#### PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Jochen G. Raimann	02/10/2012
Erik Lars Penne	02/10/2012
Stephan Thijssen	02/14/2012
Peter Kotanko	02/10/2012
Nathan W. Levin	02/10/2012

#### RECEIVING PARTY DATA

Name:	Fresenius Medical Care Holdings, Inc.	
Street Address:	920 Winter Street	
City:	Waltham	
State/Country:	MASSACHUSETTS	
Postal Code:	02451-1457	

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12896009

## CORRESPONDENCE DATA

 Fax Number:
 (978)341-0136

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: David E. Brook, Esq.

Address Line 1: 530 Virginia Road, P.O. Box 9133

Address Line 2: Hamilton, Brook, Smith & Reynolds, P.C.

Address Line 4: Concord, MASSACHUSETTS 01742-9133

ATTORNEY DOCKET NUMBER:	3806.1019-003
NAME OF SUBMITTER:	Catherine Medeiros

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#### <u>ASSIGNMENT</u>

Kotanko and Nathan W. Levin, have invented a certain improvement in Method of Controlling Diffusive Sodium Transport in Dialysis described in an application for Patent,	
	the specification of which is about to be filed in the United States Patent Office (use for utility (37 CFR § 1.53(b)) and design filings only);
	is about to be filed in the United States Patent Office as a Provisional Application
	the specification of which is United States Application No. 12/896,009, filed October 1, 2010;
	the specification of which is a Patent Cooperation Treaty Application, International Application No. [ ], filed [ ], which designates the United States of America [and is assigned United States Application No. [ ]];
	which was patented under United States Patent No. [ ].

WHEREAS, Fresenius Medical Care Holdings, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of New York, and having a usual place of business at 920 Winter Street, Waltham, Massachusetts 02451-1457 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the

date set forth below.	
Inventor's Signature:	Jochen G. Raimann
State/Commonwealth of New York County of New York	Jochen G. Raimann
On this 10 day of 150 day of public, personally appeared Jochen G.	Raimann, 2017, before me, the undersigned notary
personally known to me, or	
proved to me through satisfact	ory evidence of identification, which was
	ned on the foregoing instrument in my presence, and foregoing instrument as his/her free act and deed.
(SEAL)	Notary Public
• •	Notary Public, State of New York
· · · .	My Commission expires Qualified in Queens County Commission Expires May 12, 20
	Clarite Pal

	Docket No. 3806,1019-003
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Inventor's Signature:	1/2-
$\alpha$	Erik Lars Penne
State/Commonwealth of North House	
of NORTH HOLLAND County of <u>the Notherlan</u>	B
On this $19 - \text{day of } \frac{1}{2}$	20 17, before me, the undersigned notary
public, personally appeared Erik L	
personally known to me, or	
proved to me through satist	factory evidence of identification, which was
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	signed on the foregoing instrument in my presence, and he foregoing instrument as his/her free act and deed.
(SEAL)	Notary Public PENNY PALMIERO
	Notary Public, State name You No. 01PAS09249 My Commission expires Qualified in/Queens Commission
	My Commission expires ministron Expires May 12, 20
	Chy Clone
Inventor's Signature:	
State/Commonwealth	Stephan Thijssen
of County of	
County of	하는 것이 있다. 그런 그런 이번 경험 경험에 있다면 보고 있다면 보고 있다. 
On this day of	20, before me, the undersigned notary
public, personally appeared Stepha	ın Thijssen,
personally known to me, or	
proved to me through satis	factory evidence of identification, which was
to be the person whose name was a acknowledged that he/she signed t	signed on the foregoing instrument in my presence, and he foregoing instrument as his/her free act and deed.
#####################################	Notary Public
(SEAL)	Notary Tubic
(SEAL)	(print name)

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Inventor's Signature:	
Erik	Lars Penne
State/Commonwealth of Ntw York County of Artor Yerk	
On this day of February public, personally appeared Erik Lars Penne	
personally known to me, or	
proved to me through satisfactory ev	idence of identification, which was
to be the person whose name was signed on acknowledged that he/she signed the foregoing	the foregoing instrument in my presence, and ng instrument as his/her free act and deed.
(SEAL)	Notary Public Notary Public National Na
	My Commission expires may 12 of the country of the
Inventor's Signature:	A han Thijssen
State/Commonwealth of New York New York County of New York	
On this 4 14 day of Nothing public, personally appeared Stephan Thijsse	20 , before me, the undersigned notary n,
personally known to me, or	
proved to me through satisfactory ev	ridence of identification, which was
to be the person whose name was signed on acknowledged that he/she signed the forego	For the Control of th
(SEAL)	Notary Public, State of New York  Notary Public  No. 01PA6092249  Qualified in Queens (Spirity ame)
	My Commission expires / / / 20
	1 long Pholonies

ate/Commonwealth  New York  In this 12 day of February 2012, before me, the undersigned notary ablic, personally known to me, or  proved to me through satisfactory evidence of identification, which was be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  EAL)  Notary Public Notary Public State of New York No. 01Px8092249  Qualified in Quaerus Couples  Wentor's Signature:  Nathan W. Jevin  ate/Commonwealth  New York  Nathan W. Jevin  ate/Commonwealth  New York  Outlined in Quaerus Couples  Nathan W. Jevin  personally known to me, or  proved to me through satisfactory evidence of identification, which was  be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  Notary Public State of New York  Notary Public State of Ne	ventor's Signature:	Peter Kotanko
Dounty of New York  In this 10 day of February 2012, before me, the undersigned notary ablic, personally appeared Peter Kotanko,  personally known to me, or  proved to me through satisfactory evidence of identification, which was  be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  PENNY PALMIERO Notary Public, State of New York No. 0147-0202-499  Qualified in Outer 13 COUNTY OCCUMENTS OF THE WORLD NOT	tate/Commonwealth	Total Rotaliko
ate/Commonwealth  New York  Personally known to me, or  In this day of 2012_, before me, the undersigned notary ablic, personally known to me, or  proved to me through satisfactory evidence of identification, which was be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and dead.  EAL)  Notary Public PENNY PALMIERO		
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be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  PENNY PALMIERO Notary Public Notary Public Notary Public State of New York No. 01PAE092249 Qualified in Queeffice Standy Commission Expires  Wentor's Signature: Nathan W. Levin  ate/Commonwealth New York Dunty of Notary Public, personally appeared Nathan W. Levin,  personally known to me, or  proved to me through satisfactory evidence of identification, which was  be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  Notary Public State of New York Notary Publ	personally known to me, or	Africa Commence
knowledged that he/she signed the foregoing instrument as his/her free act and deed.  PENNY PALMIERO Notary Public Notary Public State of New York No. 01FA5092249 Qualified in Queens County Commission Expires May 14, 20  My Commission expires  Nathan W. Levin  ate/Commonwealth New York Outly of Notary Public State of New York No. 01FA5092249  Qualified in Queens County Outlier May 14, 20  My Commission expires  Nathan W. Levin  ate/Commonwealth New York Outlier May 12, 20  personally appeared Nathan W. Levin,  personally known to me, or  proved to me through satisfactory evidence of identification, which was  be the person whose name was signed on the foregoing instrument in my presence, and knowledged that he/she signed the foregoing instrument as his/her free act and deed.  Notary Public  PENNY PALMIERO Notary Public State of New York Notary Public My Commission expires May 12, 20	proved to me through satisfa	ectory evidence of identification, which was
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My Commission expires	SEAL)	Notary Public Notary Public, State of New York No. 01PA6092249
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