## 502683640 02/18/2014

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2730245

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
KRISHNA DEVARAKONDA	05/30/2012
MICHAEL J. GIULIANI	05/30/2012
VISHAL K. GUPTA	06/15/2012
RALPH A. HEASLEY	05/30/2012
SUSAN SHELBY	05/31/2012

#### **RECEIVING PARTY DATA**

Name:	MALLINCKRODT LLC
Street Address:	675 MCDONNELL BOULEVARD
City:	HAZELWOOD
State/Country:	MISSOURI
Postal Code:	63042

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14132500

#### **CORRESPONDENCE DATA**

Fax Number:

Email: ipdocket@mayerbrown.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: VERA A. NACKOVIC
Address Line 1: 71 S. WACKER DRIVE
Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	13436813
NAME OF SUBMITTER:	VERA A. NACKOVIC
Signature:	/Vera A. Nackovic/
	PATENT

502683640 REEL: 032233 FRAME: 0022

Date:	02/18/2014
Total Attachments: 15 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif source=Assignment#page8.tif source=Assignment#page9.tif source=Assignment#page9.tif source=Assignment#page11.tif	02/18/2014
source=Assignment#page12.tif source=Assignment#page13.tif source=Assignment#page14.tif source=Assignment#page15.tif	

PATENT REEL: 032233 FRAME: 0023

#### ASSIGNMENT

WHEREAS, we, Krishna DEVARAKONDA, 1960 Marine Terrace Drive, Apt. E, St. Louis, in the state of Missouri, 63146, US, and Michael J. GIULIANI, 843 Deaver Lane, Creve Coeur, in the state of Missouri, 63141, US, and Vishal K. GUPTA, 1 Burniston Court, Hillsborough, in the state of New Jersey, 08844, US, and Ralph A. HEASLEY, 712 Florence Avenue, Webster Groves, in that state of Missouri, 63119, US, and Susan SHELBY, 13173 Bellerive Farm Drive, Creve Coeur, in the state of Missouri, 63141, US have invented the subject matter described in US Patent Applications disclosed herein as Exhibit A (hereafter, referred to as "invention").

WHEREAS, Mallinckrodt LLC of Hazelwood, Missouri, a limited liability company of the State of Delaware, is desirous of acquiring the entire right, title and interest of each of the abovenamed inventors in and to the invention and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, I do hereby sell, assign and transfer unto Mallinckrodt LLC, its successors and assigns, our entire right, title and interest in and to the invention, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any applications filed in any foreign country based thereon, including the right to file the foreign applications under the provisions of the International Convention; also any improvements on the invention now or hereafter made by me during the period of my employment; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon the invention and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon the invention or claim priority to the above-referenced patent applications for the invention in this or any foreign country; and we hereby authorize and request the issuing authority to issue any and all patents on the application(s) to Mallinckrodt LLC, as assignee of our entire interest.

I further agree, without any payment by Mallinckrodt LLC other than expenses incurred by the undersigned, to communicate to Mallinckrodt LLC, its representatives or agents, any fact relating to the invention, including evidence for interference purposes or for other legal proceedings, whenever requested; testify in any interference or other legal proceedings, whenever requested; and execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective.

Page 1 of 4

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my
signature.
(L.S.) Dated this 30th day of May 2012.  Krishna DEVARAKONDA
ACKNOWLEDGEMENT
On this 30 day of
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature.
(L.S.), Dated this day of, 2012.
ACKNOWLEDGEMENT
On this
N 1 12
Notary Public

Page 2 of 4

IN TESTIMONY WHEREOF, I	have hereunto set my hand	and seal on the da	te set after
my signature.			
(L.S.)Vishal K. GUPTA	, Dated this	day of	, 2012.
ACK	KNOWLEDGEMENT		
On this day of	cuted the foregoing instru- d. In testimony whereof I	ment, and acknow	vledge that he
	Notary Publi	c	
IN TESTIMONY WHEREOF, I my signature.	have hereunto set my hand	and seal on the da	ite set after
(L.S.)Ralph A. HEASLEY	, Dated this	day of	, 2012.
ACK	CNOWLEDGEMENT		
On this day of	e the person described in a ecuted the foregoing instru ed. In testimony whereof I	and who executed ment, and acknow	the foregoing wledge that he
	 Notary Publi	c	

Page 3 of 4

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature.

(L.S.) Susan Shelby, Dated this 3 and day of May, 2012.

