

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5226874

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SORRENTO THERAPEUTICS, INC.	11/07/2018
TNK THERAPEUTICS, INC.	11/07/2018
CONCORTIS BIOSYSTEMS, CORP.	11/07/2018
ARK ANIMAL HEALTH, INC.	11/07/2018
SCINTILLA PHARMACEUTICALS, INC.	11/07/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	OAKTREE FUND ADMINISTRATION, LLC
<b>Street Address:</b>	1301 AVENUE OF THE AMERICAS, 34TH FLOOR
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10019
<b>PROPERTY NUMBERS Total: 113</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14914302
Application Number:	29587921
Application Number:	29587922
Application Number:	29587924
Application Number:	29587926
Application Number:	29587927
Application Number:	13157412
Application Number:	15382774
Application Number:	13641504
Application Number:	13641501
Application Number:	15378097
Application Number:	14762534
Application Number:	13641507
Application Number:	15378109
Application Number:	13641502
Application Number:	13641500

PATENT

Property Type	Number
Application Number:	14787044
Application Number:	14354229
Application Number:	13036096
Application Number:	14914306
Application Number:	29587923
Application Number:	14762844
Application Number:	15305193
Application Number:	15305201
Application Number:	15305206
Application Number:	15744346
Application Number:	15744385
Application Number:	14354223
Application Number:	15890570
Application Number:	15413475
Application Number:	13095489
Application Number:	15411318
Application Number:	62678601
Application Number:	62678592
Application Number:	62678584
Application Number:	15310214
Application Number:	13854071
Application Number:	15330956
Application Number:	15403115
Application Number:	15403102
Application Number:	15333115
Application Number:	62640775
Application Number:	62635702
Application Number:	62581466
Application Number:	62687695
Application Number:	62723727
Application Number:	15353979
Application Number:	10477907
Application Number:	14680865
Application Number:	15854742
Application Number:	14401114
Application Number:	14401115
Application Number:	14401318
Application Number:	15679599

Property Type	Number
Application Number:	13893312
Application Number:	13903793
Application Number:	13907685
Application Number:	16111995
Application Number:	15619389
Application Number:	13916129
Application Number:	13924492
Application Number:	13924501
Application Number:	15097955
Application Number:	15925494
Application Number:	14061548
Application Number:	15141593
Application Number:	14473916
Application Number:	15462427
Application Number:	14062774
Application Number:	14292866
Application Number:	15589051
Application Number:	15682206
Application Number:	14821559
Application Number:	14825144
Application Number:	15674401
Application Number:	16128053
Application Number:	15304358
Application Number:	14839791
Application Number:	15009775
Application Number:	15043157
Application Number:	15066806
Application Number:	16138944
Application Number:	15094384
Application Number:	15093773
Application Number:	16055065
Application Number:	15093780
Application Number:	15093777
Application Number:	16135886
Application Number:	15217238
Application Number:	15049718
Application Number:	15050215
Application Number:	15061771

Property Type	Number
Application Number:	15842161
Application Number:	15061832
Application Number:	15063006
Application Number:	62258349
Application Number:	15496994
Application Number:	15298813
Application Number:	15418514
Application Number:	15609858
Application Number:	15880101
Application Number:	62587158
Application Number:	15870830
Application Number:	62621550
Application Number:	62666679
Application Number:	16052406
Application Number:	62655123
Application Number:	62655150
Application Number:	16013828
Application Number:	15017174
Application Number:	15035842
Application Number:	15472965
Application Number:	15533360

#### CORRESPONDENCE DATA

**Fax Number:** (212)291-9868

*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:** 2125584229

**Email:** demarcor@sullcrom.com, nguyenb@sullcrom.com

**Correspondent Name:** RAFFAELE A. DEMARCO

**Address Line 1:** 125 BROAD STREET

**Address Line 4:** NEW YORK, NEW YORK 10004-2498

<b>ATTORNEY DOCKET NUMBER:</b>	018392.00026
<b>NAME OF SUBMITTER:</b>	RAFFAELE A. DEMARCO
<b>SIGNATURE:</b>	/Raffaele A. DeMarco/
<b>DATE SIGNED:</b>	11/07/2018

#### Total Attachments: 17

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of November 7, 2018 (as amended, restated, supplemented or otherwise modified from time to time, this “**IP Security Agreement**”), is made by each of the entities listed as grantors on the signature pages hereto (each a “**Grantor**” and, collectively, the “**Grantors**”) in favor of Oaktree Fund Administration, LLC, as administrative and collateral agent for the Secured Parties (in such capacity and together with its successors and permitted assigns, the “**Agent**”).

