

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5826241

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>SEQUENCE:</b>	1

## CONVEYING PARTY DATA

Name	Execution Date
GRIFOLS SHARED SERVICES NORTH AMERICA, INC.	11/15/2019
GRIFOLS THERAPEUTICS LLC	11/15/2019
GRIFOLS BIOLOGICALS LLC	11/15/2019
BIOMAT USA, INC.	11/15/2019
GRIFOLS WORLDWIDE OPERATIONS USA, INC.	11/15/2019
GRIFOLS USA, LLC	11/15/2019
TALECRIS PLASMA RESOURCES, INC.	11/15/2019

## RECEIVING PARTY DATA

<b>Name:</b>	BANK OF AMERICA, N.A., AS COLLATERAL AGENT
<b>Street Address:</b>	101 N. TYRON STREET
<b>Internal Address:</b>	ONE INDEPENDENCE CENTER
<b>City:</b>	CHARLOTTE
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	28255

## PROPERTY NUMBERS Total: 50

Property Type	Number
Patent Number:	5561108
Patent Number:	5688912
Patent Number:	5723579
Patent Number:	5844087
Patent Number:	6037452
Patent Number:	6121422
Patent Number:	5659017
Patent Number:	6566504
Patent Number:	5744586
Patent Number:	6162904
Patent Number:	5561115
Patent Number:	5610285

PATENT

Property Type	Number
Patent Number:	5783663
Patent Number:	5831003
Patent Number:	5911165
Patent Number:	5985836
Patent Number:	6355243
Patent Number:	6462180
Patent Number:	6964764
Patent Number:	6969515
Patent Number:	7544500
Patent Number:	7871608
Patent Number:	8075175
Patent Number:	8231869
Patent Number:	8852585
Patent Number:	8560246
Patent Number:	8101394
Patent Number:	8772461
Patent Number:	8617863
Patent Number:	9206410
Patent Number:	8596326
Patent Number:	9616126
Patent Number:	8759293
Patent Number:	8648177
Patent Number:	8840637
Patent Number:	9121857
Patent Number:	9273366
Patent Number:	9512493
Patent Number:	9879246
Patent Number:	8182808
Patent Number:	9921229
Patent Number:	8034913
Patent Number:	8268782
Patent Number:	8420079
Patent Number:	8512980
Patent Number:	9725501
Patent Number:	10113206
Patent Number:	9290820
Patent Number:	9598739
Application Number:	12741030

**CORRESPONDENCE DATA****Fax Number:** (202)835-7586

*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:** 202-835-7500**Email:** dcip@milbank.com**Correspondent Name:** JAVIER J. RAMOS**Address Line 1:** 1850 K STREET, NW, SUITE 1100**Address Line 2:** MILBANK, LLP**Address Line 4:** WASHINGTON, D.C. 20006

<b>ATTORNEY DOCKET NUMBER:</b>	27465.00047
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<b>NAME OF SUBMITTER:</b>	JAVIER J. RAMOS
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<b>SIGNATURE:</b>	/Javier J. Ramos/
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<b>DATE SIGNED:</b>	11/18/2019
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**Total Attachments: 10**

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## PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of November 15, 2019 (as it may be amended, restated, supplemented or otherwise modified from time to time, this “Agreement”), is made by the entities identified as grantors on the signature pages hereto (collectively, the “Grantors”) in favor of **BANK OF AMERICA, N.A.**, as collateral agent for the Secured Parties (in such capacity, together with its successors and permitted assigns, the “Collateral Agent”).

**WHEREAS**, the Grantors are party to a U.S. Pledge and Security Agreement dated as of November 15, 2019 (the “U.S. Pledge and Security Agreement”) between each of the Grantors and the other grantors party thereto and the Collateral Agent pursuant to which the Grantors granted a security interest to the Collateral Agent in the Patent Collateral (as defined below) and are required to execute and deliver this Agreement.

**NOW, THEREFORE**, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors hereby agree with the Collateral Agent as follows:

### SECTION. 1. Defined Terms

Unless otherwise defined herein, terms defined in the U.S. Pledge and Security Agreement and used herein have the meaning given to them in the U.S. Pledge and Security Agreement.

