## 504672374 12/05/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4719096

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

## **CONVEYING PARTY DATA**

Name	Execution Date
GRIFOLS SHARED SERVICES NORTH AMERICA, INC.	12/05/2017
GRIFOLS THERAPEUTICS INC.	12/05/2017
GRIFOLS BIOLOGICALS INC.	12/05/2017
BIOMAT USA, INC.	12/05/2017
GRIFOLS DIAGNOSTIC SOLUTIONS.	12/05/2017
GRIFOLS WORLDWIDE OPERATIONS USA, INC.	12/05/2017

## **RECEIVING PARTY DATA**

Name:	EUROPEAN INVESTMENT BANK, AS LENDER
Street Address:	100 BOULEVARD KONRAD ADENAUER
City:	LUXEMBOURG
State/Country:	LUXEMBOURG
Postal Code:	L-2950

## **PROPERTY NUMBERS Total: 65**

Property Type	Number
Patent Number:	5319072
Patent Number:	5356878
Patent Number:	5399670
Patent Number:	5288853
Patent Number:	5561108
Patent Number:	5688912
Patent Number:	5723579
Patent Number:	5844087
Patent Number:	6037452
Patent Number:	6121422
Patent Number:	6693173
Patent Number:	5286849
Patent Number:	5659017
Patent Number:	6566504
Patent Number:	5744586

PATENT REEL: 044696 FRAME: 0846

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Patent Number:	6162904
Patent Number:	5561115
Patent Number:	5610285
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:	8759293
Patent Number:	8648177
Patent Number:	8840637
Patent Number:	9121857
Patent Number:	9273366
Patent Number:	9512493
Patent Number:	8182808
Patent Number:	8034913
Patent Number:	8268782
Patent Number:	8420079
Patent Number:	8512980
Patent Number:	6391298
Patent Number:	8232369
Patent Number:	6984492
Patent Number:	6521226
Patent Number:	9290820

Property Type	Number
Application Number:	12741030
Application Number:	14819001
Application Number:	14926450
Application Number:	13761684
Application Number:	15161931
Application Number:	14803416
Application Number:	14294460
Application Number:	14221341
Application Number:	15312365
Application Number:	12724032
Application Number:	14288691
Application Number:	62442134

#### CORRESPONDENCE DATA

**Fax Number:** (800)494-7512

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.

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Address Line 2: COGENCY GLOBAL INC.

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER: F174162 GRIF 2015 PT	
NAME OF SUBMITTER:	RACHEL KLEIN
SIGNATURE:	/Rachel Klein/
DATE SIGNED:	12/05/2017

## **Total Attachments: 10**

source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page3.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page4.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page5.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page6.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page7.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page8.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page9.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page10.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page11.tif source=Grifols 2015 EIB - U.S. Patent Security Agreement\_flat#page11.tif

#### PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of December 5, 2017 (as it may be amended, restated, supplemented or otherwise modified from time to time, this "<u>Agreement</u>"), is made by the entities identified as grantors on the signature pages hereto (collectively, the "<u>Grantors</u>") in favor of European Investment Bank, as Lender (in such capacity, together with its successors and permitted assigns, the "<u>Lender</u>").

WHEREAS, the Grantors are party to a Pledge and Security Agreement dated as of the date hereof (the "Pledge and Security Agreement") between each of the Grantors and the other grantors party thereto and the Lender pursuant to which the Grantors granted a security interest to the Lender 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 Lender as follows:

#### SECTION, 1. Defined Terms

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

## **SECTION 2.** Grant of Security Interest

Each Grantor hereby grants to the Lender 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 Lender pursuant to the Pledge and Security Agreement, and the Grantors hereby acknowledge and affirm that the rights and remedies of the Lender with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the 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 Pledge and Security Agreement, the provisions of the Pledge and Security Agreement shall control.

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#### **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, WITHOUT REGARD TO CONFLICTS OF LAW PROVISIONS THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE STATE OF NEW YORK (OTHER THAN ANY MANDATORY PROVISIONS OF LAW RELATING TO THE LAW GOVERNING PERFECTION AND THE EFFECT OF PERFECTION OF THE SECURITY INTEREST).