### **ACKNOWLEDGEMENT**

NOTARY SEAL S

TAMMY GINN
My Commission Expires
April 19, 2015
St. Charles County
Commission #11175132

Page 4 of 4

REEL: 032233 FRAME: 0027

# **EXHIBIT A**

- U.S. Provisional Application no. 61/487,047 filed May 17, 2011 entitled "Pharmaceutical Composition Comprising Oxycodone and Acetaminophen" (ref. no. H-MP-00177.P1)
- U.S. Provisional Application no. 61/537,527 filed September 21, 2011 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P2)
- U.S. Provisional Application no. 61/606,850 filed March 5, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P3)
- U.S. Provisional Application no. 61/537,533 filed September 21, 2011 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P1)
- U.S. Provisional Application no. 61/606,896 filed March 5, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P2)
- U.S. Non-provisional Application no. 13/473,578 filed May 16, 2012 entitled "Tamper Resistant Composition Comprising Hydrocodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00213 US)
- U.S. Non-provisional Application no. 13/473,586 filed May 16, 2012 entitled "Pharmaceutical Compositions for Extended Release of Oxycodone and Acetaminophen Resulting in a Quick Onset and Prolonged Period of Analgesia" (ref. no. H-MP-00177 US)
- U.S. Non-provisional Application no. 13/473,563 filed May 16, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.A1 US)
- U.S. Non-provisional Application no. 13/473,584 filed May 16, 2012 entitled "Treatment of Pain with an Extended Release Opioid and Non Opioid Combination Composition" (ref. no. H-MP-00188 US)
- U.S. Non-provisional Application no. 13/473,571 filed May 16, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.A1 US)

PATENT REEL: 032233 FRAME: 0028

#### **ASSIGNMENT**

WHEREAS, we, Krishna DEVARAKONDA, 1960 Marine Terrace Drive, Apt. E, St. Louis, in the state of Missouri, 63146, US, and Michael J. GIULIANI, 843 Deaver Lane, Creve Coeur, in the state of Missouri, 63141, US, and Vishal K. GUPTA, I Burniston Court, Hillsborough, in the state of New Jersey, 08844, US, and Ralph A. HEASLEY, 712 Florence Avenue, Webster Groves, in that state of Missouri, 63119, US, and Susan SHELBY, 13173 Bellerive Farm Drive, Creve Coeur, in the state of Missouri, 63141, US have invented the subject matter described in US Patent Applications disclosed herein as Exhibit A (hereafter, referred to as "invention").

WHEREAS, Mallinckrodt LLC of Hazelwood, Missouri, a limited liability company of the State of Delaware, is desirous of acquiring the entire right, title and interest of each of the abovenamed inventors in and to the invention and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, I do hereby sell, assign and transfer unto Mallinckrodt LLC, its successors and assigns, our entire right, title and interest in and to the invention, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any applications filed in any foreign country based thereon, including the right to file the foreign applications under the provisions of the International Convention; also any improvements on the invention now or hereafter made by me during the period of my employment; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon the invention and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon the invention or claim priority to the above-referenced patent applications for the invention in this or any foreign country; and we hereby authorize and request the issuing authority to issue any and all patents on the application(s) to Mallinckrodt LLC, as assignee of our entire interest.

I further agree, without any payment by Mallinckrodt LLC other than expenses incurred by the undersigned, to communicate to Mallinckrodt LLC, its representatives or agents, any fact relating to the invention, including evidence for interference purposes or for other legal proceedings, whenever requested; testify in any interference or other legal proceedings, whenever requested; and execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective.

Page 1 of 4

signature.	WHEREOF, I liave i	icreditio set my ne	mic and scar	on the date set	arter my
(L.S.)	rishna DEVARAKO	Da	ted this	day of	, 2012.
	Δ.	CKNOWLEDGEN	MENT	•	
	A	<u>DKNO WEEDGE!</u>	VILTATI		
foregoing instrument that he executed the	day of  KONDA to me kn at, and acknowledge same as his free act day and year last abo	that he executed and deed. In test	the foregoin	ng instrument, a	ind acknowledge
		7	Notary Publi	c	
e.					
					·
my signature.	MONY WHEREOF,				
(L.S.) <u>Ø</u>	M. Quel S. ichael J. GYULIAN	alion, Da	ted this _ <del>}</del>	Aday of	19y , 2012.
	AC	CKNOWLEDGE	MENT		
Michael J. GIULIA instrument, and ack executed the same a	day of	o be the person dexecuted the foregoed. In testimon	escribed in a	and who execu ment, and ackr	nowledge that he
Motary Public State of Commissioned to	Y POKORNY - Notary Seal Massouri r St. Louis County pires: Jume 07, 2014	. · · · · · · · · · · · · · · · · · · ·	Oelica Notary Publi	Kay Pak	oury

