PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

n v1.1 EPAS ID: PAT3577987

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DOUGLAS J. JOLLY	10/22/2013
HARRY E. GRUBER	10/23/2013
AMY H. LIN	10/23/2013
CHRISTOPHER R. LOGG	05/14/2015
NORIYUKI KASAHARA	10/19/2015

RECEIVING PARTY DATA

Name:	TOCAGEN INC.
Street Address:	3030 BUNKER HILL STREET, SUITE 230
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92109

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US1366709

CORRESPONDENCE DATA

Fax Number: (858)458-9986

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.

Phone: 8584583607

Email: elena.lopez@bbiplaw.com **Correspondent Name:** JOSEPH R. BAKER, JR.

Address Line 1: 4660 LA JOLLA VILLAGE DRIVE, SUITE 750

Address Line 4: SAN DIEGO, CALIFORNIA 92122

ATTORNEY DOCKET NUMBER:	00014-017WO1
NAME OF SUBMITTER:	JOSEPH R. BAKER, JR.
SIGNATURE:	/Joseph R. Baker, Jr./
DATE SIGNED:	10/20/2015

Total Attachments: 6

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PATENT REEL: 036836 FRAME: 0349

ASSIGNMENT

THIS ASSIGNMENT, by Douglas J. Jolly, residing at 382 Sunset Drive, Encinitas, California 92024, United States of America; Harry E. Gruber, M.D., residing at P.O. Box 675272, Rancho Santa Fe, California 92067, United States of America; and Amy H. Lin, residing at 5488, Sonoma Place, San Diego, California 92130, United States of America; (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in

RETROVIRAL VECTOR COMPRISING MINI-PROMOTER CASSETTE

set forth in an application for Letters Patent of the United States, which is a

(1)	\boxtimes	provis	sional application	
	(a)	\boxtimes	bearing Application No. 61/718,610, and filed on October	25, 2012
	(b)		to be filed herewith; or	

Whereas, Tocagen Inc. a corporation having a principal place of business at 3030 Bunker Hill Street, Suite 230, San Diego, California 92109, United States of America (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefore and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever

counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Gavrilovich, Dodd & Lindsey LLP to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 10/22/2013

DATE 10/23/2013

DATE 10/23/2013

Douglas J. Jo

Harry E/Gruber, M.C

Amy H. Lin

Joseph R. Baker, Jr. Counsel for Assignee

Acknowledged and Hereby Accepted:

Date: 6.23.2013

ASSIGNMENT

THIS ASSIGNMENT, by Harry E. Gruber, with a mailing address of P.O. Box 675272, Rancho Santa Fe, California 92067, United States of America; Douglas J. Jolly, residing at 382 Sunset Drive, Encinitas, California 92024, United States of America; Amy H. Lin, residing at 5488 Sonoma Place, San Diego, California 92130, United States of America; Christopher R. Logg, residing at 1504 Wayno Avenue, South Pasadena, California 91030, United States of America; Noriyuki Kasahara, residing at 8446 Kirkwood Drive, Los Angeles, California 90046, United States of America; (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in RETROVIRAL VECTOR WITH MINI-PROMOTER CASSETTE 294 Saint Albans Ave. CRL. set forth in an application for Letters Patent of the United States, which is a (1)provisional application (a) bearing Application No. _____, and filed on _____; (b) to be filed herewith; or (2) \boxtimes non-provisional application (a) \boxtimes bearing Application No. 14/438,564, and filed on April 24, 2015; (b) \boxtimes bearing Application No. PCT/US13/66709, and filed on October 24, 2013; (c) having an oath or declaration executed on even date herewith prior to filing of application; having an oath or declaration executed on a different date than this (d)

Assignment: and

Whereas, Tocagen Inc., a corporation having a principal place of business at 3030 Bunker Hill Street, Suite 230, San Diego, California 92109, United States of America (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefore and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Gavrilovich, Dodd & Lindsey LLP to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

	Harry E. Gruber
NTE	
	Douglas J. Jolly
ATE	Amenda I fin
ITE May 14, 2015	Army H. Lin
	Christopher R. Logg
ATE	
	Noriyuki Kasahara

ASSIGNMENT

THIS ASSIGNMENT, by Harry E. Gruber, with a mailing address of P.O. Box 675272, Rancho Santa Fe, California 92067, United States of America; Douglas J. Jolly, residing at 382 Sunset Drive, Encinitas, California 92024, United States of America; Amy H. Lin, residing at 5488 Sonoma Place, San Diego, California 92130, United States of America; Christopher R. Logg, residing at 1504 Wayne Avenue, South Pasadena, California 91030, United States of America; Noriyuki Kasahara, residing at 8446 Kirkwood Drive, Los Angeles, California 90046, United States of America; (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in

RETROVIRAL VECTOR WITH MINI-PROMOTER CASSETTE

set forth in an application for Letters Patent of the United States, which is a provisional application (1) bearing Application No. ______, and filed on _____; (a) (b) to be filed herewith; or non-provisional application (2) \boxtimes bearing Application No. 14/438,564, and filed on April 24, 2015; (a) \boxtimes \boxtimes bearing Application No. PCT/US13/66709, and filed on October 24, (b) 2013; having an oath or declaration executed on even date herewith prior to (c) filing of application; having an oath or declaration executed on a different date than this (d)

Whereas, Tocagen Inc., a corporation having a principal place of business at 3030 Bunker Hill Street, Suite 230, San Diego, California 92109, United States of America (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon.

Assignment; and

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefore and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

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DATE	
Wage and the second sec	Harry E. Gruber
DATE	
	Douglas J. Jolly
DATE	
Section 2014 APPLY AND DESCRIPTION OF SECTION OF SECTIO	Amy H. Lin
DATE	
	Christopher R. Logg
DATE 10/19/2015	M. Laxekara
	Noriyuki Kasahara