WHEREAS, the Agent and the Grantors are party to a Collateral Agreement, dated as of November 7, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the “**Collateral Agreement**”), among the Agent, the Grantors, and other grantors party thereto, pursuant to which the Grantors granted a security interest to the Agent in certain Collateral (as defined therein), including without limitation the IP Collateral (as defined below), and are required to execute and deliver this IP Security Agreement for the benefit of Agent.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors hereby agree with the Agent as follows:

Section 1.      Defined Terms. Unless otherwise defined herein, terms defined in the Collateral Agreement and used herein have the meaning given to them in the Collateral Agreement and the Term Loan Agreement (as defined in the Collateral Agreement), as applicable.

Section 2.      Grant of Security Interest in IP Collateral. Each Grantor, as collateral security for the payment and performance in full of the Obligations of such Grantor when due, hereby pledges to the Agent, its successor and assigns, for the ratable benefit of the Secured Parties, a Lien on and security interest in all of its right, title and interest in, to and under the following Collateral wherever located, whether now owned or at any time hereafter created, developed, or acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the “**IP Collateral**”):

(a)      all of its Copyrights and all License Agreements providing for the grant by or to such Grantor of any right under any Copyright, including, without limitation, those referred to on Schedule 1 hereto;

(b)      all of its Patents and all IP Licenses providing for the grant by or to such Grantor of any right under any Patent, including, without limitation, those referred to on Schedule 2 hereto;

(c)      all of its Trademarks and all IP Licenses providing for the grant by or to such Grantor of any right under any Trademark (and all goodwill connected with the use of, and symbolized by, each such Trademark), including, without limitation, those referred to on Schedule 3 hereto; provided, that no Lien or security interest is granted hereunder with respect to any United States “intent-to-use” trademark or service mark application filed pursuant to Section 1(b) of the Lanham Act, solely to the extent that, and only for so long as, the grant of a security interest therein would impair the validity or enforceability of, or render void or voidable or result in the cancellation of, any Grantor’s right, title or interest therein;

(d)      all renewals, reversions and extensions of the foregoing; and

(e) all income, royalties, proceeds and Liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

Section 3. Collateral Agreement. The security interest granted pursuant to this IP Security Agreement is granted in conjunction with the security interest granted to the Agent pursuant to the Collateral Agreement, and each Grantor hereby acknowledges and agrees that the rights and remedies of the Administrative Agent with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Collateral Agreement, the terms and provisions of which are incorporated by reference as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Collateral Agreement, the provisions of the Collateral Agreement shall control.

Section 4. Grantor Remains Responsible. Each Grantor hereby agrees that, subject to the terms and conditions of the Term Loan Agreement and the Collateral Agreement, notwithstanding the security interest and Lien granted herein, such Grantor shall retain full and complete responsibility for the prosecution, defense, maintenance, enforcement and any other necessary or desirable actions in connection with its Intellectual Property and License Agreements that are subject to a security interest hereunder.

Section 5. Recordation. Each Grantor hereby authorizes and requests that the United States Patent Office and United States Copyright Office, as applicable, record this IP Security Agreement as notice of the security interests and Liens granted hereunder.

Section 6. Counterparts. This IP Security Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract. Delivery of an executed signature page to this Agreement by facsimile or in electronic (i.e., "pdf" or "tif") format shall be as effective as delivery of a manually signed counterpart of this Agreement, provided that the foregoing shall not relieve any party from any obligation to provide original signatures where required for proper recordation.

Section 7. Governing Law. This IP Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York.

[SIGNATURE PAGES FOLLOW]

Grantors:

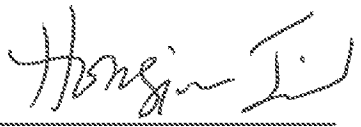
**SORRENTO THERAPEUTICS, INC.**

By: 

Name: Henry Ji, Ph.D.

Title: Chairman of the Board, President  
and Chief Executive Officer

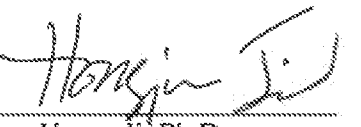
**ARK ANIMAL HEALTH, INC.**

By: 

Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

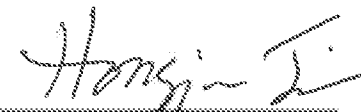
**CONCORTIS BIOSYSTEMS, CORP.**

By: 

Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

**SCINTILLA PHARMACEUTICALS, INC.**

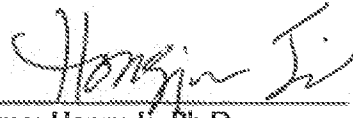
By: 

Name: Henry Ji, Ph.D.

