504462612 07/18/2017

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT4509314

Electronic Version v1.1
Stylesheet Version v1.2

SUBMISSION TYPE:NEW ASSIGNMENTNATURE OF CONVEYANCE:ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARK S. SCHMIDT	07/11/2017
WILLIAM P. FRANKS	07/11/2017
PAUL MORONEY	07/13/2017

RECEIVING PARTY DATA

Name:	ARRIS ENTERPRISES LLC
Street Address:	3871 LAKEFIELD DRIVE
City:	SUWANEE
State/Country:	GEORGIA
Postal Code:	30024

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15621467

CORRESPONDENCE DATA

Fax Number:

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.

Phone: (215) 323-1086

Email: arrisdocketing@arris.com

Correspondent Name: ARRIS ENTERPRISES, LLC LEGAL DEPT - DOCK

Address Line 1: 101 TOURNAMENT DRIVE

Address Line 4: HORSHAM, PENNSYLVANIA 19044

ATTORNEY DOCKET NUMBER:	ARR00964
NAME OF SUBMITTER:	THOMAS A. WARD
SIGNATURE:	/Thomas A. Ward/
DATE SIGNED:	07/18/2017

Total Attachments: 4

source=Assignment_executed_ARR00964#page1.tif source=Assignment_executed_ARR00964#page2.tif source=Assignment_executed_ARR00964#page3.tif source=Assignment_executed_ARR00964#page4.tif

PATENT 504462612 REEL: 043037 FRAME: 0668

ASSIGNMENT

WHEREAS we, Mark S. Schmidt, William P. Franks, Paul Moroney, (hereinafter collectively referred to as ASSIGNOR), have invented certain inventions and improvements entitled "Reduction of Startup Time in Remote HLS" disclosed in Patent Application Number 15621467 filed in the United States Patent and Trademark Office on June 13, 2017; and as described, illustrated and claimed in the following applications: U.S. Provisional Application No. 62/849623, filed on June 13, 2016, 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.

1

PATENT REEL: 043037 FRAME: 0669

Mary	1.	lehma	lò

DATE 7/11/17

Mark S. Schmidt

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 Xlan Clayo)ss

personally appeared Mark

On July 11, 2017, before me, Janker Juker Notary Public personally appeared Mark & Achmidt

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.

SANDRA JENKINS Notary Public - California San Diego County Commission # 2147908 My Comm. Expires Apr 27, 2020

WITNESS my hand and official seal.

Signature

Signature of Notary Public

Place Notary Scal Above

DATE 7-11-17

William P. Franks

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 Jan Quago)ss

On July 11, 2017

), before me, Sandra William P. Fi

Notary Public

personally appeared

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.

SAND Notary Pr San D Commiss My Commo

SANDRA JENKINS
Notary Public - California
San Diego County
Commission # 2147908
My Comm. Expires Apr 27, 2020

WITNESS my hand and official seal,

Signature

Signature of Notary Publ

Place Notary Seal Above

Docket ARR00964

Faul Juny
Paul Moroney

DATE 7/13/2017

Patent Application 15621467

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 Sanding))ss

On Aly 13 3617, before me, Name of Notary

personally appeared

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.

SANDRA JENKINS

Notary Public - California
San Diego County
Commission # 2147908
My Comm, Expires Apr 27, 2020

Place Notary Seal Above

WITNESS my hand and official seal.

Signature

Signature of Notary Public

4

PATENT REEL: 043037 FRAME: 0672