### SECTION 2. Grant of Security Interest

Each Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in and continuing lien on all of such Grantor’s right, title and interest in, to and under the following, in each case whether now owned or existing or hereafter acquired, developed, created or arising and wherever located (collectively, the “Patent Collateral”):

all United States issuances and applications for any of the following: patents and certificates of invention, or similar industrial property rights, and applications for any of the foregoing, including, but not limited to: (i) each patent and patent application listed or required to be listed in Schedule A attached hereto, (ii) all reissues, divisions, continuations, continuations-in-part, extensions, renewals, and reexaminations thereof, (iii) all patentable inventions and improvements thereto, (iv) all rights to sue or otherwise recover for any past, present and future infringement or other violation thereof, (v) all Proceeds of the foregoing, including, without limitation, license fees, royalties, income, payments, claims, damages, and proceeds of suit now or hereafter due and/or payable with respect thereto, and (vi) all other rights of any kind accruing thereunder or pertaining thereto throughout the world.

### SECTION 3. Security Agreement

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Collateral Agent for the Secured Parties pursuant to the U.S. Pledge and Security Agreement, and the Grantors hereby acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the U.S. Pledge and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the U.S. Pledge and Security Agreement, the provisions of the U.S. Pledge and Security Agreement shall control.

#### **SECTION 4. Governing Law**

THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND ALL CLAIMS AND CONTROVERSIES ARISING OUT OF THE SUBJECT MATTER HEREOF 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.

#### **SECTION 5. Intercreditor Agreement**

Notwithstanding anything herein to the contrary, the liens and security interests granted to the Collateral Agent pursuant to this Agreement in any Patent Collateral and the exercise of any right or remedy by the Collateral Agent with respect to any Patent Collateral hereunder are subject to the provisions of the Pari Passu Intercreditor Agreement. In the event of any conflict between the terms of the Pari Passu Intercreditor Agreement and the terms of this Agreement, the terms of the Pari Passu Intercreditor Agreement shall govern and control.

#### **SECTION 6. Counterparts**

This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

[Remainder of page intentionally left blank]

**IN WITNESS WHEREOF**, each Grantor has caused this Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.


**GRIFOLS SHARED SERVICES NORTH AMERICA, INC.**

By:   
Name: Alfredo Arroyo  
Title: Authorized Signatory

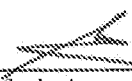
**GRIFOLS THERAPEUTICS LLC**

By:   
Name: Alfredo Arroyo  
Title: Authorized Signatory


**GRIFOLS BIOLOGICALS LLC**

By:   
Name: Alfredo Arroyo  
Title: Authorized Signatory

**BIOMAT USA, INC.**

By:   
Name: Alfredo Arroyo  
Title: Authorized Signatory

**GRIFOLS WORLDWIDE OPERATIONS USA, INC.**

By:   
Name: Alfredo Arroyo  
Title: Authorized Signatory

**GRIFOLS USA, LLC**

By: \_\_\_\_\_

Name: Alfredo Arroyo

Title: Authorized Signatory

**TALECRIS PLASMA RESOURCES, INC.**

By: \_\_\_\_\_

Name: Alfredo Arroyo

Title: Authorized Signatory

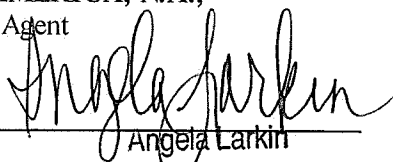
Accepted and Agreed:

**BANK OF AMERICA, N.A.,**  
as Collateral Agent

By: \_\_\_\_\_

Name:

Title:

A handwritten signature in black ink, appearing to read "Angela Larkin", is written over a horizontal line.

Angela Larkin

Vice President

[Signature Page to Patent Security Agreement]

