PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Christopher W. Grote	06/17/2009
Gary L. Cantrell	06/18/2009
Joseph P. McClurg	06/23/2009
Catherine E. Thomasson	06/22/2009

RECEIVING PARTY DATA

Name:	Mallinckrodt Inc.
Street Address:	675 McDonnell Boulevard
City:	Hazelwood
State/Country:	MISSOURI
Postal Code:	63042

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12797642

CORRESPONDENCE DATA

Fax Number: (314)654-3156

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

Phone: 314-654-3960

Email: tammy.ginn@covidien.com

Correspondent Name: Mallinckrodt Inc.

Address Line 1: 675 McDonnell Boulevard

Address Line 4: HAZELWOOD, MISSOURI 63042

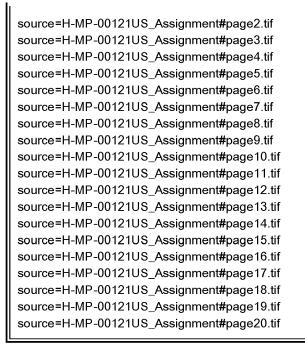
ATTORNEY DOCKET NUMBER:	H-MP-00121 US ASG PHARMA
NAME OF SUBMITTER:	Craig D. Siman

Total Attachments: 20

source=H-MP-00121US_Assignment#page1.tif

PATENT REEL: 024513 FRAME: 0361 12/9/642

501200599



PATENT REEL: 024513 FRAME: 0362

WHEREAS, we, Christopher W. GROTE, 1420 Gardenia Drive, Webster Groves, in the state of Missouri, 63119, USA, and Gary L. CANTRELL, 509 Lakewood Drive, Troy, in the state of Illinois, 62294, USA, and Joseph P. MCCLURG, 415 Ranch Drive, Manchester, in the state of Missouri, 63011, USA, and Catherine E. THOMASSON, 456 Forest Green Drive, Webster Groves, in the state of Missouri, 63119, USA, and Frank W. MOSER, 3896 Petrified Forest Drive, Arnold, in the state of Missouri, 63010, USA, have invented the subject matter described in US provisional patent application serial no. 61/186,091 entitled PREPARATION OF 6-ALPHA-AMINO N-SUBSTITUTED MORPHINANS BY CATALYTIC HYDROGEN TRANSFER and filed in the United States Patent and Trademark Office on June 11, 2009 (hereafter, the "invention").

WHEREAS, Mallinckrodt Inc. of Hazelwood, Missouri, a corporation of the State of Delaware, is desirous of acquiring the entire right, title and interest of each of the above-named inventors in and to the invention and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, we do hereby sell, assign and transfer unto Mallinckrodt Inc., 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 application 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 Inc., as assignee of our entire interest.

We further agree, without any payment by Mallinckrodt Inc. other than expenses incurred by the undersigned, to communicate to Mallinckrodt Inc., 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 I of 4

IN TESTIMONY WHEREOF, I have hered	unto set my hand and seal on the date set after
(L.S.) Kustopher W. Low Christopher W. GROTE	_, Dated this _17 day of _Tune, 2009.
ACKNOWLE	DGEMENT
Christopher W. GROTE to me known to be foregoing instrument, and acknowledge that he executed the same as his free act and deed. I and official seal the day and year last above written. (Seal)	cuted the foregoing instrument, and acknowledge in testimony whereof I have hereunto set my hand
Notary Public - Notary Seal State of Missouri, Jefferson County Commission # 08388358 My Commission Expires Feb 26, 2012	Notary Public
	eunto set my hand and seal on the date set after
my signature.	
(L.S.) Gary L. CANTRELL	, Dated this day of, 2009.
ACKNOWLE	DGEMENT
On this day of	e foregoing instrument, and acknowledge that he
·	Notary Public

IN TESTIMONY WHEREOF, I ha	ave hereunto set my hand	dand seal on the d	late set after
my signature.			
(L.S.) Joseph P. MCCLURG	, Dated this	day of	, 2009.
ACKN	OWLEDGEMENT		
On this day of	uted the foregoing instr . In testimony whereof	ument, and ackin	imicage mar ne
	Notary Pub	lic	
IN TESTIMONY WHEREOF, I have my signature.	ave hereunto set my han	d and seal on the	date s et a fter
(L.S.)Catherine E. THOMASS	, Dated this SON	day of	, 2009.
<u>ACK1</u>	NOWLEDGEMENT		
On this day of	own to be the person de at he executed the foregod d deed. In testimony wh	escribed in and wo bing instrument, a	no executed the and acknowledge
	Notary Pul	blic	

IN TESTIM	ONY WHEREOF, I h	ave hereunto set my hand	l and seal on the d	late set after
my signature.				
(L.S.)Fra	nk W. MOSER	, Dated this	day of	, 2009.
	<u>ACK)</u>	NOWLEDGEMENT		
Frank W. MOSER instrument, and ackne executed the same as	to me known to be owledge that he exec	, 2009, the person described in cuted the foregoing instr l. In testimony whereof tten.	and who execute ument, and ackno	d the foregoing owledge that he
÷		Notary Pub	lic	

Page 4 of 4

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NOW, THEREFORE, for good and valuable consideration, we do hereby sell, assign and transfer unto Mallinckrodt Inc., 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 application 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 Inc., as assignee of our entire interest.