### **SECTION 5.** 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.

GRI	FOLS SHARED SERVICES NORTH AMERICA
INC	•
Ву:	<u>Vide</u>
	Name: Victor Grifols Deu
	Title: Authorized Signatory
Ву:	1290ins
	Name: Raimon Grifols Roura
	Title: Authorized Signatory
GRI	FOLS THERAPEUTICS INC.
By:	Vick
2.3 .7 .	Name: Victor Grifols Deu
	Title: Authorized Signatory
By:	7260°MS
~	Name: Raimon Grifols Roura
	Title: Authorized Signatory
GRI	FOLS BIOLOGICALS INC.
Ву:	Vista
J ·	Name: Victor Grifols Deu
	Title: Authorized Signatory
Ву:	290 n>
*	Name: Raimon Grifols Roura
	Title: Authorized Signatory

BIO	MATUSA, INC.
Ву:	W.L.
	Name: Victor Grifols Deu
	Title: Authorized Signatory
By:	776rm
7	Name: Raimon Grifols Roura
	Title: Authorized Signatory
GRI	FOLS DIAGNOSTIC SOLUTIONS INC.
By:	<u>Vide</u>
•	Name: Victor Grifols Deu
	Title: Authorized Signatory
Ву:	<u> 126prz</u>
	Name: Raimon Grifols Roura
	Title: Authorized Signatory
GRI	FOLS WORLDWIDE OPERATIONS USA, INC.
Ву:	Wide
•	Name: Victor Grifols Deu
	Title: Authorized Signatory
By:	DGnM
*	Name: Raimon Grifols Roura

Title: Authorized Signatory

Accepted and Agreed:

EUROPEAN INVESTMENT BANK,

as Lender-

By:

Name: Fernando Torija Ruiz Title: Authorised Attorney

By:

Name: Ignacio Lacorzana Barinagarrementería

Title: Authorised Attorney

# SCHEDULE A to PATENT SECURITY AGREEMENT

# PATENTS AND PATENT APPLICATIONS

Title	Application No.	Filing Date	Patent No. / Pub No.	Issue Date / Pub Date
HUMAN ANTITHROMBIN-III PREPARATION	07818831	01/10/1992	5319072	06/07/1994
GEL FILTRATION OF FACTOR VIII	08000852	01/04/1993	5356878	10/18/1994
SOLUBILIZATION AND STABILIZATION OF FACTOR VIII COMPLEX	08054903	04/29/1993	5399670	03/21/1995
FACTOR VIII PURIFICATION PROCESS	07876410	4/30/1992	5,288,853	2/22/1994
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	09/19/20001
METHOD TO REMOVE CITRATE AND ALUMINUM FROM PROTEINS	09805397	03/13/2001	6693173	02/17/2004
PURIFICATION OF FACTOR IX	07913666	7/14/1992	5,286,849	2/15/1994
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

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

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	00015313	1/22/5222	<b>5.5</b> 00.550	<b>-</b>
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	0012551	<b>5/04/4</b> 000	- 00-00-6	11/16/1000
BINDING PEPTIDES	09127574	7/31/1998	5,985,836	11/16/1999
METHOD OF THROMBOLYSIS BY				
LOCAL DELIVERY OF ACTIVE				
PLASMIN, PLASMIN FORMULATION	00.420224	1.4.2.4.000		
AND PROCESS OF PRODUCING	09438331	11/13/1999	6,355,243	3/12/2002
METHOD OF PREPARING ALPHA-1	00440607	11/01/1000	6 462 400	10/0/2002
PROTEINASE INHIBITOR	09449695	11/24/1999	6,462,180	10/8/2002
METHOD OF THROMBOLYSIS BY				
LOCAL DELIVERY OF REVERSIBLY	10140157	5/10/2002	6.064.764	11/15/2005
INACTIVATED ACIDIFIED PLASMIN	10143157	5/10/2002	6,964,764	11/15/2005
METHOD OF THROMBOLYSIS BY				
LOCAL DELIVERY OF REVERSIBLY	10200444	10/05/0000	6.060.515	11/20/2005
ACIDIFIED PLASMIN	10280444	10/25/2002	6,969,515	11/29/2005
PROCESS FOR THE PRODUCTION OF				
A REVERSIBLY INACTIVE	10/02105	10/22/2002	7.544.500	(10/2000
ACIDIFIED PLASMIN COMPOSITION	10692105	10/23/2003	7,544,500	6/9/2009
REVERSIBLY INACTIVATED	12107617	0/05/0000	7 071 700	1/0/20112
ACIDIFIED PLASMIN	12197617	8/25/2008	7,871,608	1/8/2011 <sup>2</sup>
METHOD FOR MELTING FROZEN,				
WATER-CONTAINING PRODUCTS IN	10570404	2/1/2027	0.075.175	10/10/2011
A MIXER	10579401	2/1/2007	8,075,175	12/13/2011
RECOMBINANT PLASMIN FOR	12000702	2/22/2000	0.221.000	7/21/2012
OPTHALMIC INDICATIONS	12090782	3/23/2009	8,231,869	7/31/2012

 $<sup>^{2}</sup>$  Inventor assignment not recorded.

