### 502700394 02/27/2014

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2746999

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GRIFOLS INC.	02/27/2014
GRIFOLS THERAPEUTICS INC.	02/27/2014
GRIFOLS-CHIRON DIAGNOSTICS CORP.	02/27/2014

#### **RECEIVING PARTY DATA**

Name:	DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AGENT			
Street Address:	60 WALL STREET			
City:	NEW YORK			
State/Country:	NEW YORK			
Postal Code:	10005			

PROPERTY NUMBERS Total: 163

Property Type	Number
Patent Number:	4725673
Patent Number:	4944647
Patent Number:	5110907
Patent Number:	5177191
Patent Number:	5219995
Patent Number:	5248596
Patent Number:	5286849
Patent Number:	5288853
Patent Number:	5319072
Patent Number:	5356878
Patent Number:	5399670
Patent Number:	5477896
Patent Number:	5549866
	PATENT

Patent Number:	5561108
Patent Number:	5561115
Patent Number:	5610285
Patent Number:	5612453
Patent Number:	5659017
Patent Number:	5688912
Patent Number:	5723579
Patent Number:	5744586
Patent Number:	5783663
Patent Number:	5830411
Patent Number:	5831003
Patent Number:	5844087
Patent Number:	5846930
Patent Number:	5911165
Patent Number:	5932468
Patent Number:	5985836
Patent Number:	6037452
Patent Number:	6054264
Patent Number:	6121422
Patent Number:	6159471
Patent Number:	6162399
Patent Number:	6162904
Patent Number:	6261764
Patent Number:	6267927
Patent Number:	6300056
Patent Number:	6355243
Patent Number:	6391298
Patent Number:	6391540
Patent Number:	6416944
Patent Number:	6428792
Patent Number:	6436666
Patent Number:	6462180
Patent Number:	6485725
Patent Number:	6503226
Patent Number:	6514731
	PATENT

	6521226
Patent Number:	6537745
Patent Number:	6566504
Patent Number:	6605445
Patent Number:	6630298
Patent Number:	6632601
Patent Number:	6660471
Patent Number:	6676664
Patent Number:	6693173
Patent Number:	6709221
Patent Number:	6740323
Patent Number:	6796108
Patent Number:	6797809
Patent Number:	6815160
Patent Number:	6832463
Patent Number:	6875848
Patent Number:	6924122
Patent Number:	6936442
Patent Number:	6942965
Patent Number:	6964764
Patent Number:	6969515
Patent Number:	6984492
Patent Number:	7056658
Patent Number:	7108967
Patent Number:	7117901
Patent Number:	7166426
Patent Number:	7183107
Patent Number:	7198923
Patent Number:	7241879
Patent Number:	7252958
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Patent Number:	7306420
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Patent Number:	7332577
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	7439040
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Patent Number:	7931916
Patent Number:	8034913
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Patent Number:	8231869
Patent Number:	8232369
Patent Number:	8252590
Patent Number:	8268782
Patent Number:	8354505
Patent Number:	8376188
Patent Number:	8420079
Patent Number:	8454909
Patent Number:	8512980
II .	PATENT

	8551706
Patent Number:	8560246
Patent Number:	8574495
Patent Number:	8596326
Patent Number:	8617863
Patent Number:	8648177
Patent Number:	RE36259
Patent Number:	RE44558
Application Number:	11251566
Application Number:	11759578
Application Number:	11766934
Application Number:	12162532
Application Number:	12434813
Application Number:	12689607
Application Number:	12724032
Application Number:	12741030
Application Number:	12822764
Application Number:	12915346
Application Number:	12937454
Application Number:	13033507
Application Number:	13145875
Application Number:	13147491
Application Number:	13169061
Application Number:	13266763
Application Number:	13301599
Application Number:	13418123
Application Number:	13504783
Application Number:	13509309
Application Number:	13551738
Application Number:	13567678
Application Number:	13581697
Application Number:	13761684
Application Number:	13803128
Application Number:	13825505
Application Number:	13828374
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	13833545
Application Number:	13838424
Application Number:	13859395
Application Number:	13951070
Application Number:	14053245
Application Number:	14119563
Application Number:	14122726
Application Number:	14126269
Application Number:	14232783
Application Number:	14237746

#### **CORRESPONDENCE DATA**

Fax Number:

Phone: 213-892-4000
Email: cholm@milbank.com

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

Correspondent Name: CHRIS L HOLM

Address Line 1: 601 SOUTH FIGUEROA ST

Address Line 2: 30TH FLOOR

Address Line 4: LOS ANGELES, CALIFORNIA 90017

NAME OF SUBMITTER:	CHRIS L. HOLM	
Signature:	/s/ Chris L. Holm	
Date:	02/27/2014	

#### Total Attachments: 34

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#### PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of February 27, 2014 (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 **DEUTSCHE BANK AG NEW YORK BRANCH**, as collateral agent for the Secured Parties (in such capacity, together with its successors and permitted assigns, the "<u>Collateral Agent</u>").

WHEREAS, the Grantors are party to a Pledge and Security Agreement dated as of February 27, 2014 (the "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 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 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 and foreign 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 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 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.

#### **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]

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IN WITNESS WHEREOF, each Grantor and the Collateral Agent have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

GRIFOLS INC.

By:

Name: David Bell

Title: Corporate Vice President

GRAFOLS THERAPEUTICS INC.

By:

Name: David Bell

Title: Corporate Vice President

GRIFOLS-CHIRON DIAGNOSTICS CORP.

By:

Name: David Bell

Title: Authorized Signatory

[Grifols -Patent Security Agreement]

Accepted and Agreed:

DEUTSCHE BANK AG NEW YORK BRANCH, as Collateral Agent

...... Хільт

Name: Title:

Michael Winters

Vice President

By:

Title:

Kirk L. Tashjian Vice President

#4843-3088-4888

[Grifols - Patent Security Agreement]

# SCHEDULE A to PATENT SECURITY AGREEMENT

# PATENTS AND PATENT APPLICATIONS

Title	Application No.	Filing Date	Patent No. / Pub No.	Issue Date / Pub Date
PLASMA FRACTION PURIFICATION USING SILICA RESIN BOUND TO A LIGAND	06902155	08/29/1986	4725673	02/16/1988
BOTTLE CUTTING AND EMPTYING MACHINE	07187818	04/13/2011	4944647	07/31/1990
FACTOR VIII COMPLEX PURIFICATION USING HEPARIN AFFINITY CHROMATOGRAPHY	07388254	08/01/1989	5110907	05/05/1992
GEL FILTRATION OF FACTOR VIII	07587815	09/24/1990	5177191	01/05/1993
PLASMA FRACTION PURIFICATION	07913590	07/14/1992	5219995	06/15/1993
METHOD OF DETECTING PROTEOLYTICALLY MODIFIED ANTITHROMBIN	07844354	03/02/1992	5248596	09/28/1993
PURIFICATION OF FACTOR IX	07913666	07/14/1992	5286849	02/15/1994
FACTOR VIII PURIFICATION PROCESS	07876410	04/30/1992	5288853	02/22/1994
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

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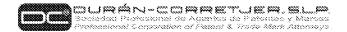
#4843-3088-4888

PATENT

REEL: 032367 FRAME: 0012

SOLUBILIZATION AND STABILIZATION OF FACTOR VIII COMPLEX	08054903	04/29/1993	5399670	03/21/1995
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
METHOD OF USING PON-1 TO DECREASE ATHEROMA FORMATION	09199672	11/25/1998	6391298	05/21/2002
METHOD OF USING PON-1 TO DECREASE ATHEROMA FORMATION	10105640	03/25/2002	6521226	02/18/2003
RAPID METHOD OF DETERMINING CLEARANCE OF PRION PROTEIN	09253800	02/22/1999	6605445	08/12/2003
DEVICE FOR METERING HARDENABLE MASS FOR BONE TREATMENTS	09628873	07/24/2000	6676664	01/13/2004
METHOD TO REMOVE CITRATE AND ALUMINUM FROM PROTEINS	09805397	03/13/2001	6693173	02/17/2004

METHODS AND COMPOSITIONS FOR TREATING HERPES INFECTIONS	10656781	09/05/2003	6984492	01/10/2006
DETECTION OF TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHY (TSE) PROTEIN EMPLOYING A HIGHLY SENSITIVE WESTERN BLOT ASSAY AND CHEMILUMINESCENT DETECTION SYSTEM	10406182	04/03/2003	7504204	03/17/2009
DEVICE AND METHOD FOR PRECIPITATION OF PEPTIDES	12520117	12/23/2009	8232369	07/31/2012
PREPARING ESSENTIALLY MONOMERIC NORMAL HUMAN SERUM ALBUMIN	08276861	07/18/1994	RE36259	07/27/1999
METHODS AND REAGENTS FOR EFFICIENT AND TARGETED GENE TRANSFER TO MONOCYTES AND MACROPHAGES	13266763	10/27/2011	US20120045389	02/23/2012



**ACTIVE** 

**ACTIVE** 

Client: 43029484 GRIFOLS, S.A.

