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| PATENT ASSIGNMENT COVER SHEET |
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Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6491726

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| SUBMISSION TYPE: | CORRECTIVE ASSIGNMENT |
| NATURE OF CONVEYANCE: | Corrective Assignment to correct the ASSIGNEE NAME previously recorded on Reel 053654 Frame 0254. Assignor(s) hereby confirms the RELEASE OF SECURITY INTEREST GRANTED PURSUANT TO THE PATENT SECURITY AGREEMENT PREVIOUSLY RECORDED. |

CONVEYING PARTY DATA

| Name | Execution Date |
|---|----------------|
| STARBOARD VALUE INTERMEDIATE FUND LP, AS COLLATERAL AGENT | 06/30/2020 |

RECEIVING PARTY DATA

| | |
|--------------------------|-------------------------------------|
| Name: | INNOVATIVE DISPLAY TECHNOLOGIES LLC |
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| Internal Address: | SUITE 400 |
| City: | FRISCO |
| State/Country: | TEXAS |
| Postal Code: | 75034 |

PROPERTY NUMBERS Total: 8

| Property Type | Number |
|----------------|---------|
| Patent Number: | 6827456 |
| Patent Number: | 7364341 |
| Patent Number: | 7497599 |
| Patent Number: | 7364342 |
| Patent Number: | 7448775 |
| Patent Number: | 7887227 |
| Patent Number: | 8322905 |
| Patent Number: | 7367705 |

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PATENT

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|--------------------------------|---------------------------|
| ATTORNEY DOCKET NUMBER: | 069902-0049 |
| NAME OF SUBMITTER: | SCOTT KAREFF(069902-0049) |
| SIGNATURE: | /rr for sk/ |
| DATE SIGNED: | 01/12/2021 |

Total Attachments: 150

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RELEASE OF SECURITY INTEREST IN PATENTS

WHEREAS, pursuant to that certain Patent Security Agreement (the "Patent Security Agreement"), dated as of June 4, 2020, and recorded in the United States Patent and Trademark Office at Reel 052853, Frame 0153, each Grantor on the signature pages hereto (each a "Releasee" and, together, the "Releasees") granted to Starboard Value Intermediate Fund LP ("Releasor"), as Collateral Agent for itself and various other financial institutions, a security interest in all right, title and interest of Releasee in and to the patents and patent applications listed on Schedule A attached hereto (the "Patents"); and

WHEREAS, each Releasee has requested, and Releasor wishes to provide a document suitable for recording in the United States Patent and Trademark Office for purposes of recording the release, relinquishment and discharge of its security interest in the Patents.

NOW, THEREFORE, in consideration of and in exchange for good and valuable consideration, Releasor hereby agrees as follows:

1. Defined Terms. All capitalized terms used but not otherwise defined herein have the meanings given to them in the Patent Security Agreement.
2. Release of Security Interest. Releasor, without representation, warranty or recourse, hereby terminates the Patent Security Agreement and releases, relinquishes, terminates, cancels and discharges its continuing security interest in the Collateral, including without limitation, its continuing security interest in the Patents, including, without limitation, all applications, registrations and recordings thereof, as applicable, and all proceeds thereof, including, without limitation, any and all causes of action which may exist by reason of infringement, misappropriation or other violation thereof and any and all damages arising from past, present and future infringements, misappropriations or other violations thereof.
3. Recordation. The Releasor authorizes the Commissioner for Patents and any other government officials to record and register this Release of Security Interest in Patents upon written request by any Releasee.

IN WITNESS WHEREOF, the parties have caused this Release of Security Interest in Patents to be duly executed as of June 30, 2020.

**STARBOARD VALUE INTERMEDIATE
FUND LP**

By: 
Name: Jeffrey C. Smith
Title: Authorized Signatory

SCHEDULE A

Patent and Patent Applications

| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|--|-------------------------------|-------------|------------|
| United States | ACACIA RESEARCH GROUP LLC METHOD AND APPARATUS FOR COLLECTING AND EXPRESSING GEOGRAPHICALLY REFERENCED DATA | 6572142 | 2000-10-31 | 2004-08-03 |
| United States | METHOD AND SYSTEM FOR A WIRELESS DIGITAL MESSAGE SERVICE | 6349135 | 1998-09-01 | 2002-02-19 |
| United States | AUTOMATED SECURITY AND RECORD SYSTEM FOR TRANSPORTER TAGGED ITEMS | 6080800 | 2001-02-16 | 2006-01-17 |
| United States | INDIVIDUAL ADJUSTMENT OF PIT AND BAND TRANSITION LOCATIONS IN AN OPTICAL DISC MASTERING PROCESS | 6469969 | 2001-08-21 | 2002-10-22 |
| United States | VARYING THE RATE AT WHICH DATA APPEAR ON AN OPTICAL DISC ROTATED AT A CONSTANT LINEAR VELOCITY TO PREVENT UNAUTHORIZED DUPLICATION OF THE DISC | 6477124 | 2001-05-18 | 2002-11-05 |
| United States | COPY PROTECTION THROUGH SYMBOL SUBSTITUTION AND INDUCED ERRORS | 6715122 | 2001-02-23 | 2004-03-30 |
| United States | HIDING DIGITAL DATA IN A DIGITAL AUDIO OR VIDEO CARRIER SIGNAL | 6768709 | 2001-02-23 | 2004-07-27 |
| United States | METHOD OF MAKING A VERTICAL INTEGRATED CIRCUIT | 5766984 | 1995-09-22 | 1998-06-16 |
| United States | WIRING METHOD FOR PRODUCING A VERTICAL INTEGRATED CIRCUIT | 6448174 | 2000-10-05 | 2002-09-10 |
| United States | STRUCTURE AND VERTICAL INTEGRATED CIRCUIT STRUCTURE | 6548391 | 2002-03-18 | 2003-04-15 |
| United States | METHOD OF VERTICALLY INTEGRATING ELECTRIC COMPONENTS BY MEANS OF BACK CONTACTING | 6664132 | 2001-11-29 | 2003-12-16 |
| United States | METHOD FOR PRODUCING THREE DIMENSIONAL CIRCUITS | 6631923 | 1997-04-07 | 2000-02-29 |
| United States | ELECTRONMAGNETICALLY SHIELDED HEARING AIDS | 7476982 | 2004-05-11 | 2007-02-13 |
| United States | HAND HELD CONTROL DEVICE WITH DUAL MODE JOYSTICK FOR POINTING AND SCROLLING | 5936571 | 1997-01-31 | 1999-08-10 |
| United States | INTEGRATED GPS/INTERFERENCE LOCATION SYSTEM | 6185576 | 1998-10-21 | 2001-02-06 |
| United States | DEFINING A UNIFORM SUBJECT CLASSIFICATION SYSTEM | | | |
| United States | CORPORATING DOCUMENT MANAGEMENT/RECORDS RETENTION FUNCTIONS | | | |
| United States | METHOD AND SYSTEM FOR ACQUIRING BRANDED PROMOTIONAL PRODUCTS | 7127415 | 1999-11-16 | 2006-10-24 |
| United States | INDUCTANCE REDUCED WIRE BONDING TYPE SEMICONDUCTOR DEVICE | 5798571 | 1996-07-02 | 1998-08-25 |
| United States | VOLTAGE BOOSTER CIRCUIT | 5812018 | 1997-01-13 | 1998-09-22 |
| United States | BRIDGE CIRCUITRY COMPRISING SERIES CONNECTION OF VERTICAL AND LATERAL MOSFETS | 5818282 | 1997-02-07 | 1998-10-06 |

| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|---|-------------------------------|-------------|------------|
| United States | SEMICONDUCTOR STORAGE DEVICE | 5918773 | 1997-09-29 | 1998-10-06 |
| United States | HIGH-VOLTAGE GENERATING CIRCUIT ABLE TO GENERATE POSITIVE-HIGH VOLTAGE AND NEGATIVE HIGH VOLTAGE AT THE SAME TIME | 5931844 | 1997-08-13 | 1998-11-03 |
| United States | DIFFERENTIAL AMPLIFIER | 5947598 | 1997-05-14 | 1998-12-08 |
| United States | OUTPUT CIRCUIT WITH OVERVOLTAGE PROTECTION | 5964245 | 1996-10-15 | 1999-03-26 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE | 5949699 | 1998-06-25 | 1999-09-07 |
| United States | SEMICONDUCTOR DEVICE INCORPORATING A STEPPED CONTACT HOLE | 5952724 | 1997-06-19 | 1999-09-14 |
| United States | SENSE AMPLIFIER CIRCUIT HAVING HIGH SPEED OPERATION | 5999479 | 1997-07-22 | 1999-12-07 |
| United States | SEMICONDUCTOR DEVICE WITH CONDUCTIVE PLUGS | 6004839 | 1997-02-20 | 1999-12-21 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE WITH DUMMY PATTERN FOR EQUALIZING THICKNESS OF INTER-LEVEL INSULATING STRUCTURE | 6023099 | 1997-12-22 | 2000-02-08 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT MEMORY | 6023442 | 1997-08-11 | 2000-02-08 |
| United States | DIFFERENTIAL AMPLIFIER WITH INPUT SIGNAL DETERMINED STANDBY STATES | 6028458 | 1998-01-22 | 2000-02-22 |
| United States | VARIABLE-CURRENT SOURCE WITH DEVIATION COMPENSATION | 6031366 | 1998-08-19 | 2000-02-29 |
| United States | SEMICONDUCTOR DEVICE ASSEMBLY METHOD AND SEMICONDUCTOR DEVICE PRODUCED BY THE METHOD | 6044697 | 1998-12-30 | 2000-04-04 |
| United States | OUTPUT CIRCUIT FREE FROM OVERSHOOT AND UNDERSHOOT ON SIGNAL LINES ALTERNATELY DRIVEN IN POSITIVE POTENTIAL RANGE AND NEGATIVE POTENTIAL RANGE | 6046633 | 1998-12-21 | 2000-04-04 |
| United States | FABRICATION METHOD OF SEMICONDUCTOR DEVICE USING CMP PROCESS | 6096632 | 1998-04-10 | 2000-09-01 |
| United States | INPUT CIRCUIT HAVING CURRENT CONTROL | 6121792 | 1998-09-25 | 2000-09-19 |
| United States | SOLAMOS FIELD EFFECT TRANSISTOR THAT WITHDRAWS EXCESS CARRIER THROUGH A CARRIER PATH SILICON LAYER | 6124613 | 1998-05-04 | 2000-09-26 |
| United States | SEMICONDUCTOR MEMORY DEVICE | 6130846 | 1999-02-05 | 2000-10-10 |
| United States | BOOSTING CIRCUIT USING 2-STEP BOOSTING OPERATION | 6137733 | 1999-10-04 | 2000-10-24 |
| United States | METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE HAVING MULTILAYER WIRING | 6140225 | 1998-06-25 | 2000-10-31 |
| United States | BOOSTING CIRCUIT WITH BOOSTED VOLTAGE LIMITED | 6141262 | 1999-04-07 | 2000-10-31 |
| United States | SYNCHRONOUS-BUFFER CIRCUIT AND DATA TRANSMISSION CIRCUIT HAVING THE SYNCHRONOUS-BUFFER CIRCUIT | 6172539 | 1999-05-28 | 2001-01-09 |

| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|---|-------------------------------|-------------|------------|
| United States | POWER ON CIRCUIT BUILT IN IC | 6198319 | 1999-11-26 | 2001-03-06 |
| United States | EMBEDDED ISYAWING-A FERAM SECTION AND A LOGIC CIRCUIT SECTION | 6218197 | 2000-06-29 | 2001-04-17 |
| United States | METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE HAVING MULTILAYER WIRING | 6225217 | 1999-11-12 | 2001-05-01 |
| United States | STATIC-RANDOM-ACCESS MEMORY (SRAM) CIRCUIT | 6259623 | 2000-06-16 | 2001-07-10 |
| United States | PROGRAM COMPLETE SYSTEM AND ITS COMPILER METHOD FOR EFFICIENTLY COMPILING A SOURCE PROGRAM INCLUDING AN INDIRECT CALL FOR A PROCEDURE | 6292940 | 1999-01-26 | 2001-09-18 |
| United States | CAPACITOR HAVING FIRST AND SECOND PROTECTIVE FILMS | 6295195 | 1999-12-28 | 2001-09-25 |
| United States | COMPILING METHOD FOR GENERATING TARGET PROGRAM IN ACCORDANCE WITH TARGET PROCESSOR TYPE, COMPILING DEVICE, RECORDING MEDIUM WITH COMPILING PROGRAM RECORDED THEREIN AND RECORDING MEDIUM WITH CONVERSION TABLE USED IN COMPILING RECORDED THEREIN | 6305013 | 1999-04-01 | 2001-10-16 |
| United States | BOOSTING CIRCUIT | 6341077 | 2000-10-31 | 2002-01-22 |
| United States | INPUT CIRCUIT, OUTPUT CIRCUIT, AND INPUT/OUTPUT CIRCUIT AND SIGNAL TRANSMISSION SYSTEM USING THE SAME INPUT/OUTPUT CIRCUIT | 6366126 | 1999-12-10 | 2002-04-02 |
| United States | FAN FILTER UNIT FOR CLEANROOM | 6368393 | 2000-07-13 | 2002-04-09 |
| United States | FERROELECTRIC MEMORY INCLUDING FERROELECTRIC CAPACITOR, ONE OF WHOSE ELECTRODES IS CONNECTED TO METAL SILICIDE FILM | 6384440 | 2000-11-02 | 2002-05-07 |
| United States | NON-VOLATILE SEMICONDUCTOR DEVICE AND NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE FOR STORING MULTI-VALUE INFORMATION | 6441425 | 2000-10-10 | 2002-08-27 |
| United States | SEMICONDUCTOR STORAGE DEVICE DATA SENSING METHOD AND APPARATUS | 6442081 | 2001-04-25 | 2002-08-27 |
| United States | COPPER WIRING STRUCTURE COMPRISING A COPPER MATERIAL BURIED IN A HOLLOW OF AN INSULATING FILM AND A CARBON LAYER BETWEEN THE HOLLOW AND THE COPPER MATERIAL IN SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME | 6486559 | 1998-06-25 | 2002-11-26 |
| United States | SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING SAME | 6549950 | 2000-06-27 | 2005-02-01 |
| United States | SEMICONDUCTOR DEVICE AND A METHOD OF MANUFACTURING THE SAME | 6060765 | 1998-07-08 | 2000-05-09 |

