# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5080696

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
TRILINK BIOTECHNOLOGIES	08/02/2018
TRILINK BIOTECHNOLOGIES, INC.	08/02/2018
TRILINK BIOTECHNOLOGIES, LLC	08/02/2018
GLEN RESEARCH CORPORATION	08/02/2018

### **RECEIVING PARTY DATA**

Name:	JPMORGAN CHASE BANK, N.A., AS COLLATERAL AGENT
Street Address:	4 CHASE METROTECH CENTER
Internal Address:	MC: NY1-C413
City:	BROOKLYN
State/Country:	NEW YORK
Postal Code:	11245-0001

### **PROPERTY NUMBERS Total: 21**

Property Type	Number
Patent Number:	6320041
Patent Number:	8361753
Patent Number:	8133669
Patent Number:	8728725
Patent Number:	7102024
Patent Number:	7732628
Patent Number:	RE46171
Patent Number:	6800728
Patent Number:	7462689
Patent Number:	8541555
Patent Number:	8846875
Patent Number:	6911535
Patent Number:	7999098
Patent Number:	7173125
Patent Number:	6686461
Patent Number:	6770754

PATENT REEL: 046708 FRAME: 0095

505033945

Property Type	Number
Patent Number:	7491817
Patent Number:	8394948
Patent Number:	7144995
Patent Number:	9631227
Application Number:	15495848

#### **CORRESPONDENCE DATA**

**Fax Number:** (800)914-4240

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:** 800-713-0755

Email: Michael.Violet@wolterskluwer.com

Correspondent Name: CT CORPORATION

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	DORIS KA
SIGNATURE:	/Doris Ka/
DATE SIGNED:	08/02/2018

#### **Total Attachments: 12**

source=Maravai 1L - TriLink.JPM Patent Security Agreement#page1.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page2.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page3.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page4.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page5.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page6.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page7.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page8.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page9.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page10.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page11.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page11.tif source=Maravai 1L - TriLink.JPM Patent Security Agreement#page12.tif

RECORDATION FORM COVER SHEET		
	S ONLY	
	e record the attached documents or the new address(es) below.	
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)	
1. TriLink BioTechnologies 2. TriLink BioTechnologies, Inc.	Name: JPMorgan Chase Bank, N.A., as Collateral Agent	
TriLink BioTechnologies, LLC     Glen Research Corporation	Internal Address: MC: NY1-C413	
Additional name(s) of conveying party(ies) attached? Yes X No		
3. Nature of conveyance/Execution Date(s):	Street Address: 4 Chase Metrotech Center	
Execution Date(s) August 2, 2018		
Assignment Merger	Otto D. H.	
⊠ Security Agreement	City: Brooklyn	
Joint Research Agreement	State: NY	
Government Interest Assignment	Country: USA Zip:11245-0001	
Executive Order 9424, Confirmatory License		
Other_	Additional name(s) & address(es) attached?  Yes  No	
	document is being filed together with a new application.	
A. Patent Application No.(s)	B. Patent No.(s)	
See attached patent Schedule A	See attached patent Schedule A	
Additional numbers at	tached? XYes No	
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 21	
Name: <u>Doris Ka, Legal Assistant</u>	7. Total fee (37 CFR 1.21(h) & 3.41) \$	
Internal Address: Cahill Gordon & Reindel LLP	7. Total lee (37 Of K 1.21(II) & 3.41) \$\pi	
	Authorized to be charged to deposit account	
Street Address: 80 Pine Street	Enclosed	
Street Address. 80 Fine Street	None required (government interest not affecting title)	
City: New York	8. Payment Information	
State: NY Zip: 10005		
Phone Number: _ 212-701-3569		
Docket Number: <u>57320.1375 (1st Lien)</u>	Deposit Account Number	
	Authorized User Name	
Email Address: dka@cahill.com		
9. Signature:	August 2, 2018	
Signature	Date	
	Total number of pages including cover sheet, attachments, and documents:	
Documents to be recorded (including cover shee	t) should be faxed to (571) 273-0140, or mailed to:	
Mall Stop Assignment Recordation Services, Director o	f the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450	

