

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Duane L. Horton</td> <td>01/09/2007</td> </tr> <tr> <td>Andrew D. Speth</td> <td>11/14/2006</td> </tr> </tbody> </table>		Name	Execution Date	Duane L. Horton	01/09/2007	Andrew D. Speth	11/14/2006				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Mallinckrodt LLC</td> </tr> <tr> <td>Street Address:</td> <td>675 McDonnell Boulevard</td> </tr> <tr> <td>City:</td> <td>Hazelwood</td> </tr> <tr> <td>State/Country:</td> <td>MISSOURI</td> </tr> <tr> <td>Postal Code:</td> <td>63042</td> </tr> </table>		Name:	Mallinckrodt LLC	Street Address:	675 McDonnell Boulevard	City:	Hazelwood	State/Country:	MISSOURI	Postal Code:	63042
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CORRESPONDENCE DATA											
<p>Fax Number: 314-612-23  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 314-621-5070</p> <p>Email: USpatents@armstrongteasdale.com,        clager@armstrongteasdale.com</p> <p>Correspondent Name: Patent Docket Department Armstrong Teasd</p> <p>Address Line 1: 7700 Forsyth Boulevard</p> <p>Address Line 2: Suite 1800</p> <p>Address Line 4: St. Louis, MISSOURI 63105</p>											
ATTORNEY DOCKET NUMBER:	27910-376 (H-MI-00148.C1)										
NAME OF SUBMITTER:	Michael G. Munsell										
Signature:	/Michael G. Munsell/										

Date:

09/13/2013

**Total Attachments: 4**

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## ASSIGNMENT

WHEREAS, we, Duane L. HORTON 4401 Gray Haven, St. Louis, in the state of Missouri, 63128, USA, and Andrew D. SPETH, 7028 Holly Hills, St. Louis, in the state of Missouri, 63123, USA, have invented a new and improved **SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM** identified as Case No. H-MI-00148.P1 US, and described in US provisional patent application no. 60/849,869 as filed in the United States Patent and Trademark Office on October 6, 2006.

WHEREAS, Mallinckrodt Inc. of St. Louis, Missouri, a corporation of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, we do hereby sell, assign and transfer unto said Mallinckrodt Inc., its successors and assigns, the entire right, title and interest in and to said invention or inventions, 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 said foreign applications under the provisions of the International Convention; also any improvements on said invention or inventions 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 said invention, inventions, or improvements and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention, inventions, or improvements in this or any foreign country; and I hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said Mallinckrodt Inc., as assignee of the entire interest.

I further agree, without any payment by Mallinckrodt Inc. other than expenses incurred by the undersigned, to communicate to said Mallinckrodt Inc., its representatives or agents, any fact relating to said inventions, inventions or improvements, 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.) Duane L. Horton, Dated this 9 day of Jan, <sup>DLH</sup>~~2006~~<sup>2007</sup>

Duane L. HORTON

ACKNOWLEDGEMENT

On this 9 day of January, <sup>7</sup>~~2006~~, before me personally appeared Duane L. HORTON 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)



STEPHANIE KARDASZ  
My Commission Expires  
October 16, 2009  
St. Louis County  
Commission #05505725

Stephanie Kardasz  
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 \_\_\_\_\_, 2006.

Andrew D. SPETH

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 2006, before me personally appeared Andrew D. SPETH 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

## ASSIGNMENT

WHEREAS, we, Duane L. HORTON 4401 Gray Haven, St. Louis, in the state of Missouri, 63128, USA, and Andrew D. SPETH, 7028 Holly Hills, St. Louis, in the state of Missouri, 63123, USA, have invented a new and improved **SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM** identified as Case No. H-MI-00148.P1 US, and described in US provisional patent application no. 60/849,869 as filed in the United States Patent and Trademark Office on October 6, 2006.

WHEREAS, Mallinckrodt Inc. of St. Louis, Missouri, a corporation of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, we do hereby sell, assign and transfer unto said Mallinckrodt Inc., its successors and assigns, the entire right, title and interest in and to said invention or inventions, 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 said foreign applications under the provisions of the International Convention; also any improvements on said invention or inventions 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 said invention, inventions, or improvements and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention, inventions, or improvements in this or any foreign country; and I hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said Mallinckrodt Inc., as assignee of the entire interest.

I further agree, without any payment by Mallinckrodt Inc. other than expenses incurred by the undersigned, to communicate to said Mallinckrodt Inc., its representatives or agents, any fact relating to said inventions, inventions or improvements, 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 \_\_\_\_\_, 2006.  
**Duane L. HORTON**

ACKNOWLEDGEMENT

On this \_\_\_\_\_ day of \_\_\_\_\_, 2006, before me personally appeared **Duane L. HORTON** 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)

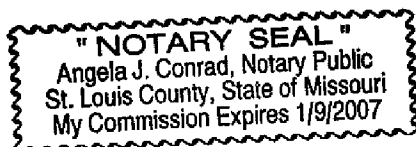
\_\_\_\_\_  
Notary Public

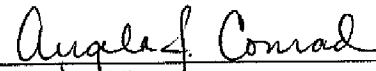
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal on the date set after my signature.

(L.S.)  \_\_\_\_\_, Dated this 14 day of November, 2006.  
**Andrew D. SPETH**

ACKNOWLEDGEMENT

On this 14<sup>th</sup> day of November, 2006, before me personally appeared **Andrew D. SPETH** 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