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| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|---|-------------------------------|-------------|------------|
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE INCLUDING TREATMENT OF GAS USED IN THE PROCESS | 6066508 | 1998-06-03 | 2000-05-23 |
| United States | METHOD OF FABRICATING A SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE HAVING AN INTERLEVEL DIELECTRIC LAYER WITH VOIDS BETWEEN NARROWLY SPACED WIRING LINES | 6162723 | 1998-12-14 | 2000-12-19 |
| United States | SEMICONDUCTOR DEVICE COMPRISING CAPACITOR AND METHOD OF FABRICATING THE SAME | 6194758 | 1998-06-11 | 2001-02-27 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE AND METHOD OF MANUFACTURING SAME | 6255151 | 1998-12-11 | 2001-07-03 |
| United States | METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE | 6300206 | 2000-03-03 | 2001-10-09 |
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE INCLUDING TREATMENT OF GAS USED IN THE PROCESS | 6319860 | 2000-04-18 | 2001-11-20 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE | 6423992 | 2001-05-15 | 2002-07-23 |
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE INCLUDING TREATMENT OF GAS USED IN THE PROCESS | 6521550 | 2001-10-19 | 2003-02-18 |
| United States | METHOD OF FABRICATING SEMICONDUCTOR DEVICE | 6545326 | 2001-07-24 | 2003-04-08 |
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE INCLUDING TREATMENT OF GAS USED IN THE PROCESS | 6602808 | 2001-12-13 | 2003-08-05 |
| United States | METHOD OF FABRICATING SEMICONDUCTOR DEVICE | 6610564 | 2001-07-24 | 2003-08-26 |
| United States | SEMICONDUCTOR DEVICE MANUFACTURING METHOD AND SEMICONDUCTOR DEVICE | 6924192 | 2003-10-31 | 2005-08-02 |
| United States | SEMICONDUCTOR DEVICE COMPRISING A HIGHLY RELIABLE CONSTANT CAPACITANCE CAPACITOR | 6940116 | 2001-01-10 | 2005-09-06 |
| United States | METHOD OF FABRICATING SEMICONDUCTOR DEVICE | 7118983 | 2005-06-30 | 2006-10-10 |
| United States | SEMICONDUCTOR DEVICE COMPRISING CAPACITOR AND METHOD OF FABRICATING THE SAME | 7439132 | 2006-01-23 | 2008-10-21 |
| United States | SEMICONDUCTOR DEVICE MANUFACTURING METHOD AND SEMICONDUCTOR DEVICE | 7439569 | 2006-06-20 | 2008-10-21 |
| United States | SEMICONDUCTOR DEVICE COMPRISING CAPACITOR AND METHOD OF FABRICATING THE SAME | 8471321 | 2010-09-13 | 2013-06-25 |
| United States | SRAM WITH STACKED CAPACITOR SPACED FROM GATE ELECTRODES | 5780910 | 1996-07-17 | 1998-07-14 |
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE | 6030865 | 1998-04-28 | 2000-02-29 |

| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|---|-------------------------------|-------------|------------|
| United States | METHOD OF MANUFACTURING A SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE | 6171992 | 1998-02-19 | 2001-01-09 |
| United States | PROCESS FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE | 6245614 | 1999-11-05 | 2001-06-12 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE HAVING CAPACITOR ELEMENT | 6396114 | 2001-04-17 | 2002-05-28 |
| United States | SEMICONDUCTOR DEVICE WITH SHIELD LAYERS AND METHOD OF FORMING THE SAME | 6399485 | 2000-07-28 | 2002-06-04 |
| United States | SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE HAVING CAPACITOR ELEMENT | 6476453 | 2001-12-03 | 2002-11-05 |
| United States | MEMORY SYSTEM ALLOWING FAST OPERATION OF PROCESSOR WHILE USING FLASH MEMORY INCAPABLE OF RANDOM ACCESS | 6610444 | 2003-02-25 | 2004-10-26 |
| United States | SEMICONDUCTOR DEVICE WITH SEAL RING | 7605448 | 2005-09-08 | 2009-10-20 |
| United States | SEMICONDUCTOR DEVICE WITH SEAL RING AND SACRIFICIAL CORNER PATTERN | 7884034 | 2009-06-15 | 2011-02-08 |
| United States | SEMICONDUCTOR CHIP WITH SEAL RING AND SACRIFICIAL CORNER PATTERN | 8018030 | 2009-03-24 | 2011-09-13 |
| United States | SEMICONDUCTOR CHIP WITH SEAL RING AND SACRIFICIAL CORNER PATTERN | 8063294 | 2011-05-20 | 2015-02-24 |
| United States | Method And Nonvolatile Semiconductor Memory For Repairing Over-Fused Cells | 5844847 | 1996-12-06 | 1998-12-01 |
| United States | Semiconductor Device Capable Of Operating Stably With Reduced Power Consumption | 6046627 | 1998-02-20 | 2000-04-04 |
| United States | High-Speed Semiconductor Memory Apparatus Including Circuitry To Increase Writing And Reading Speed | 6091629 | 1997-08-06 | 2000-07-18 |
| United States | Non-Volatile Semiconductor Memory Device For Selective Cell Flash Erasing/Programming | 6111792 | 1999-03-15 | 2000-08-29 |
| United States | Information Processing Apparatus Having A Bus Using The Protocol Of The Acknowledge Type In The Source Clock Synchronous System | 6539444 | 1999-09-03 | 2003-03-25 |
| United States | Semiconductor Memory Apparatus, Semiconductor Apparatus, Data Processing Apparatus And Computer System | 6665209 | 2002-12-17 | 2003-12-16 |
| United States | Information Processing Apparatus | 6665807 | 1999-09-03 | 2003-12-16 |

| Jurisdiction | Title | Application No. or Patent No. | Filing Date | Issue Date |
|---------------|---|-------------------------------|-------------|------------|
| United States | Semiconductor-Memory-Apparatus, Semiconductor-Apparatus, Data Processing-Apparatus-And-Computer-System | 6030268 | 2003-10-17 | 2005-01-04 |
| United States | Semiconductor-Device | 7560975 | 2007-01-05 | 2009-07-14 |
| United States | SEMICONDUCTOR-DEVICE-WITH-AN-ACTIVE-REGION-AND-PLURAL DUMMY-REGIONS | 6693315 | 2001-11-02 | 2004-02-17 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 7071560 | 2003-12-31 | 2006-07-04 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 7411302 | 2006-05-10 | 2008-08-12 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 7589423 | 2007-05-24 | 2009-09-15 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 7687914 | 2007-10-30 | 2010-03-30 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 7948086 | 2010-03-01 | 2011-05-24 |
| United States | METHOD-OF-MANUFACTURING-A-SEMICONDUCTOR-DEVICE-HAVING-AN ACTIVE-REGION-AND-DUMMY-PATTERNS | 8119495 | 2011-04-28 | 2012-02-21 |
| United States | SEMICONDUCTOR-DEVICE-HAVING-ACTIVE-REGION-AND-DUMMY WIRINGS | 8426969 | 2012-01-31 | 2013-04-23 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 8604505 | 2013-04-08 | 2013-12-10 |
| United States | METHOD-OF-MANUFACTURING-A-SEMICONDUCTOR-DEVICE-INCLUDING DUMMY-REGIONS-AND-DUMMY-WIRINGS | 9064926 | 2013-12-09 | 2015-06-23 |
| United States | SEMICONDUCTOR-DEVICE-AND-A-METHOD-OF-MANUFACTURING-THE SAME-AND-DESIGNING-THE-SAME | 9337147 | 2015-06-19 | 2016-05-10 |
| United States | Intermediate-potential-generating-circuit | 5869997 | 1997-01-08 | 1999-02-09 |
| United States | Speech-recognition-system | 5099665 | 1997-05-29 | 1999-06-01 |
| United States | Semiconductor-integrated-circuit | 5014905 | 1997-11-04 | 1999-06-22 |
| United States | Chopper-comparator-showing-high-speed-and-low-power-operations-free-of-misfunction-under-variation-of-logical-threshold-voltage-of-inverter | 5959469 | 1997-09-22 | 1999-09-28 |
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| United States | Determining a known character string equivalent to a query string | US7546316B2 | 6/14/2007 | 6/9/2009 |
| United States | Method and system for providing advertising inventory information in response to demographic inquiries | US8060416B2 | 5/7/2001 | 11/15/2011 |
| United States | Method and apparatus for accessing targeted, personalized voice/audio web content through wireless devices | US7206745B2 | 3/9/2004 | 4/17/2007 |
| United States | Method and apparatus for accessing targeted, personalized voice/audio web content through wireless devices | US6728731B2 | 5/15/2001 | 4/27/2004 |
| United States | Online media exchange | US7962363B2 | 11/22/2002 | 6/14/2011 |
| United States | Load balancing system and method in a multiprocessor system | US7203747B2 | 5/25/2001 | 4/10/2007 |
| United States | Centralized feed manager | US8135805B2 | 9/14/2010 | 3/13/2012 |
| United States | Centralized feed manager | US7177931B2 | 5/31/2001 | 2/13/2007 |
| United States | Centralized feed manager | US8292536B2 | 3/8/2012 | 3/5/2013 |
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| United States | Technique for license management and online software license enforcement | US7890430B2 | 1/6/2009 | 2/15/2011 |
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| United States | Data list transmission and input mapping | US6950994B2 | 8/24/2001 | 9/27/2005 |
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| United States | System and method allowing advertisers to manage search listings in a pay-for-placement search system using grouping | US7698315B2 | 5/8/2006 | 4/13/2010 |
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| United States | Method for embedding a component in a base and forming a contact | US6991966B2 | 9/23/2004 | 1/31/2006 |
| United States | Method for embedding a component in a base | US7732909B2 | 5/4/2007 | 6/8/2010 |
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| United States | Method and system for blending search engine results from disparate sources into one search result | US7219090B2 | 4/25/2003 | 5/15/2007 |
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| United-States | Listings optimization using a plurality of data sources | US7617203B2 | 1/6/2004 | 11/10/2009 |
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| United States | Systems and methods for a search-based email client | US0438540B2 | 4/1/2013 | 9/6/2016 |
| United States | System and method for a subscription model for user email database for use in anti-spam | US7181764B2 | 10/28/2004 | 2/20/2007 |
| United States | Method and system of providing dynamic dialogs | US7412655B2 | 11/2/2004 | 8/12/2008 |
| United States | Customized geographical location indexing | US0051087B2 | 9/30/2008 | 11/1/2011 |
| United States | Optimal storage and retrieval of XML data | US7403940B2 | 11/16/2004 | 7/22/2008 |

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| United-States | Systems and Methods for Providing Notification And Feedback Based On Electronic Payment Transactions | US10991539 | 11/17/2004 | |
| United-States | Automatic generation of taxonomies for categorizing queries and search query processing using taxonomies | US7428533B2 | 12/16/2004 | 9/23/2008 |
| United-States | Search processing with automatic categorization of queries | US7620628B2 | 12/16/2004 | 11/17/2009 |
| United-States | System and methods for ranking the relative value of terms in a multi-term search query using deletion prediction | US7406465B2 | 12/14/2004 | 7/29/2008 |
| United-States | Bitmaps access for managing blog content | US7689575B2 | 12/29/2004 | 3/30/2010 |
| United-States | Search systems and methods using enhanced contextual queries | US7856441B1 | 1/10/2005 | 12/21/2010 |
| United-States | Reputation based search | US7406466B2 | 1/14/2005 | 7/29/2008 |
| United-States | System and method for improving online search engine results | US7599966B2 | 1/28/2005 | 10/6/2009 |
| United-States | Method and apparatus for providing real-time notification for avatars | US7965566B2 | 1/31/2005 | 1/4/2011 |
| United-States | Method and apparatus for providing flash based avatars | US7707520B2 | 1/31/2005 | 4/27/2010 |
| United-States | Predictive communication routing scheme using instant messaging preferences and/or settings for routing packet traffic for voice, video and other multimedia communications | US8223747B2 | 2/10/2005 | 7/17/2012 |
| United-States | Integrated instant messaging and telephone services billing system | US7634072B2 | 2/10/2005 | 12/15/2009 |
| United-States | Scenarios interfacing for instant messaging and internet telephony across wireless networks | US7260082B2 | 2/10/2005 | 8/21/2007 |
| United-States | System and method for proximity area networking for selection of messaging | US8265654B2 | 7/20/2011 | 9/11/2012 |
| United-States | System and method for proximity area networking for mobile gaming | US8989727B2 | 9/5/2012 | 3/24/2015 |
| United-States | System and method for wireless communication between previously known and unknown users | US8023920B2 | 2/27/2009 | 9/20/2011 |
| United-States | System and method for profile filtered messaging | US8240566B2 | 7/20/2011 | 8/21/2012 |
| United-States | System and method for portable profiles | US8478247B2 | 7/20/2011 | 7/2/2013 |
| United-States | System and method for profile filtered advertisements | US8478254B2 | 8/20/2012 | 7/2/2013 |
| United-States | System and method for wireless communication between previously known and unknown users | US7545784B2 | 2/10/2005 | 6/9/2009 |
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| United States | Database replication across different database platforms | US7026988B1 | 3/4/2005 | 4/20/2010 |
| United States | Ranking and increasing the relevance of the results of internet searches | US7574436B2 | 3/10/2005 | 8/11/2009 |
| United States | System for modifying queries before presentation to a sponsored search generator or other matching system where modifications improve coverage without a corresponding reduction in relevance | US7668808B2 | 3/10/2005 | 2/23/2010 |
| United States | Tester for determining the validity of a feature in a remote device | US7630708B2 | 3/11/2005 | 12/8/2009 |
| United States | Systems and methods for collecting user annotations | US7599950B2 | 3/15/2005 | 10/6/2009 |
| United States | Inverse-search systems and methods | US8150825B2 | 3/15/2005 | 4/3/2012 |
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| United States | Inverse-search systems and methods | US8612417B2 | 3/4/2013 | 12/17/2013 |
| United States | Search system and methods with integration of user annotations from a trust network | US8788492B2 | 3/15/2005 | 7/22/2014 |
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| United States | Search systems and methods with integration of user annotations | US8058508B2 | 3/15/2005 | 8/23/2011 |
| United States | Integration of personalized portals with web content syndication | US8020106B2 | 3/15/2005 | 9/13/2011 |
| United States | Search systems and methods with integration of aggregate user annotations | US8005835B2 | 3/15/2005 | 8/23/2011 |
| United States | Search systems and methods with integration of user annotations | US9489463B2 | 5/10/2011 | 11/8/2016 |
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| United States | Closed-loop feedback control system for online services | US7908249B1 | 4/13/2005 | 3/15/2011 |
| United States | Heat-conduction from an embedded component | US8076586B2 | 2/9/2007 | 12/13/2011 |
| United States | Electronics module comprising an embedded microdevice | US8351214B2 | 5/4/2010 | 1/8/2013 |
| United States | System and method for providing temporary search results in response to a search query | US7577651B2 | 4/28/2005 | 8/18/2009 |

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| United States | Proxy-server-for-relaying-VOIP-messages | US7313134B2 | 5/12/2005 | 12/25/2007 |
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| United States | Dynamically selecting CODECS for managing an audio message | US7821953B2 | 5/13/2005 | 10/26/2010 |
| United States | Relay-server-for-SIP/RTP-messages-with-buffer-management | US7751316B2 | 5/13/2005 | 7/6/2010 |
| United States | Intergrating access to audio messages and instant messaging with VOIP | US8107495B2 | 5/13/2005 | 1/31/2012 |
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| United States | Apparatus and method for normalizing user-selected keywords in a folksonomy | US7685209B1 | 6/8/2005 | 3/23/2010 |
| United States | Active-Abstracts | US7606794B2 | 6/28/2005 | 10/20/2009 |
| United States | Method for manufacturing an electronic module comprising a component electrically connected to a conductor pattern layer | US8240032B2 | 6/13/2005 | 8/14/2012 |
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| United States | System and method for securing a user device | US788352B2 | 7/14/2005 | 8/31/2010 |
| United States | Alert mechanism for notifying multiple user devices of an incoming a connected data-set | US8112549B2 | 7/14/2005 | 2/7/2012 |
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| United-States | Universal calendar event handling | US0417828B2 | 7/14/2005 | 4/9/2013 |
| United-States | Automatically generating a search result in a separate window for a displayed symbol that is selected with a drag and drop control | US7827503B2 | 7/27/2005 | 11/2/2010 |
| United-States | Reorder boundary identification and extraction through pattern mining | US7606816B2 | 7/28/2005 | 10/20/2009 |
| United-States | Establishing communication between a messaging client and a remote device through a browsing application | US7506829B2 | 8/3/2005 | 3/17/2009 |
| United-States | Link-based spam detection | US7533092B2 | 8/4/2005 | 5/12/2009 |
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| United-States | Circuit board including an embedded component | US0487194B2 | 2/9/2010 | 7/16/2013 |
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| United-States | System and method for determining alternate search queries | US7634462B2 | 8/10/2005 | 12/15/2009 |
| United-States | Unsupervised, automated web host dynamicaly detection, dead link detection and prerequisite page discovery for search indexed web pages | US7610267B2 | 8/13/2005 | 10/27/2009 |
| United-States | Search specification of pages flows | US7584267B2 | 8/22/2005 | 9/1/2009 |
| United-States | Employing parallel evaluation to provide a page | US0046678B2 | 8/22/2005 | 10/25/2011 |
| United-States | Customization of an online shopping experience | US7756752B2 | 8/22/2005 | 7/13/2010 |
| United-States | Extraction and matching of characteristic fingerprints from audio signals | US7516074B2 | 9/1/2005 | 4/7/2009 |
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| United-States | System and method for presenting information based on publisher-selected labels | US8478792B2 | 7/2/2008 | 7/1/2013 |
| United-States | System and method for selecting advertising in a social bookmarking system | US0768772B2 | 11/14/2005 | 7/1/2014 |
| United-States | System and method for bookmarking and auto tagging a content item based on file type | US0224788B2 | 1/15/2009 | 7/17/2012 |
| United-States | System and method for presenting information based on publisher-selected labels | US7421441B1 | 9/20/2005 | 9/2/2008 |
| United-States | System and method for presenting advertising content based on publisher-selected labels | US7409402B1 | 9/20/2005 | 8/5/2008 |
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| United States | Shortcut for establishing a communication channel with a remote device over a network | US7702341B2 | 10/3/2005 | 4/20/2010 |
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| United States | Media device and user interface for selecting media | US928279B2 | 12/31/2013 | 3/27/2018 |
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| United States | Search score for the determination of search quality | US8095419B1 | 10/17/2005 | 1/10/2012 |
| United States | Unsupervised learning tool for feature correction | US7483903B2 | 10/17/2005 | 1/27/2009 |
| United States | Interactive map based travel guide | US8825370B2 | 10/28/2005 | 9/2/2014 |
| United States | Sealable software blade architecture | US7873696B2 | 10/28/2005 | 1/18/2011 |
| United States | Recovering a blade in sealable software blade architecture | US7791578B2 | 10/28/2005 | 8/17/2010 |
| United States | Low code footprint security solution | US7259278B2 | 10/29/2005 | 5/25/2010 |
| United States | Sharing data in sealable software blade architecture | US7870288B2 | 10/28/2005 | 1/11/2011 |
| United States | System and method for labeling a document | US7680760B2 | 10/28/2005 | 3/16/2010 |
| United States | Systems and methods for assigning monocular values to search terms | US8015065B2 | 10/28/2005 | 9/6/2011 |
| United States | Methods for navigating collections of information in varying levels of detail | US7693912B2 | 10/31/2005 | 4/6/2010 |
| United States | Method and system for displaying contentual rotating advertisements | US8595633B2 | 10/31/2005 | 11/26/2013 |
| United States | Indication of exclusive items in a result set | US7747612B2 | 10/31/2005 | 6/29/2010 |
| United States | Reservation of differences between multiple searches | US7747613B2 | 10/31/2005 | 6/29/2010 |
| United States | Clickable map interface | US8709586B2 | 1/12/2006 | 4/15/2014 |
| United States | Difference control for generating and displaying a difference result set from the result sets of a plurality of search engines | US7747614B2 | 10/31/2005 | 6/29/2010 |
| United States | System and method for recording a result set display notice | US7809731B2 | 10/31/2005 | 10/5/2010 |
| United States | Systems and methods for improving access to synchronization feeds in network browsing applications | US9582602B2 | 10/31/2005 | 2/28/2017 |
| United States | Systems and methods for managing transactions in network browsing applications | US7958446B2 | 10/31/2005 | 6/7/2011 |
| United States | System for selecting ad inventory with a clickable map interface | US8682713B2 | 7/17/2008 | 3/25/2014 |