#### FIRST LIEN INTELLECTUAL PROPERTY SECURITY AGREEMENT

This FIRST LIEN INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, amended and restated, supplemented or otherwise modified from time to time, the "IP Security Agreement") dated as of August 2, 2018, is among the Persons listed on the signature pages hereof (each a "Grantor" and, collectively, the "Grantors") and JPMORGAN CHASE BANK, N.A., as collateral agent (in such capacity, together with any successor collateral agent, the "Collateral Agent") for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, MARAVAI INTERMEDIATE HOLDINGS, LLC, a Delaware limited liability company ("Parent Borrower"), CYGNUS TECHNOLOGIES, LLC, a Delaware limited liability company ("Cygnus"), TRILINK BIOTECHNOLOGIES, LLC, a Delaware limited liability company ("TriLink"), VECTOR LABORATORIES, INC., a California corporation ("Vector"; and together with the Parent Borrower, Cygnus and TriLink, the "Borrowers" and each a "Borrower"), MARAVAI TOPCO HOLDINGS, LLC, a Delaware limited liability company ("Holdings"), have entered into the First Lien Credit Agreement dated as of August 2, 2018 (as amended, amended and restated, supplemented, replaced, refinanced or otherwise modified from time to time, the "Credit Agreement"), with the lenders and financial institutions from time to time party thereto and JPMORGAN CHASE BANK, N.A., as Administrative Agent, Collateral Agent, an L/C Issuer and a Lender. Capitalized terms defined in the Credit Agreement or in the Security Agreement (as defined below) and not otherwise defined herein are used herein as defined in the Credit Agreement or the Security Agreement, as the case may be (and in the event of a conflict, the applicable definition shall be the one given to such term in the Security Agreement).

WHEREAS, pursuant to the Credit Agreement, each Grantor has executed and delivered that certain First Lien Security Agreement dated as of August 2, 2018 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), among the Grantors, the other grantors from time to time party thereto and the Collateral Agent.

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed thereunder to execute this IP Security Agreement for recording with the USPTO and/or the USCO, as applicable.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

- Section 1. <u>Grant of Security</u>. Each Grantor hereby pledges to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, and each Grantor hereby grants to the Collateral Agent (and its successors and permitted assigns), 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 and to the following, whether now owned or held or hereafter acquired or created by the undersigned (the "<u>Collateral</u>"):
  - (i) all Patents, including the patents and patent applications set forth in <u>Schedule A</u> hereto (the "<u>Patent Collateral</u>");
  - (ii) all Trademarks, including the trademark and service mark registrations and applications set forth in <u>Schedule B</u> hereto, together with the goodwill of the business connected with the use thereof and symbolized thereby (the "<u>Trademark Collateral</u>");

- (iii) all Copyrights, whether registered or unregistered, including, without limitation, the copyright registrations and applications set forth in <u>Schedule C</u> hereto (the "Copyright Collateral");
- (iv) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;
- (v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect such damages, or otherwise recover with respect to such claims; and
- (vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and Supporting Obligations relating to, any and all of the foregoing or arising from any of the foregoing;

provided that notwithstanding anything to the contrary contained in the foregoing clauses (i) through (vi), the security interest created hereby shall not extend to, and the term "Collateral" shall not include, any Excluded Property, including, for clarity, any United States intent-to-use trademark or service mark applications prior to the filing of a "Statement of Use" pursuant to Section 1(d) of the Lanham Act or an "Amendment to Allege Use" pursuant to Section 1(c) of the Lanham Act with respect thereto, to the extent that, and solely during the period, if any, in which, the grant of a security interest therein would impair the validity or enforceability of any registration that issues from such intent-to-use application under applicable federal law.

