503784942 04/15/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ					
		Name	Execution Date			
TAT KEUNG CHAN			04/14/2016			
ALEXANDER MEDVINS	бкү		04/14/2016			
ALI NEGAHDAR			04/14/2016			
RECEIVING PARTY DA						
Name:	1	ARRIS Enterprises LLC				
Street Address:	_	3871 Lakefield Drive				
Internal Address:						
City:	Suwanee					
State/Country:	GEORGIA					
Postal Code:	30024	30024				
PROPERTY NUMBERS	5 Total: 1					
Property Type		Number				
Property Type Application Number:		Number 15083242				
Application Number:		15083242				
Application Number: CORRESPONDENCE D Fax Number:	ΟΑΤΑ	(678)473-8095				
Application Number: CORRESPONDENCE D Fax Number: Correspondence will b	OATA be sent to	15083242				
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	OATA be sent to provided	15083242 (678)473-8095 The e-mail address first; if that is uns I; if that is unsuccessful, it will be ser (678)473-8697				
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PATENT REEL: 038289 FRAME: 0717

ASSIGNMENT

WHEREAS we, Tat Keung Chan, Alexander Medvinsky, Ali Negahdar, (hereinafter collectively referred to as ASSIGNOR), have invented certain inventions and improvements entitled "Cryptographic Service with Output Redirection" disclosed in Patent Application Number 15083242 filed in the United States Patent and Trademark Office on March 28, 2016; and as described, illustrated and claimed in the following applications: U.S. Provisional Application No. 62/139049, filed on March 27, 2015; and,

WHEREAS, ARRIS Enterprises LLC, a limited liability company formed under the laws of Delaware, having a principal place of business at 3871 Lakefield Drive, Suwanee, Georgia 30024 (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to, and under said invention and the United States Letters Patent to be obtained therefore:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNORS hereby sell, assign, and transfer to ASSIGNEE the full and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefore on said patent application, design patent application, or any continuation, continuation-in-part, divisional, reexamination, renewal, substitute, or reissue thereof and in and to all Letters Patent and all Convention and Treaty rights of all kinds, in all countries throughout the world for said invention for the full term or terms for which the same may be granted.

ASSIGNOR hereby covenants that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

ASSIGNOR further covenants that ASSIGNOR will promptly provide ASSIGNEE, upon its request, with all pertinent facts and documents relating to said application, said invention, and said Letters Patent as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments, or affidavits required to apply for, obtain, maintain, and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

PATENT REEL: 038289 FRAME: 0718

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Docket ARR00461

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414/16 DATE

Tat Keung Chan

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of the document.

State of California

County o)55

. Notary Public On , before me, Name of Notary Public personally appeared

Who proved to me on the basis of satisfactory evidence to be the person(s) who 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.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

panda udares Signature Signature of Notary Rublic

Place Notary Scal Above

Patent Application

15083242

PATENT REEL: 038289 FRAME: 0719

4-14-2016 DATE Alexander Medvinsky

Alexanuci Micuvinsky

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of the document.

State of California

County of Aan Dage)ss

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On april 14, 2016	_, before me, Janden Denkins , Notary Public	:
Date Date	Name of Notary Public	
personally appeared	alepirder Medomsky	
	/ Name(s) of Signer(s)	

Who proved to me on the basis of satisfactory evidence to be the person(s) who 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.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Soulein. Signature Signature of Notary Pub

Place Notary Seal Above

Docket ARR00461			Patent Application 15083242
4/14/16	A. molat		
Date	Ali Negahdar	 Na andro oc unid	
77.5.30.00			
United States of America) SS		
State of <u>Geora</u>)		
Negahdar, whose name is subscrib acknowledged that they signed, sea the uses and purposes therein set fo	blic in and for the County and State affect to the foregoing instrument, appear led and delivered the instrument as the orth. seal this $\underline{14}^{4}$ day of \underline{Apri}^{1}	red before me the infree and volue to the second seco	nis day in person and
My commission expires: Notary Public Signature MoHey Printed Name of Notary Rublic			

PATENT REEL: 038289 FRAME: 0721

RECORDED: 04/15/2016