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| United States | Remote selection and installation of auxiliary content | US7636766B2 | 11/15/2005 | 12/22/2009 |
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| United States | System and method for displaying of historical click-through data for multiple versions of an advertisement | US7840438B2 | 11/16/2005 | 11/23/2010 |
| United States | System and method for revenue based advertisement placement | US7397088B2 | 11/16/2005 | 6/15/2010 |
| United States | Matching pursuit approach to sparse Gaussian process regression | US7496654B2 | 11/18/2005 | 2/24/2009 |
| United States | Multi-modal auto-complete function for a connection | US7583671B2 | 11/23/2005 | 9/4/2009 |
| United States | Method for manufacturing an electronics module | US6062537B2 | 11/23/2005 | 11/22/2011 |
| United States | Electronics module and method for manufacturing the same | US6547701B2 | 11/24/2005 | 10/4/2013 |
| United States | URL shortening and authentication with reverse hash lookup | US7698269B2 | 11/29/2005 | 4/13/2010 |
| United States | Method and mechanism for processing image data | US7627166B2 | 11/30/2005 | 12/14/2009 |
| United States | Systems and methods for managing and using multiple concepts networks for assisted search processing | US7707201B2 | 12/5/2005 | 4/27/2010 |
| United States | Selectable replay of buffered conversation in a VoIP session | US7869579B2 | 12/9/2005 | 11/11/2011 |
| United States | System for geographically contextualizing data items | US7853270B2 | 8/20/2009 | 12/14/2010 |
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| United States | System for providing location predictive advertisements | US7848764B2 | 9/9/2009 | 12/7/2010 |
| United States | System and method for providing geo-relevant information based on a location | US76066581B2 | 12/13/2005 | 10/20/2009 |
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| United States | System and method for creating minimum bounding rectangles for use in a geo-coding system | US6050689B2 | 12/13/2005 | 11/14/2011 |
| United States | System and method for providing geo-relevant information based on a mobile device | US761616964B2 | 12/13/2005 | 11/10/2009 |
| United States | System for determining probable meanings of inputted words | US7681147B2 | 12/13/2005 | 3/16/2010 |
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| United States | System and method for optimizing the delivery of advertisements | US7685010B2 | 12/28/2005 | 3/23/2010 |
| United States | System and method for collection of advertisements using information | US7949563B2 | 7/26/2006 | 5/24/2011 |
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| United States | System and method for optimizing the selection and delivery of advertisements | US9533040B2 | 4/9/2007 | 9/10/2013 |
| United States | Apparatus and method for controlling content access based on shared annotations for annotated users in a folksonomy scheme | US7761436B2 | 1/3/2006 | 7/20/2010 |
| United States | Targeted sidebar advertising | US10175862B2 | 12/12/2013 | 1/8/2019 |
| United States | Targeted sidebar advertising | US8621372B2 | 1/5/2006 | 12/31/2013 |
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| United-States | System-and-method-for-browsing-search-results-based-on-topic-familiarity | US6095487B2 | 3/16/2006 | 1/10/2012 |
| United-States | System-and-method-for-reorder-neighbor-clustering-of-text | US7747083B2 | 3/27/2006 | 6/29/2010 |
| United-States | Creating-and-viewing-private-events-in-an-events-repository | US7676449B2 | 3/28/2006 | 3/9/2010 |
| United-States | Providing-event-information-to-third-party-event-applications | US7688388B2 | 3/28/2006 | 2/23/2010 |
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| United-States | Identifying-excepted-web-documents | US8583778B1 | 4/26/2006 | 11/12/2013 |
| United-States | Contextual-mobile-local-search-based-on-social-network-visibility information | US8095906B2 | 5/8/2008 | 8/23/2011 |
| United-States | Contextual-mobile-local-search-based-on-social-network-visibility information | US7636779B2 | 4/28/2006 | 12/22/2009 |
| United-States | Advertiser-reporting-system-and-method-in-a-networked-database-search system | US8321275B2 | 4/28/2006 | 11/27/2012 |
| United-States | Advertiser-alerting-system-and-method-in-a-networked-database-search system | US8321274B2 | 4/28/2006 | 11/27/2012 |
| United-States | System-and-method-for-indexing-web-content-using-click-through features | US7647314B2 | 4/29/2006 | 1/12/2010 |

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| United-States | System-and-method-for-determining-semantically-related-terms | US7548929B2 | 5/11/2006 | 6/16/2009 |
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| United-States | Enabling-rent/buy-redirection-in-invitation-to-an-online-service | US8108515B2 | 9/19/2008 | 1/31/2012 |
| United-States | System-and-method-for-bookmarking-and-tagging-a-content-item | US0589782B2 | 12/6/2010 | 11/19/2013 |
| United-States | System-and-method-for-bookmarking-and-tagging-a-content-item | US7870475B2 | 5/16/2006 | 1/11/2011 |
| United-States | System-and-method-for-selecting-object-metadata-evolving-over-time | US7739275B2 | 5/19/2006 | 6/15/2010 |
| United-States | System-and-method-for-visualizing-the-temporal-evolution-of-object metadata | US7581184B2 | 5/19/2006 | 8/25/2009 |
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| United-States | Predicting-results-for-input-data-based-on-a-model-generated-from clusters | US0862328B2 | 6/14/2006 | 2/26/2013 |
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| United-States | Method-for-manufacturing-a-circuit-board-structure | US0581109B2 | 6/15/2006 | 11/12/2013 |
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| United States | Search engine with augmented relevance ranking by community participation | US69521734B2 | 7/28/2011 | 8/27/2013 |
| United States | Using community annotations to enhance text | US7647306B2 | 8/2/2006 | 1/12/2010 |
| United States | Trust propagation through both explicit and implicit social networks | US9576029B2 | 4/9/2013 | 2/21/2017 |
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| United States | Search evaluator | US8301616B2 | 7/14/2006 | 10/30/2012 |
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| United-States | Business intelligent architecture system and method | US0158831B2 | 6/30/2009 | 10/13/2015 |
| United-States | Business intelligent architecture system and method | US7580944B2 | 7/27/2006 | 8/25/2009 |
| United-States | System and method for web destination profiling | US0676961B2 | 7/27/2006 | 3/18/2014 |
| United-States | System and method for searching a bookmark and tag database for relevant bookmarks | US0367637B2 | 8/20/2012 | 6/14/2016 |
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| United-States | Automatic identification of distance-based event classification errors in a network by comparing to a second classification using event logs | US7693805B2 | 8/1/2006 | 4/6/2010 |
| United-States | Providing an interface to browse links or redirects to a particular webpage | US0554869B2 | 8/2/2006 | 10/8/2013 |
| United-States | Electronic document information extraction | US0547648B2 | 8/3/2006 | 1/17/2017 |
| United-States | System and method for dynamically ranking items of audio content | US7849078B2 | 8/3/2006 | 12/7/2010 |
| United-States | System and method for accessing preferred provider of audio content | US0005827B2 | 8/3/2006 | 8/23/2011 |
| United-States | Calendar event, notification and alert bar embedded within mail | US0745141B2 | 8/7/2006 | 6/3/2014 |
| United-States | Method and apparatus for reconstructing a search query | US0209317B2 | 10/11/2011 | 6/26/2012 |
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| United-States | System and method for providing tag based relevance recommendations of bookmarks in a bookmark and tag database | US0104772B2 | 12/29/2011 | 8/11/2015 |
| United-States | Approsch for near duplicate image detection | US7860308B2 | 8/17/2006 | 12/28/2010 |
| United-States | System and method for shortening click URLs | US7698347B2 | 8/19/2006 | 4/13/2010 |
| United-States | Persistent saving portal | US0572202B2 | 8/22/2006 | 10/29/2013 |

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| United States | Structured match-in-a-directory sponsored search system | US0977605B2 | 8/28/2006 | 3/10/2015 |
| United States | Platform for managing mobile domains and keyword activated applications | US0175623B2 | 8/30/2006 | 5/8/2012 |
| United States | Techniques for navigational query identification | US7693865B2 | 8/30/2006 | 4/6/2010 |
| United States | Methods and computer readable media for enhancing product reviews | US7885863B2 | 8/31/2006 | 2/8/2011 |
| United States | System and method for identifying media content items and related media content items | US0166029B2 | 9/7/2006 | 4/24/2012 |
| United States | Generating event data display code | US0290980B2 | 9/8/2006 | 10/16/2012 |
| United States | Displaying items using a reduced presentation | US761805B2 | 9/11/2006 | 7/20/2010 |
| United States | Path discovery and analytics for network data | US0054756B2 | 9/18/2006 | 11/8/2011 |
| United States | Discovering associative intent queries from search web logs | US7552112B2 | 9/18/2006 | 6/23/2009 |
| United States | System and method for creating user profiles | US0655916B2 | 9/22/2006 | 2/18/2014 |
| United States | Instant messaging interoperability between disparate services providers | US0762530B2 | 6/8/2015 | 9/12/2017 |
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| United States | Multi-tiered anti-abuse registration for a mobile device user | US0620315B1 | 9/29/2006 | 12/31/2013 |
| United States | Mobile device catalog registration based on user agents and customer snapshots of capabilities | US0224308B1 | 9/29/2006 | 7/17/2012 |
| United States | Managing page sizes for a mobile device using estimation of content customizer techniques | US7996000B1 | 9/29/2006 | 8/9/2011 |
| United States | Digital media benefit attachment mechanism | US0781892B2 | 9/29/2006 | 7/15/2014 |
| United States | Script based content embedding code generation in digital media benefit attachment mechanism | US0943401B2 | 9/29/2006 | 1/27/2015 |
| United States | Content embedding code generation in digital media benefit attachment mechanism | US0965783B2 | 9/29/2006 | 2/24/2015 |
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| United States | Mobile monetization | US10049391B2 | 8/15/2013 | 8/14/2018 |
| United States | Method for distributed database processing | US0190610B2 | 10/5/2006 | 5/29/2012 |
| United States | System and method for enhanced text matching | US783660B2 | 10/5/2006 | 8/24/2010 |
| United States | Infrastructure for more efficient processing to generate of ad hoc reports | US7809735B2 | 10/11/2006 | 10/5/2010 |
| United States | Augmented search with error detection and replacement | US7577644B2 | 10/11/2006 | 8/18/2009 |
| United States | Systems and methods for establishing or maintaining a personalized trusted social network | US0479474B2 | 10/27/2015 | 10/25/2016 |
| United States | Handling dynamic URLs in crawl for better coverage of unique content | US7827166B2 | 10/13/2006 | 11/2/2010 |
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| United States | Automated clustering of records, biased by supervised classification processing | US7849027B2 | 10/18/2006 | 12/7/2010 |
| United States | Contextual syndication platform | US7962465B2 | 10/19/2006 | 6/14/2011 |
| United States | Format language and translator for parallel processing of data | US7921446B2 | 10/20/2006 | 4/5/2011 |
| United States | Systems and methods for receiving and processing media content | US0123048B2 | 10/20/2006 | 9/1/2015 |
| United States | System and method for determining a relationship between available content and current interests to identify a need for content | US010529B2 | 10/23/2006 | 8/30/2011 |
| United States | Computerized system and method for creating a modified version of a digital slide show by creating and inserting a digital content item into the digital slide show | US0978072B2 | 10/25/2006 | 5/22/2018 |
| United States | Computerized system and method for creating a modified version of a digital ticket data feed by creating and inserting a digital content item into the digital ticket data feed | US0916587B2 | 5/10/2007 | 3/13/2018 |
| United States | System and method for adaptively refreshing a web page | US0745183B2 | 10/26/2006 | 6/3/2014 |
| United States | Recommendation diversity | US7860862B2 | 10/27/2006 | 12/28/2010 |
| United States | Optimization of targeted advertisements based on user profile information | US7680786B2 | 10/30/2006 | 3/16/2010 |

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| United States | Optimization of targeted advertisements based on user profile information | US06060520B2 | 3/11/2010 | 11/15/2011 |
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| United States | Methods and systems for providing a customizable guide for navigating a corpus of content | US0914729B2 | 10/30/2006 | 12/16/2014 |
| United States | Automatic association of reference data with primary processes data based on time and shared identifier | US0171237B2 | 10/31/2006 | 5/1/2012 |
| United States | Automatic association of reference data with primary processes data based on time and shared identifier | US0621162B2 | 2/11/2013 | 12/31/2013 |
| United States | Automatic association of reference data with primary processes data based on time and shared identifier | US0397037B2 | 4/2/2012 | 3/12/2013 |
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| United States | Searching and route mapping based on a social network, location and time | US0108501B2 | 11/1/2006 | 1/31/2012 |
| United States | Personalized search | US10275419B2 | 11/22/2016 | 4/30/2019 |
| United States | Personalized search | US0519745B2 | 11/2/2006 | 12/13/2016 |
| United States | Determining logically related sub-strings of a string | US7747607B2 | 11/2/2006 | 6/29/2010 |
| United States | Content server for associating information based on content | US0251252B2 | 11/22/2013 | 2/2/2016 |
| United States | Content server for associating information based on content | US0594702B2 | 11/16/2006 | 11/26/2013 |
| United States | Sharing tagged data on the internet | US7953775B2 | 11/7/2006 | 5/31/2011 |
| United States | System and method for synchronizing data | US7900145B2 | 11/9/2006 | 3/1/2011 |
| United States | Customizable connections between media and meta-data via feeds | US0015189B2 | 11/8/2006 | 9/6/2011 |

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| United States | System and method for transmission of DNS beacons | US7985372A92 | 11/19/2006 | 12/14/2010 |
| United States | System and method for generating subscriber queries | US7962470B2 | 7/2/2007 | 6/14/2011 |
| United States | Deriving user intent from a user query | US7974976B2 | 5/18/2007 | 7/5/2011 |
| United States | System and method for recognizing and storing information and associated context | US8056007B2 | 11/15/2006 | 11/8/2011 |
| United States | System and method for generating subscriber queries on the basis of one or more features | US7730264B2 | 11/15/2006 | 6/15/2010 |
| United States | Client-side generated search | US7895175B2 | 11/15/2006 | 2/22/2011 |
| United States | Avatar skinning and scrolling | US8087507B2 | 11/15/2006 | 7/21/2015 |
| United States | Map reduce with merge to process multiple relational datasets | US7523123B2 | 11/16/2006 | 4/21/2009 |
| United States | System and method using query patterns to distinguish query intent | US8635203B2 | 11/16/2006 | 1/21/2014 |
| United States | System and method for determining semantically related terms based on sequences of search queries | US7814086B2 | 11/16/2006 | 10/12/2010 |
| United States | Method and system for finding similar charts for financial analysis | US7873178B2 | 11/21/2006 | 1/25/2011 |
| United States | Method, system and apparatus for using user profile electronic device data in media delivery | US9110903B2 | 11/22/2006 | 8/18/2015 |
| United States | Method, system and apparatus for delivery of media | US8402356B2 | 11/22/2006 | 3/19/2013 |
| United States | Wait timer for partially formed query | US7630970B2 | 11/28/2006 | 12/8/2009 |
| United States | Interactive user interface for collecting and processing nonemblematic and placement metrics for website design | US8126766B2 | 11/29/2006 | 2/28/2012 |
| United States | Agent for identifying domains with content arranged for display by a mobile device | US8041702B2 | 11/29/2006 | 10/18/2011 |
| United States | Method and user interface tool for navigation through grid of scheduled items | US8381130B2 | 11/29/2006 | 2/19/2013 |
| United States | Keyword bidding strategy for novel concepts | US7941436B2 | 11/30/2006 | 5/10/2011 |
| United States | Method and systems for managing playlists | US8176058B2 | 11/30/2006 | 5/8/2012 |
| United States | Method and system for managing playlists | US8396103B2 | 5/7/2012 | 7/19/2016 |
| United States | Dynamic cluster visualization | US7590945B2 | 11/30/2006 | 10/6/2009 |
| United States | End of program pattern detector | US8045802B2 | 12/14/2006 | 10/25/2011 |
| United States | Topic focused search result summaries | US7921092B2 | 12/14/2006 | 4/5/2011 |