Title: Chief Executive Officer



TNK THERAPEUTICS, INC.

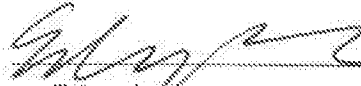
By:   
Name: Henry Ji, Ph.D.  
Title: Chief Executive Officer

[Signature Page to Intellectual Property Security Agreement]

**PATENT**  
**REEL: 047446 FRAME: 0343**

**OAKTREE FUND ADMINISTRATION, LLC**

By: Oaktree Capital Management, L.P.  
Its: Managing Member

By:   
Name: Edgar Lee  
Title: Managing Director

By:   
Name: Mary Galleghy  
Title: Senior Vice President

SCHEDULE 1  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

Copyrights

None.

Exclusive Copyright Licenses

None.

SCHEDULE 2  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

Patents and Patent Applications

Title	Country	Application No.	Patent No.	Owner
DRAPED MICRONEEDLE ARRAY	United States	14914302	9962536	SORRENTO THERAPEUTICS, INC.
STRAP COMPONENT FOR A FLUID DELIVERY APPARATUS	United States	29587921	D810604	SORRENTO THERAPEUTICS, INC.
COLLET FOR A FLUID DELIVERY APPARATUS	United States	29587922	D831198	SORRENTO THERAPEUTICS, INC.
FLUID DELIVERY APPARATUS	United States	29587924	D819197	SORRENTO THERAPEUTICS, INC.
APPLICATOR DEVICE FOR A FLUID DELIVERY APPARATUS	United States	29587926	D810927	SORRENTO THERAPEUTICS, INC.
CARRYING CASE	United States	29587927	D810421	SORRENTO THERAPEUTICS, INC.
TRANSDERMAL DEVICE CONTAINING MICRONEEDLES	United States	13157412	8636696	SORRENTO THERAPEUTICS, INC.
COMPOSITE MICRONEEDLE ARRAY INCLUDING NANOSTRUCTURES THEREON	United States	15382774	10029084	SORRENTO THERAPEUTICS, INC.
COMPOSITE MICRONEEDLE ARRAY INCLUDING NANOSTRUCTURES THEREON	United States	13641504	9526883	SORRENTO THERAPEUTICS, INC.
DEVICE FOR DELIVERY OF RHEUMATOID ARTHRITIS MEDICATION	United States	13641501	9522263	SORRENTO THERAPEUTICS, INC.
DEVICE FOR DELIVERY OF RHEUMATOID ARTHRITIS MEDICATION	United States	15378097	10029082	SORRENTO THERAPEUTICS, INC.

<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
DRUG DELIVERY DEVICE	United States	14762534	9861801	SORRENTO THERAPEUTICS, INC.
INJECTION MOLDED MICRONEEDLE ARRAY AND METHOD FOR FORMING THE MICRONEEDLE ARRAY	United States	13641507	9545507	SORRENTO THERAPEUTICS, INC.
MEDICAL DEVICES FOR DELIVERY OF siRNA	United States	15378109	10029083	SORRENTO THERAPEUTICS, INC.
MEDICAL DEVICES FOR DELIVERY OF siRNA	United States	13641502	9522262	SORRENTO THERAPEUTICS, INC.
METHOD FOR INCREASING PERMEABILITY OF AN EPITHELIAL BARRIER	United States	13641500	9586044	SORRENTO THERAPEUTICS, INC.
MICRONEEDLES WITH IMPROVED OPEN CHANNEL CROSS-SECTIONAL GEOMETRIES	United States	14787044	9795775	SORRENTO THERAPEUTICS, INC.
TRANSDERMAL DELIVERY OF HIGH VISCOSITY BIOACTIVE AGENTS	United States	14354229	9550053	SORRENTO THERAPEUTICS, INC.
TRANSDERMAL PATCH CONTAINING MICRONEEDLES	United States	13036096	8696637	SORRENTO THERAPEUTICS, INC.
CARTRIDGE PORTION OF TRANSDERMAL DRUG DELIVERY APPARATUS AND METHODS	United States	14914306		SORRENTO THERAPEUTICS, INC.
CARTRIDGE FOR A FLUID DELIVERY APPARATUS	United States	29587923		SORRENTO THERAPEUTICS, INC.
TRANSDERMAL DRUG DELIVERY DEVICE	United States	14762844		SORRENTO THERAPEUTICS, INC.
TRANSDERMAL DRUG DELIVERY APPARATUS AND METHODS	United States	15305193		SORRENTO THERAPEUTICS, INC.

