505103043 09/20/2018

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| RAGHURAMAN GOPALAN | 09/19/2018 |

RECEIVING PARTY DATA

| Name: | AT&T INTELLECTUAL PROPERTY I, L.P. |
|-----------------|------------------------------------|
| Street Address: | 675 WEST PEACHTREE STREET |
| City: | ATLANTA |
| State/Country: | GEORGIA |
| Postal Code: | 30308 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16136412 |

CORRESPONDENCE DATA

Fax Number: (732)542-2283

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: 732-542-2280

Email: khunter@trbklaw.com

Correspondent Name: AT&T LEGAL DEPARTMENT - TRBK

Address Line 1: ONE AT&T WAY Address Line 2: ROOM 2A-212

Address Line 4: BEDMINSTER, NEW JERSEY 07921

| ATTORNEY DOCKET NUMBER: | 2018-0047 |
|-------------------------|------------------|
| NAME OF SUBMITTER: | KIRSTEN HUNTER |
| SIGNATURE: | /Kirsten Hunter/ |
| DATE SIGNED: | 09/20/2018 |

Total Attachments: 3

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PATENT 505103043 REEL: 046921 FRAME: 0365

ASSIGNMENT

WHEREAS I, Raghuraman Gopalan, residing at Dublin, California, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "ENABLING SECURE VIDEO SHARING BY EXPLOITING DATA SPARSITY" having AT&T Docket No. 2018-0047, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, AT&T Intellectual Property I, L.P., a partnership organized and existing under the laws of Nevada and having an address at 675 West Peachtree Street, Atlanta, Georgia, 30308 (hereinafter referred to as Assignee), desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereto;

NOW THEREFORE, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, as Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention and this non-provisional application, and all divisions, substitutions, and continuations thereof; and all Letters Patent of the United States which may be granted thereon, and all reexaminations and reissues thereof; and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application; and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, including certificates of inventions, utility models, industrial design protection, design patent protection, and other governmental grants or issuances; and all extensions, renewals, prolongations, and reissues thereof; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents;

AND, I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent application identified above; assist in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; testify in any interference, litigation, or other legal proceeding; sign all lawful papers when called upon to do so; execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns; execute all divisional, continuation, and reissue applications; make all rightful oaths and generally do everything possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the

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United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; and hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without compensation, but at the expense of Assignee or its representatives.

AND, I HEREBY consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of **AT&T Intellectual Property I, L.P.** to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

This Assignment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one and the same instrument. A facsimile copy of this Assignment, or any form of an electronic copy of this Assignment, including the signature pages hereto, shall be deemed to be an original.

| IN TESTIMONY WHEREOF, I have | e hereunto set my hand this 19 day of Septem, be |
|---|--|
| 2018. | Raghuraman Gopalan |
| State of CALIFORNIA) | |
| County of ALAMEDA | |
| | , 2018, before me a Notary Public in and for the above |
| County and State, personally appeared | Raghuraman Gopalan, and acknowledged the execution |
| of the foregoing assignment as his/her to PLEASE SEE ATTACHED | free act and deed for the purpose herein set forth. |
| Notary Public Hilen Bhuptani | My Commission Expires: APRIL 12, 2221 |

| ACKNOWLEDGMENT | |
|--|---|
| A notary public or other officer completing this certificate verifies only the identity of the | ٠ |
| individual who signed the document to which this certificate is attached, and not the truthfulness, | |
| accuracy, or validity of that document. | |
| State of California, County of ALAMEDA | |
| on Sep 19, 2018, before me, HITEN BHUPTANI, NOTARY PUBLI personally appeared RACHURAMAN GOPALAN | ç |
| personally appeared KNCHV KHMAN GO!ALAN | |
| 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 (ne) 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. | |
| COMM. # 2190669 O PROTARY PUBLIC CALIFORNIA | |
| ALAMEDA COUNTY 0 | |
| Signature My Commission Expires APR. 12, 2021 | |
| Seal | |
| OPTIONAL | |
| Though the information in this section is not required by law, it may prove valuable to persons relying on the | |
| document and could prevent fraudulent removal and reattachment of this form to another document. | |
| Description of Attached Document | |
| Title or Type of Document: Assignment Docket 2018 - 0047 Document Date: Identifying No.: No. of Pages: | |
| Docket 2018-0047 | |
| Document Date:No. of Pages: | |
| Signer(s) or Issuing Agency: | |
| Capacity Claimed by Custodian | |
| ✓ Individual ☐ Attorney ☐ Trustee ☐ Business Proprietor or Manager ☐ Corporate Officer — Title: | |
| ☐ University or School Officer — Title: | |
| ☐ Governmental Officer or Agent — Title: | |
| Other: | |
| Custodian Is Representing: | |

PATENT REEL: 046921 FRAME: 0368

RECORDED: 09/20/2018