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| United States | Search results presented as visually-illustrative concepts | US7555478B2 | 12/5/2006 | 6/30/2009 |
| United States | Sponsored-search coverage expansion | US6380706B2 | 12/5/2006 | 2/19/2013 |
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| United States | Web-services-multi-protocol-support | US7685304B2 | 12/6/2006 | 3/23/2010 |
| United States | System and method for identifying target nodes from predetermined seed node subsets | US7805667B2 | 12/6/2006 | 9/28/2010 |
| United States | System and method for routing streaming data requests | US6713192B2 | 12/8/2006 | 4/29/2014 |
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| United States | Selecting and presenting user-search results based on an environment taxonomy | US7822734B2 | 12/12/2006 | 10/26/2010 |
| United States | Bid-optimization in search engine marketing | US6712932B2 | 12/12/2006 | 4/29/2014 |
| United States | Harvesting of media objects from searched sites without a user having to enter the sites | US7941416B2 | 3/11/2010 | 5/10/2011 |
| United States | Harvesting of media objects from searched sites without a user having to enter the sites | US7707198B2 | 12/12/2006 | 4/27/2010 |
| United States | System for generating a smart advertisement based on a dynamic file and a configuration file | US6160925B2 | 12/12/2006 | 4/17/2012 |
| United States | Selecting and presenting user-search results based on user information and/or identifying tags and host marketing for a mobile application | US6341144B2 | 10/13/2010 | 12/25/2012 |
| United States | Query rewriting with spell correction suggestions using a generated set of query features | US6268873B2 | 12/14/2006 | 2/23/2016 |
| United States | Query rewriting with spell correction suggestions using a generated set of query features | US7630978B2 | 12/14/2006 | 12/8/2009 |
| United States | Creative-adult-system | US6538888B2 | 12/14/2006 | 9/17/2013 |
| United States | Management of network login identities | US6510813B2 | 12/14/2006 | 8/13/2013 |
| United States | Modulated synchronization data feed | US6224889B2 | 12/14/2006 | 7/17/2012 |
| United States | Interconnection processing of requests relative to synchronization data feed items | US6886707B2 | 12/14/2006 | 11/11/2014 |

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| United-States | System-and-method-for-facilitating-iterative-selection-and-presentation-of-datasets | US7581193B2 | 12/15/2006 | 8/25/2009 |
| United-States | Auto-gniffing-of-carrier-performance-using-reverse-round-trip-time | US08041303B2 | 12/18/2006 | 10/18/2011 |
| United-States | Evaluating-performance-of-click-fraud-detection-systems | US0655724B2 | 9/5/2013 | 2/18/2014 |
| United-States | Evaluating-performance-of-binary-classification-systems | US0854623B2 | 12/18/2006 | 10/8/2013 |
| United-States | Systems-and-methods-for-identifying-premium-content-items-in-a-result-set | US08041723B2 | 12/16/2006 | 10/18/2011 |
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| United-States | Methods and systems for delivery of information to a mobile computing device based on priority of the information | US8762693B2 | 6/9/2014 | 9/12/2017 |
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| United-States | System-for-classifying-a-search-query | US7603348B2 | 1/26/2007 | 10/13/2009 |
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| United States | Link optimization | US7647316B2 | 3/5/2007 | 1/12/2010 |
| United States | Method of processing and segmenting web usage information | US7822755B2 | 3/6/2007 | 10/26/2010 |
| United States | Scrolling mobile advertisement | US7904062B2 | 3/8/2007 | 3/8/2011 |
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| United States | Manufacture of a circuit board and circuit board containing a component | US50085347B2 | 3/18/2015 | 9/25/2018 |
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| United States | System and method of restoring data and context of client applications stored on the web | US6046439B2 | 3/16/2007 | 10/25/2011 |
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| United States | System and method for modeling user selection feedback in a search result page | US7982718A02 | 4/10/2007 | 11/2/2010 |
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| United States | Method and system for media identification | US7998556B2 | 6/14/2007 | 3/15/2011 |
| United States | Mobile contextual SMS advertising | US9430772B2 | 6/14/2007 | 8/30/2016 |
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| United States | System and method for enabling parallel access to serially compressed files | US07756817B2 | 7/5/2007 | 7/13/2010 |
| United States | Interface for visually searching and navigating objects | US0794142B2 | 7/10/2007 | 5/10/2011 |
| United States | Behavioral predictions based on network activity locations | US0958222B2 | 7/13/2007 | 6/7/2011 |
| United States | Method and system for improved media distribution | US0881186B2 | 7/12/2007 | 11/4/2014 |
| United States | Method for matching electronic advertisements to surrounding content based on their advertisement content | US0807389B2 | 7/16/2007 | 12/6/2011 |
| United States | Calculating efficiency score for navigating interfaces based on eye-tracking data | US0108800B2 | 7/16/2007 | 4/31/2012 |
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| United States | Techniques for improving user engagement with advertisements | US0947016B2 | 7/18/2007 | 4/17/2018 |
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| United States | System and method to facilitate matching of content to advertising information in a network | US0688521B2 | 7/20/2007 | 4/1/2014 |
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| United States | Tráfico predictor for network accessible information modules | US0987261B2 | 7/31/2007 | 7/26/2011 |
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| United States | Enabling clustered search processing via text messaging | US0693902B2 | 8/2/2007 | 4/6/2010 |

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| United States | Estimating the date relevance of a query from query logs | US7966341B2 | 8/6/2007 | 6/24/2011 |
| United States | Method and system of facilitating search by color | US6577134B2 | 8/7/2007 | 11/5/2013 |
| United States | Remote profile modification for device recovery assist | US10182345B2 | 4/21/2015 | 11/15/2019 |
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| United-States | System and method for analyzing and ranking reviews with inferred analytics | US9495637B2 | 7/27/2011 | 11/15/2016 |
| United-States | Media toolbar and aggregated/distributed media ecosystem | US9736216B2 | 12/26/2012 | 8/15/2017 |
| United-States | Maintaining state transition data for a plurality of users, modeling, detecting, and predicting user states and behavior | US7941383B2 | 12/21/2007 | 5/10/2011 |
| United-States | Method for determining network proximity for global traffic load balancing using passive-TCP performance instrumentation | US7962631B2 | 12/21/2007 | 6/14/2011 |
| United-States | Media toolbar and aggregated/distributed media ecosystem | US9375131B2 | 12/21/2007 | 2/12/2013 |
| United-States | Systems and methods of ranking attention | US7697408B2 | 12/21/2007 | 8/3/2010 |
| United-States | System and method for analyzing and analyzing reviews with inferred analytics | US9032471B2 | 12/21/2007 | 10/4/2011 |

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| United-States | User-vibration-detection-and-response | US0832270B2 | 8/16/2013 | 9/9/2014 |
| United-States | Using-product-and-social-network-data-to-improve-online-advertising | US0843406B2 | 12/27/2007 | 9/23/2014 |
| United-States | System-and-method-for-adding-identity-to-web-rank | US0832069B2 | 12/4/2012 | 9/9/2014 |
| United-States | System-and-method-for-generating-expertise-based-search-results | US0306965B2 | 11/9/2010 | 11/6/2012 |
| United-States | System-and-method-for-generating-expertise-based-search-results | US7853583B2 | 12/27/2007 | 12/14/2010 |
| United-States | System-and-method-for-adding-identity-to-web-rank | US0346750B2 | 10/27/2011 | 11/1/2013 |
| United-States | System-and-method-for-adding-identity-to-web-rank | US78440548B2 | 12/27/2007 | 11/23/2010 |
| United-States | System-and-method-for-annotation-and-ranking-of-reviews-personalized-to-prior-user-experience | US0364685B2 | 12/27/2007 | 11/29/2013 |
| United-States | System-and-method-for-adding-identity-to-web-rank | US0051065B2 | 10/19/2010 | 11/11/2011 |
| United-States | Method-and-apparatus-for-detecting-spam-user-created-content | US0095547B2 | 12/28/2007 | 11/0/2012 |
| United-States | Creating-and-editing-media-objects-using-web-requests | US7840661B2 | 12/29/2007 | 11/23/2010 |
| United-States | Determining-attention-data-using-DNS-information | US7949724B1 | 12/28/2007 | 5/24/2011 |
| United-States | Method-of-creating-graph-structure-from-time-series-of-attention-data | US0046675B2 | 12/28/2007 | 10/25/2011 |
| United-States | Method-of-creating-graph-structure-from-time-series-of-attention-data | US0621339B2 | 10/21/2011 | 12/31/2013 |
| United-States | Maps-for-global-server-load-balancing-of-network-traffic-using-abstract-routing | US0873953B2 | 5/28/2010 | 12/6/2011 |
| United-States | Hot-term-prediction-for-contextual-shorts | US0060455B2 | 12/31/2007 | 11/15/2011 |
| United-States | System-and-method-of-feature-selection-for-text-classification-using-subspace-sampling | US0046317B2 | 12/31/2007 | 10/25/2011 |
| United-States | Predicting-and-ranking-search-query-results | US7831595B2 | 12/31/2007 | 11/9/2010 |
| United-States | Computerized-system-and-method-of-mapping-attention-based-on-W4-data-related-to-a-user | US10311452B2 | 3/24/2017 | 6/4/2019 |
| United-States | Computerized-system-and-method-for-generating-and-updating-a-map-user-interface | US102112539B2 | 7/3/2017 | 2/19/2019 |
| United-States | Systems-and-methods-of-mapping-attention | US0626685B2 | 11/4/2008 | 4/18/2017 |
| United-States | Interest-mapping-system | US0706345B2 | 11/4/2008 | 7/11/2017 |
| United-States | Automatic-visual-segmentation-of-webpages | US0255793B2 | 11/9/2008 | 8/28/2012 |
| United-States | Adapting-a-context-independent-relevance-function-for-identifying-relevant-search-results | US0775416B2 | 11/9/2008 | 7/8/2014 |

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| United-States | Query identification and normalization for web search | US7974971B2 | 6/17/2010 | 7/5/2011 |
| United-States | Local query identification and normalization for web search | US7769746B2 | 4/16/2008 | 8/3/2010 |
| United-States | System and method for word of mouth advertising | US10074093B2 | 7/25/2008 | 9/11/2018 |
| United-States | Query processing for web search | US6296288B2 | 7/1/2011 | 10/23/2012 |
| United-States | Learning framework for online applications | US7996897B2 | 1/23/2008 | 8/9/2011 |
| United-States | Personalized ad delivery when ads fatigue | US7805429B2 | 4/29/2008 | 9/28/2010 |
| United-States | System and/or method for obtaining of user-generated content boxes | US8856097B2 | 1/30/2008 | 10/7/2014 |
| United-States | Apparatus and methods for tracking, querying, and visualizing behavior targeting processes | US7933884B2 | 1/30/2008 | 4/26/2011 |
| United-States | Learning query rewrite policies | US6005828B2 | 2/5/2008 | 8/23/2011 |
| United-States | Context-sensitive query expansion | US7831588B2 | 2/5/2008 | 11/9/2010 |
| United-States | Mobile marketing application | US6196095B2 | 2/5/2008 | 6/5/2012 |
| United-States | Power management for proximity-based ad hoc networks | US7822564B2 | 2/8/2008 | 10/26/2010 |
| United-States | Time-code validation and correction for proximity-based ad hoc networks | US9467808B2 | 6/6/2014 | 10/11/2016 |
| United-States | Time-code validation and correction for proximity-based ad hoc networks | US6756030B2 | 2/9/2008 | 6/17/2014 |
| United-States | Method and system for presenting targeted advertisements | US9773249B2 | 2/8/2008 | 9/26/2017 |
| United-States | Data sharing based on proximity-based ad hoc network | US8060018B2 | 2/8/2008 | 11/15/2011 |
| United-States | Location tracking based on proximity-based ad hoc network | US8045482B2 | 2/8/2008 | 10/25/2011 |
| United-States | Automated document classifier turning including training set adaptive to user browsing behavior | US7797260B2 | 2/11/2008 | 9/14/2010 |
| United-States | Social-network search | US8195656B2 | 2/13/2008 | 6/5/2012 |
| United-States | Apparatus and methods for lossless compression of numerical attributes in rule-based systems | US6650144B2 | 2/14/2008 | 2/11/2014 |
| United-States | Efficient compression of applications | US8813041B2 | 2/14/2008 | 8/19/2014 |
| United-States | Search result abstract quality using community metadata | US6930376B2 | 2/15/2008 | 1/6/2015 |
| United-States | Systems and methods of predicting resource usefulness using universal resource locators including counting the number of times URL features occur in training data | US7908234B2 | 2/15/2008 | 3/15/2011 |

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| United States | System and method for writing data dependent upon multiple records in a distributed database | US7895172B2 | 2/19/2008 | 2/22/2011 |
| United States | Systems and methods for providing direct communication from personalized targeted advertisements | US8468049B2 | 2/19/2008 | 6/18/2013 |
| United States | Method for generating forecasts and escapes | US8296177B2 | 2/19/2008 | 10/23/2012 |
| United States | Identifying IP addresses for sponsors | US7849146B2 | 2/21/2008 | 12/7/2010 |
| United States | Structured templates identification for electronic documents | US8239387B2 | 2/22/2008 | 8/7/2012 |
| United States | System for query scheduling to maximize work sharing | US7873888B2 | 2/25/2008 | 1/25/2011 |
| United States | Prioritizing media assets for publication | US7860878B2 | 2/25/2008 | 12/28/2010 |
| United States | Filter for blocking image based spam | US8055078B2 | 2/28/2008 | 11/8/2011 |
| United States | System and/or method for personalization of searches | US8043313B2 | 2/28/2008 | 5/26/2015 |
| United States | Method and apparatus for social network marketing with adweight referral | US8388118B2 | 3/3/2008 | 9/17/2013 |
| United States | Method and apparatus for social network marketing with consumer referral | US8554623B2 | 3/3/2008 | 10/8/2013 |
| United States | Method and apparatus for social network marketing with brand referral | US8560390B2 | 3/3/2008 | 10/15/2013 |
| United States | Search query categorization into verticals | US7895206B2 | 3/5/2008 | 2/22/2011 |
| United States | Navigation using a search engine and phonetic voice recognition | US8380512B2 | 3/10/2008 | 2/19/2013 |
| United States | System and method for automatic detection of ready queries | US8312011B2 | 5/16/2011 | 11/13/2012 |
| United States | System and method for automatic detection of ready queries | US7970760B2 | 3/11/2008 | 6/28/2011 |
| United States | System method and/or apparatus for recording search results | US8412702B2 | 3/12/2008 | 4/2/2013 |
| United States | Personalizing sponsored search advertising layout using user behavior history | US8762364B2 | 3/18/2008 | 6/24/2014 |
| United States | Graphical rating conversion | US8170340B2 | 3/18/2008 | 5/1/2012 |
| United States | System and method for detecting human judgment drift and variation control | US8005775B2 | 3/18/2008 | 8/23/2011 |
| United States | Classifying content resources using structured patterns | US8005862B2 | 3/20/2008 | 8/23/2011 |
| United States | Using embedded metadata to improve search result presentation | US8135707B2 | 3/27/2008 | 3/13/2012 |
| United States | Search engine configured to minimize performance degradation under high load | US8108340B2 | 3/28/2008 | 1/31/2012 |