Title	Country	Application No.	Patent No.	Owner
CONTROLLER PORTION OF TRANSDERMAL DRUG DELIVERY APPARATUS AND METHODS	United States	15305201		SORRENTO THERAPEUTICS, INC.
RECEPTACLE PORTION OF TRANSDERMAL DRUG DELIVERY APPARATUS AND METHODS	United States	15305206		SORRENTO THERAPEUTICS, INC.
METHODS FOR BETTER DELIVERY OF ACTIVE AGENTS TO TUMORS	United States	15744346		SORRENTO THERAPEUTICS, INC.
METHODS FOR LYMPHATIC DELIVERY OF ACTIVE AGENTS	United States	15744385		SORRENTO THERAPEUTICS, INC.
IMPLANTABLE DEVICES FOR DELIVERY OF BIOACTIVE AGENTS	United States	14354223		SORRENTO THERAPEUTICS, INC.
INCREASED BIOAVAILABILITY OF TRANSDERMALLY DELIVERED AGENTS	United States	15890570		SORRENTO THERAPEUTICS, INC.
METHOD FOR INCREASING PERMEABILITY OF AN EPITHELIAL BARRIER	United States	15413475		SORRENTO THERAPEUTICS, INC.
NANOPATTERNED MEDICAL DEVICE WITH ENHANCED CELLULAR INTERACTION	United States	13095489		SORRENTO THERAPEUTICS, INC.
TRANSDERMAL DELIVERY OF HIGH VISCOSITY BIOACTIVE AGENTS	United States	15411318		SORRENTO THERAPEUTICS, INC.
DRUG DELIVERY TO THE LYMPHATIC SYSTEM FOR REGIONAL OR SYSTEMIC TREATMENT OF CANCER	United States	62678601		SORRENTO THERAPEUTICS, INC.

Title	Country	Application No.	Patent No.	Owner
DRUG DELIVERY TO THE LYMPHATIC SYSTEM FOR REGIONAL OR SYSTEMIC TREATMENT OF INFLAMMATORY CONDITIONS	United States	62678592		SORRENTO THERAPEUTICS, INC.
DRUG DELIVERY METHOD FOR REGIONAL OR SYSTEMIC TREATMENT OF THE LYMPHATIC SYSTEM	United States	62678584		SORRENTO THERAPEUTICS, INC.
CHEMICALLY-LOCKED BISPECIFIC ANTIBODIES	United States	15310214		SORRENTO THERAPEUTICS, INC.
FULLY HUMAN ANTIBODIES THAT BIND TO VEGFR2 AND METHODS OF USE THEREOF	United States	13854071		SORRENTO THERAPEUTICS, INC.
ANTIGEN BINDING PROTEINS THAT BIND WISP1	United States	15330956		SORRENTO THERAPEUTICS, INC.
SAFETY AND EFFICACY WITH A CHO CELL GLYCOSYLATED CHIMERIC ANTIBODY TO TNF	United States	15403115		SORRENTO THERAPEUTICS, INC.
IMPROVED SAFETY FOR TREATING CANCERS WITH GLYCOSYLATED CHIMERIC ANTIBODY TO EGFR	United States	15403102		SORRENTO THERAPEUTICS, INC.
PROGRAMMABLE UNIVERSAL CELL RECEPTORS AND METHOD OF USING THE SAME	United States	15333115		SORRENTO THERAPEUTICS, INC.
DIMERIC ANTIGEN RECEPTORS AND BIVALENT ANTIGEN RECEPTORS	United States	62640775		TNK Therapeutics, Inc.