- Section 2. <u>Security for Obligations</u>. The grant of a security interest in the Collateral by each Grantor under this IP Security Agreement secures the payment of all Secured Obligations of such Grantor. Without limiting the generality of the foregoing, this IP Security Agreement secures, as to each Grantor, the payment of all amounts that constitute part of the Secured Obligations that would be owed by such Grantor to any Secured Party under the Secured Documents but for the fact that they are unenforceable or not allowable due to the existence of a bankruptcy, or reorganization or similar proceeding involving a Loan Party.
- Section 3. <u>Recordation</u>. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks, as applicable, record this IP Security Agreement.
- Section 4. <u>Execution in Counterparts</u>. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
- Section 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this IP Security Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

#### Section 6. <u>Governing Law; Jurisdiction; Etc.</u>

- (a) THIS IP SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAWS PRINCIPLES THEREOF, BUT INCLUDING SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW.
- EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY (b) SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK CITY IN THE BOROUGH OF MANHATTAN AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK SITTING IN THE BOROUGH OF MANHATTAN, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS IP SECURITY AGREEMENT SHALL AFFECT ANY RIGHT THAT THE COLLATERAL AGENT, ANY LENDER OR ANY L/C ISSUER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS IP SECURITY AGREEMENT OR THE RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT AGAINST ANY LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.
- (c) EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT IN ANY COURT REFERRED TO IN CLAUSE (b) OF THIS SECTION 6. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.
- (d) EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 10.02 OF THE CREDIT AGREEMENT. NOTHING IN THIS IP SECURITY AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.
- (e) EACH PARTY TO THIS IP SECURITY AGREEMENT HEREBY EXPRESSLY WAIVES ANY RIGHT TO TRIAL BY JURY OF ANY CLAIM, DEMAND, ACTION OR CAUSE OF ACTION ARISING UNDER THIS IP SECURITY AGREEMENT OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES HERETO OR ANY OF THEM WITH RESPECT TO THIS IP

SECURITY AGREEMENT, OR THE TRANSACTIONS RELATED THERETO, IN EACH CASE WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER FOUNDED IN CONTRACT OR TORT OR OTHERWISE; AND EACH PARTY HEREBY AGREES AND CONSENTS THAT ANY SUCH CLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY COURT TRIAL WITHOUT A JURY, AND THAT ANY PARTY TO THIS IP SECURITY AGREEMENT MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF SECTION 10.17 OF THE CREDIT AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE SIGNATORIES HERETO TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

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

VECTOR LABORATORIES, INC.; TRILINK BIOTECHNOLOGIES, LLC; and GLEN RESEARCH, LLC

By:

Name: Kevin Herde

Title: Chief Financial Officer

JPMORGAN CHASE BANK, N.A., as Collateral Agent

By:

Name: Vanessa Chiu Title: Executive Director

# **SCHEDULE A**

# **PATENTS**

Assignee	Title	Country	Issued Date
TriLink	Pre-activated Carbonyl	United States	6320041
BioTechnologies,	Linkers for the Modification		11/20/2001
Inc.	of Oligonucleotides		
TriLink	Phosphotriester-Modified	United States	8361753
BioTechnologies	Oligonucleotide Primers for		01/29/2013
	Nucleic Acid Amplification		
TriLink	Chemically Modified	United States	8133669
BioTechnologies	Nucleoside 5'-Triphosphates		03/13/2012
	for Thermally Initiated		
	Amplification of Nucleic		
	Acid		
TriLink	Chemically Modified Ligase	United States	8728725
BioTechnologies	Cofactors, Donors and		05/20/2014
	Acceptors		
TriLink	Functional biopolymer	United States	7102024
BioTechnologies, LLC	modification reagents and		09/05/2006
	uses thereof	TI 's 1 Co	######################################
TriLink	Functional biopolymer	United States	7732628
BioTechnologies, LLC	modification reagents and		06/08/2010
TriLink	uses thereof	TI 's 1 Cs s	DE46171
BioTechnologies,	Functional biopolymer	United States	RE46171
LLC	modification reagents and		10/04/2016
TriLink	uses thereof	IIt. 1 C4-4	(900739
BioTechnologies,	Hydrazine-based and carbonyl-based bifunctional	United States	6800728 10/05/2004
LLC	crosslinking reagents		10/03/2004
TriLink	Hydrazine-based and	United States	7462689
BioTechnologies,	carbonyl-based bifunctional	Office States	12/09/2008
LLC	crosslinking reagents		12/09/2006
TriLink	Hydrazone-based and	United States	8541555
BioTechnologies,	oxime-based fluorescent and	Office States	09/24/2013
LLC	chromophoric/pro-		03/21/2013
	flourescent and pro-		
	chromophoric reagents and		
	linkers		
TriLink	Preparation and/or	United States	8846875
BioTechnologies,	purification of		09/30/2014
LLC	oligonucleotide conjugates		
TriLink	Biomolecule/polymer	United States	6911535
BioTechnologies,	conjugates		06/28/2005
LLC			
TriLink	Triphosphate	United States	7999098
BioTechnologies, LLC	oligonucleotide modification		08/16/2011
LLC	reagents and uses thereof		

