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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HUGH WILLIAM HARNEY	11/03/2016

RECEIVING PARTY DATA

Name:	AXIOM, INC.	
Street Address:	6716 ALEXANDER BELL DR.	
Internal Address:	SUITE 220	
City:	COLUMBIA	
State/Country:	MARYLAND	
Postal Code:	21046	

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	62250301
Application Number:	15342549
PCT Number:	US1660287

CORRESPONDENCE DATA

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

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COOLEY LLP Correspondent Name:

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ATTORNEY DOCKET NUMBER:	AXIO-001/01US 326032-2002	
NAME OF SUBMITTER:	ANDERS E. FERNSTROM	
SIGNATURE:	/Anders E. Fernstrom/ Reg. # 72,629	
DATE SIGNED:	11/03/2016	

Total Attachments: 5

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ASSIGNMENT

Hugh William HARNEY, residing at 8616 Second Ave., Apt. 611, Silver Spring, MD 20910 (referred to as "Assignor") has made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, and which is a:

(1)	provisional application, entitled "Methods and Apparatus for System having
	Distributed Denial of Services (DDOS) Resistant Multicast,"
	(a) to be filed herewith; or
	(b) bearing Application No. 62/250,301, and filed on November 3,
	2015 ;
(2)	☐ non-provisional application entitled "Methods and Apparatus for System
	having Denial of Services (DOS) Resistant Multicast,"
	(a) \(\sum \) to be filed herewith; or
	(b) bearing Application No. , and filed on ; and/or
(3)	
` /	of Services (DDOS) Resistant Multicast,"
	(a) \(\big \) to be filed herewith; or
	(b) bearing Application No., and filed on.

WHEREAS, Axiom, Inc., a corporation having its principal place of business at 6716 Alexander Bell Dr., Suite 220, Columbia, MD 21046 its successors, legal representatives and assigns, (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application(s) for patent identified above; the right to file applications for patent of the United States or other countries on the Invention(s); any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, these applications; any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of these application(s); and any and all patent(s) of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee or a predecessor in interest of the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee or a predecessor in interest of the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application(s) for patent identified above;

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- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Hague Convention, the Paris Convention for the Protection of Industrial Property, and under the Patent Cooperation Treaty, and all rights of claiming priority in any country of the world;
- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, at least one of the application(s) for patent identified above or any application(s) for patent claiming the Invention(s), including any substitute application(s), division(s), continuation(s), and continuation(s)-in-part;
- (f) any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of any application for patent identified in the preceding paragraphs (b)-(e) and of any and all patent(s) granted based thereon in the United States and in all other countries; and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b)-(e), including any reissue(s), reexamination(s), revival(s), renewal(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein, and that Assignor will not make or enter into any assignment, sale, agreement or encumbrance which would conflict with these presents.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said application(s), and said patent(s), including interference and derivation proceedings, and any post-grant proceedings (e.g., opposition proceedings, post-grant reviews, *Inter partes* reviews, supplemental examinations, etc.) without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

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The Assignor hereby authorizes and requests the attorneys of COOLEY LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application(s) identified above when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

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Date: 3 Nov 2016 By:	Hugh William HARNEY
A notary public or other officer completing this cindividual who signed the document to which this cer	
accuracy, or validity of that document.	
State of	
On, before me, _	
Public, personally appeared	1 1 /
1 done, personally appeared	, who proved to me
on the basis of satisfactory evidence, to be the perso	
	n(s) whose name(s) is/are subscribed to the
on the basis of satisfactory evidence, to be the perso	n(s) whose name(s) is/are subscribed to the she/they executed the same in his/her/their
on the basis of satisfactory evidence, to be the perso within instrument and acknowledged to me that he/	n(s) whose name(s) is/are subscribed to the she/they executed the same in his/her/their nature(s) on the instrument the person(s), or
on the basis of satisfactory evidence, to be the perso within instrument and acknowledged to me that he/authorized capacity(ies), and that by his/her/their sign	n(s) whose name(s) is/are subscribed to the she/they executed the same in his/her/their nature(s) on the instrument the person(s), or

My Commission Expires:

For and on behalf of ASSIGNEE:	_		
J	Name: Hugh W Harney Title: President Company: Axiom, Inc.		
A notary public or other officer completing this individual who signed the document to which this caccuracy, or validity of that document.			
State of			
On, before me,	, Notary		
Public, personally appeared	, who proved to me		
on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the			
within instrument and acknowledged to me that he/she/they executed the same in his/her/their			
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or			
the entity upon behalf of which the person(s) acted, executed the instrument.			
WITNESS my hand and official seal.			
Signature of Notary Public	Place Notary Seal Above		

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RECORDED: 11/03/2016