Country: UNITED STATES OF AMERICA

Case: 6989 Y/Ref.: GSF

UNITED STATES OF AMERICA PATENT. Registration n. 6832463 **ACTIVE** 

Denomination: A METHOD FOR THE STERILE DOSING OF VIALS

Filing Date: Jan 12, 2004 Granting Date: Dec 21, 2004 Jun 21, 2016 Next Payment:

Case: 12087

UNITED STATES OF AMERICA PATENT. Application n. 61/581708

ALPHA 1-PROTEINASE INHIBITOR FOR DELYING THE ONSET OR Denomination:

PROGRESSION OF PULMONARY EXACERBATIONS

Dec 30, 2011 Filing Date: Pendina Granting Date: Pending Next Payment:

Case: 5825

UNITED STATES OF AMERICA PATENT. Registration n. 6503226 **ACTIVE** 

APPARATUS FOR ANGIOGRAPHY BY THE INJECTION OF CO2 Denomination:

Jul 18, 2000 Jan 07, 2003 Filing Date: Granting Date: Jul 07, 2014 Next Payment:

Case: 6526

UNITED STATES OF AMERICA PATENT. Registration n. 7117901

APPARATUS FOR FILLING CONTAINERS FOR PHARMACEUTICAL USES AND Denomination:

THE LIKE Feb 25, 2002 Filing Date: Granting Date: Oct 10, 2006 Next Payment: Apr 10, 2014

Case: 8041

UNITED STATES OF AMERICA PATENT. Registration n. 7511818

**ACTIVE** 

APPARATUS FOR MEASURING THE OPTICAL ABSORBENCY OF SAMPLES Denomination:

OF LIQUIDS, METHOD AND REACTION CONTAINER FOR ITS

**IMPLEMENTATION** 

Filing Date: Nov 15, 2005 Mar 31, 2009 Granting Date: Next Payment: Sep 30, 2016

Case: 5238

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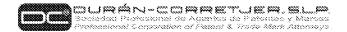
UNITED STATES OF AMERICA PATENT. Registration n. 6267927

**ACTIVE** 

Denomination: APPARATUS FOR PERFORMING LABORATORY TESTS AUTOMATICALLY

Nov 19, 1998 Filing Date: Granting Date: Jul 31, 2001 Nov 19, 2018 Next Payment:

**PATEN** 155/169



**Case:** 8043

UNITED STATES OF AMERICA PATENT. Registration n. 7622078

**ACTIVE** 

Denomination: APPARATUS FOR THE AUTOMATED CLINICAL ANALYSIS OF SAMPLES

Filing Date: Nov 08, 2005 Granting Date: Nov 24, 2009 Next Payment: May 24, 2017

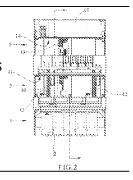
Case: 9816

UNITED STATES OF AMERICA PATENT. Registration n. 8574495

ACTIVE

Denomination: APPARATUS FOR THE AUTOMATIC ANALYSIS OF SAMPLES ON GEL CARDS

Filing Date: May 20, 2009
Granting Date: Nov 05, 2013
Next Payment: May 05, 2017



**Case:** 3429

UNITED STATES OF AMERICA PATENT. Registration n. 5477896

**ACTIVE** 

Denomination: APPARATUS FOR THE STERILE FILLING OF STERILE BAGS FOR

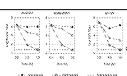
PERFUSION LIQUIDS AND FOR CHECKING THIS FILLING.

Filing Date: Feb 24, 1994
Granting Date: Dec 26, 1995
Next Payment: Feb 24, 2014

Case: 13698

UNITED STATES OF AMERICA PATENT. Application n. 13/951070

ACTIVE



Denomination: CAPRYLATE VIRAL DEACTIVATION

Filing Date: Jul 25, 2013
Granting Date: Pending
Next Payment: Pending

Case: 12349 Y/Ref.: ROI 2012-04

UNITED STATES OF AMERICA PATENT. Application n. 61/681265

n n. 61/681265 ACTIVE

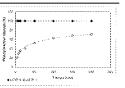
Denomination: CAPRYLATE VIRAL DEACTIVATION

Filing Date: Aug 09, 2012
Granting Date: Pending
Next Payment: Pending

Case: 9995

UNITED STATES OF AMERICA PATENT. Registration n. 7931916

ACTIVE

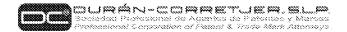


Denomination: COMPOSITION OF BIOCOMPATIBLE MICROPARTICLES OF ALGINIC ACID FOR THE CONTROLLED RELEASE OF ACTIVE INGREDIENTS BY

INTRAVENOUS ADMINISTRATION

Filing Date: Dec 09, 2009
Granting Date: Apr 26, 2011
Next Payment: Oct 26, 2014

PATEN 1 56/169



**Case:** 13442

UNITED STATES OF AMERICA PATENT. Application n. 13/833545

**ACTIVE** 

Denomination: CULTURE MEDIUM FOR HUMAN MESENCHYMAL STEM CELLS

Filing Date: Mar 15, 2013 Pending Granting Date: Next Payment: Pending

Case: 4274

UNITED STATES OF AMERICA PATENT. Registration n. 5830411

**ACTIVE** 

DEVICE FOR CARRYING OUT ERYTHROCYTIC REACTIONS Denomination:

Filing Date: Jan 17, 1997 Granting Date: Nov 03, 1998 Next Payment: Jan 17, 2017

Case: 12289

UNITED STATES OF AMERICA PATENT. Application n. 13/551738

**ACTIVE** 

DEVICE FOR EMPTYING A BLOOD PRODUCT BAG Denomination:

Filing Date: Jul 18, 2012 Granting Date: Pending Next Payment: Pending

**Case:** 9349

UNITED STATES OF AMERICA PATENT. Registration n. 8454909

**ACTIVE** 

DEVICE FOR LOADING REAGENT CARDS FOR CLINICAL ANALYSERS Denomination:

Oct 16, 2007 Filing Date: Jun 04, 2013 Granting Date: Next Payment: Dec 04, 2016

FIG

**Case:** 10170

UNITED STATES OF AMERICA PATENT. Registration n. 8376188

**ACTIVE** 

DEVICE FOR THE APPLICATION OF FIBRIN ADHESIVE Denomination:

Apr 14, 2010 Filing Date: Feb 19, 2013 Granting Date: Next Payment: Aug 19, 2016



**Case:** 10042

UNITED STATES OF AMERICA PATENT. Application n. 12/689607

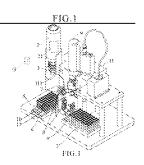
**ACTIVE** 

DEVICE FOR THE AUTOMATIC TAKING OF SAMPLES OF LIQUID FROM Denomination:

COLLECTION CONTAINERS AND METHOD FOR PERFORMING SAID

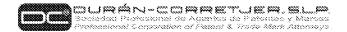
SAMPLE TAKING

Jan 19, 2010 Filing Date: Pending Granting Date: Next Payment: Pending



REEL: 032367 FRAME: 0017

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**Case:** 6694

UNITED STATES OF AMERICA PATENT. Registration n. 6709221

**ACTIVE** 

Denomination: GRIPPING MEANS FOR HANDLING BLOOD PLASMA CONTAINERS

Filing Date: Mar 14, 2003
Granting Date: Mar 23, 2004
Next Payment: Sep 23, 2015

**Case:** 12088 Y/Ref.: 2011-011

UNITED STATES OF AMERICA PATENT. Application n. 61/578290

ACTIVE

Denomination: IDENTIFICATION OF ATYPICAL ANTIBODIES IN HUMAN BLOOD AND

**BLOOD PRODUCTS** 

Filing Date: Dec 21, 2011
Granting Date: Pending
Next Payment: Pending

**Case:** 10267

UNITED STATES OF AMERICA PATENT. Registration n. 8252590 B2

**ACTIVE** 

Denomination: MAMMALIAN CELL CULTURE MEDIA WHICH COMPRISE SUPERNATANT

FROM COHN FRACTIONATION STAGES AND USE THEREOF

Filing Date: Jul 02, 2010
Granting Date: Aug 28, 2012
Next Payment: Feb 28, 2016

Case: 6691 Y/Ref.: VIALES MARCADO/DOSIF

UNITED STATES OF AMERICA PATENT. Registration n. 6796108

**ACTIVE** 

Denomination: METHOD AND APPARATUS FOR CONTROLLING THE FILLING OF

CONTAINERS UNDER ASEPTIC CONDITIONS

Filing Date: Mar 14, 2003
Granting Date: Sep 28, 2004
Next Payment: Mar 28, 2016

**Case:** 6688

UNITED STATES OF AMERICA PATENT. Registration n. 7306420

**ACTIVE** 

Denomination: METHOD AND APPARATUS FOR EMPTYING BLOOD PLASMA CONTAINERS

Filing Date: Mar 14, 2003
Granting Date: Dec 11, 2007
Next Payment: Jun 11, 2015

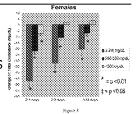
Case: 12070

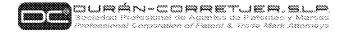
UNITED STATES OF AMERICA PATENT. Application n. 13/418123

**ACTIVE** 

Denomination: METHOD AND DEVICE FOR TREATING BLOOD CHOLESTEROL DISORDERS

Filing Date: Mar 12, 2012
Granting Date: Pending
Next Payment: Pending





**Case:** 4253

UNITED STATES OF AMERICA PATENT. Application n. 5932468

**ACTIVE** 

Denomination: METHOD OF INACTIVATING VIRUSES IN PROTEINS

Filing Date: Nov 01, 1996 Granting Date: Aug 03, 1999 Next Payment: Nov 01, 2016

Case: 9806

UNITED STATES OF AMERICA PATENT. Application n. 12/434813

ACTIVE

Denomination: MICROTUBE READER DEVICE FOR THE ANALYSIS OF BLOOD SAMPLES

Filing Date: May 04, 2009
Granting Date: Pending
Next Payment: Pending

FIG.1

**Case:** 11305

UNITED STATES OF AMERICA PATENT. Application n. 61/493566

**ACTIVE** 

Denomination: PRIMING ANTICOAGULANT ALIGNMENT FOR BLOOD COLLECTION

Filing Date: Jun 06, 2011
Granting Date: Pending
Next Payment: Pending

**Case:** 11304

UNITED STATES OF AMERICA PATENT. Application n. 61/490856

**ACTIVE** 

Denomination: PRIMING ANTICOAGULANT ALIGNMENT FOR BLOOD COLLECTION

Filing Date: May 27, 2011
Granting Date: Pending
Next Payment: Pending

Case: 12228/2

UNITED STATES OF AMERICA PATENT. Application n. 14122726

ACTIVE

Denomination: PRIMING ANTICOAGULANT LINE FOR BLOOD EXTRACTION

Filing Date: Nov 27, 2013
Granting Date: Pending
Next Payment: Pending

9 8 110 6 110 6

**Case:** 8356

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UNITED STATES OF AMERICA PATENT. Registration n. 7323881

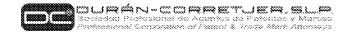
**ACTIVE** 

Denomination: PROCESS AND APPARATUS FOR EVALUATING THE DEGREE OF VACUUM

IN CLOSED BODIES WITH TRANSPARENT WALLS

Filing Date: Nov 06, 2006
Granting Date: Jan 29, 2008
Next Payment: Jul 29, 2015

PATENT 159/169



**Case:** 9750

UNITED STATES OF AMERICA PATENT. Registration n. 8354505

**ACTIVE** 

Denomination: PROCESS FOR OBTAINING A CONCENTRATE OF VON WILLEBRAND

FACTOR OR A COMPLEX OF FACTOR VIII/VON WILLEBRAND FACTOR AND

USE OF THE SAME

Filing Date: Jan 07, 2009
Granting Date: Jan 15, 2013
Next Payment: Jul 15, 2016

Case: 13491

UNITED STATES OF AMERICA PATENT. Application n. 13/838424

**ACTIVE** 

Denomination: PROCESS FOR OBTAINING AN IGG COMPOSITION THROUGH HEAT

TREATMENT

Filing Date: Mar 15, 2013
Granting Date: Pending
Next Payment: Pending

**Case:** 9721

UNITED STATES OF AMERICA PATENT. Registration n. 8088416

**ACTIVE** 

Denomination: PROCESS FOR OBTAINING HIGH EFFICIENCY HUMAN ALBUMIN FOR USE

IN DETOXIFICATION THERAPY

Filing Date: Nov 11, 2008 Granting Date: Jan 03, 2012 Next Payment: Jul 03, 2015

Case: 10653

UNITED STATES OF AMERICA PATENT. Registration n. 8231599

**ACTIVE** 

Denomination: PROCESS FOR OBTAINING HIGH EFFICIENCY HUMAN ALBUMIN FOR USE

IN DETOXIFICATION THERAPY

Filing Date: Feb 15, 2011
Granting Date: Jul 31, 2012
Next Payment: Jan 31, 2016

Case: 7035 Y/Ref.: FIBRINOGENO

UNITED STATES OF AMERICA PATENT. Registration n. 7442308

ACTIVE

Denomination: PROCESS FOR REMOVING VIRUSES IN FIBRINOGEN SOLUTIONS AND

FIBRINOGEN OBTAINED BY SAID PROCESS

Filing Date: Feb 25, 2004
Granting Date: Oct 28, 2008
Next Payment: Apr 28, 2016

Case: 6514

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UNITED STATES OF AMERICA PATENT. Registration n. 6875848

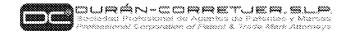
**ACTIVE** 

Denomination: PROCESS FOR THE PRODUCTION OF VIRUS-INACTIVATED HUMAN

GAMMAGLOBULIN G

Filing Date: Jan 17, 2002
Granting Date: Apr 05, 2005
Next Payment: Oct 05, 2016

PATENT 160/169



**Case:** 3087

UNITED STATES OF AMERICA PATENT. Registration n. 5549866

**ACTIVE** 

Denomination: PROCESS OF MAKING A FLOW REGULATION DEVICE

Filing Date: Jun 22, 1994 Aug 27, 1996 Granting Date: Jun 22, 2014 Next Payment:

Case: 13525

UNITED STATES OF AMERICA PATENT. Application n. 13/828374

**ACTIVE** 

PURIFICATION OF CELL CULTURE DERIVED ALPHA1 PROTEASE Denomination:

**INHIBITOR** 

Filing Date: Mar 14, 2013 Pending Granting Date: Next Payment: Pending

Case: 12317 Y/Ref.: ROI 2012-05

UNITED STATES OF AMERICA PATENT. Application n. 61/675560

**ACTIVE** 

PURIFICATION OF CELL CULTURE DERIVED ALPHA1 PROTEASE Denomination:

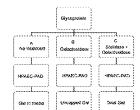
**INHIBITOR** 

Jul 25, 2012 Filing Date: Pending Granting Date: Next Payment: Pending

**Case:** 12297/2

UNITED STATES OF AMERICA PATENT. Application n. 14/232783

**ACTIVE** 



Denomination:

RAPID AND ACCURATE ANALYSIS OF PROTEIN SIALYLATION

Filing Date: Jan 14, 2014 Granting Date: Pending Next Payment: Pending

Case: 11306

UNITED STATES OF AMERICA PATENT. Application n. 61/507643

**ACTIVE** 

Denomination: RAPID AND ACCURATE ANALYSIS OF PROTEIN SIALYLATION

Filing Date: Jul 14, 2011 Granting Date: Pending Next Payment: Pending

Case: 13374

UNITED STATES OF AMERICA PATENT. Application n. 13/761684

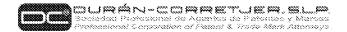
**ACTIVE** 

REVERSIBLY INACTIVATED ACIDIFIED PLASMIN Denomination:

Feb 07, 2013 Filing Date: Pending Granting Date: Pending Next Payment:

> $\mathbf{PATENT}^{161\overline{/169}}$ REEL: 032367 FRAME: 0021

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**Case:** 9299

UNITED STATES OF AMERICA PATENT. Registration n. 6485725

**ACTIVE** 

Denomination: ROOM

ROOM TEMPERATURE STORABLE IMMUNOGLOBULIN PREPARATION FOR

INTRAVENOUS I

Filing Date: May 03, 2000
Granting Date: Nov 26, 2002
Next Payment: May 26, 2014

Case: 9298 Y/Ref.: Ig Mitsubishi

UNITED STATES OF AMERICA
PATENT. Registration n. 6159471

ACTIVE

Denomination: ROOM TEMPERATURE STORABLE IMMUNOGLOBULIN PREPARATION FOR

**INTRAVENOUS I** 

Filing Date: Oct 23, 1998
Granting Date: Dec 12, 2000
Next Payment: Oct 23, 2018

Case: 8030

UNITED STATES OF AMERICA

PATENT. Application n. 11/251566 ACTIVE

Denomination: STABLE THROMBIN COMPOSITION

Filing Date: Oct 13, 2005
Granting Date: Pending
Next Payment: Pending

**Case:** 9244

UNITED STATES OF AMERICA PATENT. Application n. 11/759578

**ACTIVE** 

Denomination: STOPPER FOR FLASKS OF STERILE PRODUCTS AND USE OF SAID

STOPPER IN STERILE MEASURED FILLING

Filing Date: Jun 07, 2007
Granting Date: Pending
Next Payment: Pending

**Case:** 9231

UNITED STATES OF AMERICA PATENT. Application n. 11/766934

**ACTIVE** 

Denomination: SUSPENSION MEDIUM FOR RED BLOOD CELLS

Filing Date: Jun 22, 2007
Granting Date: Pending
Next Payment: Pending

Case: 10528

UNITED STATES OF AMERICA PATENT. Application n. 12/915346

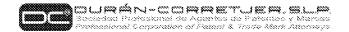
**ACTIVE** 

Denomination: SUSPENSION MEDIUM FOR RED BLOOD CELLS

Filing Date: Oct 29, 2010
Granting Date: Pending
Next Payment: Pending

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PATENT 162/169



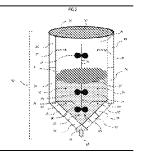
**Case:** 13526

UNITED STATES OF AMERICA PATENT. Application n. 13/803128

**ACTIVE** 

Denomination: THAWING VESSEL FOR BIOLOGICAL PRODUCTS

Filing Date: Mar 14, 2013
Granting Date: Pending
Next Payment: Pending



Case: 12318 Y/Ref.: ROI 2012-01

UNITED STATES OF AMERICA PATENT. Application n. 61/675572

**ACTIVE** 

Denomination: THAWING VESSEL FOR BIOLOGICAL PRODUCTS

Filing Date: Jul 25, 2012
Granting Date: Pending
Next Payment: Pending

**Case:** 4353

UNITED STATES OF AMERICA PATENT. Registration n. 5846930

**ACTIVE** 

Denomination: THERAPEUTIC HUMAN ALBUMIN HAVING A LOW ALUMINIUM BINDING

CAPACITY
Filing Date: Jan 24, 1997
Granting Date: Dec 08, 1998
Next Payment: Jan 24, 2017

n 24, 2017

Case: 9190

UNITED STATES OF AMERICA PATENT. Registration n. 8084580

**ACTIVE** 

Denomination: THERAPEUTIC HUMAN ALBUMIN SOLUTIONS WITH LOW PREKALLICREIN

ACTIVATOR (PKA) ACTIVITY AND PROCESS FOR OBTAINING THEM

Filing Date: Mar 21, 2007
Granting Date: Dec 27, 2011
Next Payment: Jun 27, 2015

**Case:** 7876

UNITED STATES OF AMERICA PATENT. Registration n. 7332577

ACTIVE

Denomination: THERAPEUTIC HUMAN ALBUMIN SOLUTIONS WITH LOW PREKALLICREIN

ACTIVATOR (PKA) ACTIVITY AND PROCESS FOR OBTAINING THEM

Filing Date: Jul 19, 2005 Granting Date: Feb 19, 2008 Next Payment: Aug 19, 2015

**Case:** 9037

UNITED STATES OF AMERICA PATENT. Registration n. 7531513

**ACTIVE** 

Denomination: THERAPEUTIC PREPARATION OF VERY HIGH PURITY FVIIA AND METHOD

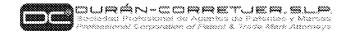
FOR OBTAINING SAME

Filing Date: Feb 08, 2007 Granting Date: May 12, 2009 Next Payment: Nov 12, 2016

PATENT 163/169

REEL: 032367 FRAME: 0023





Case: 5111 Y/Ref.: WADIANA

UNITED STATES OF AMERICA
PATENT. Registration n. 6162399

Denomination: UNIVERSAL APPARATUS FOR CLINICAL ANALYSIS

Filing Date: Jul 23, 1998
Granting Date: Dec 19, 2000
Next Payment: Jul 23, 2018

Case: 7993

UNITED STATES OF AMERICA PATENT. Registration n. 7291595

**ACTIVE** 

**ACTIVE** 

Denomination: USE OF ALPHA-1 ANTITRYPSIN FOR THE PREPARATION OF

MEDICAMENTS FOR THE TREATMENT OF FIBROMYALGIA

Filing Date: Sep 19, 2005 Granting Date: Nov 06, 2007 Next Payment: May 06, 2015

**Case:** 10223

UNITED STATES OF AMERICA PATENT. Application n. 12/822764

**ACTIVE** 

Denomination: USE OF ALPHA-1-ANTITRYPSIN FOR THE PREPARATION OF DRUGS FOR

THE TREATMENT OF CHRONIC FATIGUE SYNDROME

Filing Date: Jun 24, 2010
Granting Date: Pending
Next Payment: Pending

**Case:** 9638

UNITED STATES OF AMERICA PATENT. Registration n. 7851446

**ACTIVE** 

Denomination: USE OF THERAPEUTIC HUMAN ALBUMIN FOR THE PREPARATION OF A

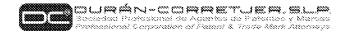
DRUG FOR THE TREATMENT OF PATIENS SUFFERING FROM COGNITIVE

DISORDERS

Filing Date: Oct 24, 2008
Granting Date: Dec 14, 2010
Next Payment: Jun 14, 2014

PATENT 164/169
REEL: 032367 FRAME: 0024





# Client: 43131141 GRIFOLS THERAPEUTICS INC. Country: UNITED STATES OF AMERICA

**Case:** 11252

UNITED STATES OF AMERICA PATENT. Registration n. 5985836

ACTIVE

Denomination: ALPHA-1 PROTEINASE INHIBITOR BINDING PEPTIDES

Filing Date: Jul 31, 1998 Granting Date: Nov 16, 1999 Next Payment: Jul 31, 2018

**Case:** 11233

UNITED STATES OF AMERICA PATENT. Registration n. 8268782 B2

**ACTIVE** 

Denomination: COMPOSITION AND METHOD FOR PREPARING PLASMINOGEN

Filing Date: Mar 06, 2009
Granting Date: Sep 18, 2012
Next Payment: Mar 18, 2016

**Case:** 11146/11 Y/Ref.: 2008-039/40

UNITED STATES OF AMERICA PATENT. Application n. 13/504783

**ACTIVE** 

Denomination: COMPOSITION, METHOD AND KIT FOR ALPHA-1 PROTEINASE INHIBITOR

Filing Date: Apr 27, 2012
Granting Date: Pending
Next Payment: Pending

Case: 11417

UNITED STATES OF AMERICA PATENT. Application n. 12/995447

**ACTIVE** 

Denomination: COMPOSITION, METHOD AND KIT FOR PREPARING PLASMIN

Filing Date: Mar 18, 2011
Granting Date: Dec 31, 2013
Next Payment: Jun 30, 2017

**Case:** 11162

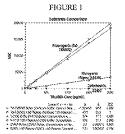
UNITED STATES OF AMERICA PATENT. Application n. 13/145875