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| United-States | Method for segmenting webpages by parsing webpages into document object-modules (DOMs) and creating weighted graphs | US7974934B2 | 3/20/2008 | 7/5/2011 |
| United-States | System and method for adding session cookies to webpages | US6859486B2 | 3/29/2008 | 11/19/2013 |
| United-States | System and method for optimizing the storage of data | US6745133B2 | 3/28/2008 | 6/3/2014 |
| United-States | Extending media annotations using collective knowledge | US6429176B2 | 3/28/2008 | 4/23/2013 |
| United-States | System for providing mobile advertisement actions | US540373201B2 | 9/7/2017 | 8/6/2019 |
| United-States | System for providing mobile advertisement actions | US9785970B2 | 12/30/2013 | 10/10/2017 |
| United-States | Learning ranking functions incorporating boosted ranking in a regression framework for information retrieval and ranking | US7849076B2 | 3/31/2008 | 12/7/2010 |
| United-States | Information retrieval and ranking information retrieval using dynamic guided navigation | US9708806B2 | 3/31/2008 | 10/24/2017 |
| United-States | Learning ranking functions incorporating boosted ranking in a regression framework for information retrieval and ranking | US8051072B2 | 3/31/2008 | 11/14/2011 |
| United-States | System for providing mobile advertisement actions | US8644808B2 | 3/31/2008 | 2/4/2014 |
| United-States | Cross-domain matching system | US9477747B2 | 3/31/2008 | 10/25/2016 |
| United-States | Ranking advertisements with pseudo relevance feedback and translation models | US9411886B2 | 3/31/2008 | 8/9/2016 |
| United-States | System and method for modeling relationships between entities | US8386499B2 | 8/20/2012 | 2/26/2013 |
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| United-States | Access to trusted user-generated content using social networks | US6250096B2 | 3/31/2008 | 8/21/2012 |
| United-States | System and method for modeling relationships between entities | US6271506B2 | 3/31/2008 | 9/18/2012 |
| United-States | System and method for providing dynamically updating applications in a television display environment | US9179086B2 | 4/4/2008 | 11/3/2015 |
| United-States | Local map chat | US9312380B2 | 4/4/2008 | 11/13/2012 |
| United-States | Method and system for comparing effects of video views ads on internet searches | US8374913B2 | 4/7/2008 | 2/12/2013 |
| United-States | System and method for detecting templates of a website using hyperlink analysis | US7962523B2 | 4/14/2008 | 6/14/2011 |
| United-States | System and/or method for bulk loading of records into an ordered distributed database | US8893131B2 | 4/14/2008 | 11/18/2014 |
| United-States | Abbreviation handling in web search | US8204874B2 | 9/17/2010 | 6/19/2012 |
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| United-States | System-and-method-for-providing-image-labeling-game-using-CBIR | US7962468B2 | 4/17/2008 | 6/14/2011 |
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| United-States | Ranking-using-word-overlap-and-correlation-features | US8918328B2 | 4/18/2008 | 12/23/2014 |
| United-States | System-and-method-for-classifying-tags-of-content-using-a-hyperlinked corpus-of-classified-web-pages | US8046361B2 | 4/18/2008 | 10/25/2011 |
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| United-States | Search-query-scoring-and-popularity-monitoring-and-systems-and methods-therefor | US9817896B2 | 4/28/2008 | 11/14/2017 |
| United-States | Discovery-of-friends-using-social-network-graph-properties | US8744976B2 | 4/28/2008 | 6/3/2014 |
| United-States | Method-and-apparatus-for-rating-user-generated-content-in-search results | US7949643B2 | 4/29/2008 | 5/24/2011 |
| United-States | Method-and-apparatus-for-rating-user-generated-content-in-search results | US8290927B2 | 4/19/2011 | 10/16/2012 |
| United-States | Ranking-documents-through-contentual-shortcuts | US9135328B2 | 4/30/2008 | 9/15/2015 |
| United-States | Modification-of-brand-representations-by-a-brand-engine-in-a-social network | US9058699B2 | 4/30/2008 | 6/16/2015 |
| United-States | Modification-of-content-representation-by-a-brand-engine-in-a-social network | US9262764B2 | 4/30/2008 | 2/16/2016 |
| United-States | Adaptive-user-feedback-window | US8332775B2 | 4/30/2008 | 12/11/2012 |
| United-States | Generating-document-templates-that-are-robust-to-styretical-variations | US7668942B2 | 5/2/2008 | 2/23/2010 |
| United-States | Algorithmically-generated-topic-pages | US9798807B2 | 5/6/2008 | 10/24/2017 |
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| United States | Distributed program filtering utilizing a plurality of global classifiers and a local classifier | US0108323B2 | 5/19/2008 | 1/31/2012 |
| United States | System and method for automatically ranking lines of text | US0005845B2 | 5/20/2008 | 8/23/2011 |
| United States | Virtual billboards | US0711176B2 | 5/22/2008 | 4/20/2014 |
| United States | Real-time expert dialog service | US7974940B2 | 5/22/2008 | 7/5/2011 |
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| United States | Automated ad group creation in a networked advertising environment | US0505097B2 | 5/30/2008 | 11/26/2013 |
| United States | Application navigation | US0171429B2 | 5/30/2008 | 5/14/2012 |
| United States | System and method for delivery of augmented messages | US0166124B2 | 4/4/2011 | 4/24/2012 |
| United States | System and method for delivery of augmented messages | US7925708B2 | 6/2/2008 | 4/12/2011 |
| United States | Contextual ranking of keywords using click data | US0051080B2 | 6/3/2008 | 11/14/2011 |
| United States | Indexed indices in information extraction to improve records extracted per annotation | US0105444B2 | 6/6/2008 | 8/30/2011 |
| United States | Identifying regional sensitive queries in web search | US7949672B2 | 6/10/2008 | 5/24/2011 |
| United States | System and/or method for balancing allocation of data among reduce processes by reallocation | US0726290B2 | 6/12/2008 | 5/13/2014 |
| United States | Creation and enrichment of search based taxonomy for finding information from semistructured data | US0126908B2 | 6/18/2008 | 2/28/2012 |
| United States | Methods and apparatuses for adapting a ranking function of a search engine for use with a specific domain | US0126839B2 | 6/19/2008 | 2/28/2012 |
| United States | Mobile imaging device as navigator | US0478000B2 | 10/3/2011 | 7/2/2013 |
| United States | Mobile imaging device as navigator | US0798323B2 | 8/8/2012 | 8/5/2014 |
| United States | Adaptive materialized view selection for databases | US7921103B2 | 6/20/2008 | 4/5/2011 |
| United States | Mobile imaging device as navigator | US0807498B2 | 2/11/2013 | 11/25/2014 |
| United States | Mobile imaging device as navigator | US0098944B2 | 6/20/2008 | 11/17/2012 |
| United States | Assigning human-understandable labels to web pages | US0185528B2 | 6/23/2008 | 5/22/2012 |
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| United-States | System-and-method-for-location-based-media-delivery | US8813187B2 | 6/27/2008 | 8/19/2014 |
| United-States | Compiler-based-code-modification-for-use-in-document-ranking | US8621424B2 | 6/30/2008 | 12/31/2013 |
| United-States | Analysis-of-database-performance-reports-for-graphical-presentation-of summary-results | US8156421B2 | 6/30/2008 | 4/10/2012 |
| United-States | Pre-fetching-data-for-document-ranking | US8458170B2 | 6/30/2008 | 6/4/2013 |
| United-States | Automated-system-and-method-for-creating-a-content-rich-site-based-on an-emerging-subject-of-interest-search | US9271474B2 | 6/30/2008 | 9/18/2012 |
| United-States | Real-time-detection-of-parking-space-availability | US9170974B2 | 7/7/2008 | 5/14/2012 |
| United-States | Systems-and-methods-for-query-expansion-in-sponsored-search | US8521731B2 | 7/9/2008 | 2/22/2011 |
| United-States | Operations-of-multi-level-nested-data-structure | US8078638B2 | 7/9/2008 | 12/13/2011 |
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| United-States | Anti-spam-profile-clustering-based-on-user-behavior | US9554847B2 | 7/15/2008 | 10/8/2013 |
| United-States | Method-and-apparatus-for-sharing-concurrent-ad-hoc-web-content between-users-visiting-the-same-web-pages | US9009228B2 | 1/13/2012 | 4/14/2015 |
| United-States | Method-and-apparatus-for-sharing-concurrent-ad-hoc-web-content between-users-visiting-the-same-web-pages | US8099463B2 | 7/16/2008 | 1/17/2012 |
| United-States | Virtual-notes-in-a-reality-overlay | US9191238B2 | 7/23/2008 | 11/17/2015 |
| United-States | Virtual-notes-in-a-reality-overlay | US9288079B2 | 1/27/2012 | 3/15/2016 |
| United-States | Decision tree-coalescing-for-document-ranking | US8065242B2 | 7/23/2008 | 11/22/2011 |
| United-States | Tokenization-platform | US9195738B2 | 8/13/2012 | 11/24/2015 |
| United-States | Tokenization-platform | US83014437B2 | 7/24/2008 | 10/30/2012 |
| United-States | Techniques-for-visual-representation-of-user-activity-associated-with-an information-resource | US8210916B2 | 7/25/2008 | 7/10/2012 |

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| United States | Federated community search | US10025955B2 | 7/19/2008 | 7/17/2018 |
| United States | Region and duration uniform resource identifiers (URL) for media objects | US0867008B2 | 7/19/2008 | 12/27/2011 |
| United States | Building a research document based on implicit/explicit actions | US0361375B2 | 7/19/2008 | 6/7/2016 |
| United States | Research tool access based on research session detection | US0832098B2 | 7/19/2008 | 9/19/2014 |
| United States | System and method for improving and routing | US10230903B2 | 7/19/2008 | 3/12/2019 |
| United States | System and method for content enhanced mapping | US10133458B2 | 12/19/2014 | 11/20/2018 |
| United States | System and method for content enhanced mapping | US0959100B2 | 11/11/2013 | 2/17/2015 |
| United States | System and method for content enhanced mapping | US0583668B2 | 7/19/2008 | 11/12/2013 |
| United States | Bandwidth and cost management for ad hoc networks | US7792040B2 | 7/19/2008 | 9/7/2010 |
| United States | Automatic updating of content included in research documents | US0775465B2 | 7/19/2008 | 7/8/2014 |
| United States | System and method for loading records into a partitioned database table | US0051032B2 | 7/11/2008 | 11/11/2011 |
| United States | Framework to evaluate content display policies | US0504558B2 | 7/11/2008 | 8/6/2013 |
| United States | Classifying documents using implicit feedback and query patterns | US0645369B2 | 7/11/2008 | 2/4/2014 |
| United States | Systems and methods for determining a tag match ratio | US0024342B2 | 7/11/2008 | 9/10/2011 |
| United States | Method and system for displaying online advertisements | US0280770B2 | 12/11/2011 | 3/8/2016 |
| United States | Method and system for displaying online advertisements | US0398458B2 | 8/6/2008 | 5/2/2017 |
| United States | Interconnected universal search experience across multiple verticals | US0489582B2 | 8/6/2008 | 7/16/2013 |
| United States | Content based search arrangement for mobile devices | US0367618B2 | 8/7/2008 | 6/14/2016 |
| United States | Window overlay for online collaboration platform | US0608288B2 | 8/8/2008 | 11/15/2011 |
| United States | Facilitated search for online collaboration platform | US0606200B2 | 8/8/2008 | 8/23/2011 |
| United States | Notification controls for online collaboration platform | US0608232B2 | 8/8/2008 | 11/15/2011 |
| United States | System and method for combating phishing | US0528079B2 | 11/12/2008 | 9/3/2013 |
| United States | System and method for compiling a set of domain names to recover | US0499032B2 | 8/14/2008 | 7/10/2013 |
| United States | Online batch execution | US01811178B2 | 8/14/2008 | 5/15/2012 |
| United States | Generating subnets for web URLs | US0346754B2 | 8/19/2008 | 1/4/2013 |
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| United States | Information sharing in an online community | US0719258B2 | 8/20/2008 | 5/6/2014 |
| United States | System and method for content-enhanced messaging | US0886506B2 | 8/24/2008 | 2/26/2013 |
| United States | System and method for assisting search requests with vertical suggestions | US0810537B2 | 8/27/2008 | 8/30/2011 |
| United States | Embeddable web application agent | US0820070B2 | 8/28/2008 | 4/28/2015 |
| United States | Generation of search result abstracts | US0808439B2 | 8/29/2008 | 3/17/2015 |
| United States | Delivering partially processed results based on system metrics in network content delivery systems | US0819899B2 | 8/28/2008 | 9/13/2011 |
| United States | Performing large-scale structured search allowing partial schema changes without system downtime | US0820023B2 | 9/5/2008 | 10/16/2012 |
| United States | Presence-independent configuration methodology | US768965B1 | 9/12/2008 | 3/30/2010 |
| United States | Restoring program information for clips of broadcast programs shared online | US0836717B2 | 8/31/2012 | 5/19/2015 |
| United States | Restoring program information for clips of broadcast programs shared online | US0424349B2 | 5/18/2015 | 8/23/2016 |
| United States | Restoring program information for clips of broadcast programs shared online | US0295363B2 | 9/15/2008 | 10/23/2012 |
| United States | Efficient data layout techniques for fast machine-learning based document ranking | US0533129B2 | 9/16/2008 | 9/10/2013 |
| United States | System and method for detecting internet bots | US0433785B2 | 9/16/2008 | 4/30/2013 |
| United States | Apparatus, method, and apparatus for managing scalable and traceable exchanges of content between advertisers and publishers for mobile devices | US0391798B2 | 9/16/2008 | 3/5/2013 |
| United States | Method and apparatus for advertising a bidding language for online advertising | US0527353B2 | 9/16/2008 | 9/3/2013 |
| United States | System and method for distributing media related to a location | US08281027B2 | 9/19/2008 | 10/2/2012 |
| United States | System and method for distributing media related to a location | US0856375B2 | 9/14/2012 | 10/7/2014 |
| United States | System and method for ranking search results using social information | US7966325B2 | 9/24/2008 | 6/21/2011 |
| United States | Time-tagged metadata information and content display method and system | US0856641B2 | 9/24/2008 | 10/7/2014 |
| United States | Optimization filters for user generated content searches | US0793249B2 | 9/24/2008 | 7/29/2014 |
| United States | Automated tagging of objects in databases | US0407216B2 | 9/25/2008 | 3/26/2013 |

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| United States | Integration of open advertisements with e-commerce activities | US6374940B2 | 9/26/2008 | 2/12/2013 |
| United States | Estimating on-line advertising inventory value based on content eligibility information | US6353800B2 | 9/29/2008 | 9/17/2013 |
| United States | Community-based networking | US6108481B2 | 9/29/2008 | 1/31/2012 |
| United States | Classification and analysis of spam detection and reduction | US7809824B2 | 9/29/2008 | 10/5/2010 |
| United States | Query refinement based on user selection | US6819003B2 | 4/23/2013 | 8/26/2014 |
| United States | System and method for detecting user interaction patterns based on limited activities | US6740986B2 | 9/30/2008 | 8/22/2017 |
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| United States | Age-targeted online marketing using inferred age information | US6996844B2 | 9/30/2008 | 6/12/2018 |
| United States | Click-through rate prediction system and method | US6873843B2 | 9/30/2008 | 5/27/2014 |
| United States | Decomposition used to generate dynamic data driven advertisements | US7941340B2 | 9/30/2008 | 5/10/2011 |
| United States | System for optimizing ad performance at campaign running time | US6645205B2 | 9/30/2008 | 2/4/2014 |
| United States | System and method for reporting and analysis of media consumption data | US6600484B2 | 9/30/2008 | 3/21/2017 |
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| United States | Query-log mining for detecting spam hosts | US6996622B2 | 9/30/2008 | 3/31/2015 |
| United States | Method and system for verifying a recipient of a communication | US7945630B2 | 9/30/2008 | 5/17/2011 |
| United States | System and method for content enhanced mapping within a user interface | US6108778B2 | 9/30/2008 | 1/31/2012 |
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| United States | Demand forecasting system and method for online advertisements | US6321280B2 | 10/14/2008 | 11/27/2012 |
| United States | Interactive system for internet information retrieval and exploration | US6719292B2 | 10/7/2008 | 5/6/2014 |
| United States | Context-sensitive user group communications | US6990277B2 | 12/2/2013 | 2/20/2018 |
| United States | System and method for maintaining context-sensitive user groups | US6601377B2 | 10/6/2008 | 12/3/2013 |
| United States | Detection of undesirable web pages | US7974970B2 | 10/9/2008 | 7/5/2011 |
| United States | System and method for content access control | US6607096B2 | 6/23/2014 | 3/28/2017 |

