504583268 10/06/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4629980

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | |
|-----------------------|----------------|----------------|--|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT | ASSIGNMENT | | |
| SEQUENCE: | 1 | 1 | | |
| CONVEYING PARTY DATA | | | | |
| | Name | Execution Date | | |

| Name: | AT&T PROPERTIES, LLC | | |
|--------------------|----------------------|--|--|
| Street Address: | 645 E. PLUMB LANE | | |
| City: | RENO | | |
| State/Country: | NEVADA | | |
| Postal Code: 89502 | | | |

PROPERTY NUMBERS Total: 9

| Property Type | Number | | |
|---------------------|----------|--|--|
| Application Number: | 09111301 | | |
| Application Number: | 10090764 | | |
| Application Number: | 11192245 | | |
| Application Number: | 09007983 | | |
| Application Number: | 09052028 | | |
| Application Number: | 09109516 | | |
| Application Number: | 09152404 | | |
| Application Number: | 10124307 | | |
| Application Number: | 09373823 | | |

CORRESPONDENCE DATA

| Fax Number: | er: (832)213-0279 | | | | |
|---------------------|---|--|--|--|--|
| | nt to the e-mail address first; if that is unsuccessful, it will be sent ided; if that is unsuccessful, it will be sent via US Mail. | | | | |
| Phone: | 8028991136 | | | | |
| Email: | jp9856@att.com | | | | |
| Correspondent Name: | AT&T LEGAL DEPARTMENT | | | | |
| Address Line 1: | ONE AT&T WAY | | | | |
| Address Line 2: | ROOM 2A-212 | | | | |
| Address Line 4: | BEDMINSTER, NEW JERSEY 07921 | | | | |
| NAME OF SUBMITTER: | JEANNE PANIAGUA | | | | |

504583268

PATENT REEL: 043803 FRAME: 0905

| SIGNATURE: | NATURE: /Jeanne Paniagua/ | | | |
|--------------|--|--|--|--|
| DATE SIGNED: | 10/06/2017 | | | |
| _ | Total Attachments: 2 source=AST Content Distribution_ATTCorp_ATTProperties_Recordable Assn#page1.tif source=AST Content Distribution_ATTCorp_ATTProperties_Recordable Assn#page2.tif | | | |

RECORDABLE PATENT ASSIGNMENT

This Recordable Patent Assignment is between AT&T Corp. ("AT&T Corp."), a New York corporation, and AT&T Properties, LLC ("AT&T Properties"), a Nevada limited liability company.

Effective on June 30, 2008, for good and adequate consideration, the receipt and sufficiency of which has been and hereby is acknowledged, AT&T Corp. hereby assigns, transfers, and conveys and/or has assigned, transferred, and conveyed to AT&T Properties all of AT&T Corp.'s right, title and interest in and to the patents and pending patent applications identified on Attachment A (the "Patents"), with respect to which and to the extent to which AT&T Corp. has or previously had the right to so assign, transfer and convey such rights, including all claims for past infringement, and all divisions. reexaminations, reissues, substitutions, continuations, continuations-in-part and extensions thereof, including the right to file applications and obtain patents, utility models, industrial models and designs for said inventions in its own name throughout the world including all rights of priority, all rights to public cautionary notices reserving ownership of said inventions and all rights to claim and register said inventions in appropriate registries. AT&T Corp. has further agreed to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in AT&T Properties, its successors, assigns and legal representatives.

IN WITNESS WHEREOF, AT&T Corp. has caused this Recordable Patent Assignment to be executed by its duly authorized representative.

AT&T CORP.

Acanette Napp Assistant Secretary

STATE OF GEORGIA)) ss: COUNTY OF COWETA)

Before me personally appeared the person described in and who executed the foregoing instrument, and she acknowledged to me that she executed the same for the purposes therein stated, this 3 day of October, 2017.



Francine McKee

PATENT REEL: 043803 FRAME: 0907

ATTACHMENT A

| Docket Number | Country | Application Number | Application Date | Patent Number | Title |
|------------------|---------------|-----------------------|---------------------|------------------|--|
| 111902 | United States | 09/111301 | .07/07/1998 | 6389471 | Network Broadcasting System For Broadcasting Audiovisual Information To An Identified Audience |
| 111902 | United States | 10/090764 | 03/06/2002 | 6941373 | Network Communications System And Method For Worldwide Web Broadcasting |
| 111902 | United States | 11/192245 | 07/29/2005 | | Network Communications System And Method For Worldwide Web Broadcasting |
| 112234 | United States | 09/007983 | 01/15/1998 | 6154749 | Distributed Caching Scheme For Database Systems |
| 112259 | United States | 09/052028 | 03/31/1998 | 6181697 | Method For A Unicast Endpoint Client To Access A Multicast Internet Protocol (IP) Session And To Serve As A Redistributor Of Such Session |
| 112609 | United States | 09/109516 | 07/02/1998 | 6216125 | Coarse Indexes For A Data Warehouse |
| 112713 | United States | 09/152404 | 09/14/1998 | 6412011 | Method And Apparatus To Enhance A Multicast Information Stream In A Communication Network |
| 112713 | United States | 10/124307 | 04/18/2002 | 6845399 | Method And Apparatus To Enhance A Multicast Information Stream In A Communication Network |
| 1999-0077 | United States | 09/373823 | 08/13/1999 | 6539391 | Method And System For Squashing A Large Data Set |