

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7877825

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNOR AND ASSIGNEE ARE REVERSED previously recorded on Reel 063095 Frame 0573. Assignor(s) hereby confirms the ASSIGNMENT OF ASSIGNORS INTEREST.	
CONVEYING PARTY DATA		
	Name	Execution Date
	DICERNA PHARMACEUTICALS, INC.	03/15/2023
RECEIVING PARTY DATA		
Name:	NOVO NORDISK A/S	
Street Address:	NOVO ALLE 1	
City:	BAGSVÆRD	
State/Country:	DENMARK	
Postal Code:	DK-2880	
PROPERTY NUMBERS Total: 8		
Property Type	Number	
Application Number:	14323299	
Application Number:	15247201	
Application Number:	16457394	
Application Number:	16918205	
Application Number:	17454694	
Application Number:	61842551	
Application Number:	61891548	
PCT Number:	US2014045365	
CORRESPONDENCE DATA		
Fax Number:	(617)275-8374	
<i>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.</i>		
Phone:	617-728-7100	
Email:	karen.delgreco@dechert.com, bospatents@dechert.com	
Correspondent Name:	DECHERT LLP	
Address Line 1:	ONE INTERNATIONAL PLACE, 40TH FLOOR	
Address Line 2:	100 OLIVER STREET	
Address Line 4:	BOSTON, MASSACHUSETTS 02110-2605	
ATTORNEY DOCKET NUMBER:	170266,170267,170272	

PATENT

507830689

REEL: 063209 FRAME: 0861

NAME OF SUBMITTER:	GANG WANG
SIGNATURE:	/Gang Wang/
DATE SIGNED:	03/31/2023
Total Attachments: 8 source=Dicerna_Novo_Assignment_Cover_Sheet#page1.tif source=Dicerna_Novo_Assignment_Cover_Sheet#page2.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page1.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page2.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page3.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page4.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page5.tif source=Dicerna_Novo_DRNA026_220035_400930-003_Family Assignment (signed)#page6.tif	

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SUBMISSION TYPE:	NEW ASSIGNMENT																		
NATURE OF CONVEYANCE:	ASSIGNMENT																		
CONVEYING PARTY DATA																			
<table border="1"><tr><th>Name</th><th>Execution Date</th></tr><tr><td>NOVO NORDISK A/S</td><td>03/24/2023</td></tr></table>	Name	Execution Date	NOVO NORDISK A/S	03/24/2023															
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NOVO NORDISK A/S	03/24/2023																		
RECEIVING PARTY DATA																			
<table border="1"><tr><td>Name:</td><td>DICERNA PHARMACEUTICALS, INC.</td></tr><tr><td>Street Address:</td><td>75 HAYDEN AVENUE</td></tr><tr><td>City:</td><td>LEXINGTON</td></tr><tr><td>State/Country:</td><td>MASSACHUSETTS</td></tr><tr><td>Postal Code:</td><td>02421</td></tr></table>	Name:	DICERNA PHARMACEUTICALS, INC.	Street Address:	75 HAYDEN AVENUE	City:	LEXINGTON	State/Country:	MASSACHUSETTS	Postal Code:	02421									
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Fax Number:	(617)275-8374																		
Phone:	6177287100																		
Email:	debra.derbyshire@dechert.com, BOSPatents@dechert.com																		
<i>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.</i>																			
Correspondent Name:	DECHERT LLP																		
Address Line 1:	ONE INTERNATIONAL PLACE																		
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Address Line 4:	BOSTON, MASSACHUSETTS 02110-2605																		

PATENT

ATTORNEY DOCKET NUMBER:	170266,170267,170272
NAME OF SUBMITTER:	ANDREA L.C. REID
Signature:	/Andrea L.C. Reid/
Date:	03/24/2023
Total Attachments: 6 source=Dicerna_Novo_003_170266#page1.tif source=Dicerna_Novo_003_170266#page2.tif source=Dicerna_Novo_003_170266#page3.tif source=Dicerna_Novo_003_170266#page4.tif source=Dicerna_Novo_003_170266#page5.tif source=Dicerna_Novo_003_170266#page6.tif	
RECEIPT INFORMATION EPAS ID: PAT7865745 Receipt Date: 03/24/2023	