ACTIVE

Denomination: COMPOSITIONS, KITS AND METHODS FOR DETERMINING PLASMIN

ACTIVITY Sep 14, 2011

Filing Date: Sep 14, 201
Granting Date: Pending
Next Payment: Pending



**Case:** 11299

UNITED STATES OF AMERICA PATENT. Application n. 13/147491

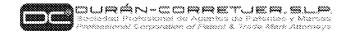
ACTIVE

Denomination: COMPOSITIONS, METHODS AND KITS FOR PREPARING PLASMINOGEN

AND PLASMIN PREPARED THEREFROM

Filing Date: Sep 23, 2011
Granting Date: Pending
Next Payment: Pending

PATENT 63/71



**Case:** 12325/2

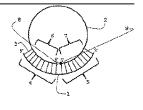
UNITED STATES OF AMERICA PATENT. Application n. 14/237746

CONFIRM RECORD

Denomination: COMPOSITIONS, METHODS, AND KITS FOR NUCLEIC ACID

HYBRIDIZATION

Filing Date: Feb 07, 2014
Granting Date: Pending
Next Payment: Pending



Case: 12083

UNITED STATES OF AMERICA PATENT. Application n. 13/262269

**ACTIVE** 

Denomination: DEVICE FOR MAINTAINING STERILE INTEGRITY OF CONNECTED FLUID

PATHWAYS

Filing Date: Dec 16, 2011
Granting Date: Pending
Next Payment: Pending

Case: 13858

UNITED STATES OF AMERICA PATENT. Application n. 14/053245

3245 ACTIVE

Denomination: HUMAN ERYTHROVIRUS

Filing Date: Oct 14, 2013
Granting Date: Pending
Next Payment: Pending

**Case:** 11163

UNITED STATES OF AMERICA PATENT. Application n. 12/724032

ACTIVE

Denomination: HUMAN ERYTHROVIRUS

Filing Date: Mar 15, 2010
Granting Date: Pending
Next Payment: Pending

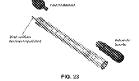
Case: 12090/6

UNITED STATES OF AMERICA PATENT. Application n. 13/823505

ACTIVE

Denomination: IMMUNOCHROMATOGRAPHY DEVICES, METHODS AND KITS

Filing Date: Mar 14, 2013
Granting Date: Pending
Next Payment: Pending



Case: 11285

UNITED STATES OF AMERICA PATENT. Registration n. 5561115

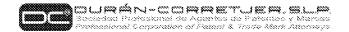
ACTIVE

Denomination: LOW TEMPERATURE ALBUMIN FRACTIONATION USING SODIUM

CAPRYLATE AS A PARTITIONING AGENT

Filing Date: Aug 10, 1994
Granting Date: Oct 01, 1996
Next Payment: Aug 10, 2014

PATENT 64/71



Y/Ref.: 2008-026 **Case:** 11965/11

UNITED STATES OF AMERICA PATENT. Application n. 13/510401

**ACTIVE** 

Denomination: LYOPHILIZATION METHODS, COMPOSITIONS, AND KITS

Filing Date: May 17, 2012 Feb 11, 2014 Granting Date: Aug 11, 2017 Next Payment:

Case: 11274

UNITED STATES OF AMERICA PATENT. Registration n. 5911165

**ACTIVE** 

METHOD AND DEVICE FOR MECHANICAL TESTING OF FIBRIN GLUE Denomination:

**STRENGTH** May 29, 1997

Filing Date: Jun 08, 1999 Granting Date: Next Payment: May 29, 2017

Case: 11165

UNITED STATES OF AMERICA PATENT. Registration n. 8560246

**ACTIVE** 

Denomination: METHOD FOR ADJUSTING RESULTS OF A POLYMERASE CHAIN REACTION

(PCR) INSTRUMENT

Sep 14, 2010 Filing Date: Oct 15, 2013 Granting Date: Apr 15, 2017 Next Payment:

Case: 11158

UNITED STATES OF AMERICA PATENT. Registration n. 8075175

**ACTIVE** 

METHOD FOR MELTING FROZEN, WATER-CONTAINING PRODUCTS IN A Denomination:

**MIXER** 

Filing Date: Feb 01, 2007 Granting Date: Dec 13, 2011 Next Payment: Jun 13, 2015

**Case:** 11248

UNITED STATES OF AMERICA PATENT. Registration n. 6462180

**ACTIVE** 

METHOD OF PREPARING ALPHA-1 PROTEINASE INHIBITOR Denomination:

Nov 24, 1999 Filing Date: Oct 08, 2002 Granting Date: Apr 08, 2014 Next Payment:

**Case:** 12362

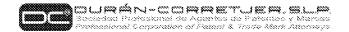
UNITED STATES OF AMERICA PATENT. Application n. 13/567678

**ACTIVE** 

METHOD OF PREPARING ALPHA-1 PROTEINASE INHIBITOR Denomination:

Aug 06, 2012 Filing Date: Granting Date: Pending Next Payment: Pending

GTI\_patentes.doc **PATENT** 



**Case:** 11239

UNITED STATES OF AMERICA PATENT. Registration n. 6355243

**ACTIVE** 

Denomination: METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF ACTIVE PLASMIN

Filing Date: Nov 13, 1999
Granting Date: Mar 12, 2002
Next Payment: Nov 13, 2019

Case: 11246

UNITED STATES OF AMERICA PATENT. Registration n. 6964764

ACTIVE

Denomination: METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF REVERSIBLY

INACTIVATED ACIDIFIED PLASMIN

Filing Date: May 10, 2002
Granting Date: Nov 15, 2005
Next Payment: May 15, 2017

Case: 11234

UNITED STATES OF AMERICA PATENT. Registration n. 6969515

**ACTIVE** 

Denomination: METHOD OF THROMBOLYSIS BY LOCAL DELIVERY OF REVERSIBLY

INACTIVATED ACIDIFIED PLASMIN

Filing Date: Oct 25, 2002 Granting Date: Nov 29, 2005 Next Payment: May 29, 2017

**Case:** 11206

UNITED STATES OF AMERICA PATENT. Application n. 12/162532

**ACTIVE** 

Denomination: METHOD OF TREATMENT AND PROPHYLAXIS OF DISEASES RELATED TO

AMYLOID DEPOSITION USING IGM

Filing Date: May 07, 2009
Granting Date: Pending
Next Payment: Pending

**Case:** 11167

UNITED STATES OF AMERICA PATENT. Application n. 12/741030

**ACTIVE** 

Denomination: METHOD, COMPOSITION, AND ARTICLE OF MANUFACTURE FOR

PROVIDING ALPHA-1 ANTITRYPSIN

Filing Date: Sep 14, 2010
Granting Date: Pending
Next Payment: Pending

Case: 11518

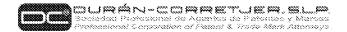
UNITED STATES OF AMERICA PATENT. Application n. 13/169061

