

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		SECURITY INTEREST	
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
NxStage Medical, Inc.		03/10/2010	CORPORATION: DELAWARE
RECEIVING PARTY DATA			
Name:	Silicon Valley Bank		
Street Address:	One Newton Executive Park		
Internal Address:	2221 Washington Street, Suite 200		
City:	Newton		
State/Country:	MASSACHUSETTS		
Postal Code:	02462		
Entity Type:	Bank: CALIFORNIA		
PROPERTY NUMBERS Total: 3			
Property Type	Number	Word Mark	
Serial Number:	77544488	NXRX	
Serial Number:	75800711	NXSTAGE	
Serial Number:	75800705	NXSTAGE	
CORRESPONDENCE DATA			
Fax Number:	(703)415-1557		
	<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>		
Phone:	703-415-1555		
Email:	mail@specializedpatent.com		
Correspondent Name:	Christopher E. Kondracki		
Address Line 1:	1501 Wilson Boulevard		
Address Line 2:	Suite 510		
Address Line 4:	Arlington, VIRGINIA 22209		
ATTORNEY DOCKET NUMBER:	1002802		
NAME OF SUBMITTER:	Christopher E. Kondracki		

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REEL: 004171 FRAME: 0974

Signature:	/Christopher E. Kondracki/
Date:	03/22/2010
Total Attachments: 14 source=Nxstage#page1.tif source=Nxstage#page2.tif source=Nxstage#page3.tif source=Nxstage#page4.tif source=Nxstage#page5.tif source=Nxstage#page6.tif source=Nxstage#page7.tif source=Nxstage#page8.tif source=Nxstage#page9.tif source=Nxstage#page10.tif source=Nxstage#page11.tif source=Nxstage#page12.tif source=Nxstage#page13.tif source=Nxstage#page14.tif	

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of March 10, 2010 by and between **SILICON VALLEY BANK** ("**Bank**") and **NXSTAGE MEDICAL, INC.**, a Delaware corporation ("**Grantor**").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "**Loans**") in the amounts and manner set forth in that certain Loan and Security Agreement by and among Bank, Grantor, **EIR MEDICAL, INC.**, a Massachusetts corporation, **MEDISYSTEMS CORPORATION**, a Washington corporation and **MEDISYSTEMS SERVICES CORPORATION**, a Nevada corporation, dated as of the date hereof (as the same may be amended, modified or supplemented from time to time, the "**Loan Agreement**"; capitalized terms used herein are used as defined in the Loan Agreement). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "**Intellectual Property Collateral**"), including, without limitation, the following:

1. Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "**Copyrights**");
2. Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;
3. Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;
4. All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the

same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the “**Patents**”);

5. Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the “**Trademarks**”);

6. All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the “**Mask Works**”);

7. Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

8. All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

9. All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

10. All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

[Signature page follows.]


IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as a sealed instrument under the laws of the Commonwealth of Massachusetts, as of the first date written above.

GRANTOR:

Address of Grantor:

NXSTAGE MEDICAL, INC.

NxStage Medical, Inc.
439 South Union Street, 5th Floor
Lawrence, Massachusetts 01843
Attn: General Counsel
Fax: (978) 687-4825
Email: wswan@nxstage.com

By: 
Name: Robert S. Brown
Title: Treasurer, Senior Vice President and
Chief Financial Officer

BANK:

Address of Bank:

SILICON VALLEY BANK

Silicon Valley Bank
One Newton Executive Park Suite 200
2221 Washington Street
Newton, Massachusetts 02462
Attn: Mr. Ryan Ravenscroft
Fax: (617) 527- 0177
Email: rravenscroft@svb.com

By: _____
Name: _____
Title: _____

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as a sealed instrument under the laws of the Commonwealth of Massachusetts, as of the first date written above.

GRANTOR:

Address of Grantor:

NXSTAGE MEDICAL, INC.

