503809465 05/03/2016 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3856113

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY DA	ATA	i		
		Name	Execution Date	
MICHAEL A. CORMACK			09/21/2006	
JENNIFER L. DRAKE			09/18/2006	
THOMAS F. HALLER			09/21/2006	
ROBERT A. HILL			09/21/2006	
RECEIVING PARTY DA	ТΔ			
Name: ARCHIPELAGO HOLDINGS, INC.				
Street Address:	100 SOUTH WACKER DRIVE, SUITE 1800			
City:	CHICAGO			
State/Country:	ILLINOIS			
Postal Code:	60606			
	1			
PROPERTY NUMBERS	Total: 1		7	
Property Type		Number		
Application Number: 146		14685193]	
CORRESPONDENCE DA		(215)656-2498		
		the e-mail address first; if that is un	successful, it will be sent	
using a fax number, if p	orovided	; if that is unsuccessful, it will be se		
		215-656-3385		
		pto.phil@dlapiper.com	L A. TAUFER, DLA PIPER LLP (US)	
Address Line 1:		1650 MARKET STREET, SUITE 4900	3)	
		PHILADELPHIA, PENNSYLVANIA 191	03	
		-		
	MDED.			
	MBER:	NGI-14-1089DIV-CON-DIV1		
NAME OF SUBMITTER:	MBER:	NANCY NUNEZ		
ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	MBER:	NANCY NUNEZ /NN/		
NAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	MBER:	NANCY NUNEZ		
NAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 3		NANCY NUNEZ /NN/		
NAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	1.tif	NANCY NUNEZ /NN/		

ASSIGNMENT

WHEREAS, we, MICHAEL A. CORMACK of Evanston, Illinois, JENNIFER L. DRAKE of Evanston, Illinois, THOMAS F. HALLER of Longwood, Florida, and ROBERT A. HILL of LaGrange, Illinois (the "ASSIGNORS") have invented a certain new and useful invention disclosed in an application for United States Letters Patent entitled, DIRECTED ORDER, which is executed by Declaration herewith.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ARCHIPELAGO HOLDINGS, INC., an Illinois corporation located at 100 South Wacker Drive, Suite 1800, Chicago, Illinois, 60606 (hereinafter, together with any successors, assigns, nominees or other legal representatives thereof, called "ASSIGNEE") the entire right, title and interest in and to said application and all divisions, substitutions, continuations and continuations-in-part thereof and any improvements disclosed in or related to the subject matter of said application, and all United States Letters Patents which may be granted thereon and all reissues and extensions thereof, and all priority rights under applicable international conventions, and all applications for patents (including related rights such as utilitymodel registrations, inventor's certificates and the like) heretofore or hereafter filed from said application or improvements in any foreign countries, and all patents (including all extensions, renewals and reissues thereof) granted from said application or improvements; and ASSIGNORS hereby authorize and request the United States Commissioner of Patents and Trademarks and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all such patents to ASSIGNEE in accordance with the terms of this assignment;

AND ASSIGNORS HEREBY covenant that we have full right to convey the entire interest herein assigned and that we have not executed, and will not execute, any agreement in conflict herewith;

AND ASSIGNORS HEREBY further covenant and agree that we will communicate to ASSIGNEE any facts known to us respecting said application and

PATENT REEL: 038443 FRAME: 0672

AND ASSIGNORS HEREBY further covenant and agree that we will communicate to ASSIGNEE any facts known to us respecting said application and improvements and will testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute and reissue applications, make all rightful oaths and declarations and generally provide assistance as necessary and required to aid ASSIGNEE to obtain proper patent protection from said application and improvements and to enforce such patent protection in all countries.

IN WITNESS WHEREOF, I have hereunto set my hand this 21^{2} day of

STATE OF ILLINOIS COUNTY OF COOK

) SS.

On \underline{Sapt} $\underline{Sl}^{\underline{st}}$, 2006, before the undersigned, a Notary Public for the State and County aforesaid, appeared the above-named MICHAEL A. CORMACK, personally known to me to be the one who executed the foregoing instrument and acknowledged that he executed the same.



MICHAEL A. CORMACK

IN WITNESS WHEREOF, I have hereunto set my hand this $18^{7/2}$ day of $5ept_{mber}$, 2006.

IFÉR L. DRAKE

STATE OF ILLINOIS COUNTY OF COOK

Official Seal Natalie Janeen Notary Public State of Winois Ay Commission Expires 04/14/08) SS.

On $\underline{Sept 21^{st}}$, 2006, before the undersigned, a Notary Public for the State and County aforesaid, appeared the above-named JENNIFER L. DRAKE, personally known to me to be the one who executed the foregoing instrument and acknowledged that he executed the same.

PATENT REEL: 038443 FRAME: 0673 IN WITNESS WHEREOF, I have hereunto set my hand this _______ September_, 2006. day of THOMAS F. HALLER STATE OF ILLINOIS) SS. COUNTY OF COOK

On $\underline{Sept. 21St}$, 2006, before the undersigned, a Notary Public for the State and County aforesaid, appeared the above-named THOMAS F. HALLER, personally known to me to be the one who executed the foregoing instrument and acknowledged that he executed the same.



21 day of IN WITNESS WHEREOF, I have hereunto set my hand this _ September, 2006.

ROBERT A. HILL

STATE OF ILLINOIS COUNTY OF COOK

) SS.

9-18, 2006, before the undersigned, a Notary Public for the State On and County aforesaid, appeared the above-named ROBERT A. HILL, personally known to me to be the one who executed the foregoing instrument and acknowledged that he executed the same.

NOTARY PUBLI

Official Seel Natalie Jansen Notary Public State of Illinois My Commission Expires 04/14/08

> PATENT REEL: 038443 FRAME: 0674

RECORDED: 05/03/2016