ACTIVE

Denomination: METHODS AND COMPOSITIONS FOR HEPATITIS C VIRUS

Filing Date: Jun 27, 2011
Granting Date: Pending
Next Payment: Pending

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**Case:** 11300

UNITED STATES OF AMERICA PATENT. Application n. 13/033507

**ACTIVE** 

Denomination:

METHODS, COMPOSITIONS AND KITS FOR DETERMINING HUMAN

IMMUNIDEFICIENCY (HIV)

Feb 23, 2011 Filing Date: Granting Date: Pending Next Payment: Pending

**Case:** 12236/7

UNITED STATES OF AMERICA PATENT. Application n. 14/119563

**ACTIVE** 

Denomination:

METHODS, COMPOSITIONS AND KITS FOR DETERMINING HUMAN

IMMUNODEFIENCY VIRUS (HIV)

Nov 22, 2013 Filing Date: Granting Date: Pending Next Payment: Pending

Case: 11307

UNITED STATES OF AMERICA PATENT. Application n. 61/497234

**ACTIVE** 

Denomination:

METHODS, COMPOSITIONS AND KITS FOR DETERMINING HUMAN

IMMUNODEFIENCY VIRUS (HIV)

Jun 15, 2011 Filing Date: Pending Granting Date: Next Payment: Pending

Case: 11519

UNITED STATES OF AMERICA PATENT. Application n. 61/526773

**ACTIVE** 

METHODS, COMPOSITIONS ANS KITS FOR NUCLEIC ACID Denomination: **HYBRIDIZATION** 

Aug 24, 2011

Filing Date: Granting Date: Pending Next Payment: Pending

Case: 12326/4

UNITED STATES OF AMERICA PATENT. Application n. 14/126269

**ACTIVE** 

METHODS, COMPOSITIONS, AND KITS FOR DETERMINING HEPATITIS A Denomination:

**VIRUS** Dec 13, 2013 Filing Date: Pending Granting Date: Next Payment: Pending

Case: 12086

UNITED STATES OF AMERICA PATENT. Application n. 61/531818

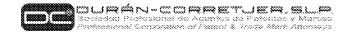
**ACTIVE** 

Denomination: METHOS, COMPOSITIONS AND KITS FOR DETERMINING HEPATITIS A

**VIRUS** 

Filing Date: Sep 07, 2011 Granting Date: Pending Next Payment: Pending

GTI\_patentes.doc **PATENT** 



**Case:** 11275

UNITED STATES OF AMERICA PATENT. Registration n. 5783663

**ACTIVE** 

Denomination: PEPTIDE LIGANDS FOR AFFINITY PURIFICATION OF FIBRINOGEN

Filing Date: Jan 23, 1998 Jul 21, 1998 Granting Date: Jan 23, 2018 Next Payment:

**Case:** 11261

UNITED STATES OF AMERICA PATENT. Registration n. 5831003

**ACTIVE** 

PEPTIDES WHICH BIND TO PROTHROMBIN AND THROMBIN Denomination:

Filing Date: Jun 28, 1996 Granting Date: Nov 03, 1998 Next Payment: Jun 28, 2016

**Case:** 11232

UNITED STATES OF AMERICA PATENT. Registration n. 7544500

**ACTIVE** 

PROCESS FOR THE PRODUCTION OF A REVERSIBLY INACTIVE ACIDIFIED Denomination:

PLASMIN COMPOSITION

Filing Date: Oct 23, 2003 Jun 09, 2009 Granting Date: Dec 09, 2016 Next Payment:

Case: 11276

UNITED STATES OF AMERICA PATENT. Registration n. 5610285

**ACTIVE** 

PURIFICATION OF .ALPHA.-1 PROTEINASE INHIBITOR USING NOVEL Denomination:

CHROMATOGRAPHIC SEPARATION CONDITIONS

Aug 24, 1994 Filing Date: Mar 11, 1997 Granting Date: Next Payment: Aug 24, 2014

Case: 11207

UNITED STATES OF AMERICA PATENT. Registration n. 8231869

ACTIVE

Denomination: RECOMBINANT PLASMIN FOR OPTHALMIC INDICATIONS

Filing Date: Mar 23, 2009 Granting Date: Jul 31, 2012 Jan 31, 2016 Next Payment:

Case: 11189

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UNITED STATES OF AMERICA PATENT. Registration n. 8101394

**ACTIVE** 

RECOMBINANTLY MODIFIED PLASMIN Denomination:

Sep 16, 2010 Filing Date: Jan 24, 2012 Granting Date: Next Payment: Jul 24, 2015

**Case:** 12242 Y/Ref.: 2006-011

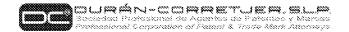
UNITED STATES OF AMERICA PATENT. Registration n. 8512980

**ACTIVE** 

Denomination: RECOMBINANTLY MODIFIED PLASMIN

May 03, 2012 Filing Date: Granting Date: Aug 20, 2013 Feb 20, 2017 Next Payment:

68/71



**Case:** 12082

UNITED STATES OF AMERICA PATENT. Registration n. 8420079

**ACTIVE** 

Denomination:

RECOMBINANTLY MODIFIED PLASMIN

Filing Date: Granting Date: Next Payment:

Sep 01, 2011 Apr 16, 2013 Oct 16, 2016

Case: 12080

UNITED STATES OF AMERICA PATENT. Registration n. 8182808

**ACTIVE** 

Denomination:

RECOMBINANTLY MODIFIED PLASMIN

Filing Date: Granting Date: Next Payment: Nov 22, 2011 May 22, 2012 Nov 22, 2015

Case: 11334

UNITED STATES OF AMERICA

PATENT. Registration n. 8034913

**ACTIVE** 

Denomination: Filing Date:

RECOMBINANTLY MODIFIED PLASMIN

Granting Date: Next Payment: Oct 17, 2006 Oct 11, 2011 Apr 11, 2015

**Case:** 11243

UNITED STATES OF AMERICA

PATENT. Registration n. 7871608

**ACTIVE** 

Denomination:

REVERSIBLY INACTIVATED ACIDIFIED PLASMIN

Filing Date: Granting Date: Next Payment: Aug 25, 2008 Jan 18, 2011 Jul 18, 2014

Case: 11147/15

UNITED STATES OF AMERICA

PATENT. Application n. 13/581697

**ACTIVE** 

Denomination:

THERAPEUTIC DELIVERY DEVICES, SYSTEMS, AND METHODS

Filing Date: Granting Date: Next Payment: Aug 29, 2012 Pending Pending

Case: 13570

Y/Ref.: 2012-12

UNITED STATES OF AMERICA

PATENT. Application n. 13/859395

**ACTIVE** 

Denomination:

THERAPEUTIC DELIVERY DEVICES, SYSTEMS, AND METHODS

Filing Date:

Apr 09, 2013

Granting Date: Next Payment: Pending Pending

Case: 11205

UNITED STATES OF AMERICA

PATENT. Application n. 12/937454

**ACTIVE** 

Denomination:

TWO-STAGE ULTRAFILTRATION/DIAFILTRATION

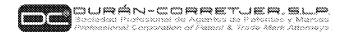
Filing Date: Granting Date: May 20, 2011

Pendina

Next Payment:

Pending





**Case:** 11148/11 Y/Ref.: 2008-040

UNITED STATES OF AMERICA PATENT. Application n. 13/509309

ACTIVE

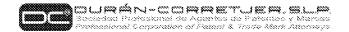
Denomination: VON WILLEBRAND FACTOR (VWF)-CONTAINING PREPARATIONS, AND

METHODS, KITS AND USES RELATED THERETO

Filing Date: May 11, 2012
Granting Date: Pending
Next Payment: Pending

GTI\_patentes.doc PATENT 70/71





Client: 43131140 BAYER HEALTHCARE LLC Country: UNITED STATES OF AMERICA

**Case:** 12416

UNITED STATES OF AMERICA PATENT. Registration n. RE44558E

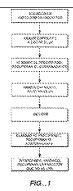
**ACTIVE** 

Denomination: CHROMA

CHROMATOGRAPHIC METHOD FOR HIGH YIELD PURIFICATION AND

VIRAL INACTIVATION OF ANTIBODIES

Filing Date: Jul 19, 2012
Granting Date: Oct 22, 2013
Next Payment: Apr 22, 2017



bayer healthcare\_patentes.doc PATENT 1/1

Client: 43131290 GRIFOLS INC.

