11/22/2019 505787044

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5833872

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|-------------------|
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| AOL INC. | 07/01/2013 |
| AOL ADVERTISING INC. | 07/01/2013 |
| BUYSIGHT, INC. | 07/01/2013 |
| MAPQUEST, INC. | 07/01/2013 |
| PICTELA, INC. | 07/01/2013 |

RECEIVING PARTY DATA

| Name: | JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT |
|-----------------|--|
| Street Address: | 10 S. DEARBORN, 7TH FLOOR |
| City: | CHICAGO |
| State/Country: | ILLINOIS |
| Postal Code: | 60603 |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 16656154 | |

CORRESPONDENCE DATA

Fax Number: (202)450-5538

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: 2028083550

Email: tcoates@bomcip.com

Correspondent Name: BOOKOFF MCANDREWS, PLLC

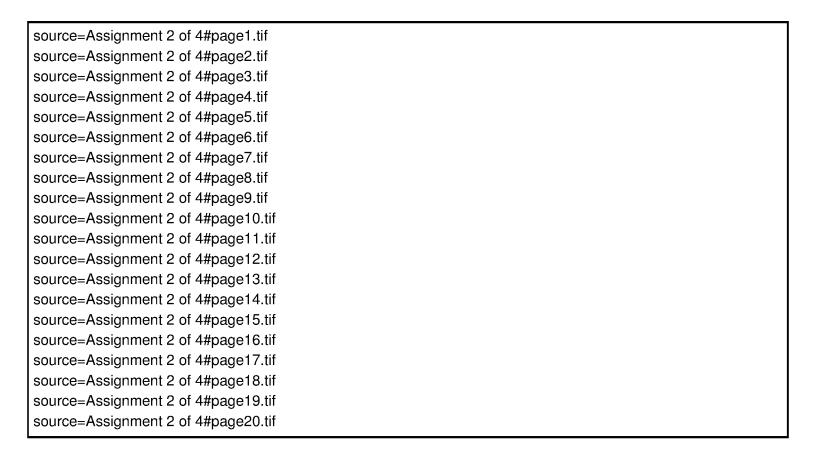
Address Line 1: 2020 K STREET, NW

SUITE 400 Address Line 2:

Address Line 4: WASHINGTON, D.C. 20006

| ATTORNEY DOCKET NUMBER: | 00008-0195-01000 |
|-------------------------|------------------|
| NAME OF SUBMITTER: | PABLO HUERTA |
| SIGNATURE: | /Pablo Huerta/ |
| DATE SIGNED: | 11/22/2019 |
| | |

Total Attachments: 20



GRANT OF SECURITY INTEREST IN PATENT RIGHTS

This GRANT OF SECURITY INTEREST IN PATENT RIGHTS ("Agreement"), effective as of July 1, 2013, is made by AOL Inc., a Delaware corporation, AOL Advertising Inc., a Maryland corporation, Buysight, Inc., a Delaware corporation, MapQuest, Inc., a Delaware corporation, Pictela, Inc., a Delaware corporation (collectively, the "Obligors"), in favor of JPMorgan Chase Bank, N.A., a national banking association, as Administrative Agent (the "Agent") for the several banks and other financial institutions or entities (the "Lenders"), parties to the Credit Agreement, dated as of July 1, 2013 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among AOL Inc., a Delaware Corporation (the "Borrower"), the Lenders from time to time parties thereto, and the Agent.

$\underline{W} \underline{I} \underline{T} \underline{N} \underline{E} \underline{S} \underline{S} \underline{E} \underline{T} \underline{H}$:

WHEREAS, pursuant to the Credit Agreement, the Lenders have severally agreed to make Loans and other extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein; and

WHEREAS, in connection with the Credit Agreement, the Borrower and certain of its subsidiaries have executed and delivered a Guarantee and Collateral Agreement, dated as of July 1, 2013, in favor of the Agent (together with all amendments and modifications, if any, from time to time thereafter made thereto, the "Guarantee and Collateral Agreement"); and

WHEREAS, pursuant to the Guarantee and Collateral Agreement, the Obligors assigned, transferred and granted to the Agent for the benefit of the Agent and the Lenders a security interest in certain Intellectual Property, including the patents and patent applications set forth on Schedule A hereto (the "Patents").

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and in order to induce the Lenders to make Loans and other financial accommodations to the Borrower pursuant to the Credit Agreement, the Obligors agree, for the benefit of the Agent and the Lenders, as follows:

SECTION 1. <u>Definitions</u>. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement and the Guarantee and Collateral Agreement.

SECTION 2. Grant of Security Interest. The Obligors hereby grant a security interest in all of the Obligors' right, title and interest in, to and under the Patents to the Agent for the benefit of the Agent and the Lenders to secure payment, performance and observance of the Obligations.

SECTION 3. <u>Purpose</u>. This Agreement has been executed and delivered by the Obligors for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office. The security interest granted hereby has been granted to the Lenders in connection with the Guarantee and Collateral Agreement and is expressly subject to the terms and conditions thereof. The Guarantee and Collateral Agreement (and all rights and remedies of the Lenders thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. Acknowledgment. The Obligors do hereby further acknowledge and affirm that the rights and remedies of the Lenders with respect to the security interest in the Patents granted hereby are more fully set forth in the Credit Agreement and the Guarantee and Collateral Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Guarantee and Collateral Agreement, the terms of the Guarantee and Collateral Agreement shall govern.