Page 2 of 4

IN TESTIMONY WHEREOF, I have herew	nto set my hand	and seal on the date se	t after
my signature.			
(L.S.)	, Dated this	day of	, 2012.
Visnai K. GUPTA			
ACKNOWLED	<u>GEMENT</u>		
On this day of	foregoing instru	ment, and acknowled	ge that he
·	Notary Publi	c	
•			
	•		
IN TESTIMONY WHEREOF, I have hereu	nto set my hand	and seal on the date se	et after
my signature.			
(L.S.) Ralph A. HEASLEY	, Dated this <u>20</u>	Hday of May	2012.
ACKNOWLED	GEMENT		
<u>HOMIO WESE</u>	<u> </u>		
On this 30 day of Nay  Ralph A. HEASLEY to me known to be the perso instrument, and acknowledge that he executed the executed the same as his free act and deed. In testin official seal the day and year last above written. (Seal)	foregoing instru	ment, and acknowled	ge that he
SBRA KAY POKORNY THE PLANT SEAL STATE OF THE STATE OF ALSO HAS COUNTY TO LIGHT EXPIRES: June 07, 2014 TO SIGN Number: 10981963	Notary Publi	Kny Polon	4
DESPA KAY POKURNY Notery Public - Hotery Seel State of Missesser Commissioned for St. Louis County My Commission Expires: June 117, 2014 Commission Humber, 10801983			Page 3 of 4

IN TESTIM	ONY WHEREOF, I	have hereunto set my han	d and seal on the d	late set after
my signature.				
(L.S.)		, Dated this	day of	, 2012.
Sus	an SHELBY			
	ACI	KNOWLEDGEMENT		
Susan SHELBY to nstrument, and acknowledge	me known to be to owledge that he exc his free act and dec	, 2012 the person described in a ecuted the foregoing instr ed. In testimony whereof ritten.	and who executed ument, and ackno	d the foregoing owledge that he
		Notary Pub	olic	

Page 4 of 4

# **EXHIBIT A**

- U.S. Provisional Application no. 61/487,047 filed May 17, 2011 entitled "Pharmaceutical Composition Comprising Oxycodone and Acetaminophen" (ref. no. H-MP-00177.P1)
- U.S. Provisional Application no. 61/537,527 filed September 21, 2011 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P2)
- U.S. Provisional Application no. 61/606,850 filed March 5, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P3)
- U.S. Provisional Application no. 61/537,533 filed September 21, 2011 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P1)
- U.S. Provisional Application no. 61/606,896 filed March 5, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P2)
- U.S. Non-provisional Application no. 13/473,578 filed May 16, 2012 entitled "Tamper Resistant Composition Comprising Hydrocodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00213 US)
- U.S. Non-provisional Application no. 13/473,586 filed May 16, 2012 entitled "Pharmaceutical Compositions for Extended Release of Oxycodone and Acetaminophen Resulting in a Quick Onset and Prolonged Period of Analgesia" (ref. no. H-MP-00177 US)
- U.S. Non-provisional Application no. 13/473,563 filed May 16, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.A1 US)
- U.S. Non-provisional Application no. 13/473,584 filed May 16, 2012 entitled "Treatment of Pain with an Extended Release Opioid and Non Opioid Combination Composition" (ref. no. H-MP-00188 US)
- U.S. Non-provisional Application no. 13/473,571 filed May 16, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.A1 US)

PATENT REEL: 032233 FRAME: 0033

#### ASSIGNMENT

WHEREAS, we, Krishna DEVARAKONDA, 1960 Marine Terrace Drive, Apt. E, St. Louis, in the state of Missouri, 63146, US, and Michael J. GIULIANI, 843 Deaver Lane, Creve Coeur, in the state of Missouri, 63141, US, and Vishal K. GUPTA, 1 Burniston Court, Hillsborough, in the state of New Jersey, 08844, US, and Ralph A. HEASLEY, 712 Florence Avenuc, Webster Groves, in that state of Missouri, 63119, US, and Susan SHELBY, 13173 Bellerive Farm Drive, Creve Coeur, in the state of Missouri, 63141, US have invented the subject matter described in US Patent Applications disclosed herein as Exhibit A (hereafter, referred to as "invention").

WHEREAS, Mallinckrodt LLC of Hazelwood, Missouri, a limited liability company of the State of Delaware, is desirous of acquiring the entire right, title and interest of each of the abovenamed inventors in and to the invention and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, I do hereby sell, assign and transfer unto Mallinckrodt LLC, its successors and assigns, our entire right, title and interest in and to the invention, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any applications filed in any foreign country based thereon, including the right to file the foreign applications under the provisions of the International Convention; also any improvements on the invention now or hereafter made by me during the period of my employment; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon the invention and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon the invention or claim priority to the above-referenced patent applications for the invention in this or any foreign country; and we hereby authorize and request the issuing authority to issue any and all patents on the application(s) to Mallinckrodt LLC, as assignee of our entire interest.