NxStage Medical, Inc.
439 South Union Street, 5th Floor
Lawrence, Massachusetts 01843
Attn: Chief Executive Officer
Fax: (978) 687-4700
Email: jburbank@nxstage.com


By: _____
Name: _____
Title: _____

BANK:

Address of Bank:

SILICON VALLEY BANK

Silicon Valley Bank
One Newton Executive Park Suite 200
2221 Washington Street
Newton, Massachusetts 02462
Attn: Mr. Ryan Ravenscroft
Fax: (617) 527-0177
Email: rravenscroft@svb.com

By: 
Name: Ryan Ravenscroft
Title: VP

[Signature page to Intellectual Property Security Agreement - NxStage]

TRADEMARK
REEL: 004171 FRAME: 0979

EXHIBIT A

NxStage Copyrights

None.

EXHIBIT B

NxStage Patents, Patent Applications and Patent Licenses

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14198GB01	GB	98904867.3	GB0969887	Hemofiltration System	2/5/1998	11/16/2005
T4342-14198JP05	JP	2001-543177	JP4387631	Layered Fluid Circuit Assemblies And Methods For Making Them	11/29/2000	10/9/2009
T4342-14198US02	US	09/513910	US6830553	Blood Treatment Systems And Methods That Maintain Sterile Extracorporeal	2/25/2000	12/14/2004
T4342-14198US03	US	09/513773	US6579253	Fluid Processing Systems And Methods Using Extracorporeal Fluid Flow Panels Oriented Within A Cartridge	2/25/2000	6/17/2003
T4342-14198US04	US	09/865905	US6852090	Fluid Processing Systems And Methods Using Extracorporeal Fluid Flow	5/24/2001	2/8/2005
T4342-14198US05	US	10/913815	US7347849	Modular Medical Treatment Replaceable Component	8/6/2004	3/25/2008
T4342-14198US09	US	09/513911	US6638478	Synchronized Volumetric Fluid Balancing Systems And Methods	2/25/2000	10/28/2003
T4342-14198US11	US	09/513902	US6554789	Layered Fluid Circuit Assemblies And Methods For Making Them	2/25/2000	4/29/2003
T4342-14198US12	US	09/513771	US6673314	Interactive Systems And Methods For Supporting Hemofiltration Therapies	2/25/2000	1/6/2004
T4342-14198US13	US	09/512927	US6589482	Extracorporeal Circuits For Performing Hemofiltration Employing Pressure Sensing Without An Air Interface	2/25/2000	7/8/2003
T4342-14198US14	US	09/512929	US6638477	Fluid Replacement Systems And Methods For Use In Hemofiltration	2/25/2000	10/28/2003
T4342-14198US16	US	09/513915	US6595943	Systems And Methods For Controlling Blood Flow And Waste Fluid Removal During Hemofiltration	2/25/2000	7/22/2003
T4342-14198US17	US	10/649582	US7473238	Hemofiltration Systems And Methods That Maintain Sterile Extracorporeal Processing Conditions	8/27/2003	1/6/2009
T4342-14198US22	US	10/796787	US7147613	Measurement Of Fluid Pressure In A Blood Treatment Device	3/8/2004	12/12/2006

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14198US24	US	10/807906	US7300413	Blood Processing Machine And System Using Fluid Circuit Cartridge	3/23/2004	11/27/2007
T4342-14198US25	US	10/808207	US7338460	Blood Processing Machine Fluid Circuit Cartridge	3/23/2004	3/4/2008
T4342-14198US28	US	10/808213	US7267658	Renal Replacement Therapy Device For Controlling Fluid Balance Of Treated Patient	3/23/2004	9/11/2007
T4342-14198US32	US	10/041949	US6979309	Systems And Methods For Performing Blood Processing And/Or Fluid Exchange Procedures	1/7/2002	12/27/2005
T4342-14198US34	US	09/894236	US6955655	Hemofiltration System	6/27/2001	10/18/2005
T4342-14495US01	US	09/904712	US6702561	Devices And Methods For Potting A Filter For Blood Processing	7/12/2001	3/9/2004
T4342-14498US03	US	11/160764	US7544300	Batch Filtration System For Preparation Of Sterile Fluid For Renal Replacement Therapy	7/7/2005	6/9/2009
T4342-14499US01	US	10/393295	US6872346	Method And Apparatus For Manufacturing Filters	3/20/2003	3/29/2005
T4342-14500DE01	DE	04700648.1	DE602004021672	Preparing Replacement Fluid	8/5/2005	6/24/2009
T4342-14500EP01	EP	04700648.1	EP1592494	Batch Filtration System For Preparation Of Sterile Replacement Fluid For Renal Therapy	1/7/2004	6/24/2009
T4342-14500GB01	GB	04700648.1	GB1592494	Preparing Replacement Fluid	8/5/2005	6/24/2009
T4342-14501US01	US	10/393185	US7470265	Dual Access Spike For Infusate Bags	3/20/2003	12/30/2008
T4342-14504US01	US	10/650935	US7214312	Fluid Circuits, Systems, And Processes For Extracorporeal Blood Processing	8/27/2003	5/8/2007
T4342-14504US02	US	11/695739	US7419597	Fluid, Circuits, Systems, And Processes For Extracorporeal Blood Processing	4/3/2007	9/2/2008
T4342-14504US04	US	09/905246	US6649063	Method For Performing Renal Replacement Therapy Including Producing Sterile Replacement Fluid In A Renal Replacement Therapy Unit	7/12/2001	11/18/2003
T4342-14506US01	US	09/829670	US6572641	Devices For Warming Fluid And Methods Of Use	4/9/2001	6/3/2003