SECTION 5. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together constitute one and the same original.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

AOL INC.

Βv:

lame: Karen Dykstra

Title: Executive Vice President and Chief

Financial Officer

[Signature Page to Grant of Security Interest in Patent Rights]

AOL ADVERTISING INC.

By:

Name: Matthew Kelpy

Title: Vice President, Controller, and Treasurer

BUYSIGHT, INC.

By:

Name: Matthew Kelpy

Title: Vice President, Controller, and Treasurer

MAPQUEST, INC.

By:

Name: Matthewokelpy

Title: Vice President, Controller, and Treasurer

PICTELA, INC.

By:

Name: Matthew Kelpy

Title: Vice President, Controller, and Treasurer

[Signature Page to Grant of Security Interest in Patent Rights]

JPMORGAN CHASE BANK, N.A., as Administrative Agent for the Lenders

Name: Title:

Tina Ruyter

Preentive Direct

REEL: 051084 FRAME: 0036

SCHEDULE A

U.S. Patent Registrations and Applications

U.S. Pending Patents

| Grantor | <u>Patent</u> | Patent or Application Number |
|----------------------|--|------------------------------|
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | 29/376,570 |
| AOL Advertising Inc. | Ad Generation Including Procedures for Optimal Effectiveness | 11/796,135 |
| AOL Advertising Inc. | Lag Compensated Performance Prediction | 11/819,058 |
| AOL Advertising Inc. | Method and System For Media Initialization Via Data Sharing | 13/618,164 |
| AOL Advertising Inc. | Methods and Systems for Data Validation in a Client-Server Environment | 12/917,463 |
| AOL Advertising Inc. | Mobile Communications Device | 11/023,632 |
| AOL Advertising Inc. | Partitioning Mobile Advertising Inventory | 12/850,568 |
| AOL Advertising Inc. | System and Methods for Contextual Segmentation Using Dynamically-Derived Topics | 13/241,856 |
| AOL Advertising Inc. | Systems and Methods For Accessing First Party Cookies | 13/777,914 |
| AOL Advertising Inc. | Systems and Methods for Administering an Online Advertiser Bidding Interface | 12/565,187 |
| AOL Advertising Inc. | Systems and Methods for Advertising on Content- Screened Web Pages | 12/612,270 |
| AOL Advertising Inc. | Systems and Methods for Allocating Electronic Advertising Opportunities | 11/984,244 |
| AOL Advertising Inc. | Systems and Methods for Contextual Analysis and Segmentation of Information Objects | 13/241,834 |
| AOL Advertising Inc. | Systems And Methods For Controlling Bidding For Online Advertising Campaigns | 12/385,552 |
| AOL Advertising Inc. | Systems And Methods For Controlling Initialization Of Advertising Campaigns | 12/385,554 |
| AOL Advertising Inc. | Systems And Methods For Controlling Online Advertising Campaigns | 13/416,796 |
| AOL Advertising Inc. | Systems and Methods For Determining Bids For Placing Advertisements | 13/465,568 |
| AOL Advertising Inc. | Systems And Methods For Displaying Digital Content And Advertisements Over Electronic Networks | 13/668,828 |
| AOL Advertising Inc. | Systems and Methods for Generating a Forecasting Model and Forecasting Future Values | 13/243,193 |
| AOL Advertising Inc. | Systems and Methods for Generating Expanded User Segments | 12/775,826 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------------|---|------------------------------|
| AOL Advertising Inc. | Systems and Methods For Improved Sorting Using Intelligent Partitioning And Termination | 13/765,312 |
| AOL Advertising Inc. | Systems and Methods For Online Auction of Diverse Advertisements | 13/829,019 |
| AOL Advertising Inc. | Systems and Methods for Online User Profiling and Segmentation | 12/558,891 |
| AOL Advertising Inc. | Systems and Methods For Optimizing Advertising Spending Using a User Influenced Advertisement Policy | 13/837,385 |
| AOL Advertising Inc. | Systems and Methods For Partitioning Advertisements | 13/053,581 |
| AOL Advertising Inc. | Systems and Methods For Requesting Electronic Programming Content Through Internet Content Or Advertising | 13/840,873 |
| AOL Advertising Inc. | Systems and Methods For Sponsorship Fulfillment and Control | 13/841,187 |
| AOL Advertising Inc. | Systems And Methods For Spreading Online Advertising Campaigns | 12/385,553 |
| AOL Advertising Inc. | Systems And Methods For Advertisement And Content Optimization Over An Electronic Network | 13/734,587 |
| AOL Inc. | A Media File Format, System, and Method | 13/489,273 |
| AOL Inc. | A Media Protocol and System | 10/830,407 |
| AOL Inc. | A Network Scoring System and Method | 13/620,583 |
| AOL Inc. | A Portion of a Display Screen | 29/434,893 |
| AOL Inc. | A Rule-based Playlist Engine | 11/619,554 |
| AOL Inc. | A System And Method For Interapplication Communications | 11/465,183 |
| AOL Inc. | A system and method for subject matter notifications | 10/747,254 |
| AOL Inc. | A system and method for tailoring notifications | 10/747,259 |
| AOL Inc. | A System and Method for Using a Streaming Protocol | 12/576,784 |