Country: UNITED STATES OF AMERICA

**Case:** 7812

UNITED STATES OF AMERICA PATENT. Registration n. 5659017

**ACTIVE** 

Denomination: ANION EXCHANGE PROCESS FOR THE PURIFICATION OF FACTOR VIII

Filing Date: Nov 07, 1995 Aug 19, 1997 Granting Date: Nov 07, 2015 Next Payment:

**Case:** 7828 Y/Ref.: Ig6 proceso 2 etapas

UNITED STATES OF AMERICA PATENT. Registration n. 6162904

**ACTIVE** 

MANUFACTURING METHOD FOR INTRAVENEOUSLY ADMINISTRABLE Denomination:

IMMUNE GLOBULIN AND RESULTANT PRODUCT

Oct 21, 1999 Filing Date: Dec 19, 2000 Granting Date: Next Payment: Dec 24, 2017

Case: 7825

UNITED STATES OF AMERICA PATENT. Registration n. 5744586

**ACTIVE** 

Denomination: MANUFACTURING PROCESS FOR THE PRODUCTION OF PURIFIED

> **TRANSFERRIN** Jun 26, 1996

Filing Date: Apr 28, 1998 Granting Date: Jun 26, 2016 Next Payment:

Case: 7824

UNITED STATES OF AMERICA PATENT. Registration n. 6566504

**ACTIVE** 

PROCESS FOR VIRAL INACTIVATION OF LYOPHILIZED BLOOD PROTEINS Denomination:

Jun 28, 2001 Filing Date: May 20, 2003 Granting Date: Nov 20, 2014 Next Payment:

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# Client: 43126628 NOVARTIS VACCINES AND DIAGNOSTICS, INC. Country: UNITED STATES OF AMERICA

**Case:** 14641

UNITED STATES OF AMERICA PATENT. Registration n. 6261764

**ACTIVE** 

Denomination: BUFFERS FOR STABILIZING ANTIGENS

Filing Date: Sep 22, 1998
Granting Date: Jul 17, 2001
Next Payment: Sep 22, 2018

**Case:** 14492

UNITED STATES OF AMERICA PATENT. Registration n. 6660471

**ACTIVE** 

Denomination: ENHANCED REPLICATION OF HCV RNA

Filing Date: Aug 03, 2001 Granting Date: Dec 09, 2003 Next Payment: Jun 09, 2015

Case: 14617

UNITED STATES OF AMERICA PATENT. Registration n. 7183107

**ACTIVE** 

Denomination: ENHANCED REPLICATION OF HCV RNA

Filing Date: Oct 14, 2003 Granting Date: Feb 27, 2007 Next Payment: Aug 27, 2014

**Case:** 14446

UNITED STATES OF AMERICA PATENT. Registration n. 7439058

**ACTIVE** 

Denomination: HBV/HCV VIRUS-LIKE PARTICLE

Filing Date: Nov 17, 2003
Granting Date: Oct 21, 2008
Next Payment: Apr 21, 2016

**Case:** 14445

UNITED STATES OF AMERICA PATENT. Registration n. 6740323

**ACTIVE** 

Denomination: HBV/HCV VIRUS-LIKE PARTICLE

Filing Date: Nov 22, 2000
Granting Date: May 25, 2004
Next Payment: Nov 25, 2015

**Case:** 14618

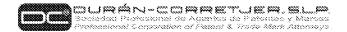
UNITED STATES OF AMERICA

PATENT. Registration n. 7166426 ACTIVE

Denomination: HCV ASSAY
Filing Date: Sep 08, 2003
Granting Date: Jan 23, 2007
Next Payment: Jul 23, 2014

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**Case:** 14650

UNITED STATES OF AMERICA PATENT. Registration n. 7871625

**ACTIVE** 

Denomination: HCV MULTIPLE EPITOPE FUSION ANTIGENS WITH MODIFIED

PROTEOLYTIC CLEAVAGE SITES AND USES THEREOF

Filing Date: Mar 17, 2008
Granting Date: Jan 18, 2011
Next Payment: Jul 18, 2014

Case: 14649

UNITED STATES OF AMERICA PATENT. Registration n. 7491808

ACTIVE

Denomination: HCV NON-STRUCTURAL PROTEIN MUTANTS AND USES THEREOF

Filing Date: Aug 26, 2005 Granting Date: Feb 17, 2009 Next Payment: Aug 17, 2016

**Case:** 14646

UNITED STATES OF AMERICA PATENT. Registration n. 6942965

**ACTIVE** 

Denomination: HEPATITIS A VIRUS NUCLEOTIDE SEQUENCES, RECOMBINANT PROTEINS

AND USES THEREOF

Filing Date: Oct 15, 2002
Granting Date: Sep 13, 2005
Next Payment: Mar 13, 2017

**Case:** 14643

UNITED STATES OF AMERICA PATENT. Registration n. 7108967

**ACTIVE** 

Denomination: HEPATITIS C VIRAL ANTIGEN IMMUNOASSAY DETECTION SYSTEMS

Filing Date: Apr 07, 2004
Granting Date: Sep 19, 2006
Next Payment: Mar 19, 2014

**Case:** 14426

UNITED STATES OF AMERICA PATENT. Registration n. 6428792

ACTIVE

Denomination: HEPATITIS C VIRUS MULTIPLE COPY EPITOPE FUSION ANTIGENS

Filing Date: May 20, 1997
Granting Date: Aug 06, 2002
Next Payment: Feb 06, 2014

**Case:** 14443

UNITED STATES OF AMERICA PATENT. Application n. 13/301599

ACTIVE

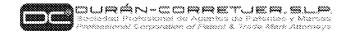
Denomination: IDENTIFICATION OF OLIGONUCLEOTIDES FOR THE CAPTURE,

DETECTION AND QUANTITATION OF HEPATITIS A VIRAL NUCLEIC ACID

Filing Date: Nov 21, 2011
Granting Date: Pending
Next Payment: Pending

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**Case:** 14653

UNITED STATES OF AMERICA PATENT. Registration n. 7807813

**ACTIVE** 

Denomination:

IDENTIFICATION OF OLIGONUCLEOTIDES FOR THE CAPTURE,

DETECTION AND QUANTITATION OF WEST NILE VIRUS

Oct 20, 2006 Filing Date: Oct 05, 2010 Granting Date: Apr 05, 2014 Next Payment:

Case: 14652

UNITED STATES OF AMERICA PATENT. Registration n. 7927839

**ACTIVE** 

Denomination:

IDENTIFICATION OF OLIGONUCLEOTIDES FOR THE CAPTURE,

DETECTION AND QUANTITATION OF WEST NILE VIRUS

Oct 20, 2006 Filing Date: Granting Date: Apr 19, 2011 Next Payment: Oct 19, 2014

Case: 14651

UNITED STATES OF AMERICA PATENT. Registration n. 8551706

**ACTIVE** 

Denomination:

IDENTIFICATION OF OLIGONUCLEOTIDES FOR THE CAPTURE,

DETECTION AND QUANTITATION OF WEST NILE VIRUS

Apr 15, 2011 Filing Date: Oct 08, 2013 Granting Date: Next Payment: Apr 08, 2017

Case: 14639

UNITED STATES OF AMERICA PATENT. Registration n. 7241879

**ACTIVE** 

IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES Denomination:

Jul 26, 2004 Filing Date: Granting Date: Jul 10, 2007 Jan 10, 2015

Next Payment:

**Case:** 14172

UNITED STATES OF AMERICA PATENT. Registration n. 7198923

**ACTIVE** 

Denomination:

METHOD FOR THE PREPARATION OF PURIFIED HCV RNA BY EXOSOME

SEPARATION Filing Date: Feb 26, 2003 Apr 03, 2007 Granting Date: Next Payment: Oct 03, 2014

