

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	MOREGA SYSTEMS INC.	12/15/2017
RECEIVING PARTY DATA		
Name:	3311148 NOVA SCOTIA LIMITED	
Street Address:	55 COMMERCE VALLEY DRIVE WEST	
Internal Address:	SUITE 600	
City:	THORNHILL, ONTARIO	
State/Country:	CANADA	
Postal Code:	L3T 7V9	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Application Number:	12978488
CORRESPONDENCE DATA		
Fax Number:	(310)964-0941	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Email:	js703n@att.com	
Correspondent Name:	AT&T LEGAL DEPARTMENT	
Address Line 1:	ONE AT&T WAY	
Address Line 2:	ROOM 2A-212	
Address Line 4:	BEDMINSTER, NEW JERSEY 07921	
ATTORNEY DOCKET NUMBER:	MOR008A ORIGINAL	
NAME OF SUBMITTER:	JANET SHIBATA	
SIGNATURE:	/Janet Shibata/	
DATE SIGNED:	01/24/2019	
Total Attachments: 6		
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EXHIBIT X

ASSIGNMENT OF PATENT RIGHTS

This Assignment of Patent Rights ("**Assignment**") is made and entered into on this 15 day of December 2017 by and between:

MOREGA SYSTMS INC. a corporation organized and existing under the province of Ontario, with a place of business at 1210 Sheppard Avenue East, Suite 102, Toronto, Ontario, M2K 1E3 ("**Assignor**"); and **3311148 NOVA SCOTIA LIMITED**, a corporation organized and existing under the province of Nova Scotia, with a place of business at 55 Commerce Valley Drive West, Suite 600, Thornhill, Ontario, L3T 7V9 ("**Assignee**").

WHEREAS, Assignor is the owner of all right, title and interest in and to, and has agreed to assign and transfer to Assignee all right, title and interest in and to, the patents and patent applications set forth on Attachment A attached hereto ("**Assigned Patents**");

WHEREAS, Assignee is desirous of acquiring all right, title, and interest in and to the Patents.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby assigns to Assignee, or its designees, all right, title and interest that exist today and may exist in the future in and to all of the following (collectively, the "**Patent Rights**"): (a) the Assigned Patents, including: all rights pursuant to 35 U.S.C. § 154; (b) all patents or patent applications (i) to which any of the foregoing claim priority and/or (ii) for which any of the foregoing forms a basis for priority; (c) any and all continuing, divisional and continuation-in-part applications of any of the foregoing; (d) all requests for continuing examination, substitutions, reissues, extensions, renewals and reexaminations of any of the foregoing; (e) all foreign patents, patent applications and counterparts to any of the foregoing, including certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances; and (f) all rights to apply in any country for patents, certification of invention, utility models, industrial design protections, design patent protection or other governmental grants or issuances corresponding to any of the foregoing throughout the world, including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement or understanding; (g) all inventions set forth in any of the Assigned Patents; (h) all past, present and future causes of action (whether currently pending, filed, or otherwise) and other enforcement actions (including, without limitation, all rights to damages, injunctive remedies and relief, and other remedies of any kind for past, current and future infringement) and all rights to collect royalties (other than royalties or other payments due under agreements entered into by Assignor and third parties prior to the date of this Assignment), damages and profits, due or accrued, relating to any of the foregoing, including the right to sue and recover for, and the right to profits and damages, due or accrued, arising out of or in connection with, any and all past, present or future infringements or dilutions. The assignment of the Assigned Patents includes all documents related to the conception, diligence and reduction to practice of the inventions disclosed in the Assigned Patents and all domestic and international patent filing documents.

Assignor hereby authorizes and requests the Director of the U.S. Patent and Trademark Office and any official of any other country whose duty it is to issue patents on the applications included in the Patent Rights, to issue all Letters Patent, patents, certificates of invention, utility models or other governmental grants or issuances for the inventions disclosed therein to Assignee, its successors and assigns, as the assignee to the entire interest therein.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, Assignor has caused this Assignment of Patent Rights to be executed by its duly authorized representative on the date set forth below.

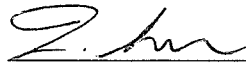
ASSIGNOR:

MOREGA SYSTEMS INC.

By: 
Name: Ashraf Tahir
Title: President

On this 15 day of December, 2017, before me, a Notary Public, appeared ASHRAF TAHIR, who is personally known to me or proved to me on the basis of satisfactory evidence to be the same person whose name is subscribed to this Assignment document.

Witness my hand and official seal:

 RYAN SCHMITT
Notary Public

Assignee hereby accepts assignment of the Assigned Patents.

Assignee:

3311148 NOVA SCOTIA LIMITED

By: 

Name: Stephen A. McGaw
Title: Authorized Signatory

ATTACHMENT A**LIST OF ISSUED PATENTS AND PENDING PATENT APPLICATIONS IN THE U.S., EUROPE AND CHINA HELD IN
NAME OF ASSIGNOR****U.S.**