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| United-States | Method-and-system-for-providing-customized-regional-maps | US6336605B2 | 10/13/2008 | 5/10/2016 |
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| United-States | System-and-methodology-for-a-multi-site-search-engine | US6995545B2 | 10/14/2008 | 1/10/2012 |
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| United-States | System-and-method-for-generating-an-online-summary-of-a-collection-of-documents | US6037053B2 | 10/31/2008 | 10/11/2011 |
| United-States | Virtual-environment-spawning-desktop-and-cloud | US6965842B2 | 7/15/2014 | 2/24/2015 |
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| United States | Click-model-for-search-ranking | US8671093B2 | 11/18/2008 | 3/11/2014 |
| United States | System-and-method-for-determining-relevance-from-URL-based-content-queries | US8400987B2 | 9/19/2011 | 7/26/2016 |
| United States | Efficient-caching-for-dynamic-web-service-queries-cacheable-fragments | US7962502B2 | 11/18/2008 | 6/14/2011 |
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| United States | System-and-method-for-URL-based-queries-for-retrieving-data-related-to-a-context | US8832508B2 | 11/18/2008 | 10/4/2011 |
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| United States | Navigation-assistance-for-search-engines | US8484184B2 | 4/27/2011 | 7/9/2013 |
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| United-States | Rules-and-method-for-improving-image-search-relevance-through-gammas | US8296305B2 | 12/9/2008 | 10/23/2012 |
| United-States | Mining-broad-hidden-query-aspects-from-user-search-sessions | US9305051B2 | 12/10/2008 | 4/5/2016 |
| United-States | System-and-method-for-in-context-exploration-of-search-results | US9489420B2 | 2/29/2016 | 11/8/2016 |
| United-States | System-and-method-for-in-context-exploration-of-search-results | US9317602B2 | 12/11/2008 | 4/19/2016 |
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| United-States | System and method for monetizing user generated web content | US0423409B2 | 9/21/2010 | 4/16/2013 |
| United-States | Building content in Q-and-A sites by auto-posting of questions extracted from web search logs | US0452747B2 | 9/27/2010 | 5/28/2013 |
| United-States | Social network based user initiated review and purchase related information and advertising | US0458160B2 | 9/8/2010 | 6/4/2013 |
| United-States | Scoring users of network based users | US0712843B2 | 9/8/2010 | 4/29/2014 |
| United-States | System and method for obtaining user information | US0843817B2 | 9/14/2010 | 9/23/2014 |
| United-States | Determining whether to provide an advertisement to a user of a social network | US0478697B2 | 9/15/2010 | 7/2/2013 |
| United-States | Search assist powered by session analysis | US0255414B2 | 9/15/2010 | 8/28/2012 |

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| United-States | Method and system for generating search URLs | US0902537B2 | 9/15/2010 | 7/28/2015 |
| United-States | Determining whether to provide an advertisement to a user of a social network | US0805301B2 | 5/29/2013 | 10/31/2017 |
| United-States | Measuring online ad performance for third-party ad serving | US0536240B2 | 9/29/2010 | 1/3/2017 |
| United-States | Training a search query intent classifier using wiki article titles and a search click log | US0465864B2 | 9/29/2010 | 10/11/2016 |
| United-States | Determining placement of advertisements on web pages | US0566160B2 | 9/30/2010 | 10/22/2013 |
| United-States | System and method for content filtering a networked display | US0160810B2 | 2/11/2015 | 10/13/2015 |
| United-States | System and method for controlling a networked display | US0990702B2 | 9/30/2010 | 3/24/2015 |
| United-States | Contextual quick-picks | US0779168B2 | 10/4/2010 | 10/3/2017 |
| United-States | Network resource-specific search assistance | US10423672B2 | 10/4/2010 | 9/24/2019 |
| United-States | Contextual quick-picks | US10303732B2 | 7/14/2017 | 5/28/2019 |
| United-States | Method and system for processing and learning rules for extracting information from incoming web pages | US0280528B2 | 10/4/2010 | 3/8/2016 |
| United-States | Time-managed challenge response test | US0955044B2 | 10/4/2010 | 2/10/2015 |
| United-States | Method of content tagging/determining by user-credibility signals | US0529822B2 | 10/5/2010 | 12/27/2016 |
| United-States | Multisided audience-related hybrid measurements | US0819293B2 | 9/3/2013 | 8/26/2014 |
| United-States | Multisided audience-related hybrid measurements | US0549103B2 | 10/7/2010 | 10/11/2013 |
| United-States | Movie-gesture-assisted search | US0930390B2 | 10/8/2010 | 1/6/2015 |
| United-States | Topic-oriented diversified item recommendation | US0589378B2 | 10/11/2010 | 11/19/2013 |
| United-States | System for training classifiers in multiple categories through active learning | US0498950B2 | 10/15/2010 | 7/30/2013 |
| United-States | Matching items of user-generated content to entities | US0412771B2 | 10/21/2010 | 4/23/2013 |
| United-States | Securing expandable display advertisements in a display advertising environment | US0443257B2 | 10/21/2010 | 9/13/2016 |
| United-States | User-feed data delivery | US0633354B2 | 10/27/2010 | 4/25/2017 |
| United-States | Measuring the effects of social sharing on online content and advertising | US0324093B2 | 10/28/2010 | 4/26/2016 |
| United-States | Consumer group buying through online ads | US1028274B2 | 10/29/2010 | 5/7/2019 |
| United-States | Profile prediction for shared computers | US0536000B2 | 10/29/2010 | 1/3/2017 |
| United-States | Extracting rich temporal context for business entities and events | US0606564B2 | 11/1/2010 | 12/10/2013 |

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| United-States | Mobile-based-real-time-food-and-beverage-recommendation-system | US6429027B2 | 11/09/2010 | 4/23/2013 |
| United-States | Methods-and-systems-for-pathing-analysis | US6947160B2 | 11/12/2010 | 10/18/2016 |
| United-States | Methods-and-systems-for-pathing-analysis | US6940390B2 | 9/30/2016 | 4/10/2018 |
| United-States | Online-advertising-with-enhanced-publisher-involvement | US6911135B2 | 11/15/2010 | 3/6/2018 |
| United-States | Combination-creative-advertisement-targeting-system | US6510653B2 | 11/15/2010 | 8/13/2013 |
| United-States | Bootstrapping-recommendation-system-and-method | US6510248B2 | 11/18/2010 | 8/13/2013 |
| United-States | Detecting-counterfeit-events | US6105008B2 | 11/29/2010 | 8/11/2015 |
| United-States | Using-clicked-state-driven-click-through-rate-estimates-in-sponsored-search | US6364525B2 | 11/30/2010 | 1/29/2013 |
| United-States | Method-and-system-for-discovering-dynamic-relations-among-entities | US6529895B2 | 10/29/2014 | 12/27/2016 |
| United-States | Systems-and-methods-for-list-ranking-and-ads-placement-using-interaction-features | US6620744B2 | 12/30/2010 | 12/31/2013 |
| United-States | Systems-and-methods-for-list-ranking-and-ads-placement-using-interaction-features | US6189804B2 | 11/26/2013 | 11/17/2015 |
| United-States | Clustering-with-similarity-adjusted-entropy | US6266140B2 | 12/10/2010 | 9/11/2012 |
| United-States | System-and-method-for-booking-an-advertisement-for-an-impression-using-a-targeting-dimension-dictionary | US6928523B2 | 12/10/2010 | 3/27/2018 |
| United-States | Cross-market-model-adaptation-with-pairwise-preference-data | US6489590B2 | 12/13/2010 | 7/16/2013 |
| United-States | Cacheing-web-documents-in-two-or-more-caches | US6849750B2 | 12/15/2010 | 9/30/2014 |
| United-States | Integrating-and-comprehensive-advertising-campaign-management-and-optimization | US6904930B2 | 12/16/2010 | 2/27/2018 |
| United-States | Image-object-retrieval-based-on-aggregation-of-visual-annotations | US6527564B2 | 12/16/2010 | 9/3/2013 |
| United-States | Display-entity-relationship | US6043360B2 | 12/17/2010 | 5/26/2015 |
| United-States | User-personalized-points-of-reference-in-selecting-advertisements shown-to-users | US6997202B2 | 12/17/2010 | 5/15/2018 |
| United-States | Method-and-system-for-generating-web-pages-for-topics-unassociated-with-a-domain-URL | US6799260B2 | 12/17/2010 | 8/5/2014 |
| United-States | Selection-and/or-modification-of-a-portion-of-online-content-based-on-an-emotional-state-of-a-user | US10380647B2 | 10/28/2016 | 8/13/2019 |
| United-States | Automatic-classification-of-displays-using-ad-images-and-landing-pages | US6732014B2 | 12/20/2010 | 5/20/2014 |
| United-States | Selection-and/or-modification-of-an-ad-based-on-an-emotional-state-of-a-user | US6514481B2 | 12/20/2010 | 12/6/2016 |

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| United States | Blending advertiser data with ad network data in order to serve finely targeted ads | US0536250B2 | 12/20/2010 | 4/9/2017 |
| United States | Classification recommendation based on social actions | US0521679B2 | 12/20/2010 | 8/27/2013 |
| United States | Searchable push-based architecture for web applications | US0137288B2 | 12/20/2010 | 9/15/2015 |
| United States | Techniques for improving relevance of social updates distributed offline | US0213981B2 | 12/20/2010 | 12/15/2015 |
| United States | Time-triggered advertiser replacement | US1002610B2 | 11/13/2014 | 7/17/2018 |
| United States | Time-triggered advertiser replacement | US0910331B2 | 12/21/2010 | 12/23/2014 |
| United States | Method and system for analyzing user movement of online advertisement using offline sales | US0935177B2 | 12/22/2010 | 1/13/2015 |
| United States | Location user-based on aggregated tweet content associated with a location | US0172666B2 | 6/10/2013 | 10/27/2015 |
| United States | Location-aware adaptive event reminder | US0311628B2 | 12/22/2010 | 4/12/2016 |
| United States | Location-based on aggregated tweet content associated with a location | US0478701B2 | 12/22/2010 | 7/2/2013 |
| United States | System and method for reducing mineral buildup on drift eliminators of a cooling tower | US0678359B2 | 12/23/2010 | 3/25/2014 |
| United States | Systems and methods for providing search assistance technologies based on user self-efficacy and search frustration | US0903845B2 | 12/23/2010 | 12/2/2014 |
| United States | Serviceable content through search | US0601017B2 | 12/23/2010 | 12/3/2013 |
| United States | System and method for reducing mineral buildup on drift eliminators of a cooling tower | US0398999B2 | 2/7/2014 | 5/26/2015 |
| United States | Signal-driven interactive television | US0185458B2 | 12/23/2010 | 11/10/2015 |
| United States | Method and system to identify geographic locations associated with queries received at a search engine | US0384289B2 | 12/23/2010 | 7/5/2016 |
| United States | System and method for recommending queries related to trending topics based on a received query | US0902410B2 | 12/23/2010 | 3/24/2015 |
| United States | System and method for reducing mineral buildup on drift eliminators of a cooling tower | US0389021B2 | 2/9/2014 | 5/26/2015 |
| United States | Selecting advertisements for placement on related web pages | US0620745B2 | 12/27/2010 | 12/31/2013 |
| United States | Method and system to utilize session queries in real-time to improve geo-precision of sponsored listings | US1019223B2 | 9/12/2016 | 1/29/2019 |
| United States | Variation of minimum advertisement relevance quality threshold based on search query attributes | US1027578B2 | 12/28/2010 | 4/30/2019 |

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| United States | Content-based content refinement of topics of user interest | US0906620B2 | 12/28/2010 | 6/12/2018 |
| United States | Method and system to utilize session queries in real time to improve geo-precision of sponsored listings | US0443026B2 | 12/28/2010 | 9/13/2016 |
| United States | System and method for providing contextual actions on a search results page | US0915140B2 | 12/30/2010 | 4/24/2015 |
| United States | Mining global folders for identifying auto-folder tags | US0463827B2 | 1/4/2011 | 6/11/2013 |
| United States | Inventory allocation for advertising with changeable supply-limited space | US0856028B2 | 1/24/2011 | 10/7/2014 |
| United States | Systems and methods for selecting ads and ranking vendors | US1016077B2 | 6/3/2013 | 1/4/2019 |
| United States | Method and system for predicting performance of software applications on prospective hardware architecture | US0208053B2 | 7/17/2014 | 12/8/2015 |
| United States | Method and system for predicting performance of software applications on prospective hardware architecture | US0818787B2 | 1/31/2011 | 8/26/2014 |
| United States | Techniques including URL-recognition and applications | US0358843B2 | 1/31/2011 | 1/22/2013 |
| United States | Techniques including URL-recognition and applications | US0652680B2 | 5/22/2015 | 5/16/2017 |
| United States | Techniques including URL-recognition and applications | US0970038B2 | 12/18/2012 | 6/30/2015 |
| United States | Techniques including URL-recognition and applications | US0946949B2 | 4/12/2017 | 4/17/2018 |
| United States | Method and system for data-provisioning management in multi-layer systems | US0819064B2 | 2/7/2011 | 8/26/2014 |
| United States | Audio fingerprint extraction by scaling in time and resampling | US0909120B2 | 2/10/2011 | 7/28/2015 |
| United States | Non-textual security using pointers | US0075981B2 | 2/15/2011 | 7/7/2015 |
| United States | Optimizing server resources using multiple retry-for-high-traffic websites | US0909253B2 | 2/16/2011 | 4/14/2015 |
| United States | Display of content-interaction data in a browser | US0510379B2 | 2/22/2011 | 8/13/2013 |
| United States | System for processing complex queries | US0977640B2 | 2/28/2011 | 3/10/2015 |
| United States | Augmented-contentual targeting advertisements using instant-messaging clients | US0671022B2 | 3/2/2011 | 3/11/2014 |
| United States | Search-assistant-system and method | US0902426B2 | 11/14/2016 | 2/13/2018 |
| United States | Search-assistant-system and method | US0405461B2 | 3/22/2011 | 11/15/2016 |
| United States | Method and system for concept summarization | US0870376B2 | 4/1/2011 | 1/16/2018 |
| United States | System and method for mining tags using social endorsement networks | US0607267B2 | 12/20/2013 | 3/28/2017 |
| United States | System and method for mining tags using social endorsement networks | US0666927B2 | 4/19/2011 | 3/4/2014 |
| United States | Collaborative electronic books | US0589804B2 | 4/22/2011 | 11/19/2013 |

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| United States | Embedding calendar knowledge in event driven inventory forecasting | US0620720B2 | 4/20/2011 | 12/31/2013 |
| United States | System and method for analyzing dynamic performance of complex applications | US0856767B2 | 4/29/2011 | 10/7/2014 |
| United States | System and method for contextualizing query instructions using user's recent search history | US0930338B2 | 5/17/2011 | 1/6/2015 |
| United States | Method to increase content relevance using insights obtained from user activity updates | US0838564B2 | 5/19/2011 | 9/16/2014 |
| United States | Determination and monetization of future location | US0947014B2 | 7/1/2011 | 4/17/2018 |
| United States | Inventory estimation for search retargeting | US0880423B2 | 7/1/2011 | 11/4/2014 |
| United States | Methods and systems for group targeting for advertisement calendar entries | US0852404B2 | 7/1/2011 | 12/26/2017 |
| United States | Method and system for improving relevance of web content | US0909633B2 | 7/1/2011 | 12/9/2014 |
| United States | Methods and systems for grabbing video surfers' attention while awaiting download | US0832729B2 | 7/5/2011 | 9/9/2014 |
| United States | Combining segments of users into vertically indexed super segments | US0566156B2 | 7/5/2011 | 10/22/2013 |
| United States | High performance personalized advertisement serving by exploiting thread assignments in a multiple core computing environment | US0571924B2 | 7/5/2011 | 10/29/2013 |
| United States | Method for summarizing event related texts to answer search queries | US0208655B2 | 2/21/2011 | 4/28/2015 |
| United States | Method for summarizing event related texts to answer search queries | US0666916B2 | 7/7/2011 | 3/4/2014 |
| United States | Real time e-commerce user interface for monitoring and interacting with consumers | US0984338B2 | 9/7/2011 | 5/29/2018 |
| United States | Dynamically altered search assistance | US0918389B2 | 7/13/2011 | 12/23/2014 |
| United States | Automatic profiling of social media users | US1012752B2 | 7/14/2011 | 11/13/2018 |
| United States | System for monitoring a video | US0804690B2 | 12/9/2011 | 10/31/2017 |
| United States | System for monitoring a video | US0214135B2 | 7/18/2011 | 12/15/2015 |
| United States | Method and system for building an elastic cloud web server farm | US0954568B2 | 7/21/2011 | 2/10/2015 |
| United States | Method and system for building an elastic cloud web server farm | US0699250B2 | 1/12/2011 | 7/4/2017 |
| United States | Method and system for fast similarity computation in high dimensional space | US0515964B2 | 7/25/2011 | 8/20/2013 |
| United States | System and method for web knowledge extraction | US0918357B2 | 7/26/2011 | 12/23/2014 |
| United States | Method and system for automatically identifying optimal meeting locations | US0558457B2 | 7/26/2011 | 1/31/2017 |

