504145551 12/14/2016 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4185397

SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEY	ANCE:	SECURITY AGREEMENT				
CONVEYING PARTY	DATA	· · · ·				
	Execution Date					
RELIABLE BIOPHARMACEUTICAL, LLC			12/13/2016			
Name:		CITIBANK, N.A., AS COLLATERAL AGENT				
RECEIVING PARTY	ΔΑΤΑ					
Street Address:		580 CROSSPOINT PKWY				
Internal Address:		CRMS DOCUMENTATION UNIT				
City:	GETZ	GETZVILLE				
State/Country:	NEW 1	NEW YORK				
Postal Code:	14068					
PROPERTY NUMBER	26 Totolu (
		Number				
Property Type Patent Number:		6252061				
Patent Number:		6596858				

Patent Number:	6596858
Patent Number:	7393954
Patent Number:	8288515
Patent Number:	8420790
Patent Number:	8703923
Patent Number:	8987430
Patent Number:	8859522
Patent Number:	9255119

CORRESPONDENCE DATA

•	nt to the	914-4240 e-mail address first; if that is unsuccessful, it will be sent nat is unsuccessful, it will be sent via US Mail.			
Phone:	800-7	713-0755			
Email:	Michael.Violet@wolterskluwer.com				
Correspondent Name:	ondent Name: MICHAEL VIOLET				
Address Line 1:	ne 1: 4400 EASTON COMMONS WAY				
Address Line 2:	SUIT	E 125			
Address Line 4:	COLUMBUS, OHIO 43219				
NAME OF SUBMITTER:		ELAINE CARRERA			

504145551

SIGNATURE:	/Elaine Carrera/			
DATE SIGNED:	12/14/2016			
Total Attachments: 6				
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PATENT SECURITY AGREEMENT

PATENT SECURITY AGREEMENT, dated as of December 13, 2016 (this "<u>Agree-ment</u>"), among RELIABLE BIOPHARMACEUTICAL, LLC ("<u>Grantor</u>") and CITIBANK, N.A., as Collateral Agent for the Secured Parties.

Reference is made to the Guarantee and Collateral Agreement dated as of September 28, 2015 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), among VWR Funding, Inc., a Delaware corporation (the "Parent Borrower"), the subsidiaries of the Parent Borrower party thereto and the Collateral Agent. The Lenders have extended credit to the Borrowers subject to the terms and conditions set forth in the Credit Agreement dated as of September 28, 2015 (as amended by Amendment No. 1, dated November 23, 2016, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement") among Parent Borrower and the Foreign Subsidiary Borrowers party from time to time thereto, as Borrowers, the Lenders from time to time party thereto, Citibank, N.A., as Administrative Agent and as Collateral Agent, Citigroup Global Markets Inc., Barclays Bank PLC, Goldman Sachs Bank USA, Merrill Lynch, Pierce, Fenner & Smith Incorporated, J.P. Morgan Securities LLC and PNC Capital Markets LLC, as Joint Lead Arrangers and Joint Bookrunners for the Credit Facilities, Barclays Bank PLC and Goldman Sachs Bank USA, as co-syndication agents, Mizuho Bank, Wells Fargo Bank, National Association and Compass Bank DBA BBVA Compass, as codocumentation agents, Sumitomo Mitsui Banking Corporation, as Senior Managing Agent and TD Bank, as Managing Agent. Consistent with the requirements of the Credit Agreement and pursuant to and in accordance with Section 3.01(b) and Section 3.02(b) of the Security Agreement, the parties hereto agree as follows:

SECTION 1. *Terms*. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Security Agreement. The rules of construction specified in Section 1.02 of the Credit Agreement also apply to this Agreement.

SECTION 2. *Grant of Security Interest*. As security for the payment or performance, as the case may be, in full of the Obligations until the Termination Date, each Grantor, pursuant to the Security Agreement, did and hereby does, to the extent required by the Security Agreement, grant to the Collateral Agent, its successors and permitted assigns, for the benefit of the Secured Parties, a security interest in, all of its right, title or interest in or to any and all of the following assets and properties (to the extent that they are part of the Collateral) now owned or at any time hereafter acquired by such Grantor and wherever located or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent Collateral"):

(a) all letters patent of the United States, all registrations and recordings thereof, and all applications for letters patent of the United States, including registrations, recordings and pending applications in the United States Patent and Trademark Office listed on Schedule I (the "<u>Patents</u>");

(b) all reissues, continuations, divisions, continuations in part, renewals or extensions thereof, and all inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein;

(c) the right to sue third parties for past, present and future infringements of any Patent; and

(d) all proceeds of and any right associated with the foregoing.

Notwithstanding the foregoing and for the avoidance of doubt, no grant of any Lien or security interest shall be deemed granted hereunder in any Excluded Property (as defined in the Security Agreement).

SECTION 3. *Security Agreement*. The security interests granted to the Collateral Agent herein are granted solely in furtherance, and not in limitation or expansion, of the security interests granted to the Collateral Agent pursuant to the Security Agreement. The Collateral Agent and each Grantor hereby acknowledge and affirm that the rights and remedies of the other parties hereto with respect to the Patent Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein, *mutatis mutandis*. In the event of any conflict or inconsistency between the terms of this Agreement and the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 4. *Counterparts.* This Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may executed this Agreement by signing and delivering one or more counterparts. Any party delivering an executed counterpart of this Agreement by telefacsimile or other electronic method of transmission shall be equally as effective as delivery of an original executed counterpart of this Agreement.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

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RELIABLE BIOPHARMACEUTICAL, LLC By:

Name James M. Kalinovich Title: Vice President

[Signature Page to Patent Security Agreement]

PATENT REEL: 040913 FRAME: 0122 CITIBANK, N.A., as Collateral Agent

By:

Name: Akshay Kulkarni Title: Vice President

[Signature Page to Patent Security Agreement]

PATENT REEL: 040913 FRAME: 0123

U.S. Patents and Applications:

title	Jurisdiction	Application No.	Patent No.	Status
process for the production of 2- halo-6-aminopurine derivatives	U.S.	09274518	6252061	In force
process for the production of 2- halo-6-aminopurine derivatives	U.S.	09803765	6596858	In force
process for the production of pentostatin aglycone and pento- statin	U.S.	10734545	7393954	In force
process for preparing fondapari- nux sodium and intermediates useful in the synthesis thereof	U.S.	12847719	8288515	In force
efficient and scalable process for the manufacture of fondaparinux sodium	U.S.	12915864	8420790	In force
process for perparing fondapari- nux sodium and intermediates useful in the synthesis thereof	U.S.	13618786	8703923	In force
efficient and scalable process for the manufacture of fondaparinux sodium	U.S.	13791178	8987430	In force
processes for the preparation of regadenoson and a new crystal- line form thereof	U.S.	14112173	8859522	In force
process for perparing fondapari- nux sodium and intermediates useful in the synthesis thereof	U.S.	14256235	9255119	In force