveness of all such issued or registered New Patents have been made (including payment of any maintenance fees), (ii) all such patent applications listed on Schedule A have been properly filed with the United States Patent and Trademark Office and any and all applicable application or filing fees have been paid in connection therewith, and (iii) except as otherwise set forth on Schedule A, such Grantor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to all such New Patents free and clear of any Liens other than Permitted Liens, including without limitation licenses and covenants by such Grantor not to sue third persons.
- 3. <u>Incorporation of the Patent Agreement</u>. The terms and provisions of the Patent Agreement are hereby incorporated by reference and this Supplement shall be considered an amendment and supplement to and part of the Patent Agreement, all of the provisions of which Patent Agreement are and remain in full force and effect. Any reference after the date hereof in any Financing Document to the Patent Agreement shall be a reference to the Patent Agreement as amended and supplemented by this Supplement.
- 4. Governing Law. THIS SUPPLEMENT AND ALL MATTERS RELATING HERETO OR ARISING HEREFROM (WHETHER SOUNDING IN CONTRACT LAW, TORT LAW OR OTHERWISE), SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES.

EXHIBIT A

2

121647.01074/21647832v.1

IN WITNESS WHEREOF, each Grantor has duly executed this Supplement to the Patent Security Agreement as of the date first written above.

# **GRANTORS:**

# BIOHORIZONS IMPLANT SYSTEMS, INC.

By:
Name:
Title:
In the presence of and before me, Notary Public:
BIOLOK INTERNATIONAL INC.
Rv
By:
Name:
Title:
In the presence of and before me, Notary Public:
ORTHOGEN CORPORATION
By:
Name:
Title:
In the presence of and before me, Notary Public:

EXHIBIT A

3

121647.01074/21647832v.1

As of the Date First Written Above	
GRANTEE:	
MERRILL LYNCH CAPITAL, a division of Merrill Lynch Business Financial Services Inc.	
By: Name: Title:	
In the presence of and before me, Notary Public:	

EXHIBIT A

121647.01074/21647832v.1

PATENT

## SCHEDULE A TO SUPPLEMENT TO PATENT SECURITY AGREEMENT DATED

# **PATENTS**

Patent Description

U.S. Patent No.

## PATENT APPLICATIONS

Patent Application Description U.S. Patent Application No.

Date Applied

121647.01074/21647832v.1

**PATENT** 

REEL: 020582 FRAME: 0110

**RECORDED: 02/29/2008**