#	Title	Owner	Serial No.	Patent No.	Filing Date	Issue Date	Status
1.	Set Top Box With Digital Rights Management For Multiple Devices And Methods For Use Therewith	Morega Systems Inc.	11821557	7886318	22-Jun-07	08-Feb-11	Issued
2.	Method For Creating A Subscriber Cable Channel And Set-Top Box For Use Therewith	Morega Systems Inc.	11821553	8082564	22-Jun-07	20-Dec-11	Issued
3.	Method For Creating A Personalized Subscriber Channel and Video Processing Device for Use Therewith	Morega Systems Inc.	13297459	8656425	16-Nov-11	18-Feb-14	Issued
4.	Distributed Digital Rights Management Node Module and Methods for Use therewith	Morega Systems Inc.	12264218	8019687	3-Nov-08	13-Sep-11	Issued
5.	Client device and local station with digital rights management and methods for use therewith	Morega Systems Inc.	13027032	8458459	14-Feb-11	04-Jun-13	Issued
6.	Client device and local station with digital rights management and methods for use therewith	Morega Systems Inc.	13875694	8996862	2-May-13	31-Mar-15	Issued
7.	Cryptography module for use with fragmented key and methods for use therewith	Morega Systems Inc.	12978484	8892908	24-Dec-10	18-Nov-14	Issued
8.	Elliptic curve cryptography with fragmented key processing and methods for use therewith	Morega Systems Inc.	12978488	8705730	24-Dec-10	22-Apr-14	Issued
9.	Elliptic curve cryptography with fragmented key processing and methods for use therewith	Morega Systems Inc.	14138583	8917867	23-Dec-13	23-Dec-14	Issued
10.	Streaming Video Server With Virtual File System and Methods For Use Therewith	Morega Systems Inc.	13095060	8510555	27-Apr-11	13-Aug-13	Issued
11.	Streaming Video Server With Virtual File System and Methods For Use Therewith	Morega Systems Inc.	13933372	8812846	2-Jul-13	19-Aug-14	Issued
12.	Streaming Video Server With Virtual File System and Methods For Use Therewith	Morega Systems Inc.	14320857	9167285	1-Jul-14	20-Oct-15	Issued
13.	Adaptive Video Server With Virtual File System And Methods For Use Therewith	Morega Systems Inc.	13197400	8813116	3-Aug-11	19-Aug-14	Issued
14.	Adaptive video server with data rate control	Morega Systems Inc.	13732473	9124672	2-Jan-13	01-Sep-15	Issued
15.	Adaptive video server with fast initialization and methods for use therewith	Morega Systems Inc.	13732479	9015470	2-Jan-13	21-Apr-15	Issued
16.	Client device with secure clock and methods for use therewith	Morega Systems Inc.	13732527	9549216	2-Jan-13	17-Jan-17	Issued
17.	Client device with application state tracking and methods for use therewith	Morega Systems Inc.	13732550	9088825	2-Jan-13	21-Jul-15	Issued
18.	Video server and client with custom key exchange and methods for use therewith	Morega Systems Inc.	13682934	9325945	21-Nov-12	26-Apr-16	Issued

#	Title	Owner	Serial No.	Patent No.	Filing Date	Issue Date	Status
19.	Scrubbing noise remover and methods for use therewith	Morega Systems Inc.	13751356	9294821	28-Jan-13	22-Mar-16	Issued
20.	Client device with video player and client-side proxy and methods for use therewith	Morega Systems Inc.	13741715	8965960	15-Jan-13	24-Feb-15	Issued
21.	Client device with video playlist translation via client-side proxy and methods for use therewith	Morega Systems Inc.	13741740	8918821	15-Jan-13	23-Dec-14	Issued
22.	Client Proxy for Adaptive Bitrate Selection in HTTP Live Streaming	Morega Systems Inc.	13893960	9584556	14-May-13	28-Feb-17	Issued
23.	Client Proxy for Key Exchange in HTTP Live Streaming	Morega Systems Inc.	13893968	9118630	14-May-13	25-Aug-15	Issued
24.	Streaming video server with segment length control and methods for use therewith	Morega Systems Inc.	13754124	9015779	30-Jan-13	21-Apr-15	Issued
25.	Media Device with Radial Gesture Control and Method for use Therewith	Morega Systems Inc.	14750707	9740384	25-Jun-15	22-Aug-17	Issued
26.	Video device with electronic program guide application and methods for use therewith	Morega Systems Inc.	14848621	9743148	9-Sep-15	22-Aug-17	Issued
27.	Module for Continuous Remote Peer-to-Peer Connectivity	Morega Systems Inc.	15674004	pending	10-Aug-17	pending	pending

EUROPE:

#	Title	Owner	Serial No.	Patent No.	Filing Date	Issue Date	Status	Country
28	Client device and local station with digital rights management and methods for use therewith	Morega Systems Inc.	11858497.8	2676453	8-Dec-2011	21-Oct-15	Issued	Europe
29	Cryptography module for use with fragmented key and methods for use therewith	Morega Systems Inc.	11850703.7	2656537	8-Dec-11		Pending	Europe
30	Elliptic curve cryptography with fragmented key processing and methods for use therewith	Morega Systems Inc.	11857710.5	2656539	8-Dec-11		Pending	Europe
31	Streaming Video Server With Virtual File System and Methods For Use Therewith	Morega Systems Inc.	12777463.6	2702770	23-Apr-12	30-Mar-2016	Issued	Europe
32	Adaptive Video Server With Virtual File System And Methods For Use Therewith	Morega Systems Inc.	12776412.4	2702769	23-Apr-12		Pending	Europe

CHINA:

#	Title	Owner	Serial No.	Patent No.	Filing Date	Issue Date	Status
33	Client device and local station with digital rights management and methods for use therewith	Morega Systems Inc.	201180067488.40	ZL201180067488.4	8-Dec-11	n/a	Issued
34	Cryptography module for use with fragmented key and methods for use therewith	Morega Systems Inc	201180061685.5	ZL201180061685.5	8-Dec-11	16-Mar-16	Issued
35	Elliptic curve cryptography with fragmented key processing and methods for use therewith	Morega Systems Inc	201180061680.2	ZL201180061680.2	8-Dec-11	n/a	Issued