

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
<b>CONVEYING PARTY DATA</b>															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Palmer David Updyke</td> <td>08/19/2010</td> </tr> <tr> <td>Harold Frederick Sandford</td> <td>08/20/2010</td> </tr> <tr> <td>Benjamin Joseph Lipps</td> <td>08/20/2010</td> </tr> <tr> <td>Douglas Mark Zatezalo</td> <td>08/27/2010</td> </tr> <tr> <td>Michael James Beiriger</td> <td>08/27/2010</td> </tr> <tr> <td>James Matthew Mullner</td> <td>09/02/2010</td> </tr> </tbody> </table>		Name	Execution Date	Palmer David Updyke	08/19/2010	Harold Frederick Sandford	08/20/2010	Benjamin Joseph Lipps	08/20/2010	Douglas Mark Zatezalo	08/27/2010	Michael James Beiriger	08/27/2010	James Matthew Mullner	09/02/2010
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<b>RECEIVING PARTY DATA</b>															
Name:	Fresenius Medical Care Holdings, Inc.														
Street Address:	920 Winter St.														
City:	Waltham														
State/Country:	MASSACHUSETTS														
Postal Code:	02451-1457														
<b>PROPERTY NUMBERS Total: 1</b>															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12844968</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12844968										
Property Type	Number														
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<b>CORRESPONDENCE DATA</b>															
Fax Number:	(877)769-7945														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	(617) 542-5070														
Email:	HECTOR@fr.com														
Correspondent Name:	Michael R. Hamlin														
Address Line 1:	FISH & RICHARDSON P.C.														
Address Line 2:	P.O.BOX 1022														
Address Line 4:	MINNEAPOLIS, MINNESOTA 55440-1022														
ATTORNEY DOCKET NUMBER:	24275-0028001														

**501307100**

**PATENT  
 REEL: 025071 FRAME: 0336**

NAME OF SUBMITTER:

Karen Hector

**Total Attachments: 7**

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ASSIGNMENT

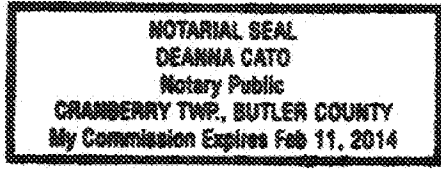
For valuable consideration, we, Palmer David Updyke, of 535 Monmouth Court, Walnut Creek, CA 94598; Harold Frederick Sandford, of 15 High Oaks Path, Groton, MA 01450; Benjamin Joseph Lipps, of 500 Atlantic Avenue, Unit 14-L, Boston, MA 02210; Douglas Mark Zatezalo, of 2912 Clearview Road, Allison Park, PA 15101; Michael James Beiriger, of 241 Carriage Blvd., Pittsburgh, PA 15239; and James Matthew Mullner, of 7636 Oxgate Ct., Hudson, OH 44236; hereby assign to FRESENIUS MEDICAL CARE HOLDINGS, INC., a corporation of New York, having a place of business at 920 Winter St., Waltham, MA 02451-1457, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled DIALYSIS SYSTEMS AND METHODS, filed July 28, 2010, and assigned U.S. Serial Number 12/844,968, this assignment including said applications, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said applications under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at WARRENDALE, PA  
this 19<sup>TH</sup> day of AUGUST, 2010  
Palmer David Updyke L.S.  
PALMER DAVID UPDYKE

State of PENNSYLVANIA :  
: ss.

County of BUTLER :

Before me this 19 day of August, 2010, personally appeared  
PALMER DAVID UPDYKE known to me to be the person whose name is subscribed to the  
foregoing Assignment and acknowledged that he executed the same as his free act and deed for  
the purposes therein contained.



Deanna Cato  
Notary Public  
My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at Dorchester, Massachusetts  
this 20 day of August, 2010  
Harold Frederick Sandford L.S.  
HAROLD FREDERICK SANDFORD

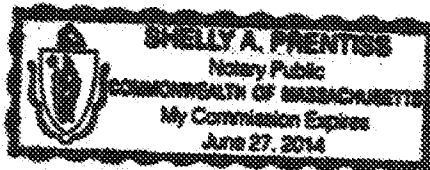
State of Massachusetts  
: ss.