I further agree, without any payment by Mallinckrodt LLC other than expenses incurred by the undersigned, to communicate to Mallinckrodt LLC, its representatives or agents, any fact relating to the invention, including evidence for interference purposes or for other legal proceedings, whenever requested; testify in any interference or other legal proceedings, whenever requested; and execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective.

Page 1 of 4

IN TESTIMONY WHEREOF, I have here signature.	eunto set my hand and seal	on the date set at	ter my
(L.S.) Krishna DEVARAKON	, Dated this	day of	, 2012.
ACK	NOWLEDGEMENT		
On this day of	at he executed the foregoned the deed. In testimony when	ng instrument, an	a acknowledge
	Notary Publ	ic	
IN TESTIMONY WHEREOF, I my signature.	have hereunto set my hand	and seal on the d	ate set after
(L.S.)	, Dated this	day of	, 2012,
ACK	KNOWLEDGEMENT		
On this day of	be the person described in ecuted the foregoing instru ed. In testimony whereof	and who execute ument, and acknowledge	whedge that he
	Notary Pub	lic	

Page 2 of 4

IN TESTIMONY WHEREOF, I have hereur	nto set my hand and seal on the date set after	
my signature.		
(L.S.) Vishal Rupta  Vishal K. GUPTA	, Dated this 15th day of June, 2012.	
ACKNOWLEDGEMENT		
On this 15th day of 16th Vishal K. GUPTA to me known to be the person instrument, and acknowledge that he executed the f executed the same as his free act and deed. In testin official seal the day and year last above written. (Seal)	foregoing instrument, and acknowledge that he	
	Notary Public	
	Tara Sutton Notary Public New Jersey	
IN TESTIMONY WHEREOF, I have hereur my signature.	nto set my hand and seal on the date set after	
(L.S.) Ralph A. HEASLEY	, Dated this day of, 2012.	
ACKNOWLED	GEMENT	
On this day of	foregoing instrument, and acknowledge that he	
	Notary Public	

Page 3 of 4

IN TESTIMONY WHEREO	F, I have hereunto set my hand and seal on the c	late set after
my signature.		
(L.S.)Susan SHELBY	, Dated this day of	, 2012.
4	<u>ACKNOWLEDGEMENT</u>	
Susan SHELBY to me known to binstrument, and acknowledge that he	2012, before me person be the person described in and who executed executed the foregoing instrument, and acknowledged. In testimony whereof I have hereunto see written.	d the foregoing owledge that he
	Notary Public	

Page 4 of 4

# **EXHIBIT A**

- U.S. Provisional Application no. 61/487,047 filed May 17, 2011 entitled "Pharmaceutical Composition Comprising Oxycodone and Acetaminophen" (ref. no. H-MP-00177.P1)
- U.S. Provisional Application no. 61/537,527 filed September 21, 2011 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P2)
- U.S. Provisional Application no. 61/606,850 filed March 5, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.P3)
- U.S. Provisional Application no. 61/537,533 filed September 21, 2011 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P1)
- U.S. Provisional Application no. 61/606,896 filed March 5, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.P2)
- U.S. Non-provisional Application no. 13/473,578 filed May 16, 2012 entitled "Tamper Resistant Composition Comprising Hydrocodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00213 US)
- U.S. Non-provisional Application no. 13/473,586 filed May 16, 2012 entitled "Pharmaceutical Compositions for Extended Release of Oxycodone and Acetaminophen Resulting in a Quick Onset and Prolonged Period of Analgesia" (ref. no. H-MP-00177 US)
- U.S. Non-provisional Application no. 13/473,563 filed May 16, 2012 entitled "Combination Composition Comprising Oxycodone and Acetaminophen for Rapid Onset and Extended Duration of Analgesia" (ref. no. H-MP-00177.A1 US)
- U.S. Non-provisional Application no. 13/473,584 filed May 16, 2012 entitled "Treatment of Pain with an Extended Release Opioid and Non Opioid Combination Composition" (ref. no. H-MP-00188 US)
- U.S. Non-provisional Application no. 13/473,571 filed May 16, 2012 entitled "Gastric Retentive Extended Release Pharmaceutical Compositions" (ref. no. H-MP-00188.A1 US)

PATENT REEL: 032233 FRAME: 0038

**RECORDED: 02/18/2014**