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14507US01	US	09/512132	US6254567	Flow-Through Peritoneal Dialyzer System And Methods With On-Line Dialysis Solution Regeneration	2/23/2000	7/3/2001
T4342-14508US01	US	09/027301	US6582385	Hemofiltration System Including Ultrafiltrate Purification And Re-Infusion System	2/20/1998	6/24/2003
T4342-14511US01	US	09/907872	US6743193	Hermetic Flow Selector Valve	7/17/2001	6/1/2004
T4342-14514JP01	JP	2003-512663	JP4118233	Method And Apparatus For Leak Detection In A Fluid Line	1/7/2004	5/2/2008
T4342-14514US01	US	09/900362	US6572576	Method And Apparatus For Leak Detection In A Fluid Line	7/7/2001	6/3/2003
T4342-14514US02	US	10/483142	US7087033	Method And Apparatus For Leak Detection In A Fluid Line	7/9/2004	8/8/2006
T4342-14515US01	US	10/037429	US7040142	Method And Apparatus For Leak Detection In Blood Circuits Combining External Fluid Detection And Air Infiltration Detection	1/4/2002	5/9/2006
T4342-14517US01	US	09/174721	US7004924	Methods, Systems, And Kits For The Extracorporeal Processing Of Blood	10/19/1998	2/28/2006
T4342-14518US02	US	10/772888	US7226538	Fluid Processing Apparatus	2/4/2004	6/5/2007
T4342-14518US03	US	11/742715	US7588684	Systems And Methods For Handling Air And/Or Flushing Fluids In A Fluid Circuit	5/1/2007	9/15/2009
T4342-14519US01	US	10/672242	US7112273	Volumetric Fluid Balance Control For Extracorporeal Blood Treatment	9/26/2003	9/26/2006
T4342-14522US01	US	11/160586	US7337674	Pressure Detector For Fluid Circuits	6/29/2005	3/4/2008
T4342-15050EU01	EU	000023148-0001	EU231480001	Blood Treatment Machine And Parts Thereof	4/1/2003	4/1/2003
T4342-14123PV02	US	61/255453	USNO PUB	Fluid Line Safety Device	10/27/2009	
T4342-14198DE02	DE	00982268.5	DE1235612	Synchronized Volumetric Fluid Balancing Systems And Methods	11/29/2000	
T4342-14198EP02	EP	00982268.5	EP1235612	Synchronized Volumetric Fluid Balancing Systems And Methods	11/29/2000	