<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
PROCESS FOR ANTIGEN RECEPTOR CONSTRUCT INSERTION TO TRANSFECT CELLS	United States	62635702		TNK Therapeutics, Inc.
CD38-DIRECTED CAR CONSTRUCTS	United States	62581466		TNK Therapeutics, Inc.
VARIANT ANTIBODY THAT BINDS TO CD38	United States	62687695		Sorrento Therapeutics, Inc.
ANTIBODY COMPOSITIONS THAT BIND TO NY-ESO-1	United States	62723727		Sorrento Therapeutics, Inc.
CHEMICALLY-LOCKED BISPECIFIC ANTIBODIES	United States	15353979		Sorrento Therapeutics, Inc.
NOVEL METHOD FOR CLONING VARIABLE DOMAIN SEQUENCES OF IMMUNOLOGICAL GENE REPERTOIRE	United States	10477907	7405062	Sorrento Therapeutics, Inc.
FULLY HUMAN ANTIBODIES THAT BIND TO VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPTOR 2 (VEGFR2)	United States	14680865		Sorrento Therapeutics, Inc.
DRUG-CONJUGATES, CONJUGATION METHODS, AND USES THEREOF	United States	15854742		Concortis Biosystems, Corp.
DRUG-CONJUGATES, CONJUGATION METHODS, AND USES THEREOF	United States	14401114	9,884,127	Concortis Biosystems, Corp.
DRUG-CONJUGATES, CONJUGATION METHODS, AND USES THEREOF	United States	14401115	9,981,046	Concortis Biosystems, Corp.
DRUG-CONJUGATES, CONJUGATION METHODS, AND USES THEREOF	United States	14401318	9,801,951	Concortis Biosystems, Corp.



<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
DRUG-CONJUGATES, CONJUGATION METHODS, AND USES THEREOF	United States	15679599		Concortis Biosystems, Corp.
ANTIBODIES THAT BIND EPIDERMAL GROWTH FACTOR RECEPTOR (EGFR)	United States	13893312	9944707	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND DLL-4	United States	13903793		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-L1	United States	13907685	9175082	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-L1	United States	16111995		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-L1	United States	15619389	10,058,609	Sorrento Therapeutics, Inc.
Antigen Binding Proteins that Bind Insulin-Like Growth Factor Receptor-1 (IGF1R)	United States	13916129		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND C-MET	United States	13924492		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND CCR2	United States	13924501	9315579	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND CCR2	United States	15097955	9,951,138	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND CCR2	United States	15925494		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND ERBB3	United States	14061548	9346890	Sorrento Therapeutics, Inc.
Antigen Binding Proteins that Bind ErbB3	United States	15141593	9,938,352	Sorrento Therapeutics, Inc.

<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
ANTI-INFECTIVE BINDING PROTEINS THAT BIND AIP2	United States	14473916	9631009	Sorrento Therapeutics, Inc.
ANTI-INFECTIVE BINDING PROTEINS THAT BIND AIP2	United States	15462427		Sorrento Therapeutics, Inc.
ANTI-INFECTIVE BINDING PROTEINS THAT BIND AIP2	United States	14062774	8859740	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-1	United States	14292866	9676853	Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-1	United States	15589051		Sorrento Therapeutics, Inc.
FULLY HUMAN ANTI-C-X-C CHEMOKINE RECEPTOR 3 (CXCR3) ANTIBODIES	United States	15682206		Sorrento Therapeutics, Inc.
FULLY HUMAN ANTI-C-X-C CHEMOKINE RECEPTOR 3 (CXCR5) ANTIBODIES	United States	14821559	9765145	Sorrento Therapeutics, Inc.
FULLY HUMAN ANTI-CXC CHEMOKINE RECEPTOR 5 (CXCR5) ANTIBODIES	United States	14825144	9765146	Sorrento Therapeutics, Inc.
FULLY HUMAN ANTI-CXC CHEMOKINE RECEPTOR 5 (CXCR5) ANTIBODIES	United States	15674401		Sorrento Therapeutics, Inc.
FORMULATION OF RESINIFERATOXIN	United States	16128053		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD147	United States	15304358		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND OprF	United States	14839791	9,879,069	Sorrento Therapeutics, Inc.
ANTIBODY DRUG CONJUGATES	United States	15009775		Sorrento Therapeutics, Inc.

<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
ANTIBODY THERAPEUTICS THAT BIND CTLA4	United States	15043157		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND PSMA	United States	15066806		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND PSMA	United States	16138944		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD38	United States	15094384	10,059,774	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD38	United States	15093773	9,951,144	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD38	United States	16055065		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD123	United States	15093780	9,969,807	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD123	United States	15093777		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD123	United States	16135886		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND LAG3	United States	15217238	9,902,772	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD137	United States	15049718		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD137	United States	15050215		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND CD47	United States	15061771	10,035,855	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND TIM3	United States	15842161		Sorrento Therapeutics, Inc.

