

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5588155

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	MARINA BIOTECH, INC.	08/14/2013
RECEIVING PARTY DATA		
Name:	ARCTURUS THERAPEUTICS, INC.	
Street Address:	10628 SCIENCE CENTER DRIVE	
City:	SAN DIEGO	
State/Country:	CALIFORNIA	
Postal Code:	92121	
PROPERTY NUMBERS Total: 4		
Property Type	Number	
Application Number:	14702991	
Application Number:	14703016	
Application Number:	15050065	
Application Number:	15952680	
CORRESPONDENCE DATA		
Fax Number:		
<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:	8583141500	
Email:	IPDocketingBOS@mintz.com	
Correspondent Name:	MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO, P.C.	
Address Line 1:	3580 CARMEL MOUNTAIN ROAD	
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Address Line 4:	SAN DIEGO, CALIFORNIA 92130-6768	
ATTORNEY DOCKET NUMBER:	049386-502C02-03-04-05 US	
NAME OF SUBMITTER:	MRIDULA P. SHERIN	
SIGNATURE:	/Mridula P. Sherin/	
DATE SIGNED:	06/24/2019	
Total Attachments: 4		
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EXHIBIT B

PATENT ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, **Marina Biotech, Inc.**, a Delaware corporation, hereinafter referred to as the ASSIGNOR, confirms that ASSIGNOR has sold and assigned, and does hereby assign, sell and transfer to **Arcturus Therapeutics, Inc.**, a Delaware corporation, with offices at **3210 Merryfield Row, San Diego, California, 92121, USA**, and to its successors, assigns and legal representatives, collectively hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States of America and in all countries, in and to any and all inventions, discoveries and applications identified in Attachment A hereto, including any subsequently filed utility applications, and including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications therefor; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, or its designee, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the inventions, discoveries and applications identified in Attachment A.

ASSIGNOR hereby authorizes and requests the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

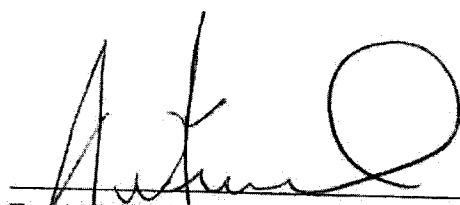
ASSIGNOR agrees, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

ASSIGNOR further agrees at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, ASSIGNOR has caused this Patent Assignment to be duly signed on its behalf.

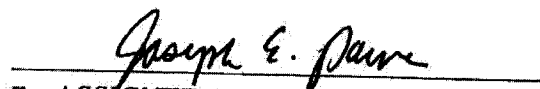
Date: 14 AUGUST 2013



For ASSIGNOR Marina Biotech, Inc.
Name: J. Michael French
Title: President and CEO

IN WITNESS WHEREOF, ASSIGNEE has accepted this Patent Assignment to be recorded on its behalf.

Date: 14 August 2013



For ASSIGNEE Arcturus Therapeutics, Inc.
Name: Joseph E. Payne
Title: President and CEO

ATTACHMENT A [TO EXHIBIT B]

ASSIGNED PATENTS

Country	Application/Serial No.	Filing date
HYDROXYMETHYL SUBSTITUTED RNA OLIGONUCLEOTIDES AND RNA COMPLEXES		
PCT	PCT/US2008/064417	May 21, 2008
Australia	2008256871	May 21, 2008
Brazil	PI0811170-7	May 21, 2008
Canada	2,687,850	May 21, 2008
China	200880016977.5	May 21, 2008
EPO	08780679.0	May 21, 2008
Hong Kong	10104397.9	May 21, 2008
Israel	202040	May 21, 2008
India	7213/DELNP/2009	May 21, 2008
Japan	2010-509534	May 21, 2008
Republic of Korea	10-2009-7024222	May 21, 2008
Mexico	MX/a/2009/012568	May 21, 2008
Malaysia	PI 20094688	May 21, 2008
New Zealand	580712	May 21, 2008
Singapore	200907326-3	May 21, 2008
South Africa	2009/07529	May 21, 2008
U.S.	12/515,403 US Patent No. 8,314,227	May 21, 2008
U.S.	13/652,965	October 16, 2012

ATTACHMENT A [TO EXHIBIT B] (continued)

ASSIGNED PATENTS

Country	Application/Serial No.	Filing date
UsiRNA COMPLEXES		
PCT	PCT/US2009/066610	December 3, 2009
Australia	2009322290	December 3, 2009
Brazil	PI0922355-0	December 3, 2009
Canada	2,744,093	December 3, 2009
China	200980148743.0	December 3, 2009
EPO	09761143.8	December 3, 2009
Hong Kong	11112883.2	December 3, 2009
Israel	212941	December 3, 2009
India	2540/KOLNP/2011	December 3, 2009
Japan	2011-539704	December 3, 2009
Republic of Korea	10-2011-7015096	December 3, 2009
Singapore	201103961-7	December 3, 2009
South Africa	2011/04540	December 3, 2009
U.S.	13/130,032	December 3, 2009