| AOL Inc. | Advertisement Delivery | 09/695,844 |
| AOL Inc. | Advertisement Within An Electronic Program Guide | 11/927,055 |
| AOL Inc. | Advertising Forecast and Revenue Systems and Methods | 13/001,772 |
| AOL Inc. | Advertising Infrastructure for Delivered Messages | 11/557,757 |
| AOL Inc. | Alerts for Monitoring User Status | 11/553,768 |
| AOL Inc. | Annotated Communication | 11/936,373 |
| AOL Inc. | Annotation of Digital Items In A Shared List | 13/423,001 |
| AOL Inc. | Announcing New Users of an Electronic Communications System to Existing Users | 11/015,476 |
| AOL Inc. | Application Unlock | 11/926,644 |
| AOL Inc. | Asynchronous Data Protocol | 09/582,297 |
| AOL Inc. | Authority Management for Electronic Searches | 11/548,055 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| AOL Inc. | Biasing of Search Result Clustering to Ensure More Effective Point of Interest (POI) Targeting | 12/833,533 |
| AOL Inc. | Buddy Share | 10/535,203 |
| AOL Inc. | Chat Room Viewing | 13/893,233 |
| AOL Inc. | Client Application Fingerprinting Based On Analysis Of Client Requests | 13/584,494 |
| AOL Inc. | Client Web Cache | 12/026,772 |
| AOL Inc. | Communication System and Method | 13/902,611 |
| AOL Inc. | Community Generated Playlists | 11/970,461 |
| AOL Inc. | Community Mapping and Direction Indicating | 12/013,254 |
| AOL Inc. | Computer-Implemented Methods and Systems for Testing Online Systems and Content | 12/964,420 |
| AOL Inc. | Conditional Advertising For Instant Messaging | 11/781,484 |
| AOL Inc. | Conference Calls and Meetings via Electronic Messaging Interface | 13/617,934 |
| AOL Inc. | Configuring Output Controls on a Per-Online Identity and/or a Per-Online Resource Basis | 11/865,852 |
| AOL Inc. | Content Distribution Tracking through Wireless Mesh Networks | 11/463,371 |
| AOL Inc. | Content Protection Through The Audio And Video Decrypting And Decoding Device | 09/833,173 |
| AOL Inc. | Content Recommendation Using Third Party Profiles | 13/614,816 |
| AOL Inc. | Culturally Relevant Search Results | 12/374,657 |
| AOL Inc. | Detecting and Remedying Unauthorized Computer Programs | 11/321,038 |
| AOL Inc. | Device Authentication for Accessing Web Services | 11/031,957 |
| AOL Inc. | Digital Asset Hosting and Distribution | 11/556,538 |
| AOL Inc. | Digital Audio And Video Distribution Transmission And Playback | 10/416,292 |
| AOL Inc. | Digital Content Distribution and Subscription System | 10/416,321 |
| AOL Inc. | Displaying Advertisements In a Computer Network Environment | 13/620,278 |
| AOL Inc. | Displaying Complex Messaging Threads Into A Single Display | 13/493,281 |
| AOL Inc. | Distributing Personalized Content | 13/751,859 |
| AOL Inc. | Dynamic Aggregation And Display Of Contextually Relevant Content | 13/053,917 |
| AOL Inc. | Electronic Information Caching | 11/276,586 |
| AOL Inc. | Electronic Mail Forwarding Service | 13/540,400 |
| AOL Inc. | Enabling An IM User To Navigate A Virtual World | 11/850,235 |
| AOL Inc. | Enabling And Exercising Control Over Selected Sounds Associated With Incoming Communications | 12/089,857 |
| AOL Inc. | Enabling Programming of Recordings | 13/675,170 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|--|------------------------------|
| AOL Inc. | Enhanced Buddy List Interface | 10/715,205 |
| AOL Inc. | Enhanced Favorites Service for Web Browsers and Web Applications | 11/197,681 |
| AOL Inc. | Enhanced Favorites Service for Web Browsers and Web Applications | 11/424,452 |
| AOL Inc. | Establishing Access Controls In a Premise-Based Environment | 10/330,542 |
| AOL Inc. | Evaluating Supply of Electronic Content Relating to Keywords | 13/052,607 |
| AOL Inc. | Exchanging Digital Content | 13/285,964 |
| AOL Inc. | Filtering System for Providing Personalized Information in the Absence of Negative Data | 13/289,222 |
| AOL Inc. | Generating And Implementing A-Lists To Manage User Relationships | 13/442,621 |
| AOL Inc. | Generic Download And Upload Functionality In A Client/Server Web Application Architecture | 11/294,182 |
| AOL Inc. | History-Based Tracking Of User Preference Settings | 12/126,770 |
| AOL Inc. | Home based Web Services and Security Enforcement | 11/126,268 |
| AOL Inc. | Identifying Callers | 11/746,243 |
| AOL Inc. | Implied Presence Detection In A Communication System | 11/292,645 |
| AOL Inc. | Instant Messaging Application Configuration Based On Virtual World Activities | 11/937,345 |
| AOL Inc. | Instant Messaging Gateway for Directory and Anonymous Services | 11/226,455 |
| AOL Inc. | Intelligent Deliverable Message Annotation | 11/952,424 |
| AOL Inc. | Intelligent Management Of Application Connectivity | 13/595,415 |
| AOL Inc. | Internet Content Marking | 11/548,785 |
| AOL Inc. | Interstitial Multimedia Advertising Targeted Based Upon Search Query | 11/173,799 |
| AOL Inc. | Local Proxy Server for Access Control Lists | 13/149,282 |
| AOL Inc. | Location-Based Parental Controls | 11/618,689 |
