504116880 11/30/2016

EPAS ID: PAT4163550

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RENXIANG LI	11/29/2016
FAISAL ISHTIAQ	11/29/2016

RECEIVING PARTY DATA

Name:	ARRIS Enterprises LLC
Street Address:	3871 Lakefield Drive
Internal Address:	
City:	Suwanee
State/Country:	GEORGIA
Postal Code:	30024

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15365231

CORRESPONDENCE DATA

Fax Number: (678)473-8095

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 ARRIS GROUP, INC, **Correspondent Name:** Address Line 1: 101 TOURNAMENT DRIVE

Address Line 4: HORSHAM, PENNSYLVANIA 19044

ATTORNEY DOCKET NUMBER:	ARR00913
NAME OF SUBMITTER:	THOMAS A. WARD
SIGNATURE:	/Thomas A. Ward/
DATE SIGNED:	11/30/2016

Total Attachments: 3

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PATENT REEL: 040469 FRAME: 0697 504116880

ASSIGNMENT

WHEREAS we, Renxiang Li and Faisal Ishtiaq, (hereinafter collectively referred to as ASSIGNOR), have invented certain inventions and improvements entitled "DETECTION OF LOGOS IN A SEQUENCE OF VIDEO FRAMES" disclosed in Patent Disclosure Number IDFA00913, and we hereby authorize and request a designated attorney associated with Customer No. 21924, to insert here in parentheses (Application Number _______, filed _______) the application number and filing date of said application when known; as filed in the United States Patent and Trademark Office; 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.

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PATENT REEL: 040469 FRAME: 0698

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Renxiang Li

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that **Renxiang Li**, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this $\frac{29}{\text{day of }}$ day of $\frac{\text{November}}{\text{moder}}$, 2016.

My commission expires: September 24, 2017

Notary Public Signature

LEA NOLAN

Printed Name of Notary Public

OFFICIAL SEAL LISA NOLAN Notary Public - State of Illinois My Commission Expires Sep 24, 2017

Ħ	-29-16
	Date

United States of America)
State of TCL/NO/S) SS
County of Cook)

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that Faisal Ishtiaq, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the instrument as their free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 29 day of November . 2016.

My commission expires: September 24, 2017

Notary Public Signature

ISA NOLAN

Printed Name of Notary Public

OFFICIAL SEAL LISA NOLAN Notary Public - State of Illinois My Commission Expires Sep 24, 2017