Title	Country	Application No.	Patent No.	Owner
ANTIBODY THERAPEUTICS THAT BIND TIM3	United States	15061832	9,873,741	Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND JAG1	United States	15063006		Sorrento Therapeutics, Inc.
METHODS FOR LOWER DOSE PAIN TREATMENT ADMINISTRATION OF RESINFERATOXIN	United States	62258349		Sorrento Therapeutics, Inc.
ANTIBODY THERAPEUTICS THAT BIND STAT3	United States	15496994		Sorrento Therapeutics, Inc.
INTRACELLULAR DELIVERY COMPOUNDS	United States	15298813		Sorrento Therapeutics, Inc.
ANTIGEN BINDING PROTEINS THAT BIND PD-L1	United States	15418514		Sorrento Therapeutics, Inc.
ANTIBODY DRUG CONJUGATES HAVING DERIVATIVES OF AMATOXIN AS THE DRUG	United States	15609858		Sorrento Therapeutics, Inc.
CELL PENETRATING PEPTIDE INHIBITORS OF p53-MDM2 INTERACTION	United States	15880101		Sorrento Therapeutics, Inc.
AQUEOUS PHARMACEUTICAL COMPOSITIONS OF POORLY SOLUBLE DRUGS	United States	62587158		Sorrento Therapeutics, Inc.
LINKED DUAL ANTIBODIES CONJUGATED AT A HINGE REGION	United States	15870830		Sorrento Therapeutics, Inc.
INTRACELLULAR DELIVERY COMPOUNDS	United States	62621550		Sorrento Therapeutics, Inc.
INTRACELLULAR DELIVERY COMPOUNDS	United States	62666679		Sorrento Therapeutics, Inc.

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<b>Title</b>	<b>Country</b>	<b>Application No.</b>	<b>Patent No.</b>	<b>Owner</b>
DISULFIDE BRIDGING CONJUGATES	United States	16052406		Sorrento Therapeutics, Inc.
HUMAN ANTIBODY THAT BINDS cKIT	United States	62655123		Sorrento Therapeutics, Inc.
HUMAN ANTIBODY THAT BINDS TIM3	United States	62655150		Sorrento Therapeutics, Inc.
CD38 ANTIBODY DRUG CONJUGATE	United States	16013828		Sorrento Therapeutics, Inc.
Antibody Drug Conjugates	United States	15017174		Sorrento Therapeutics, Inc.
SMALL MOLECULE C-MYC INHIBITORS	United States	15035842		SORRENTO THERAPEUTICS, INC.; THE SCRIPPS RESEARCH INSTITUTE
CALICHEAMICIN ANTIBODY DRUG CONJUGATES LINKING AN AMIDOACETYL GROUP TO A SUGAR MOIETY ON CALICHEAMICIN	United States	15472965		Sorrento Therapeutics, Inc.
C-MET ANTIBODY DRUG CONJUGATE	United States	15533360		Sorrento Therapeutics, Inc.

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SCHEDULE 3  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

Trademarks and Trademark Applications

Mark	Country	Serial No.	Reg. No.	Owner
DOSECONNECT	United States	87/218,763	5,449,373	SORRENTO THERAPEUTICS, INC.
DOSECONNECT	United States	87/218,765	5,429,288	SORRENTO THERAPEUTICS, INC.
DOSEDISC	United States	86/420,150	5,459,332	SORRENTO THERAPEUTICS, INC.
NEUROCLASTIN	United States	87/375,654		ARK ANIMAL HEALTH, INC.
SCINTILLA	United States	87/144,641		SCINTILLA PHARMACEUTICALS, INC.
SCINTILLA PHARMACEUTICALS & Design	United States	87/144,634		SCINTILLA PHARMACEUTICALS, INC.
SOFUSA	United States	86/420,149	5,428,688	SORRENTO THERAPEUTICS, INC.
SOFUSA	United States	86/420,148	5,448,790	SORRENTO THERAPEUTICS, INC.
SORRENTO	United States	86/639,376		SORRENTO THERAPEUTICS, INC.
SORRENTO Stylized	United States	86/639,383		SORRENTO THERAPEUTICS, INC.
TNK	United States	86/648,571		TNK THERAPEUTICS, INC.
TNK THERAPEUTICS	United States	86/642,061		TNK THERAPEUTICS, INC.