| AOL Inc. | Loosely Coupled Enterprise Infrastructure Name Space Management (Lightweight DNS Management Protocol - LDMP) | 11/941,897 |
| AOL Inc. | Managing Access to Digital Content Sources | 13/615,375 |
| AOL Inc. | Matching Members with Shared Interests | 10/703,662 |
| AOL Inc. | Mechanism For Rendering Advertising Objects Into Featured Content | 13/780,044 |
| AOL Inc. | Metadata Quality Improvement | 13/083,880 |
| AOL Inc. | Method Of Collecting Data Using An Embedded Media Player Page | 12/943,724 |
| AOL Inc. | Method of Disseminating Advertisements Using an Embedded Media Player Page | 13/399,602 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|--|------------------------------|
| AOL Inc. | Method of Sizing An Embedded Media Player Page | 10/415,210 |
| AOL Inc. | Methods and Systems for Identifying Local Search Queries | 13/633,488 |
| AOL Inc. | Methods and Systems for Providing Location- Based Communication Services | 12/230,357 |
| AOL Inc. | Methods and Systems for Restricting Electronic Content Based on Guardian Control Decisions | 13/720,443 |
| AOL Inc. | Methods for Providing Digital Bundling Services to Users | 13/887,258 |
| AOL Inc. | Migrating Rating Configuration Information Based On User Identity Information | 13/616,006 |
| AOL Inc. | Mobile Account Access Through A Data Processing System | 11/804,628 |
| AOL Inc. | Monitoring Conversations To Identify Topics Of Interest | 12/124,104 |
| AOL Inc. | Network Management | 11/941,901 |
| AOL Inc. | Offline Away Messages | 13/899,895 |
| AOL Inc. | Online Adaptive Filtering of Messages | 13/541,033 |
| AOL Inc. | Ordering of Conversations Based on Monitored Recipient User Interaction With Corresponding Electronic Messages | 12/089,852 |
| AOL Inc. | Page Views For Proxy Servers | 13/243,828 |
| AOL Inc. | Passively Populating a Participant List with Known Contacts | 11/015,423 |
| AOL Inc. | Peer-To-Peer Access Of Personalized Profiles Using Content as an Intermediary | 12/031,389 |
| AOL Inc. | Personalization Techniques Using Image Clouds | 12/018,524 |
| AOL Inc. | Personalization Techniques Using Image Clouds | 12/018,622 |
| AOL Inc. | Personalized Content | 11/563,663 |
| AOL Inc. | Personalizing Content Based on Mood | 13/758,514 |
| AOL Inc. | Popularity Index | 11/464,816 |
| AOL Inc. | Popularity of Content Items | 13/750,202 |
| AOL Inc. | Promoting Interoperability of Online Messaging Systems Through the Use of Ubiquitous Online Identities | 11/561,880 |
| AOL Inc. | Promoting Interoperability of Online Messaging Systems Through the Use of Ubiquitous Online Identities | 11/561,886 |
| AOL Inc. | Promoting Interoperability Of Presence-Based Systems Through The Use Of Ubiquitous Online Identities | 11/561,877 |
| AOL Inc. | Promoting Interoperability Of Presence-Based Systems Through The Use Of Ubiquitous Online Identities | 13/786,350 |
| AOL Inc. | Providing a User Interface | 11/410,301 |
| AOL Inc. | Reducing Latencies In Web Page Rendering | 11/183,184 |
| AOL Inc. | Router-Host Logging | 11/395,540 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| AOL Inc. | Search Ranking Based on Duplicate Selection | 11/589,991 |
| AOL Inc. | Searching For Transient Streaming Multimedia Resources | 11/489,273 |
| AOL Inc. | Searching Recent Content Publication Activity | 13/453,650 |
| AOL Inc. | Selective Call Routing and Blocking | 11/146,284 |
| AOL Inc. | Sending Application Captures In Personal Communication | 13/472,113 |
| AOL Inc. | Server Evaluation of Client-Side Script | 13/893,139 |
| AOL Inc. | Service Clean-up | 11/281,887 |
| AOL Inc. | Sharing Network Addresses | 11/548,944 |
| AOL Inc. | Sharing Social Network Information | 11/079,522 |
| AOL Inc. | Single Universal Authentication System for Internet Services | 09/935,439 |
| AOL Inc. | Smart Payment Instrument Selection | 10/209,559 |
| AOL Inc. | Social Networking Permissions | 11/079,524 |
| AOL Inc. | Social Networking With Relationship Types | 10/981,460 |
| AOL Inc. | Sorting of Electronic Messages Using Attributes of the Sender Address | 13/616,441 |
| AOL Inc. | Spam Filtering Based on Content | 12/121,268 |
| AOL Inc. | System and Method For An Instant Messaging Interface | 11/986,768 |
| AOL Inc. | System and Method for Personalizing Electronic Content in Response to a Content Request | 11/321,073 |
| AOL Inc. | Systems and Methods for Analyzing and Clustering Search Queries | 13/357,385 |
| AOL Inc. | Systems and Methods for Analyzing and Managing Electronic Content | 13/536,672 |
| AOL Inc. | Systems and Methods For Associating Electronic Content | 13/533,429 |
| AOL Inc. | Systems and Methods For Building And Using Social Networks In Image Analysis | 12/186,270 |
| AOL Inc. | Systems and Methods for Bundling Digital Services | 13/887,253 |
| AOL Inc. | Systems and Methods For Caching And Serving Dynamic Content | 13/747,302 |
| AOL Inc. | Systems and Methods for Categorizing and Moderating User-Generated Content in an Online Environment | 13/112,556 |