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Page I of 4

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the da	ite set after
my signature.	
(L.S.), Dated this day of	, 2009.
ACKNOWLEDGEMENT	
On this	d acknowledge
Notary Public	
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the d	ate set after
(L.S.) Gary L. CANTRELL Dated this 18 day of	<u>1308</u> , 2009.
ACKNOWLEDGEMENT	
On this Bah day of June, 2009, before me person described in and who execute instrument, and acknowledge that he executed the foregoing instrument, and acknowledge that he executed the foregoing instrument, and acknowledge that he executed the same as his free act and deed. In testimony whereof I have hereunto so official seal the day and year last above written. (Seal)	wledge that he
SHANNON N. KINCANNON Notary Public - Notary Seal State of Missouri, Jefferson County Commission # 08388358 My Commission Expires Feb 26, 2012	men

IN TESTIMONY WHEREOF, I have	ve hereunto set my hand	and seal on the d	ate set after
my signature.			
(L.S.) Joseph P. MCCLURG	, Dated this	day of	, 2009.
ACKNO	OWLEDGEMENT		
On this day of	ted the foregoing instri In testimony whereof	ument, and ackin	wiedge mai ne
	Notary Pub	lic	
IN TESTIMONY WHEREOF, I ham my signature.	ve hereunto set my han	d and seal on the o	date set after
(L.S.)Catherine E. THOMASS	, Dated this ON	day of	, 2009.
ACKN	OWLEDGEMENT		
On this day of	wn to be the person de the executed the forego deed. In testimony wh	escribed in and wo	no executed the ind acknowledge
	Notary Pul	blic	
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H-MP-00121,P1 US

PATENT REEL: 024513 FRAME: 0369

IN TESTIMONY WHEREO	F, I have hereunto set my hand	l and seal on the d	ate set after
my signature.			
(L.S.)	, Dated this	day of	, 2009.
Frank W. MOSER			
	<u>ACKNOWLEDGEMENT</u>		
On this day of	to be the person described in executed the foregoing instract deed. In testimony whereof	and who execute ument, and acknown	whedge that he
	Notary Pub	olic	

Page 4 of 4

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Page 1 of 4

IN TESTIMONY WHEREOF, I have I	hereunto set my hand	and seal on the da	ite set after
my signature.			
(L.S.)Christopher W. GROTE	, Dated this	day of	, 2009.
ACKNOV	VLEDGEMENT		
On this day of	executed the forego ed. In testimony who	mg mstrumem, an	u aumiowicugo
	Notary Pub	lie	
IN TESTIMONY WHEREOF, I have my signature.	hereunto set my han	d and seal on the d	late set after
(L.S.)Gary L. CANTRELL	, Dated this	day of	, 2009.
<u>ACKNO</u>	WLEDGEMENT		
On this day of	e person described in d the foregoing inst n testimony whereof	n and who execute rument, and acknowledge	ed the foregoing owledge that he
	Notary Pu	blic	

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after
my signature. (L.S.) Joseph P. MCCLURG Dated this 23 day of June, 2009.
<u>ACKNOWLEDGEMENT</u>
On this 23 day of, 2009, before me personally appeared Joseph P. MCCLURG to me known to be the person described in and who executed the foregoing instrument, and acknowledge that he executed the foregoing instrument, and acknowledge that he executed the same as his free act and deed. In testimony whereof I have hereunto set my hand and official seal the day and year last above written. (Seal)
SHANNON N. KINCANNON Notary Public - Notary Seal State of Missouri, Jefferson County Commission # 08388358 My Commission Expires Feb 26, 2012 SHANNON N. KINCANNON Warnon O. Kuncannon Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after
my signature.
(L.S.), Dated this day of, 2009. Catherine E. THOMASSON
ACKNOWLEDGEMENT
On this
Notary Public

IN TESTIMON	WHEREOF, I have hereunto set my hand and seat	on the date set after
my signature.		
(L.S.)	, Dated this day o	of, 2009.
Frank	V. MOSER	
	ACKNOWLEDGEMENT	
Frank W. MOSER to	ay of	nd acknowledge that he
	Notary Public	

