

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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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  
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**CH \$40.00 12797642**

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**PATENT  
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## ASSIGNMENT

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.

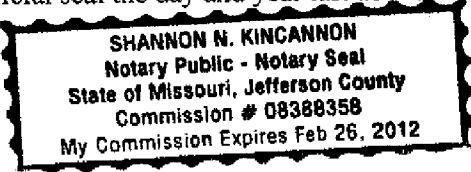
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature.

(L.S.) Christopher W. Grote, Dated this 17 day of June, 2009.  
Christopher W. GROTE

ACKNOWLEDGEMENT

On this 17<sup>th</sup> day of June, 2009, before me personally appeared Christopher W. GROTE 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

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.  
Gary L. CANTRELL

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared Gary L. CANTRELL 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)

\_\_\_\_\_  
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.  
**Joseph P. MCCLURG**

ACKNOWLEDGEMENT

On this \_\_\_\_ 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)

\_\_\_\_\_  
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 \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Catherine E. THOMASSON** 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)

\_\_\_\_\_  
Notary Public

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(L.S.) \_\_\_\_\_, Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2009.  
**Frank W. MOSER**

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 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.  
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Notary Public

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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.

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.

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.  
Christopher W. GROTE

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared Christopher W. GROTE 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)

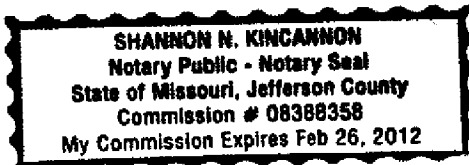
\_\_\_\_\_  
Notary Public

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

(L.S.) Gary L. Cantrell Dated this 18<sup>th</sup> day of June, 2009.  
Gary L. CANTRELL

ACKNOWLEDGEMENT

On this 18<sup>th</sup> day of June, 2009, before me personally appeared Gary L. CANTRELL 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



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.  
**Joseph P. MCCLURG**

ACKNOWLEDGEMENT

On this \_\_\_\_ 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)

\_\_\_\_\_  
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 \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Catherine E. THOMASSON** 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.  
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Notary Public

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(L.S.) \_\_\_\_\_, Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2009.  
**Frank W. MOSER**

ACKNOWLEDGEMENT

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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.  
**Christopher W. GROTE**

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(Seal)

\_\_\_\_\_  
Notary Public

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(L.S.) \_\_\_\_\_, Dated this \_\_\_\_ day of \_\_\_\_\_, 2009.  
**Gary L. CANTRELL**

ACKNOWLEDGEMENT

On this \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Gary L. CANTRELL** 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.  
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\_\_\_\_\_  
Notary Public

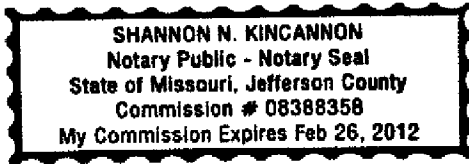
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature.

(L.S.) Joseph P. McClurg, Dated this 23 day of June, 2009.  
Joseph P. MCCLURG

ACKNOWLEDGEMENT

On this 23 day of June, 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

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Catherine E. THOMASSON

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Catherine E. THOMASSON** 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.

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**Frank W. MOSER**

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\_\_\_\_\_  
Notary Public

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**Christopher W. GROTE**

ACKNOWLEDGEMENT

On this \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Christopher W. GROTE** 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.  
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Notary Public

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**Gary L. CANTRELL**

ACKNOWLEDGEMENT

On this \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Gary L. CANTRELL** 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.  
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Notary Public



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**Joseph P. MCCLURG**

ACKNOWLEDGEMENT

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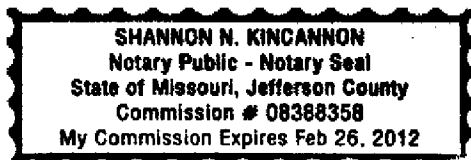
\_\_\_\_\_  
Notary Public

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

(L.S.) Catherine E. Thomasson Dated this 22nd day of June, 2009.  
**Catherine E. THOMASSON**

ACKNOWLEDGEMENT

On this 22 day of June, 2009, before me personally appeared **Catherine E. THOMASSON** 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.  
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Shannon N. Kincannon  
Notary Public

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**Frank W. MOSER**

ACKNOWLEDGEMENT

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**Christopher W. GROTE**

ACKNOWLEDGEMENT

On this \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Christopher W. GROTE** 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)

\_\_\_\_\_  
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.  
**Gary L. CANTRELL**

ACKNOWLEDGEMENT

On this \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Gary L. CANTRELL** 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)

\_\_\_\_\_  
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.  
**Joseph P. MCCLURG**

ACKNOWLEDGEMENT

On this \_\_\_\_ 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)

\_\_\_\_\_  
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 \_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared **Catherine E. THOMASSON** 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)

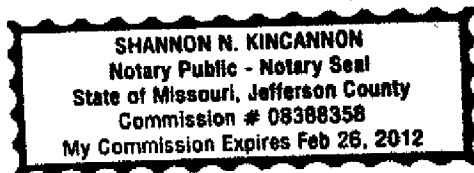
\_\_\_\_\_  
Notary Public

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

(L.S.) Frank W Moser, Dated this 19<sup>th</sup> day of June, 2009.  
Frank W. MOSER

ACKNOWLEDGEMENT

On this 19<sup>th</sup> 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