| AOL Inc. | Systems and Methods for Challenge-Response Animation and Randomization Testing | 12/726,708 |
| AOL Inc. | Systems and Methods for Challenge-Response Animation and Randomization Testing | 13/620,347 |
| AOL Inc. | Systems and Methods for Creating and Updating Reputation Records | 13/620,409 |
| AOL Inc. | Systems and Methods for Customized Electronic Communications | 13/242,301 |
| AOL Inc. | Systems and Methods for Electronic Distribution of Job Listings | 12/912,644 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|--|------------------------------|
| AOL Inc. | Systems And Methods For Electronic Distribution Of Messages Over Communication Channels | 13/010,265 |
| AOL Inc. | Systems and Methods for Facilitating the Sharing of Digital Bundles of Services Between Users | 13/887,255 |
| AOL Inc. | Systems And Methods For Identifying And Managing Topical Content For Websites | 13/205,172 |
| AOL Inc. | Systems and Methods for Identifying and Notifying Users of Electronic Content Based on Biometric Recognition | 13/156,747 |
| AOL Inc. | Systems and Methods for Identifying Electronic Content | 12/757,342 |
| AOL Inc. | Systems And Methods For Identifying Electronic Content Using Video Graphs | 13/533,398 |
| AOL Inc. | Systems and Methods For Improved Web Searching | 13/794,534 |
| AOL Inc. | Systems And Methods For Improved Web-Based Document Retrieval And Object Manipulation | 12/457,758 |
| AOL Inc. | Systems And Methods For Internet Video Delivery | 13/303,348 |
| AOL Inc. | Systems and Methods for Location Tracking and Filtering Electronic Communications | 13/046,585 |
| AOL Inc. | Systems and Methods for Location Tracking in a Social Network | 13/046,373 |
| AOL Inc. | Systems and Methods for Managing Electronic Content | 12/845,307 |
| AOL Inc. | Systems and Methods For Managing Publication Of Online Advertisements | 13/272,813 |
| AOL Inc. | Systems and Methods for Manipulating Electronic Content Based on Speech Recognition | 13/156,780 |
| AOL Inc. | Systems And Methods For Mobile Application Requests Of Physical Facilities | 13/897,438 |
| AOL Inc. | Systems And Methods For Multicast Communication | 12/202,122 |
| AOL Inc. | Systems and Methods for Online Search Recirculation and Query Categorization | 13/156,724 |
| AOL Inc. | Systems and Methods for Organizing and Displaying Electronic Media Content | 13/046,253 |
| AOL Inc. | Systems and Methods For Paginating HTML Content | 13/826,306 |
| AOL Inc. | Systems and Methods for Performing Contextual Classification Using Supervised and Unsupervised Training | 13/573,727 |
| AOL Inc. | Systems and Methods for Processing and Organizing Electronic Content | 13/886,211 |
| AOL Inc. | Systems and Methods for Processing and Organizing Electronic Content | 13/886,221 |
| AOL Inc. | Systems and Methods For Processing Electronic Content | 13/836,477 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| AOL Inc. | Systems and Methods for Processing Electronic Content | 13/886,192 |
| AOL Inc. | Systems and Methods For Processing Electronic Transactions Based On Consumer Characteristics | 13/790,752 |
| AOL Inc. | Systems and Methods for Profiling Client Devices | 13/714,745 |
| AOL Inc. | Systems and Methods for Protecting Consumer Privacy in Online Advertising Environments | 13/041,768 |
| AOL Inc. | Systems and Methods For Providing A Content Item Database And Identifying Content Items | 13/179,940 |
| AOL Inc. | Systems and Methods For Providing A Spam Database and Identifying Spam Communications | 13/179,863 |
| AOL Inc. | Systems and Methods For Providing and Updating Live-Streaming Online Content in an Interactive Web Platform | 13/735,927 |
| AOL Inc. | Systems and Methods for Providing Mobile Mapping Services Including Trip Prediction and Route Recommendation | 13/906,078 |
| AOL Inc. | Systems And Methods For Providing Personalized Recommendations For Electronic Content | 13/710,293 |
| AOL Inc. | Systems and Methods For Providing SMS Message-Enabled Advertisements And Content Delivery | 13/794,731 |
| AOL Inc. | Systems and Methods For Providing Social Games for Computing Devices | 13/837,204 |
| AOL Inc. | Systems and Methods for Query Optimization | 13/271,561 |
| AOL Inc. | Systems and Methods for Reporter-Based Filtering of Electronic Communications and Messages | 12/458,076 |
| AOL Inc. | Systems and Methods For Sharing Audio Feeds | 13/794,185 |
| AOL Inc. | Systems and Methods For Testing Online Systems and Content | 13/763,343 |
| AOL Inc. | Systems and Methods for Transferring Application State Between Devices Based on Gestural Input | 13/436,171 |
| AOL Inc. | Systems and Methods For Using Imaging to Authenticate Online Users | 13/840,839 |
| AOL Inc. | Systems And Methods For Web Page Optimization | 13/215,818 |
| AOL Inc. | Systems and Methods for Web Site Customization Based on Time-of-Day | 13/277,664 |
| AOL Inc. | Targeted Advertising For Playlists Based Upon Search Queries | 11/491,502 |