METHOD OF TREATMENT AND				
PROPHYLAXIS OF DISEASES				
RELATED TO AMYLOID	1216252	<b>5.17.10</b> 000		10/7/2011
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		
METHOD FOR ADJUSTING RESULTS	12/41030	9/14/2010		
OF A POLYMERASE CHAIN	12742801	9/14/2010	8,560,246	10/15/2013
RECOMBINANTLY MODIFIED	127.2001	3/11/2010	0,000,210	10/10/2010
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
COMPOSITION, METHOD AND KIT	14819001	8/5/2015	9,200,410	12/0/2013
FOR PREPARING PLASMINOGEN,	11015001	0/3/2013		
AND PLASMIN DERIVED				
THEREFROM				
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>		
VON WILLEBRAND FACTOR (VWF)-	14920430	10/29/2013		
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	12022505	2/14/2012	0.121.057	0/1/2015
DEVICES, METHODS AND KITS  METHODS COMPOSITIONS AND	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	1.117505	11,22,2013	,2.5,500	5,1,2010
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		

<sup>&</sup>lt;sup>3</sup> Inventor assignment not recorded.
<sup>4</sup> Typo in inventor name in recorded inventor assignment.

RECOMBINANTLY MODIFIED				
PLASMIN	13302322	11/22/2011	8,182,808	5/22/2012 <sup>5</sup>
METHOD OF PREPARING ALPHA-1	13302322	11/22/2011	0,102,000	312212012
PROTEINASE INHIBITOR	15161931	5/23/2016		
IMMUNOCHROMATOGRAPHY	13101731	3/23/2010		
DEVICES, METHODS, AND KITS	14803416	7/20/20156		
RECOMBINANTLY MODIFIED	1.002.110	772072010		
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	4/16/20139
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>		
METHODS, COMPOSITIONS, AND				
KITS FOR DETERMINING HUMAN				
IMMUNODEFICIENCY VIRUS (HIV)	14221341	3/21/2014 <sup>12</sup>		
METHOD OF USING PON-1 TO				
DECREASE ATHEROMA				
FORMATION	09199672	11/25/1998	6,391,298	5/21/2002
DEVICE AND METHOD FOR				12
PRECIPITATION OF PEPTIDES	12520117	12/23/2009	8,232,369	7/31/2012 <sup>13</sup>
METHODS AND COMPOSITIONS FOR				
TREATING HERPES INFECTIONS	10656781	9/5/2003	6,984,492	1/10/2006
METHOD OF USING PON-1 TO				
DECREASE ATHEROMA				
FORMATION	10105640	03/25/2002	6,521,226	02/18/2003
METHODS FOR DETECTION OF				.14
PARVOVIRUS B19	14053245	10/14/2013	9,290,820	3/22/2016 <sup>14</sup>
DEVICE AND METHOD FOR				
DETECTING BLOOD GROUP				
ANTIGENS BY MEANS OF AN				
INCOMPLETE ANTIBODY	15312365	5/23/2015		
HUMAN ERYTHROVIRUS	12724032	3/15/2010		
HUMAN ERITROVIRUS	14288691	5/28/2014		
COMPOSITION COMPRISING	(2446121	1/4/2017		
HIGHLY CONCENTRATED ALPHA -1-	62442134	1/4/2017		

<sup>&</sup>lt;sup>5</sup> Inventor assignment not recorded. <sup>6</sup> Inventor assignment not recorded.

<sup>&</sup>lt;sup>7</sup> Inventor assignment not recorded.

Co-owned with Bayer Intellectual Property GmbH.

Inventor assignment not recorded.

PROTEINASE INHIBITOR AND		
METHOD FOR OBTAINING THEREOF		

**RECORDED: 12/05/2017**