**PATENT**  
**REEL: 051047 FRAME: 0130**



**SCHEDULE A**  
**to**  
**PATENT SECURITY AGREEMENT**

**PATENTS AND PATENT APPLICATIONS**

<b>Title</b>	<b>Application No.</b>	<b>Filing Date</b>	<b>Patent No. / Pub No.</b>	<b>Issue Date / Pub Date</b>
PREPARATION OF ALPHA-1-ANTICHYMOTRYPSIN	08282860	07/29/1994	5561108	10/01/1996
PEPTIDE LIGANDS WHICH BIND TO VON WILLEBRAND FACTOR	08537069	09/22/1995	5688912	11/18/1997
FIBRINOGEN BINDING PEPTIDES	08595718	02/02/1996	5723579	03/03/1998
METHOD AND DEVICE FOR DELIVERING FIBRIN GLUE	08744488	11/05/1996	5844087	12/01/1998
POLY(ALKYLENE OXIDE)-FACTOR VIII OR FACTOR IX CONJUGATE	07866518	04/10/1992	6037452	03/14/2000
METHOD AND DEVICE FOR DELIVERING FIBRIN GLUE	09200636	11/25/1998	6121422	09/19/2000 <sup>1</sup>
ANION EXCHANGE PROCESS FOR THE PURIFICATION OF FACTOR VIII	08554724	11/7/1995	5,659,017	8/19/1997
PROCESS FOR VIRAL INACTIVATION OF LYOPHILIZED BLOOD PROTEINS	09894346	6/28/2001	6,566,504	5/20/2003
MANUFACTURING PROCESS FOR THE PRODUCTION OF PURIFIED TRANSFERRIN	08668351	6/26/1996	5,744,586	4/28/1998
MANUFACTURING METHOD FOR INTRAVENOUSLY ADMINISTRABLE IMMUNE GLOBULIN AND RESULTANT PRODUCT	09421405	10/21/1999	6,162,904	12/19/2000
LOW TEMPERATURE ALBUMIN FRACTIONATION USING SODIUM CAPRYLATE AS A PARTITIONING AGENT	08288180	8/10/1994	5,561,115	10/1/1996
PURIFICATION OF ALPHA-1 PROTEINASE INHIBITOR USING NOVEL CHROMATOGRAPHIC SEPARATION CONDITIONS	08295119	8/24/1994	5,610,285	3/11/1997
PEPTIDE LIGANDS FOR AFFINITY PURIFICATION OF FIBRINOGEN	09012343	1/23/1998	5,783,663	7/21/1998
PEPTIDES WHICH BIND TO PROTHROMBIN AND THROMBIN	08672805	6/28/1996	5,831,003	11/3/1998
METHOD AND DEVICE FOR MECHANICAL TESTING OF FIBRIN GLUE STRENGTH	08864797	5/29/1997	5,911,165	6/8/1999
ALPHA-1 PROTEINASE INHIBITOR BINDING PEPTIDES	09127574	7/31/1998	5,985,836	11/16/1999

<sup>1</sup> Inventor assignment not recorded.

METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF ACTIVE PLASMIN, PLASMIN FORMULATION AND PROCESS OF PRODUCING	09438331	11/13/1999	6,355,243	3/12/2002
METHOD OF PREPARING ALPHA-1 PROTEINASE INHIBITOR	09449695	11/24/1999	6,462,180	10/8/2002
METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF REVERSIBLY INACTIVATED ACIDIFIED PLASMIN	10143157	5/10/2002	6,964,764	11/15/2005
METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF REVERSIBLY ACIDIFIED PLASMIN	10280444	10/25/2002	6,969,515	11/29/2005
PROCESS FOR THE PRODUCTION OF A REVERSIBLY INACTIVE ACIDIFIED PLASMIN COMPOSITION	10692105	10/23/2003	7,544,500	6/9/2009
REVERSIBLY INACTIVATED ACIDIFIED PLASMIN	12197617	8/25/2008	7,871,608	1/8/2011 <sup>2</sup>
METHOD FOR MELTING FROZEN, WATER-CONTAINING PRODUCTS IN A MIXER	10579401	2/1/2007	8,075,175	12/13/2011
RECOMBINANT PLASMIN FOR OPHTHALMIC INDICATIONS	12090782	3/23/2009	8,231,869	7/31/2012
METHOD OF TREATMENT AND PROPHYLAXIS OF DISEASES RELATED TO AMYLOID DEPOSITION USING IGM	12162532	5/7/2009	8,852,585	10/7/2014
METHOD COMPOSITION AND ARTICLE OF MANUFACTURE FOR PROVIDING ALPHA-1 ANTITRYPSIN	12741030	9/14/2010	20110002909	1/6/2011
METHOD FOR ADJUSTING RESULTS OF A POLYMERASE CHAIN	12742801	9/14/2010	8,560,246	10/15/2013
RECOMBINANTLY MODIFIED PLASMIN	12744376	9/16/2010	8,101,394	1/24/2012
TWO-STAGE ULTRAFILTRATION / DIAFILTRATION	12937454	10/12/2010	8,772,461	7/8/2014
COMPOSITION, METHOD AND KIT FOR PREPARING PLASMIN	12995447	3/18/2011	8,617,863	12/31/2013
COMPOSITION, METHOD AND KIT FOR PREPARING PLASMINOGEN, AND PLASMIN DERIVED THEREFROM	13147491	9/23/2011	9,206,410	12/8/2015
DEVICE FOR MAINTAINING STERILE INTEGRITY OF CONNECTED FLUID	13262269	12/16/2011	8,596,326	12/3/2013
COMPOSITION, METHOD, AND KIT FOR ALPHA-1 PROTEINASE INHIBITOR	14926450	10/29/2015 <sup>3</sup>	9,616,126	4/11/2017