| AOL Inc. | Targeted Notification Of Users Of A Communications System | 13/343,635 |
| AOL Inc. | Thumbnail Image Previews | 11/618,646 |
| AOL Inc. | Transparent Reconnection | 12/856,719 |
| AOL Inc. | User Interface System For Handheld Devices | 13/615,703 |
| AOL Inc. | User Profile Snapshots | 12/036,948 |
| AOL Inc. | User-Controlled Alternative Routing | 11/320,495 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|--|------------------------------|
| AOL Inc. | Using A Home-Networking Gateway To Manage Communications | 13/157,559 |
| AOL Inc. | Using User Profile Information To Determine An Avatar and/or Avatar characteristics | 11/017,634 |
| AOL Inc. | Visually-Represented Results to Search Queries in Rich Media Content | 11/321,044 |
| AOL Inc. | Voice Over Internet Protocol Call Handling Applications | 12/758,494 |
| AOL Inc. | Window Resizing In A Graphical User Interface | 11/747,819 |
| Buysight, Inc. | Providing Individualized Advertisement Based on Collaboratively Collected User Information | 13/216,041 |
| MapQuest, Inc. | Automated Route Determination | 10/259,789 |
| MapQuest, Inc. | Automated Route Determination | 10/259,793 |
| MapQuest, Inc. | Automated Route Determination | 12/690,540 |
| MapQuest, Inc. | Computer-Implemented Methods and Systems for Multi-Level Geographic Query | 13/890,646 |
| MapQuest, Inc. | Computer-Implemented Systems and Methods for Planning a Route | 12/982,356 |
| MapQuest, Inc. | Fancy Ketchup Query Analyzer & Parser | 13/887,097 |
| MapQuest, Inc. | Methods and Systems for De-cluttering Icons Representing Points Of Interest On A Map | 12/246,413 |
| MapQuest, Inc. | Presenting A Travel Route | 13/620,498 |
| MapQuest, Inc. | Search Results Clustering | 12/458,376 |
| MapQuest, Inc. | Systems and Methods For Analyzing Failed and Successful Search Queries | 13/841,764 |
| MapQuest, Inc. | Systems And Methods For Collecting And Using User-Contributed Map Data | 12/153,640 |
| MapQuest, Inc. | Systems and Methods for Generating Electronic Map Displays With Points-of-Interest Information | 13/019,801 |
| MapQuest, Inc. | Systems and Methods for Generating Electronic Map Displays With Points-of-Interest Information Based on Density Thresholds | 13/019,646 |
| MapQuest, Inc. | Systems and Methods for Generating Electronic Map Displays With Points-of-Interest Information Based on Reference Locations | 13/019,849 |
| MapQuest, Inc. | Systems and Methods For Improved Generation Of textual Directions Based On Positional Information | 13/850,257 |
| MapQuest, Inc. | Systems and Methods for Location-Based Advertising | 13/714,185 |
| MapQuest, Inc. | Systems and Methods For Point of Interest Data Ingestion | 13/836,903 |
| MapQuest, Inc. | Systems and Methods for Ranking Points of Interest | 13/650,657 |
| MapQuest, Inc. | Using Route Narrative Symbols | 13/430,614 |
| MapQuest, Inc. | Using Routing Symbols to Describe a Driving Maneuver | 13/867,967 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| n/a | Systems and Methods for Providing and Sharing Bundled Digital Services | 61/719,900 |
| n/a | Systems and Methods for Providing and Updating Live-Streaming Online Content in an Interactive Web Platform | 61/682,190 |
| n/a | Systems And Methods For Providing Digital Bundles of Services | 61/794,730 |
| n/a | Systems and Methods for Providing SMS-Enabled Advertisements | 61/668,438 |
| n/a | Systems and Methods for Providing Social Games for Mobile Devices | 61/706,069 |
| n/a | Systems And Methods For Processing And Displaying User-Generated Content | 61/752,867 |
| n/a | Systems and Methods for Processing and Organizing Electronic Content | 61/794,993 |
| n/a | Systems and Methods for Processing Electronic Content | 61/680,117 |
| n/a | Systems and Methods for Processing Electronic Content | 61/715,290 |
| n/a | Systems And Methods For Processing Electronic Transactions Based On Consumer Characteristics | 61/730,387 |
| n/a | Systems and Methods for Processing Geographic Data | 61/820,156 |
| n/a | Systems and Methods for Location-Based Advertising | 61/666,310 |
| n/a | Systems and Methods for Facilitating the Sharing of Digital Bundles of Services Between Users | 61/798,314 |
| n/a | Systems And Methods For Facilitating The Sharing Of Digital Bundles Of Services Between Users | 61/798,118 |
| n/a | Systems and Methods For Aggregating Information And Providing Access To Multiple Web Services Through An Interactive User Interface | 61/799,869 |
| n/a | Smoothing Splines-based Response Curve Estimation | 61/822,870 |
| n/a | Computerized Methods and Systems Related to Content Optimization | 61/671,982 |
| n/a | Go-Viral Canvas Products | 61/723,273 |
| n/a | Airflow Device for Electronic Components and Related Methods of Use | 61/824,115 |
| n/a | Accessible Electronic Interface | 61/814,134 |
| n/a | Mood-Based Organization and Display of Co-User Lists | 13/892,008 |
| Pictela, Inc. | Self-Replicating Rich Media Interface | 12/561,902 |