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| United States | System and method for optimizing window display | US0342208B2 | 7/27/2011 | 5/17/2016 |
| United States | Method and system for distributed application stack deployment | US0756505B2 | 7/28/2011 | 6/17/2014 |
| United States | Disaggregation to isolate users for ad targeting | US0646327B2 | 8/9/2011 | 5/9/2017 |
| United States | Multi-step captcha with serial time consuming decryption of puzzles | US0522327B2 | 8/10/2011 | 8/27/2013 |
| United States | System and method for generation of a dynamic social page | US0914382B2 | 10/3/2011 | 12/16/2014 |
| United States | System for custom user generated achievement badges based on activity feeds | US0208470B2 | 10/4/2011 | 12/8/2015 |
| United States | Method, device, and server for transmitting and responding to a location declaration | US0880099B2 | 10/12/2011 | 11/14/2014 |
| United States | Embedding non-blocking help components in a display page using discovery-driven feature cues | US0811350B2 | 10/12/2011 | 11/7/2017 |
| United States | Methods and systems for targeting user initiated social events | US1024895B2 | 10/14/2011 | 4/2/2019 |
| United States | Method and system for resolving data inconsistencies | US0849760B2 | 10/17/2011 | 9/30/2014 |
| United States | Method and system for workload balancing | US0661136B2 | 10/17/2011 | 2/25/2014 |
| United States | Method and system for dynamic control of a multi-tier processing system | US0378058B2 | 2/25/2013 | 6/28/2016 |
| United States | Dynamically updating emotion-based on user targeting | US0870552B2 | 10/19/2011 | 1/16/2018 |
| United States | Method of tracking offline user interaction in a rendered document on a mobile device | US0825749B2 | 10/21/2011 | 9/2/2014 |
| United States | Augmented data from multiple devices belonging to one user for directed ad targeting | US0600834B2 | 10/26/2011 | 3/21/2017 |
| United States | Lock-free transactional support for large-scale storage systems | US0946745B2 | 3/19/2015 | 4/17/2018 |
| United States | Lock-free transactional support for large-scale storage systems | US0900177B2 | 10/27/2011 | 3/24/2015 |
| United States | Advertiser campaign utilizing streaming analytics | US0754279B2 | 10/27/2011 | 9/5/2017 |
| United States | Methods and systems for facilitating caching of advertisements | US0767465B2 | 10/28/2011 | 9/19/2017 |
| United States | Assisted searching | US0983996B2 | 10/31/2011 | 3/17/2015 |
| United States | Social sharing and influence graph system and method | US1013404B2 | 11/9/2011 | 11/20/2018 |
| United States | Live advertisement preview display and distribution | US0679306B2 | 11/11/2011 | 6/13/2017 |
| United States | Providing advertisements in an augmented reality environment | US0536251B2 | 11/15/2011 | 1/3/2017 |
| United States | System and method for extracting, collecting, analyzing and ranking of email objects | US0043413B2 | 11/15/2011 | 5/26/2015 |

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| United States | Premium instant messaging space | US0805388B2 | 11/16/2011 | 10/31/2017 |
| United States | Related news articles | US0713028B2 | 11/17/2011 | 4/29/2014 |
| United States | Method or system for spilling in query environments | US0356050B1 | 11/21/2011 | 1/15/2013 |
| United States | Automatically arranging of feeds on a user interface | US0930839B2 | 11/22/2011 | 1/6/2015 |
| United States | Fast maneuvering and high speed data attachments for message services | US0601079B2 | 11/29/2011 | 12/3/2013 |
| United States | Results returned for list seeking queries | US0832057B2 | 12/2/2011 | 9/9/2014 |
| United States | System and method of matching content items and consumers | US0660975B2 | 12/7/2011 | 2/25/2014 |
| United States | Image object retrieval | US0870517B2 | 12/8/2011 | 1/16/2018 |
| United States | Method and system for deploying multiple distributed application stacks on a target machine | US0268589B2 | 12/9/2011 | 2/23/2016 |
| United States | User-storing and addresssing complex information needs | US0990246B2 | 12/15/2011 | 3/24/2015 |
| United States | Interactive interface for object search | US077536B2 | 12/19/2011 | 7/8/2014 |
| United States | Query-based search | US0868558B2 | 12/19/2011 | 10/21/2014 |
| United States | Instantiating search box into a mobile terminal dialog message protocol | US10230672B2 | 4/17/2015 | 3/12/2019 |
| United States | Instantiating search box into a mobile terminal dialog message protocol | US052792B2 | 5/9/2012 | 6/9/2015 |
| United States | User behavior driven backround cache refreshing | US0808132B2 | 12/20/2011 | 11/25/2014 |
| United States | SMS-initiated mobile registration | US0210557B2 | 12/20/2011 | 12/8/2015 |
| United States | Server-side modification of messages during a mobile-terminal message exchange | US0600807B2 | 6/6/2012 | 3/11/2017 |
| United States | Location aware commenting widget for creation and consumption of relevant comments | US0158851B2 | 12/20/2011 | 10/13/2015 |
| United States | Linking newsworthy events to published content | US0880390B2 | 12/20/2011 | 11/4/2014 |
| United States | Method and system for distributed application stack test certification | US0612812B2 | 12/21/2011 | 4/4/2017 |
| United States | System and method for automatic presentation of content related data with content presentation | US0719285B2 | 12/22/2011 | 5/6/2014 |
| United States | Method and system for generating query related suggestions | US0858313B2 | 12/22/2011 | 1/2/2018 |
| United States | Methods and systems for ad placement planning | US0135632B2 | 12/28/2011 | 9/15/2015 |
| United States | Ecosystem for manually marked searchable feeds on publisher sites | US0965876B2 | 1/18/2012 | 2/24/2015 |
| United States | System for collecting customer feedback in real time | US10089636B2 | 1/20/2012 | 10/2/2018 |

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| United-States | Probe-system-for-replication-monitoring | US0447730B1 | 1/31/2012 | 5/21/2013 |
| United-States | Probe-system-for-replication-monitoring | US0886603B2 | 4/17/2013 | 11/11/2014 |
| United-States | Automatic-face-annotation-of-images-containing-in-media-content | US0676814B2 | 2/16/2012 | 3/18/2014 |
| United-States | System-for-tracking-diffusion | US10103952B2 | 4/7/2017 | 10/16/2018 |
| United-States | System-for-tracking-diffusion | US0100436B2 | 2/13/2015 | 8/4/2015 |
| United-States | System-for-tracking-diffusion | US0100286B2 | 2/13/2015 | 8/4/2015 |
| United-States | System-for-tracking-diffusion | US0634913B2 | 6/25/2015 | 4/25/2017 |
| United-States | System-for-tracking-diffusion | US0990341B2 | 2/29/2012 | 3/24/2015 |
| United-States | Flexible-tier-data-center | US0696770B2 | 3/8/2012 | 7/4/2017 |
| United-States | Publish-subscribe-platform-for-cloud-file-distribution | US0485300B2 | 3/13/2012 | 11/14/2016 |
| United-States | Method-and-system-for-edge-server-cache | US0607097B2 | 3/26/2012 | 3/28/2017 |
| United-States | Systems-and-methods-to-suggest-travel-itineraries-based-on-users'current-location | US0818715B2 | 3/29/2012 | 8/26/2014 |
| United-States | Finding-engaging-media-with-initialized-explore-exploit | US0923621B2 | 3/29/2012 | 12/30/2014 |
| United-States | Development-of-platform-independent-applications | US0235398B2 | 4/2/2012 | 1/12/2016 |
| United-States | Cross-section-advertising-campaign-sequencing | US0202232B2 | 4/2/2012 | 12/14/2015 |
| United-States | Development-and-hosting-for-platform-independent-applications | US0946526B2 | 4/2/2012 | 4/17/2018 |
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| United-States | Deployment-and-hosting-of-platform-independent-applications | US0197720B2 | 12/19/2012 | 11/24/2015 |
| United-States | Method-and-system-for-content-search | US0862610B2 | 4/13/2012 | 10/14/2014 |
| United-States | Method-and-system-of-dynamic-routing-of-aggregated-online-media streams | US1022550B2 | 4/16/2012 | 3/5/2019 |
| United-States | Method-and-system-for-providing-a-predictive-content-to-a-user | US0924799B2 | 4/16/2012 | 12/30/2014 |
| United-States | Method-and-system-for-updating-a-background-picture-of-a-web-search results-page-for-different-search-queries | US0519661B2 | 4/17/2012 | 12/13/2016 |
| United-States | Method-and-system-for-providing-content-in-formation-during-video buffering | US0888280B2 | 4/17/2012 | 2/6/2018 |
| United-States | Dynamic-webpage-image | US0971740B2 | 3/22/2016 | 5/15/2018 |
| United-States | Dynamic-webpage-image | US0317623B2 | 4/20/2012 | 4/19/2016 |

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| United-States | Snapshot refreshment for search results page preview | US0529926B2 | 4/23/2012 | 12/27/2016 |
| United-States | Snapshot generation for search results page preview | US0218410B2 | 4/23/2012 | 12/22/2015 |
| United-States | Method and system for distributed machine learning | US0633315B2 | 4/27/2012 | 4/25/2017 |
| United-States | User modeling for personalized generated content recommendations | US0996530B2 | 4/27/2012 | 3/31/2015 |
| United-States | Avatars for use with personalized generated content recommendations | US0785883B2 | 4/27/2012 | 10/10/2017 |
| United-States | Contentious content identification of broadcast content | US1027557B2 | 7/10/2017 | 4/30/2019 |
| United-States | Pricing engine revenue evaluation | US0612274B2 | 4/30/2012 | 12/17/2013 |
| United-States | Contentious content identification of broadcast content | US0703932B2 | 4/30/2012 | 7/11/2017 |
| United-States | Method and system for automatic detection of eavesdropping of an account based on identifiers and conditions | US0869280B2 | 5/2/2012 | 10/21/2014 |
| United-States | Methods and systems for personalizing user experience based on attitude prediction | US0092757B2 | 5/9/2012 | 7/28/2015 |
| United-States | Method and system for automatic assignment of identifiers to a graph of entities | US0223861B2 | 5/10/2012 | 12/29/2015 |
| United-States | Method and system for real-time de-duplication of objects in an entity-relationship graph | US0931943B2 | 5/14/2012 | 5/12/2015 |
| United-States | Media recommendation using internet media stream modeling | US0582767B2 | 5/16/2012 | 2/28/2017 |
| United-States | Context-relevant interactive television | US0866915B2 | 5/18/2012 | 1/9/2018 |
| United-States | Method and system for email secure identifier | US0856240B2 | 5/24/2012 | 10/7/2014 |
| United-States | Automatic tag extraction from video annotated photos | US0768693B2 | 5/31/2012 | 7/11/2014 |
| United-States | Personalized content from indexed archives | US0965129B2 | 6/1/2012 | 5/8/2018 |
| United-States | Creating a content index using data on user actions | US0792285B2 | 6/1/2012 | 10/17/2017 |
| United-States | System and method for discovering photograph hotspots | US0996305B2 | 6/7/2012 | 3/31/2015 |
| United-States | Method and system for mining trends around trending terms | US10275525B2 | 6/14/2012 | 4/30/2019 |
| United-States | Method and system for displaying comments associated with a query | US0177066B2 | 6/14/2012 | 11/3/2015 |
| United-States | System and method for providing sponsored applications in email | US0111201B2 | 6/19/2012 | 8/18/2015 |
| United-States | Method and system for detecting users' emotions when experiencing a media program | US0251406B2 | 6/20/2012 | 2/2/2016 |
| United-States | Index replication in distributed search engines | US0460226B2 | 6/28/2012 | 10/4/2016 |

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| United States | Method and system for recommending websites | US0147000B2 | 6/29/2012 | 9/29/2015 |
| United States | Techniques for organizing and presenting deal content | US0384502B2 | 6/29/2012 | 7/5/2016 |
| United States | Method or system for semantic categorization | US0305103B2 | 7/9/2012 | 4/5/2016 |
| United States | Peer-to-peer architecture for web traffic management | US10057341B2 | 3/17/2017 | 8/21/2018 |
| United States | Peer-to-peer architecture for web traffic management | US0621648B2 | 8/3/2015 | 4/11/2017 |
| United States | Peer-to-peer architecture for web traffic management | US0100362B2 | 7/6/2012 | 8/4/2015 |
| United States | Method and system for visualizing patterns during internet browsing | US0696896B2 | 7/9/2012 | 7/4/2017 |
| United States | Response completion in social media | US0380009B2 | 7/12/2012 | 6/28/2016 |
| United States | System and method for automatically determining an optimal power cap value | US0015502B2 | 7/13/2012 | 4/21/2015 |
| United States | Inventory control rules for inventory management | US0858582B2 | 7/30/2012 | 1/2/2018 |
| United States | System and method for identifying abusive account registration | US0862524B2 | 8/1/2012 | 10/14/2014 |
| United States | System and method for identifying abusive account registration | US0838403B2 | 8/4/2014 | 12/5/2017 |
| United States | Methods and systems for determining the effect of a host on network latency while delivering online ADS | US0667133B2 | 8/2/2012 | 3/4/2014 |
| United States | Methods and systems for recommending social network connections | US0117250B2 | 8/30/2012 | 8/25/2015 |
| United States | Method and system for reducing network latency | US0363240B2 | 8/30/2012 | 6/7/2016 |
| United States | Social content suggestions based on connections | US0367878B2 | 9/7/2012 | 6/14/2016 |
| United States | Generating an individualized web page template with entities of a web page publisher organization associated with areas of the template | US0558175B2 | 9/13/2012 | 1/31/2017 |
| United States | Multimode distribution systems and methods for providing power from power sources to power consuming devices | US0728969B2 | 8/28/2015 | 8/3/2017 |
| United States | Multimode distribution systems and methods for providing power from power sources to power consuming devices | US0136707B2 | 10/9/2012 | 9/15/2015 |
| United States | Method and system for customizing a web site | US0268885B2 | 10/9/2012 | 2/23/2016 |
| United States | Display of location related promotional message with search query results | US0311655B2 | 10/12/2012 | 4/12/2016 |
| United States | Methods and systems for package management | US0292299B2 | 10/16/2012 | 3/23/2016 |
| United States | Hybrid applications | US0887182B2 | 10/16/2012 | 11/11/2014 |
| United States | Visible personalization | US0903778B2 | 10/17/2012 | 12/2/2014 |
| United States | Writing data from hardop to off-grid storage | US0268716B2 | 10/19/2012 | 2/23/2016 |

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| United-States | Ranking products using purchase-day-based time windows | US0880518B2 | 10/26/2012 | 11/4/2014 |
| United-States | Systems and methods for implementing bid adjustments in an online advertisement exchange | US10217118B2 | 10/30/2012 | 2/26/2019 |
| United-States | User displays using N-way paginated merge of information from diverse sources | US0465881B2 | 10/31/2012 | 10/11/2016 |
| United-States | Method and system for improved language identification using language tags | US0971759B2 | 2/13/2017 | 5/15/2018 |
| United-States | Method and system for improved language identification using language tags | US0569421B2 | 10/31/2012 | 2/14/2017 |
| United-States | Social-web-browsing | US0836178B2 | 11/3/2012 | 12/5/2017 |
| United-States | Method and system for remote altering static video content in real time | US1014900B2 | 5/11/2016 | 12/4/2018 |
| United-States | Method and system for remote altering static video content in real time | US0369766B2 | 11/6/2012 | 6/14/2016 |
| United-States | Navigation bridge | US0135589B2 | 11/6/2012 | 9/15/2015 |
| United-States | Method and system for work load balancing | US0104497B2 | 11/7/2012 | 8/11/2015 |
| United-States | Method and system for providing tokenless secure login by visual cryptography | US0984225B2 | 11/15/2012 | 5/29/2018 |
| United-States | Methods and apparatuses for document processing at distributed processing nodes | US0330181B2 | 11/26/2012 | 5/3/2016 |
| United-States | Feature-rich view of an entity subgraph | US0754015B2 | 11/26/2012 | 9/5/2017 |
| United-States | Systems and methods involving features of search and/or search integration | US1038750B2 | 12/17/2012 | 8/20/2019 |
| United-States | Systems and methods involving search enhancement features associated with media modules | US1030372B2 | 6/12/2013 | 5/28/2019 |
| United-States | Identity workflow that utilizes multiple storage engines to support various lifecycles | US0367624B2 | 12/21/2012 | 6/14/2016 |
| United-States | Type-ahead search optimization | US0965999B2 | 12/24/2012 | 2/24/2015 |
| United-States | User behavior models based on source domain | US0405746B2 | 12/28/2012 | 8/23/2016 |
| United-States | Systems and methods relating to design of mobile applications for display ads on a larger screen space | US0411435B2 | 1/7/2013 | 8/9/2016 |
| United-States | Systems and methods relating to design of mobile applications for display ads on a larger screen space | US0594438B2 | 7/7/2016 | 3/14/2017 |
| United-States | Systems and methods relating to design of mobile applications for display ads on a larger screen space | US0753554B2 | 1/25/2017 | 9/5/2017 |