Page 4 of 4

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Page 1 of 4

IN TESTIMONY WHERE	EOF, I have hereunto set my hand and seal on the date set aft	er
my signature.		
(L.S.)Christopher W. (, Dated this day of	2009.
	ACKNOWLEDGEMENT	
formation instrument and acknowle	, 2009, before me personally apple known to be the person described in and who executed edge that he executed the foregoing instrument, and acknowle act and deed. In testimony whereof I have hereunto set my st above written.	wiedze.
	Notary Public	
IN TESTIMONY WHER my signature.	EOF, I have hereunto set my hand and seal on the date set at	fter
(L.S.)Gary L. CANTE	, Dated this day of,	2009.
	ACKNOWLEDGEMENT	
Gary L. CANTRELL to me knowledge that	, 2009, before me personally approximate to be the person described in and who executed the form the executed the foregoing instrument, and acknowledge and deed. In testimony whereof I have hereunto set my happened written.	regoing that he
	Notary Public	

IN TESTIMONY WHEREOF, I have hereu	into set my hand	and seal on the o	late set after
my signature.			
Joseph P. MCCLURG	_, Dated this	day of	, 2009.
ACKNOWLEI	OGEMENT		
On this day of	foregoing instru	imeni, and ackn	Owledge mar ne
	Notary Publ	ic	
IN TESTIMONY WHEREOF, I have here my signature.			
(L.S.) <u>Catherine E. THOMASSON</u>	10.200 ted this 2	Lassay of Je	<u>, 2009.</u>
<u>ACKNOWLE</u>	DGEMENT		
On this 22 day of Catherine E. THOMASSON to me known to be foregoing instrument, and acknowledge that he executed the same as his free act and deed. and official seal the day and year last above written. (Seal)	e the person de cuted the forego In testimony wh	scribed in and voing instrument,	and acknowledge
SHANNON N. KINCANNON Notary Public - Notary Seal State of Missouri, Jefferson County Commission # 08388358 My Commission Expires Feb 26, 2012	<u> Moon</u> Notary Pub	ion W. Ku	ncannon

IN TESTIMONY WHEF	REOF, I have hereunto set my hand and seal on the date	e set after
my signature.		
(L.S.) Frank W. MOS	Dated this day of	, 2009.
	ACKNOWLEDGEMENT	
Frank W. MOSER to me know instrument and acknowledge that	, 2009, before me persona with the executed the foregoing instrument, and acknow and deed. In testimony whereof I have hereunto set above written.	ledge that he
	Notary Public	

Page 4 of 4

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my signature.			
(L.S.) Christopher W. GRO	TE, Dated this	day of	, 2009.
AC	KNOWLEDGEMENT		
On this day of Christopher W. GROTE to me kno foregoing instrument, and acknowledge t that he executed the same as his free act a and official seal the day and year last abo (Seal)	that he executed the forego and deed. In testimony who	ing instrument, an	id acknowledge
	Notary Pub	lic	
IN TESTIMONY WHEREOF, my signature.			
(L.S.)Gary L. CANTRELL	, Dated this	day of	, 2009.
AC	CKNOWLEDGEMENT		
On this day of	be the person described in xecuted the foregoing inst eed. In testimony whereof	n and who execute rument, and ackn	owledge that he
	Notary Pu	blic	

IN TESTIMONY WHEREOF, I have homy signature.	ereunto set my hand	and seal on the d	ate set after
Joseph P. MCCLURG	, Dated this	day of	, 2009.
<u>ACKNOW</u>	<u>LEDGEMENT</u>		
On this day of	the foregoing insur	umeni, and acidic	Wicago mac no
	Notary Pub	lie	
IN TESTIMONY WHEREOF, I have I my signature.	nereunto set my han	d and seal on the	date set after
(L.S.)Catherine E. THOMASSON	, Dated this	day of	, 2009.
ACKNOW	VLEDGEMENT		
On this day of	executed the foregood. In testimony wh	օլրջ լրչյրատետ, գ	mu acknownedge
	Notary Pu	blic	

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature. Dated this 19th day of June , 2009. **ACKNOWLEDGEMENT** On this 1944 day of June, 2009, before me personally appeared Frank W. MOSER to me known to be the person described in and who executed the foregoing instrument, and acknowledge that he executed the foregoing instrument, and acknowledge that he executed the same as his free act and deed. In testimony whereof I have hereunto set my hand and official seal the day and year last above written. (Seal) SHANNON N. KINCANNON Notary Public - Notary Seal State of Missouri, Jefferson County

Commission # 08388358 My Commission Expires Feb 26, 2012

Page 4 of 4

H-MP-00121.PI US

RECORDED: 06/10/2010

PATENT REEL: 024513 FRAME: 0382