U.S. Issued Patents

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------------|--|------------------------------|
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,284 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,690 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,285 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,286 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,287 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,512 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,513 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,288 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,289 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,290 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,291 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,292 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,293 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,294 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,514 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,691 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,692 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,509 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,295 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,152 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D656,510 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,296 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,693 |
| AOL Advertising Inc. | A Display Apparatus Including Computer Generated Icons | D646,694 |

| Grantor | <u>Patent</u> | Patent or Application Number |
|-----------------------|---|------------------------------|
| AOL Advertising Inc. | Method and System For Media Initialization Via Data Sharing | 8301497 |
| AOL Advertising Inc. | Systems and Methods For Determining Bids For Placing Advertisements | 8175950 |
| AOL Advertising Inc. | Systems and Methods for Providing a Reverse Frequency Cap in Advertisement Viewing | 8306855 |
| AOL Advertising, Inc. | Systems and Methods for Providing Reverse Frequency Cap in Advertising Viewing | 8041602 |
| AOL Inc. | A Media File Format, System, and Method | 8,230,094 |
| AOL Inc. | A Method And System For Rule Based Indexing Of Multiple Data Structures | 7,308,464 |
| AOL Inc. | A Network Scoring System and Method | 7,685,286 |
| AOL Inc. | A Network Scoring System and Method | 8,271,646 |
| AOL Inc. | Annotation of Digital Items In A Shared List | 8,151,358 |
| AOL Inc. | Biasing Of Search Result Clustering To Ensure More Effective Point Of Interest (POI) Targeting | 7,761,350 |
| AOL Inc. | Chat Room Viewing | 8,443,041 |
| AOL Inc. | Client Application Fingerprinting Based On Analysis Of Client Requests | 8,244,799 |
| AOL Inc. | Collaborative User Query Refinement | 7,689,540 |
| AOL Inc. | Communication System and Method | 7,349,700 |
| AOL Inc. | Communication System and Method | 7,502,608 |
| AOL Inc. | Communication System and Method | 7,933,588 |
| AOL Inc. | Communication System and Method | 8,452,292 |
| AOL Inc. | Concatenated Audio Messages | 7,672,439 |
| AOL Inc. | Concatenated Audio Messages | 7,924,996 |
| AOL Inc. | Content Recommendation Using Third Party Profiles | 8,296,660 |
| AOL Inc. | Data Transfer Server | 6,721,795 |
| AOL Inc. | Database System | 6,292,800 |
| AOL Inc. | Displaying Advertisements In a Computer Network Environment | 7,962,604 |
| AOL Inc. | Displaying Advertisements In a Computer Network Environment | 8,341,264 |
| AOL Inc. | Displaying Complementary Content Sources | 7,240,092 |
| AOL Inc. | Displaying Complementary Content Sources in a Web- Based TV System | 6,757,707 |
| AOL Inc. | Displaying Complex Messaging Threads Into A Single Display | 8,200,762 |
| AOL Inc. | Distributed Image Storage Architecture | 7,197,513 |
| AOL Inc. | Distributed Image Storage Architecture | 7,526,511 |
| AOL Inc. | Distributing Personalized Content | 7,394,816 |
| AOL Inc. | Distributing Personalized Content | 7,778,258 |
| AOL Inc. | Distributing Personalized Content | 8,014,407 |
| AOL Inc. | Distributing Personalized Content | 8,363,636 |
| AOL Inc. | Dynamic Aggregation And Display Of Contextually Relevant Content | 7,917,840 |
| AOL Inc. | Dynamic Identification of Other Viewers of a Television Program to an Online Viewer | 7669213 |
| AOL Inc. | Dynamic Identification of Other Viewers of a Television Program to an Online Viewer | 8255950 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| AOL Inc. | Dynamic Scheduling of Meetings with Multiple Participants | 8358762 |
| AOL Inc. | Electronic Information Caching | 7039683 |
| AOL Inc. | Electronic Mail Forwarding Service | 8214443 |
| AOL Inc. | Enabling Programming of Recordings | 8316399 |
| AOL Inc. | Exchanging Digital Content | 8064894 |
| AOL Inc. | Filtering System for Providing Personalized Information in the Absence of Negative Data | 7567958 |
| AOL Inc. | Filtering System for Providing Personalized Information in the Absence of Negative Data | 7890505 |
| AOL Inc. | Filtering System for Providing Personalized Information in the Absence of Negative Data | 8060507 |
| AOL Inc. | Full-Text Relevancy Ranking | 6842761 |
| AOL Inc. | Full-Text Relevancy Ranking | 8095529 |
| AOL Inc. | Generating And Implementing A-Lists To Manage User Relationships | 8156098 |
| AOL Inc. | Handheld Client Framework System | 8200745 |