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| United-States | Systems and methods relating to ad/content targeting for map route options-based on personalization and user data | US10077908B2 | 1/6/2013 | 9/18/2018 |
| United-States | System and method for applying an efficient data compression scheme to URL parameters | US9087070B2 | 1/31/2013 | 7/11/2015 |
| United-States | System and method for applying an efficient data compression scheme to URL parameters | US9727574B2 | 7/9/2015 | 8/9/2017 |
| United-States | Finger-expressions for touch screens | US9760278B2 | 3/4/2013 | 9/12/2017 |
| United-States | Video-analysis system | US9749710B2 | 3/4/2013 | 8/29/2017 |
| United-States | Learned video advertisement wall | US10484755B2 | 2/27/2018 | 11/19/2019 |
| United-States | Video-advertisement-wall | US9369778B2 | 12/3/2013 | 6/14/2016 |
| United-States | Learned video advertisement wall | US9930425B2 | 4/30/2016 | 3/27/2018 |
| United-States | Automatically-fitting a wearable object | US10089680B2 | 3/12/2013 | 10/2/2018 |
| United-States | Online-advertisement-push-delivery | US10311474B2 | 3/15/2013 | 6/4/2019 |
| United-States | Online-digital-content-real-time-update | US10209694B2 | 3/15/2013 | 5/21/2019 |
| United-States | Activity-initiated virtual machine migration | US10176010B2 | 8/7/2017 | 1/9/2019 |
| United-States | Activity-initiated virtual machine migration | US9760389B2 | 3/15/2013 | 9/12/2017 |
| United-States | Forming regions characterized by labeled measurements | US9058666B2 | 3/15/2013 | 6/16/2015 |
| United-States | Social-media-based content selection system | US9424319B2 | 3/15/2013 | 8/23/2016 |
| United-States | Efficient and fault-tolerant distributed algorithm for learning latent factor models through matrix factorization | US9535938B2 | 3/15/2013 | 1/3/2017 |
| United-States | Jabba language | US9311058B2 | 3/15/2013 | 4/12/2016 |
| United-States | Identifying regions characterized by labeled measurements | US9589322B2 | 11/30/2015 | 3/7/2017 |
| United-States | Identifying regions characterized by labeled measurements | US9235898B2 | 3/15/2013 | 1/12/2016 |
| United-States | Method and system for mapping short-term ranking optimization objective to long-term engagement | US9171000B2 | 3/15/2013 | 10/27/2015 |
| United-States | Method and system for efficient matching of user profiles with audience segments | US9706008B2 | 3/15/2013 | 7/11/2017 |
| United-States | Method and system for data-triggered dynamic log-level control | US9342438B2 | 3/15/2013 | 5/17/2016 |
| United-States | Almost-online-large-scale-collaborative-filtering-based recommendation system | US9348924B2 | 3/15/2013 | 5/24/2016 |

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| United-States | Method and system for user profiling via mapping third party interests to a user's real interest space | US9430572B2 | 3/15/2013 | 8/30/2016 |
| United-States | Display time of a web page | US9355070B2 | 3/15/2013 | 5/31/2016 |
| United-States | Machine-for-recoognizing-or-generatng-jabba-type-sequences | US9262555B2 | 3/15/2013 | 2/16/2016 |
| United-States | Method and system for discovery of user-unknown interests based on supplemental content | US9270767B2 | 3/15/2013 | 2/23/2016 |
| United-States | Jabba-type content-based trigger | US9530994B2 | 3/15/2013 | 12/27/2016 |
| United-States | Jabba-type override-for-eorrection-or-improving-output-of-a-model | US9195940B2 | 3/15/2013 | 11/24/2015 |
| United-States | Detecting prohibited data-use-in-a-ution-based-online-advertising | US10198743B2 | 4/9/2013 | 2/5/2019 |
| United-States | Efficient database searching | US10275403B2 | 10/20/2016 | 4/30/2019 |
| United-States | Efficient database searching | US9501526B2 | 4/17/2013 | 11/22/2016 |
| United-States | Online-and-offline-collaboration-associated-with-shopping-and purchasing | US1018995B2 | 5/7/2013 | 10/23/2018 |
| United-States | Identifying communities within a social network based on information propagation data | US9342854B2 | 5/8/2013 | 5/17/2016 |
| United-States | Automating price-guarantees | US10032185B2 | 5/10/2013 | 7/24/2018 |
| United-States | Method and system for displaying content relating to a subject matter of a displayed media program | US9817911B2 | 5/10/2013 | 11/14/2017 |
| United-States | System and method for targeting user interests based on mobile-calls | US9582815B2 | 5/16/2013 | 2/28/2017 |
| United-States | System and method for targeting user interests based on mobile-calls | US9811843B2 | 1/31/2017 | 11/7/2017 |
| United-States | Dynamically modification of a parameter of an image based on user interest | US10282736B2 | 5/21/2013 | 5/7/2019 |
| United-States | System and method for auto-adjust positioning of preferred content for increased click-and-conversion rates | US9298357B2 | 5/28/2013 | 3/29/2016 |
| United-States | Method and system for do-enum-update | US9268899B2 | 5/29/2013 | 2/23/2016 |
| United-States | Method and system for automatically pausing advertisement-based on user attention | US10026104B2 | 11/16/2015 | 7/17/2018 |
| United-States | Method and system for automatically pausing advertisement-based on user attention | US9189895B2 | 6/18/2013 | 11/17/2015 |
| United-States | Method and system for recording and replaying user sessions in-browser based applications | US9047147B2 | 6/18/2013 | 6/2/2015 |
| United-States | Method and system for event state management-in-stream-processing | US9680893B2 | 6/19/2013 | 6/13/2017 |
| United-States | Motion-based human verification system and method | US9397841B2 | 6/26/2013 | 7/19/2016 |

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| United-States | Quality-scoring-system-for-advertisements-and-content-in-an-online-system | US9460451B2 | 7/31/2013 | 10/04/2016 |
| United-States | Interactive-site-map-with-user-footprints | US9727665B2 | 7/4/2013 | 8/9/2017 |
| United-States | Influencer-maximization-with-viral-product-design | US10546308B2 | 11/7/2016 | 1/28/2020 |
| United-States | Influencer-maximization-with-viral-product-design | US9489699B2 | 7/10/2013 | 11/9/2016 |
| United-States | Personal-trends-module | US9158850B2 | 7/24/2013 | 10/13/2015 |
| United-States | Personal-trends-module | US9990436B2 | 10/12/2015 | 6/5/2018 |
| United-States | Multi-finger-user-identification | US9392093B2 | 7/25/2013 | 7/12/2016 |
| United-States | Method-and-apparatus-for-secure-localization-of-points-of-interest | US10037327B2 | 7/9/2016 | 7/31/2019 |
| United-States | Method-and-apparatus-for-secure-localization-of-points-of-interest | US9881075B2 | 7/24/2014 | 1/30/2018 |
| United-States | Method-and-apparatus-for-secure-localization-of-points-of-interest-using-a-world-shape | US9390104B2 | 7/30/2013 | 7/12/2016 |
| United-States | Methods-and-system-for-device-authentication | US932432B2 | 8/1/2013 | 5/3/2016 |
| United-States | Encoding-pre-roll-advertisements-in-progressively-loading-images | US9066146B2 | 8/13/2013 | 6/23/2015 |
| United-States | Capture-and-retrieval-of-a-personalized-modal-icon | US10289265B2 | 8/15/2013 | 5/14/2019 |
| United-States | Testing-computer-implementable-instructions | US9146842B2 | 8/15/2013 | 9/29/2015 |
| United-States | Enhancing-network-security | US9197697B2 | 8/15/2013 | 11/24/2015 |
| United-States | Method-and-system-for-recommending-relevant-web-content-to-second-screen-application-users | US9268861B2 | 8/19/2013 | 2/23/2016 |
| United-States | System-and-method-for-automatically-suggesting-diverse-and-personalized-messages-completions | US10031908B2 | 10/12/2015 | 7/24/2018 |
| United-States | System-and-method-for-automatically-suggesting-diverse-and-personalized-messages-completions | US9161188B2 | 8/22/2013 | 10/13/2015 |
| United-States | System-and-method-for-contextual-social-messaging | US9191788B2 | 8/22/2013 | 11/17/2015 |
| United-States | User-programmable-character-store-for-video | US10055099B2 | 12/11/2013 | 8/21/2018 |
| United-States | Local-recommendation-engine | US9679062B2 | 9/18/2013 | 6/13/2017 |
| United-States | Automatic-verification-by-comparing-user-interface-images | US9135151B2 | 9/18/2013 | 9/15/2015 |
| United-States | Cache-refreshing-for-online-social-newsfeeds | US9967354B2 | 9/26/2013 | 5/9/2018 |
| United-States | Method-and-system-for-entrolling-online-user-account-using-a-mobile device | US10164931B2 | 6/19/2017 | 12/25/2018 |

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| United-States | Method and system for controlling online user account using a mobile device | US9686274B2 | 9/27/2013 | 6/20/2017 |
| United-States | Secure physical authentication input with personal display or sound device | US9760696B2 | 9/27/2013 | 9/12/2017 |
| United-States | Keyword price recommendation | US9911440B2 | 10/1/2013 | 3/6/2018 |
| United-States | Revenue share analysis | US9779422B2 | 10/1/2013 | 10/3/2017 |
| United-States | Alternate screen reveal for instant privacy | US10007810B2 | 10/5/2013 | 6/26/2018 |
| United-States | Gross device information exchange using gestures and locations | US10136280B2 | 3/17/2017 | 11/20/2018 |
| United-States | Gross device information exchange using gestures and locations | US9426605B2 | 10/10/2013 | 8/23/2016 |
| United-States | Gross device information exchange using gestures and locations | US9602957B2 | 8/22/2016 | 3/21/2017 |
| United-States | Masterless echo replication | US9602645B2 | 10/23/2013 | 3/24/2017 |
| United-States | Systems and methods for generating a dense graph | US9652875B2 | 10/28/2013 | 5/16/2017 |
| United-States | Dynamic database indexes for entity attribute value stores | US10061780B2 | 10/28/2013 | 8/28/2018 |
| United-States | Recommendation of television content | US9635401B2 | 10/31/2013 | 4/25/2017 |
| United-States | Gross platform interface for a television device | US9479832B2 | 10/31/2013 | 10/25/2016 |
| United-States | Gross platform interface for a television device | US9654839B2 | 10/17/2016 | 5/16/2017 |
| United-States | Audio visual interaction with user devices | US10275022B2 | 7/24/2018 | 4/30/2019 |
| United-States | Online marketplace to facilitate the distribution of marketing services from a marketer to an online merchant | US10026133B2 | 11/12/2013 | 7/17/2018 |
| United-States | Audio visual interaction with user devices | US10048748B2 | 11/12/2013 | 8/14/2018 |
| United-States | User engagement based contextually dependent automated pricing for non-guaranteed delivery | US10134053B2 | 11/19/2013 | 11/20/2018 |
| United-States | Method of system for access to shared resource | US10203995B2 | 11/22/2013 | 2/12/2019 |
| United-States | Blur aware photo feedback | US9210327B2 | 12/2/2013 | 12/8/2015 |
| United-States | Contextual based search suggestion | US9971837B2 | 12/16/2013 | 5/15/2018 |
| United-States | Method and system for iterative pipeline | US10326824B2 | 12/17/2013 | 6/18/2019 |
| United-States | Query suggestions | US9672298B2 | 12/30/2013 | 6/6/2017 |
| United-States | Low-key point of interest notification | US9392444B2 | 12/31/2013 | 7/12/2016 |
| United-States | Method and system for a scheduled map executor | US9986018B2 | 1/9/2014 | 5/29/2018 |
| United-States | Recursive unique user metrics in real time | US9754035B2 | 2/7/2014 | 9/5/2017 |

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| United-States | Localized-selectable-location-and/or-time-for-search-queries-and/or-search-query-results | US0970425B2 | 2/27/2014 | 4/16/2018 |
| United-States | Method-of-querying-signals | US0609043B2 | 2/27/2014 | 3/29/2017 |
| United-States | 3-dimensional-aygmented-reality-maps | US0721389B2 | 3/3/2014 | 8/4/2017 |
| United-States | System-and-method-for-email-notification | US10033681B2 | 3/3/2014 | 7/24/2018 |
| United-States | Methods-and-systems-for-facilitating-communication-between-providers-of-on-line-services-and-protectible-users | US0607309B2 | 3/4/2014 | 3/28/2017 |
| United-States | Attorney-fee-estimation-of-services-in-a-data-center | US0668375B2 | 3/13/2014 | 5/30/2017 |
| United-States | System-and-method-for-enhanced-accuracy-estimation | US10055506B2 | 3/19/2014 | 8/24/2018 |
| United-States | Compensation-threshold-decomposition | US0460456B2 | 3/21/2014 | 10/4/2016 |
| United-States | Method-and-system-for-decomposing-social-relationships-into-domains-of-interactions | US10013480B2 | 3/26/2014 | 7/3/2018 |
| United-States | Secure-information-exchange-between-devices-using-location-and-unique-codes | US0794614B2 | 12/31/2015 | 10/17/2017 |
| United-States | Secure-information-exchange-between-devices-using-location-and-unique-codes | US0282358B2 | 4/8/2014 | 3/8/2016 |
| United-States | Xpath-related-and-other-techniques-for-use-in-native-advertisement-placement | US10140627B2 | 4/14/2014 | 11/27/2018 |
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| United-States | Content-guided-techniques-for-use-in-native-advertisement-placement | US10269034B2 | 4/14/2014 | 4/23/2019 |
| United-States | Frequent-markup-techniques-for-use-in-native-advertisement-placement | US0361635B2 | 4/14/2014 | 6/7/2016 |
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| United-States | Frequent-markup-techniques-for-use-in-native-advertisement-placement | US0626699B2 | 5/23/2016 | 4/18/2017 |
| United-States | Opportunistic-ly-solving-search-use-cases | US0824149B2 | 4/23/2014 | 11/21/2017 |
| United-States | Method-and-system-for-entire-recognition-in-a-query | US0619558B2 | 4/29/2014 | 4/11/2017 |
| United-States | Method-and-system-for-providing-query-suggestions-including-entities | US0836554B2 | 4/30/2014 | 12/5/2017 |
| United-States | Modular-search-object-framework | US0830388B2 | 4/30/2014 | 11/28/2017 |
| United-States | Method-and-system-for-evaluating-query-suggestions-quality | US0606068B2 | 4/30/2014 | 3/21/2017 |
| United-States | Method-and-system-for-user-selection-of-query-suggestions | US0471570B2 | 4/30/2014 | 10/18/2016 |

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| United-States | Method of system for data traffic control and encryption | US1027755B2 | 5/21/2014 | 4/30/2019 |
| United-States | Synthetic question formulation | US0830555B2 | 5/21/2014 | 11/28/2017 |
| United-States | System and method for event triggered search results | US0754284B2 | 5/22/2014 | 9/5/2017 |
| United-States | Method and system for predicting future email | US1039745B2 | 5/30/2014 | 8/27/2019 |
| United-States | Systems and methods for advertising using sponsored verbs and contexts | US1015273B2 | 1/30/2017 | 12/11/2018 |
| United-States | Systems and methods for advertising using sponsored verbs and contexts | US0959504B2 | 5/30/2014 | 3/14/2017 |
| United-States | Determining traffic quality using event based traffic scoring | US10115125B2 | 6/3/2014 | 10/30/2018 |
| United-States | Information matching and match validation | US0947060B2 | 6/3/2014 | 4/17/2018 |
| United-States | Entity generation using queries | US10289637B2 | 6/13/2014 | 5/14/2019 |
| United-States | System and method for address based locations | US0661066B2 | 6/18/2014 | 5/23/2017 |
| United-States | Personalizing query rewrites for ad matching | US10040432B2 | 6/26/2014 | 8/14/2018 |
| United-States | Recommended query formulation | US10223477B2 | 6/26/2017 | 3/5/2019 |
| United-States | Podcasts in personalized content streams | US0661100B2 | 6/30/2014 | 5/23/2017 |
| United-States | Recommended query formulation | US0690860B2 | 6/30/2014 | 6/27/2017 |
| United-States | Method and system for predicting search results quality in vertical ranking | US10146872B2 | 7/16/2014 | 12/4/2018 |
| United-States | System and method for calibrating broadcast low energy signal strengths | US0385821B2 | 7/16/2014 | 7/5/2016 |
| United-States | System and method for detection of indoor tracking units | US0363644B2 | 8/19/2014 | 6/7/2016 |
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| United States | Charge trap type 3-level non-volatile semiconductor memory device and method of dividing the same | US7342827B2 | 1/26/2006 | 3/11/2008 |
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