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14198EP05	EP	00991516.6	EP1235613	Fluid Processing Systems And Methods Using Extracorporeal Fluid Flow Panels Oriented Within A Cartridge	11/29/2000	
T4342-14198EP06	EP	00992532.2	EP1235614	Interactive Systems And Methods For Supporting Hemofiltration Therapies	11/29/2000	
T4342-14198GB02	GB	00982268.5	GB1235612	Synchronized Volumetric Fluid Balancing Systems And Methods	11/29/2000	
T4342-14198JP03	JP	2001-539403	JP2001539403	Fluid Processing Systems And Methods Using Extracorporeal Fluid Flow Panels Oriented Within A Cartridge	11/29/2000	
T4342-14264US02	US	12/536412	USNO PUB YET	Waste Balancing For Extracorporeal Blood Treatment Systems	8/5/2009	
T4342-14494US04	US	11/577126	USNO PUB YET	Blood Treatment Dialyzer/Filter Design To Trap Entrained Air In A Fluid Circuit	4/12/2007	
T4342-14498CA01	CA	2593580	CA2593580	Devices, Systems, And Methods For Fluid, Preparation, Storage, And Treatment	1/9/2006	
T4342-14498JP01	JP	2007-550528	JP2007550528	Devices, Systems, And Methods For Fluid, Preparation, Storage, And Treatment	1/9/2006	
T4342-14499DE01	DE	N/A	DE1631152	Method And Apparatus For Manufacturing Filters [2006/10]	3/19/2004	
T4342-14499FR01	FR	04757998.2	FR1631152	Method And Apparatus For Manufacturing Filters [2006/10]	3/19/2004	
T4342-14499GB01	GB	04757998.2	GB1631152	Method And Apparatus For Manufacturing Filters [2006/10]	3/19/2004	
T4342-14499IT01	IT	04757998.2	IT1631152	Method And Apparatus For Manufacturing Filters [2006/10]	3/19/2004	
T4342-14501EP01	EP	04810398.0	EP1691882	Improved Methods And Apparatus For Leak Detection In Blood Processing Systems	11/5/2004	
T4342-14501JP01	JP	2006-538506	JP2006538506	Improved Methods And Apparatus For Leak Detection In Blood Processing Systems	11/5/2004	

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14505JP01	JP	2009-504504	JP2009504504	Filtration System For Preparation Of Fluids For Medical Applications	4/9/2007	
T4342-14514EP01	EP	02761044.3	EP1425063	Method And Apparatus For Leak Detection In A Fluid Line	7/8/2002	
T4342-14518US04	US	12/508900	USNO PUB YET	Systems And Methods For Handling Air And/Or Flushing Fluids In A Fluid Circuit	7/24/2009	
T4342-17218PV01	US	61/187227	USNO PUB	System And Method For Identifying And Pairing Devices	6/15/2009	
T4342-17318PV01	US	61/181373	USNO PUB	Needle Set With Separable Line To Reduce Sharps Waste	5/27/2009	
T4342-17332PV01	US	61/251202	USNO PUB	Dialysis Treatment Planning And Cost Optimization	10/13/2009	
T4342-17494PV01	US	61/255452	USNO PUB	Methods, Devices, And Systems For Parallel Control Of Infusion Device	10/27/2009	
T4342-14123US01	US	11/951142	US20080129042	Fluid Line Connector Safety Device	12/5/2007	
T4342-14198US06	US	12/021872	US20080149551	Blood Treatment Apparatus	1/29/2008	
T4342-14198US18	US	10/796913	US20090012442A9	Registration Of Fluid Circuit Components In A Blood Treatment Device	3/8/2004	
T4342-14198US20	US	10/796898	US20050113734	Network-Based Extracorporeal Blood Treatment Information System	3/8/2004	
T4342-14198US21	US	10/796899	US20080306426A9	Blood Flow Control In A Blood Treatment Device	3/8/2004	
T4342-14264US01	US	10/544124	US20070038191	Waste Balancing For Extracorporeal Blood Treatment Systems	8/7/2006	
T4342-14399US03	US	12/015420	US20080177215	Methods, Devices, And Systems For Hemodilution	1/16/2008	
T4342-14401US01	US	12/049903	US20080228087	Pressure Measurement Device	3/17/2008	
T4342-14494US06	US	12/432507	US20090229466	Blood Treatment Dialyzer/Filter For Permitting Gas Removal	4/29/2009	
T4342-14498EP01	EP	06717769.1	EP1838356	Devices, Systems, And Methods For Fluid, Preparation, Storage, And Treatment	1/9/2006	
T4342-14498US01	US	10/585675	US20080210606	Filtration System For Preparation Of Fluids For Medical Applications	5/19/2008	