County of Middlesex :

Before me this 20 day of August, 2010, personally appeared  
HAROLD FREDERICK SANDFORD known to me to be the person whose name is subscribed  
to the foregoing Assignment and acknowledged that he executed the same as his free act and  
deed for the purposes therein contained.

Shelly A. Prentiss  
Notary Public  
My Commission Expires: June 27, 2014

[Notary's Seal Here]



IN WITNESS WHEREOF, I hereto set my hand and seal at  Newport Beach, CA   
this  20<sup>th</sup>  day of  August , 2010  
 Ben Joseph Lipps  L.S.  
BENJAMIN JOSEPH LIPPS

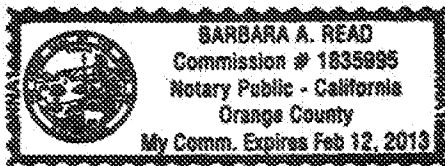
State of  CALIFORNIA  :  
: ss.  
County of  ORANGE  :

Before me this  20<sup>th</sup>  day of  August , 2010, personally appeared  
 BENJAMIN JOSEPH LIPPS  known to me to be the person whose name is subscribed to the  
foregoing Assignment and acknowledged that he executed the same as his free act and deed for  
the purposes therein contained.

Barbara A. Read   
Notary Public

My Commission Expires:  February 12, 2013

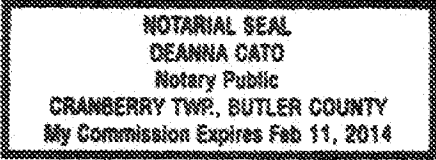
[Notary's Seal Here]



IN WITNESS WHEREOF, I hereto set my hand and seal at 770 Commonwealth Drive,  
this 27 day of August, 2010  
Douglas Mark Zatezalo L.S.  
DOUGLAS MARK ZATEZALO

State of Pennsylvania :  
: ss.  
County of Butler :

Before me this 27 day of August, 2010, personally appeared  
DOUGLAS MARK ZATEZALO known to me to be the person whose name is subscribed to the  
foregoing Assignment and acknowledged that he executed the same as his free act and deed for  
the purposes therein contained.



Deanna Cato  
Notary Public  
My Commission Expires: 2/11/14

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 770 Commonwealth Dr.  
this 27 day of August, 2010

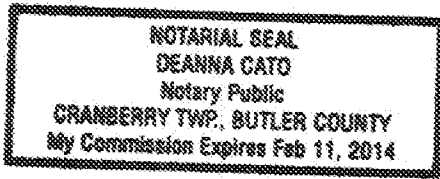
[Signature] L.S.  
MICHAEL JAMES BEIRIGER

State of Pennsylvania :

: ss.

County of Butler :

Before me this 27 day of August, 2010, personally appeared  
MICHAEL JAMES BEIRIGER known to me to be the person whose name is subscribed to the  
foregoing Assignment and acknowledged that he executed the same as his free act and deed for  
the purposes therein contained.



[Notary's Seal Here]

[Signature: Deanna Cato]  
Notary Public

My Commission Expires: 2/11/14



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_  
this 2<sup>ND</sup> day of SEPTEMBER, 2010  
James Matthew Mullner L.S.  
JAMES MATTHEW MULLNER

State of OHIO :  
: ss.  
County of USA :

Before me this 2 day of September, 2010, personally appeared  
JAMES MATTHEW MULLNER known to me to be the person whose name is subscribed to the  
foregoing Assignment and acknowledged that he executed the same as his free act and deed for  
the purposes therein contained.

Brian R Spitz  
Notary Public

My Commission Expires:

Brian R. Spitz  
Notary Public  
State of Ohio  
My Commission Expires  
December 26, 2014

[Notary's Seal Here]

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