Assignee	Title	Country	Issued Date
TriLink BioTechnologies, LLC	Triphosphate oligonucleotide modification reagents and uses thereof	United States	7173125 02/06/2007
TriLink BioTechnologies, LLC	Triphosphate oligonucleotide modification reagents and uses thereof	United States	6686461 02/03/2004
Glen Research Corporation	Universal supports for oligonucleotide synthesis	United States	6770754 8/3/2004
Glen Research Corporation	Universal supports for oligonucleotide synthesis	United States	7491817 2/17/2009
Glen Research Corporation; Nelson Biotechnologies, Inc.	Novel reagents utilizing a serinol scaffold for labeling synthetic oligonucleotide	United States	8394948 3/12/2013
Glen Research Corporation; Berry & Associates	Fluorescent nitrogenous base and nucleosides incorporating same	United States	7144995 12/5/2006
TriLink BioTechnologies, Inc.	Chemically Modified Ligase Cofactors, Donors and Acceptors	United States	9631227 04/25/2017

# PATENT APPLICATIONS

Assignee	Title	Country	Application Serial No.	Filing Date
TriLink	Chemically modified	United States	15495848	04/24/2017
BioTechnologies,	ligase cofactors, donors and acceptors			
Inc.	donors and acceptors			

### **SCHEDULE B**

# TRADEMARKS

Owner	Mark	Country	Registration No. / Date
Vector	Elite	United States	2006391
Laboratories, Inc.	Line	Office States	10/8/1996
Vector	Photoprobe	United States	1426136
Laboratories, Inc.			1/27/1987
Vector	V! and Design	United States	1635200
Laboratories, Inc.			2/19/1991
Vector Laboratories, Inc.	Vectashield	United States	1755996 3/2/1993
Vector	Vectastain	United States	1220471
Laboratories, Inc.	v cotastani	Office States	12/21/1982
Vector	Vector	United States	1259009
Laboratories, Inc.			11/29/1983
Vector	Vectrex	United States	1542135
Laboratories, Inc.			6/6/1989
TriLink BioTechnologies, LLC	CHROMALINK	United States	3268400 07/24/2007
TriLink BioTechnologies, LLC	MAGNALINK	United States	4542383 06/3/2014
TriLink BioTechnologies, LLC	NANOLINK	United States	4488606 02/25/2014
TriLink BioTechnologies, LLC	THE MODIFIED NUCLEIC ACID EXPERTS	United States	5024276 08/16/2016
TriLink BioTechnologies, LLC	OLIGOBUILDER	United States	5304533 10/10/2017

Owner	Mark	Country	Registration No. / Date
TriLink BioTechnologies, LLC	CLEANCAP	United States	5468487 05/15/2018
TriLink BioTechnologies, LLC	CLEANTAG	United States	5468481 05/15/2018
TriLink BioTechnologies, LLC	TRILINK	United States	5032541 08/30/2016
TriLink BioTechnologies, LLC	TRILINK BIOTECHNOLOGIES	United States	5082758 11/15/2016
TriLink BioTechnologies, LLC	TRILINK BIOTECHNOLOGIES & Design  Trilink **STOTECHNOLOGIES**	United States	5082759 11/15/2016
TriLink BioTechnologies, LLC	CLEANAMP	United States	5528329 7/31/2018

# TRADEMARK APPLICATIONS

Owner	Mark	Country	Application Serial No.	Filing Date
TriLink BioTechnologies, LLC	Design	United States	87939792	05/29/2018

**SCHEDULE C** 

# **COPYRIGHTS**

None.

PATENT REEL: 046708 FRAME: 0108

**RECORDED: 08/02/2018**