PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Esa T. Jarvi | 10/31/2008 |
| James R. Meyer | 10/27/2008 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 12586854 | |

CORRESPONDENCE DATA

Fax Number: (314)654-3156

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

Phone: 3146543960

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-00103US ASG PHARMA | |
|-------------------------|-------------------------|--|
| NAME OF SUBMITTER: | Craig D. Siman | |

Total Attachments: 4

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PATENT REEL: 023395 FRAME: 0171

ASSIGNMENT

WHEREAS, we, Esa JARVI, 1703 Warmington Ct., Ballwin, in the state of Missouri, 63021, USA, and James R. MEYER, 450 Brownbert Lane, St. Louis, in the state of Missouri, 63119, USA, have invented the subject matter described in US provisional patent application serial no. 61/194,784 entitled PROCESSES FOR THE ALKYLATION OF NORBUPRENORPHINE WITH REDUCED IMPURITY FORMATION and filed in the United States Patent and Trademark Office on September 30, 2008 (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 2

| IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after |
|---|
| my signature. |
| (L.S.) Esa JARVI , Dated this 31 day of oct , 2008. |
| ACKNOWLEDGEMENT |
| On this 35t day of |
| (Seal) Cheryl M Niehoff Notary Public Notary Seal State of Missouri County of St. Louis My Commission Expires 03/28/2010 Commission #06860362 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, 2008. James R. MEYER |
| ACKNOWLEDGEMENT |
| On this day of, 2008, before me personally appeared James R. MEYER 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 |

Page 2 of 2

ASSIGNMENT

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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 2

| IN TESTIMONY WHEREOF, I have | hereunto set my hand | and seal on the da | ate set after | |
|--|---|------------------------------------|--------------------------------|--|
| my signature. | | | | |
| (L.S.)Esa JARVI | , Dated this | day of | , 2008. | |
| ACKNO | WLEDGEMENT | | | |
| On this day of | strument, and acknov | vledge that he exe | cuted the same | |
| | Notary Publ | ic | | |
| IN TESTIMONY WHEREOF, I have my signature. (L.S.) AMUN R. MEYER James R. MEYER | , | | | |
| ACKNOWLEDGEMENT | | | | |
| On this 21th day of October James R. MEYER to me known to be the instrument, and acknowledge that he executed executed the same as his free act and deed. In official seal the day and year last above written (Seal) | person described in d the foregoing instr n testimony whereof | and who executed ument, and acknor | l the foregoing wledge that he | |
| Cheryl M Niehoff Notary Public Notary Seal State of Missouri County of St. Louis My Commission #26860362 | | M. Michopp lic | | |

Page 2 of 2

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RECORDED: 10/20/2009

PATENT REEL: 023395 FRAME: 0175