PATENT

CONFIRMATION OF ASSIGNMENT

WHEREAS, we, the undersigned, **DICERNA PHARMACEUTICALS, INC.**, having a place of business at **75 Hayden Avenue, Lexington, Massachusetts 02421, United States of America** (hereinafter termed "Assignor"), owner of an interest in the right, title and interest in and to the patents and applications listed on Annex A, by virtue of a prior assignment from inventors **Bob D. BROWN and Henryk T. DUDEK** (hereinafter termed "inventors"), and in and to all embodiments of the invention, heretofore conceived, made or discovered by said inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries;

WHEREAS, **NOVO NORDISK A/S**, having a place of business at **Novo Alle 1, DK-2880 Bagsværd, Denmark** (hereinafter termed "Assignee"), is desirous of acquiring Assignor's entire right, title and interest in and to said patents and applications and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignor to have been received in full from said Assignee:

1. Said Assignor does hereby sell, assign, transfer and convey, and/or confirm prior sale, assignments, transfer, and conveyance, unto said Assignee, Assignor's entire right, title and interest (a) in and to said patents and applications and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Assignor hereby covenants and agrees to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Assignor shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefore and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignor in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignor, their respective heirs, legal representatives and assigns.

4. Said Assignor hereby warrants and represents that he has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

The undersigned, whose title is supplied below, is authorized to act on behalf of the assignor.

Assignor: **DICERNA PHARMACEUTICALS, INC.**

Date: MAR 15, 2023

Signed: 

Print Name: Bob Dale Brown

Print Title: CSO, EVP of R&D

Address: 75 Hayden Avenue,
Lexington, Massachusetts 02421
United States of America

Dechert Ref.: 400930-003
Dicerna Ref.: DRNA026
Novo Ref: 220035

Date:

24-MAR-2023

Assignee:

NOVO NORDISK A/S

Signed:

Print Name:

Lars Kellberg

Print Title:

Corporate Vice President

Corporate Patents

Novo Nordisk A/S

Address:

Novo Alle 1

DK-2850 Bagsvaerd

Denmark

ANNEX A

THE ASSIGNED PATENT APPLICATIONS

Dechert Reference	Novo Reference	Country	Application Number	Title
400930-003ATD1 (187947)	220035AT01	Austria	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003AU (170268)	220035AU01	Australia	2014284298	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003AUD1 (179078)	220035AU02	Australia	2020260479	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003BED1 (187938)	220035BE01	Belgium	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003CA (170269)	220035CA01	Canada	2,916,499	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003CHD1 (187939)	220035CH01	Switzerland	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003DED1 (187931)	220035DE01	Germany	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003DKD1 (187946)	220035DK01	Denmark	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003EP	220035EP01	European Patent Convention	14820312.8	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003EPD1 (170271)	220035EP02	European Patent Convention	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA

400930-003EPD2 (187736)	220035EP03	European Patent Convention	21210315.4	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003ESD1 (187933)	220035ES01	Spain	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003FID1 (187948)	220035FI01	Finland	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003FRD1 (187937)	220035FR01	France	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003GBD1 (187945)	220035GB01	United Kingdom	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003HK (195566)	220035HK01	Hong Kong	42022065099.8	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003HUD1 (187935)	220035HU01	Hungary	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003IED1 (187941)	220035IE01	Ireland	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003ISD1 (187940)	220035IS01	Iceland	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003ITD1 (187944)	220035IT01	Italy	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003JP (170270)	220035JP01	Japan	2016-524365	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA

400930-003JPD1 (175590)	220035JP02	Japan	2020-094030	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003JPD2 (188110)	220035JP03	Japan	2022-19996	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003NLD1 (187932)	220035NL01	Netherlands	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003NOD1 (187943)	220035NO01	Norway	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003PLD1 (187954)	220035PL01	Poland	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003PTD1 (187930)	220035PT01	Portugal	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003ROD1 (187936)	220035RO01	Romania	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003SED1 (187942)	220035SE01	Sweden	18196106.1	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003US (170266)	220035US03	United States of America	14/323,299	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003USD1 (170267)	220035US04	United States of America	15/247,201	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003USD2 (170272)	220035US05	United States of America	16/457,394	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA

400930-003USD3 (175063)	220035US06	United States of America	16/918,205	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003USD4 (186864)	220035US07	United States of America	17/454,694	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003USP1	220035US01	United States of America	61/842,551	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003USP2	220035US02	United States of America	61/891,548	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA
400930-003WO	220035WO01	Patent Cooperation Treaty	PCT/US2014/045365	METHODS AND COMPOSITIONS FOR THE SPECIFIC INHIBITION OF ALPHA-1 ANTITRYPSIN BY DOUBLE-STRANDED RNA