Case: 14425

UNITED STATES OF AMERICA PATENT. Registration n. 6416944

**ACTIVE** 

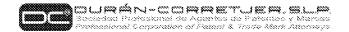
Denomination:

METHODS OF TYPING HEPATITIS C VIRUS AND REAGENTS FOR USE

THEREIN

May 11, 1995 Filing Date: Granting Date: Jul 09, 2002 Next Payment: Jul 09, 2019

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**Case:** 14419

UNITED STATES OF AMERICA PATENT. Registration n. 6054264

**ACTIVE** 

Denomination:

METHODS OF TYPING HEPATITIS C VIRUS AND REAGENTS FOR USE

Filing Date: Nov 09, 1994
Granting Date: Apr 25, 2000
Next Payment: Apr 25, 2017

Case: 14637

UNITED STATES OF AMERICA PATENT. Registration n. 6797809

ACTIVE

Denomination: MULTIPLE FUSION ANTIGENS FOR USE IN IMMUNOASSAYS FOR ANTI-

**HCV ANTIBODIES** 

Filing Date: Aug 08, 2003
Granting Date: Sep 28, 2004
Next Payment: Mar 28, 2016

Case: 14623

UNITED STATES OF AMERICA PATENT. Registration n. 7319144

**ACTIVE** 

Denomination: POLYNUCLEOTIDES ENCODING A MULTIPLE EPITOPE FUSION ANTIGEN

FOR USE IN AN HCV ANTIGEN/ANTIBODY COMBINATION ASSAY

Filing Date: Aug 19, 2003
Granting Date: Jan 15, 2008
Next Payment: Jul 15, 2015

Case: 14057

UNITED STATES OF AMERICA PATENT. Registration n. 7807438

ACTIVE

Denomination: PREPARATION OF PURIFIED EXOSOMES COMPRISING HCV RNA

Filing Date: Jan 30, 2007
Granting Date: Oct 05, 2010
Next Payment: Apr 05, 2014

**Case:** 14566

UNITED STATES OF AMERICA PATENT. Registration n. 7439040

**ACTIVE** 

Denomination: PROTEASE REGULATOR SCREENING ASSAY

Filing Date: Aug 01, 2005 Granting Date: Oct 21, 2008 Next Payment: Apr 21, 2016

Case: 14648

UNITED STATES OF AMERICA PATENT. Registration n. 8173375

**ACTIVE** 

Denomination: RABBIT MONOCLONAL ANTIBODIES TO HEPATITIS B SURFACE ANTIGENS

AND METHODS OF USING THE SAME

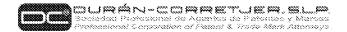
Filing Date: Oct 27, 2008
Granting Date: May 08, 2012
Next Payment: Nov 08, 2015

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PATENT 70/71

REEL: 032367 FRAME: 0038





**Case:** 14647

UNITED STATES OF AMERICA PATENT. Registration n. 7563873

**ACTIVE** 

Denomination: RABBIT MONOCLONAL ANTIBODIES TO HEPATITIS B SURFACE ANTIGENS

AND METHODS OF USING THE SAME

Filing Date: Jun 07, 2005 Granting Date: Jul 21, 2009 Next Payment: Jan 21, 2017

Case: 14621

UNITED STATES OF AMERICA PATENT. Registration n. 5612453

ACTIVE

Denomination: SELECTED PEPTIDES OF THE GROUP-SPECIFIED ANTIGEN (GAG) OF

HUMAN IMMUNODEFICIENCY VIRUS (HIV), THE PREPARATION AND USE

**THEREOF** 

Filing Date: Dec 13, 1994
Granting Date: Mar 18, 1997
Next Payment: Mar 18, 2014

**Case:** 14635

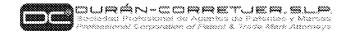
UNITED STATES OF AMERICA PATENT. Registration n. 7657385

ACTIVE

Denomination: STRUCTURE-BASED HEPATITIS C VIRUS DRUG DESIGN

Filing Date: Apr 22, 2003
Granting Date: Feb 02, 2010
Next Payment: Aug 02, 2017

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## Client: 43121194 CHIRON CORPORATION Country: UNITED STATES OF AMERICA

**Case:** 14642

UNITED STATES OF AMERICA PATENT. Registration n. 6537745

**ACTIVE** 

Denomination: BUFFERS FOR STABILIZING ANTIGENS

Filing Date: Feb 02, 2001 Granting Date: Mar 25, 2003 Sep 25, 2014 Next Payment:

**Case:** 14640

UNITED STATES OF AMERICA PATENT. Registration n. 6936442

**ACTIVE** 

DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19 Denomination:

Jun 28, 2002 Filing Date: Aug 30, 2005 Granting Date: Next Payment: Pendina

**Case:** 14622

UNITED STATES OF AMERICA PATENT. Registration n. 6630298

**ACTIVE** 

HCV ANTIGEN/ANTIBODY COMBINATION ASSAY Denomination:

Jun 14, 2001 Filing Date: Granting Date: Oct 07, 2003 Apr 07, 2015 Next Payment:

Case: 14644

UNITED STATES OF AMERICA PATENT. Registration n. 6815160

**ACTIVE** 

Denomination: HEPATITIS C VIRAL ANTIGEN IMMUNOASSAY DETECTION SYSTEMS

Jan 25, 2002 Filing Date: Granting Date: Nov 09, 2004 May 09, 2016 Next Payment:

**Case:** 14450

UNITED STATES OF AMERICA PATENT. Registration n. 6300056

**ACTIVE** 

HIV PROBES FOR USE IN SOLUTION PHASE SANDWICH HYBRIDIZATION Denomination:

> ASSAYS Dec 17, 1993

Filing Date: Granting Date: Oct 09, 2001 Next Payment: Oct 09, 2018

**Case:** 14638

UNITED STATES OF AMERICA PATENT. Registration n. 6632601

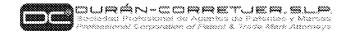
**ACTIVE** 

IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES Denomination:

Jun 14, 2001 Filing Date: Oct 14, 2003 Granting Date: Apr 14, 2015 Next Payment:

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**Case:** 14645

UNITED STATES OF AMERICA
PATENT. Registration n. 6391540

Denomination: METHOD FOR DETECTING ANTIBODIES IN A SAMPLE

Filing Date: Sep 22, 1998
Granting Date: May 21, 2002
Next Payment: Sep 22, 2018

Case: 14429

UNITED STATES OF AMERICA PATENT. Registration n. 6514731

**ACTIVE** 

**ACTIVE** 

Denomination: METHODS FOR THE PREPARATION OF HEPATITIS C VIRUS MULTIPLE

COPY EPITOPE FUSION ANTIGENS

Filing Date: May 24, 1996
Granting Date: Feb 04, 2003
Next Payment: Aug 04, 2014

Case: 14636

UNITED STATES OF AMERICA PATENT. Registration n. 7252958

**ACTIVE** 

Denomination: MODULATION OF TETRASPANIN FUNCTION

Filing Date: May 01, 2003
Granting Date: Aug 07, 2007
Next Payment: Feb 07, 2015

Case: 14434

UNITED STATES OF AMERICA

PATENT. Registration n. 7056658

**ACTIVE** 

Denomination: MULTIPLE EPITOPE FUSION PROTEIN

Filing Date: Jun 17, 2002 Granting Date: Jun 06, 2006 Next Payment: Dec 06, 2017

Case: 14620

UNITED STATES OF AMERICA PATENT. Registration n. 6924122

**ACTIVE** 

Denomination: PROTEASE REGULATOR SCREENING ASSAY

Filing Date: Aug 20, 2002 Granting Date: Aug 02, 2005 Next Payment: Feb 02, 2017

**Case:** 14207

UNITED STATES OF AMERICA PATENT. Registration n. 6436666

**ACTIVE** 

Denomination: PROTEASE REGULATOR SCREENING ASSAY

Filing Date: Oct 17, 1997
Granting Date: Aug 20, 2002
Next Payment: Feb 20, 2014

RECORDED: 02/27/2014

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