<sup>2</sup> Inventor assignment not recorded.

VON WILLEBRAND FACTOR (VWF)-CONTAINING PREPARATIONS, AND METHODS, KITS, AND USES RELATED THERETO	13509309	7/31/2012	8,759,293	6/24/2014
LYOPHILIZATION METHODS, COMPOSITIONS AND KITS	13510401	10/31/2012	8,648,177	2/11/2014
THERAPEUTIC DELIVERY DEVICES, SYSTEMS, AND METHODS	13581697	11/12/2012	8,840,637	9/23/2014
IMMUNOCHROMATOGRAPHY DEVICES, METHODS AND KITS	13823505	3/14/2013	9,121,857	9/1/2015
METHODS, COMPOSITIONS, AND KITS FOR DETERMINING HUMAN IMMUNODEFICIENCY VIRUS (HIV)	14119563	11/22/2013	9,273,366	3/1/2016
COMPOSITIONS, METHODS, AND KITS FOR NUCLEIC ACID HYBRIDIZATION	14237746	6/5/2014	9,512,493	12/6/2016 <sup>4</sup>
REVERSIBLY INACTIVATED ACIDIFIED PLASMIN COMPOSITION	13761684	2/7/2013	9,879,246	1/30/2018
RECOMBINANTLY MODIFIED PLASMIN	13302322	11/22/2011	8,182,808	5/22/2012 <sup>5</sup>
IMMUNOCHROMATOGRAPHY DEVICES, METHODS, AND KITS	14803416	7/20/2015 <sup>6</sup>	9,921,229	3/20/2018
RECOMBINANTLY MODIFIED PLASMIN	11568023	2/1/2008	8,034,913	10/11/2011 <sup>7</sup>
PROCESS FOR THE PRODUCTION OF A REVERSIBLY INACTIVE ACIDIFIED PLASMIN COMPOSITION	12399438	3/6/2009	8,268,782	9/18/2012 <sup>8</sup>
RECOMBINANTLY MODIFIED PLASMIN	13223373	9/1/2011	8,420,079	4/16/2013 <sup>9</sup>
RECOMBINANTLY MODIFIED PLASMIN	13463437	5/3/2012	8,512,980	8/20/2013 <sup>10</sup>
TWO-STAGE ULTRAFILTRATION/DIAFILTRATION	14294460	6/3/2014 <sup>11</sup>	9,725,501	8/8/2017
METHODS, COMPOSITIONS, AND KITS FOR DETERMINING HUMAN IMMUNODEFICIENCY VIRUS (HIV)	14221341	3/21/2014 <sup>12</sup>	10,113,206	10/30/2018
METHODS FOR DETECTION OF PARVOVIRUS B19	14053245	10/14/2013	9,290,820	3/22/2016 <sup>13</sup>
HUMAN ERITROVIRUS	14288691	5/28/2014	9,598,739	3/21/2017

<sup>3</sup> Inventor assignment not recorded.

<sup>4</sup> Typo in inventor name in recorded inventor assignment.

<sup>5</sup> Inventor assignment not recorded.

<sup>6</sup> Inventor assignment not recorded.

<sup>7</sup> Inventor assignment not recorded.

<sup>8</sup> Inventor assignment not recorded.

<sup>9</sup> Inventor assignment not recorded.

<sup>10</sup> Inventor assignment not recorded.

<sup>11</sup> Inventor assignment not recorded.

<sup>12</sup> Inventor assignment not recorded.

<sup>13</sup> Inventor assignment not recorded.