| AOL Inc. | Identifying Unauthorized Communication Systems Based On Their Memory Contents | 6954861 |
| AOL Inc. | Identifying Unauthorized Communication Systems Based On Their Memory Contents | 7516496 |
| AOL Inc. | Intelligent Management Of Application Connectivity | 8255466 |
| AOL Inc. | Localization of Clients and Servers | 7260094 |
| AOL Inc. | Localization of Clients and Servers | 7962570 |
| AOL Inc. | Managing Access to Digital Content Sources | 8291062 |
| AOL Inc. | Managing Content Choices | 6757691 |
| AOL Inc. | Mechanism For Rendering Advertising Objects Into Featured Content | 8413182 |
| AOL Inc. | Metadata Quality Improvement | 7925967 |
| AOL Inc. | Method and Apparatus for Publishing Hypermedia Documents Over Wide Area Networks | 5870552 |
| AOL Inc. | Method and Apparatus for Publishing Hypermedia Documents Over Wide Area Networks | 6393469 |
| AOL Inc. | Method of Disseminating Advertisements Using an Embedded Media Player Page | 8,122,236 |
| AOL Inc. | Methods and Systems For Collecting Data For Media Files | 7849160 |
| AOL Inc. | Methods and Systems for Restricting Electronic Content Based on Guardian Control Decisions | 8346953 |
| AOL Inc. | Methods and Systems For Visually Distinguishing User Attribute Similarities And Differences | 8413060 |
| AOL Inc. | Migrating Configuration Information Based On User Identity Information | 7752329 |
| AOL Inc. | Migrating Rating Configuration Information Based On User Identity Information | 8275900 |
| AOL Inc. | Mood based organization and display of instant messenger buddy lists | 7921369 |
| AOL Inc. | Mood-Based Organization and Display of Instant Messenger Buddy Lists | 8443290 |
| AOL Inc. | Offline Away Messages | 8452839 |
| AOL Inc. | Online Adaptive Filtering of Messages | 8214437 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|--|------------------------------|
| AOL Inc. | Packaging Web Content for Reuse | 7783967 |
| AOL Inc. | Page Views For Proxy Servers | 8028059 |
| AOL Inc. | Personalizing Content Based On Mood | 7764311 |
| AOL Inc. | Personalizing Content Based on Mood | 8373768 |
| AOL Inc. | Personalizing Content Using an Intermediary Bridge | 7243104 |
| AOL Inc. | Popularity of Content Items | 8364669 |
| AOL Inc. | Promoting Interoperability Of Presence-Based Systems Through The Use Of Ubiquitous Online Identities | 8396922 |
| AOL Inc. | Searching Recent Content Publication Activity | 8166061 |
| AOL Inc. | Sending Application Captures In Personal Communication | 8201098 |
| AOL Inc. | Server Evaluation of Client-Side Script | 8443346 |
| AOL Inc. | Sorting of Electronic Messages Using Attributes of the Sender Address | 7290033 |
| AOL Inc. | Sorting of Electronic Messages Using Attributes of the Sender Address | 7617286 |
| AOL Inc. | Sorting of Electronic Messages Using Attributes of the Sender Address | 7945633 |
| AOL Inc. | Sorting of Electronic Messages Using Attributes of the Sender Address | 8285803 |
| AOL Inc. | Systems and Methods For Caching And Serving Dynamic Content | 8370424 |
| AOL Inc. | Systems and Methods for Creating and Updating Reputation Records | 8321516 |
| AOL Inc. | Systems and Methods For Improved Web Searching | 8176069 |
| AOL Inc. | Systems and Methods For Improved Web Searching | 8396885 |
| AOL Inc. | Targeted Geographical Condition Notification Of Users Based On A Geographic Location and Device Types Or Software Of The Users | 7703611 |
| AOL Inc. | Targeted Notification Of Users Of A Communications System Based on Geographic Location | 8095609 |
| AOL Inc. | Throttling Electronic Communications From One or More Senders | 7032023 |
| AOL Inc. | Throttling Electronic Communications From One Or More Senders | 7788329 |
| AOL Inc. | Transparent Reconnection | 7917638 |
| AOL Inc. | User Interface System For Handheld Devices | 8327297 |
| AOL Inc. | User-Behavior Remotely-Triggered Home/Office Automation | 8170960 |
| AOL Inc. | User-Behavior Remotely-Triggered Home/Office Automation | 8458102 |
| AOL Inc. | Using A Home-Networking Gateway To Manage Communications | 7970863 |
| AOL Inc. | Using A Network Bandwidth Setting Based On Determining The Network Environment | 7412516 |
| AOL, Inc. | Method and Apparatus for Publishing Hypermedia Documents Over Wide Area Networks | 7139812 |
| AOL, Inc. | Searching Electronic Content in Instant-Messaging Applications | 7814100 |
| MapQuest, Inc. | Computer-Implemented Methods and Systems for Multi-Level Geographic Query | 8,458,173 |

| <u>Grantor</u> | <u>Patent</u> | Patent or Application Number |
|----------------|---|------------------------------|
| MapQuest, Inc. | Presenting A Travel Route | 7474960 |
| MapQuest, Inc. | Presenting A Travel Route | 7702454 |
| MapQuest, Inc. | Presenting A Travel Route | 7925430 |
| MapQuest, Inc. | Presenting A Travel Route | 8335646 |
| MapQuest, Inc. | Systems And Methods For Improved Generation Of textual Directions Based On Positional Information | 8406997 |
| MapQuest, Inc. | Using Route Narrative Symbols | 7076363 |
| MapQuest, Inc. | Using Route Narrative Symbols | 7324897 |
| MapQuest, Inc. | Using Route Narrative Symbols | 7729855 |
| MapQuest, Inc. | Using Route Narrative Symbols | 8145426 |
| MapQuest, Inc. | Using Routing Symbols To Describe A Driving Maneuver | 7620494 |
| MapQuest, Inc. | Using Routing Symbols To Describe A Driving Maneuver | 8428871 |

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