Atty Matter	Country	Application No	Document	Title	Filed	Issued
T4342-14498US02	US	11/813472	US20080230450	Filtration System For Preparation Of Fluids For Medical Applications	5/12/2008	
T4342-14498US04	US	12/434246	US20090211975	Batch Filtration System For Preparation Of Sterile Fluid For Renal Replacement Therapy	5/1/2009	
T4342-14499EP01	EP	04757998.2	EP1631152	Method And Apparatus For Manufacturing Filters [2006/10]	3/19/2004	
T4342-14501US02	US	10/578600	US20080214979	Methods And Apparatus For Leak Detection In Blood Processing Systems	3/31/2008	
T4342-14502US02	US	12/478920	US20090236027	Blood Treatment Filter And Method Of Manufacturing	6/5/2009	
T4342-14505EP01	EP	07760334.8	EP2012906	Filtration System For Preparation Of Fluids For Medical Applications	4/9/2007	
T4342-14505US01	US	12/296415	US20090182263	Filtration System For Preparation Of Fluids For Medical Applications	10/28/2008	
T4342-14510US01	US	12/091728	US20090222671	Safety Features For Medical Devices Requiring Assistance And Supervision	8/19/2008	
T4342-14512EP01	EP	03736859.4	EP1531894	Last-Chance Quality Check And/Or Air/Pyrogen Filter For Infusion Systems [2005/21]	6/5/2003	
T4342-14512US02	US	12/040748	US20080203023	Last-Chance Quality Check And/Or Air/Pathogen Filter For Infusion Systems	2/29/2008	
T4342-14516US01	US	10/037254	US20030128125	Method And Apparatus For Machine Error Detection By Combining Multiple Sensor Inputs	1/4/2002	
T4342-14518EP01	EP	02746907.1	EP1 414 543	Systems And Methods For Handling Air And/Or Flushing Fluids In A Fluid Circuit	2/3/2004	
T4342-14521US01	US	10/699921	US20040249330	Functional Isolation Of Upgradeable Components To Reduce Risk In Medical	11/3/2003	

EXHIBIT C

NxStage Trademarks, Trademark Applications and Trademark Licenses

Trademark	Status* Case Number / Sub Case	Serial Number Reg Number	Filing Date Reg Date
LIFEMATE <i>Country:</i> European Community <i>Classes:</i> 10	Registered 19918-005/116	1546456 1546456	08-Mar-2000 17-May-2001
LIFEMATE (LOGO) <i>Country:</i> European Community <i>Classes:</i> 10	Registered 19918-004/116	1546837 1546837	08-Mar-2000 21-May-2001
NxRx <i>Country:</i> United States of America <i>Classes:</i> 42	Allowed 19918-013/	77/544488	12-Aug-2008
NXSTAGE <i>Country:</i> Canada	Registered 19918-002/008	1049861 577,543	07-Mar-2000 18-Mar-2003
NXSTAGE <i>Country:</i> European Community <i>Classes:</i> 10	Registered 19918-002/116	1557586 1557586	08-Mar-2000 18-May-2001
NXSTAGE <i>Country:</i> Japan <i>Classes:</i> 10	Registered 19918-002/032	2000-024234 4550196	13-Mar-2000 08-Mar-2002
NXSTAGE <i>Country:</i> United States of America <i>Classes:</i> 10	Registered 19918-002/	75/800711 2,565,759	15-Sep-1999 30-Apr-2002
NXSTAGE (LOGO) <i>Country:</i> Canada	Registered 19918-003/008	1049860 576,481	07-Mar-2000 26-Feb-2003
NXSTAGE (LOGO) <i>Country:</i> European Community <i>Classes:</i> 10	Registered 19918-003/116	1546563 1546563	08-Mar-2000 17-May-2001

Trademark	Status* Case Number / Sub Case	Serial Number Reg Number	Filing Date Reg Date
NXSTAGE (LOGO) <i>Country:</i> Japan <i>Classes:</i> 10	Registered 19918-003/032	2000-024235 4539036	13-Mar-2000 25-Jan-2002
NXSTAGE (LOGO) <i>Country:</i> United States of America <i>Classes:</i> 10	Registered 19918-003/	75/800705 2,565,758	15-Sep-1999 30-Apr-2002

EXHIBIT D

NxStage Mask Works

None.