IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

UNOWEB VIRTUAL, LLC, ***Plaintiff,*** v. **AOL INC.,** ***Defendant.***	**Civil Action No._____** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff UnoWeb Virtual, LLC ("UnoWeb" or "Plaintiff"), by and through its attorneys, brings this action and makes the following allegations of patent infringement relating to U.S. Patent Nos. 8,307,047 ("the '047 patent"); 7,941,345 ("the '345 patent"); 8,065,386 ("the '386 patent"); 7,580,858 ("the '858 patent"); 7,987,139 ("the '139 patent"); 8,140,384 ("the '384 patent") 8,402,163 ("the '163 patent"); and 7,971,198 ("the '198 patent") (collectively, the "patents-in-suit" or the "UnoWeb Patents"). Defendant AOL Inc. ("AOL" or "Defendant") infringes the each of the patents-in-suit in violation of the patent laws of the United States of America, 35 U.S.C. § 1 *et seq.*

INTRODUCTION

1. In an effort to expand its product base and profit from the sale of specific e-commerce outsourcing systems, including methods of advertising and content distribution that, prior to the development of the UnoWeb Patents, were unknown and never employed on the internet, AOL has undertaken to copy the technologies disclosed in the UnoWeb Patents.

2. John Almeida is the inventor of the '047, '345, '386, '858, '139, '384, '163, and '198 patents.[1] Mr. Almeida developed the technologies at issue in this case in response to his

[1] John Almeida is the inventor and owner of 14 issued U.S. patents, 38 published U.S. patent applications, and numerous pending unpublished patent applications before the United States Patent and Trademark Office ("USPTO").

exposure to the unique problems that retailers and advertisers faced from the specific architecture of the internet.

3. UnoWeb is an operating company based in Plano, Texas, which provides platforms for e-commerce, internet advertising, and content management. UnoWeb's products include UnoWeb AdMind, UnoWeb WayVi, and UnoWeb OpenCommerce. UnoWeb's groundbreaking technologies are available at www.unoweb.com and www.unowebdemo.com.

4. Mr. Almeida is the owner of UnoWeb and a resident of Plano, Texas. Mr. Almeida sought patent protection for his inventions. A software developer who moved to the United States from Brazil, Mr. Almeida worked on e-commerce applications in the first wave of internet businesses in the mid-1990s. Mr. Almeida worked for TradeYard.com[2] and Roidirect.com.[3] These early internet companies exposed Mr. Almeida to problems that were unique to content distribution and advertising on the internet.[4] Problems such as internet server resource allocation, third-party content integration on the World Wide Web, internet advertising click-fraud, and internet affiliate advertising were unique problems arising from the context of content distribution over a computer network and internet-based advertising.

5. The internet created the wholly new challenge of compensating internet content providers based on contextual advertising from a third party. Mr. Almeida recognized the drawbacks in the state of the art at the time, and through his ingenuity and work, Mr. Almeida

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[2] *See* Colleen Benson, *People in Business*, SAN FRANCISCO CHRONICLE (May 8, 2000) (Describing TradeYard as an "Internet marketplace for used heavy equipment." Although common today TradeYard was introducing the novel idea of providing an internet distribution venue to regional brick and mortar stores); *see also Micro General Affiliate Escrow.com Announces Integration of Fully Functional Transaction Settlement Engine by B2B Exchanges*, Micro General Corporation Press Release (December 5, 2000).

[3] *See* Merrill Warkentin, BUSINESS TO BUSINESS ELECTRONIC COMMERCE: CHALLENGES AND SOLUTIONS AT 267 (2002) (Describing the ROIDIRECT.com solution as "such companies provide eServices such as payment processing, logistics, and site monitoring. Some vendors that provide such services are bccentral.com (from Microsoft.com), Webvision.com, Roidirect.com, dellworks.com, and Websphere from ibm.com.").

[4] *See e.g.*, U.S. Patent App. 2003/0120560, *Method for Creating and Maintaining WorldWide E-Commerce* (Filed December 20, 2001) ("At present, there are needs for easy and affordable worldwide e-commerce solutions where the seller can have their goods and services sold.").

developed a variety of systems directed at problems unique to advertising and content distribution on the internet. For example, in 2001, Mr. Almeida filed a patent application that discussed the problems faced by "e-shops" such as Amazon.com, Inc. These problems included the failure of existing prior art e-commerce platforms to enable the distribution of content, advertising, and product listings from third parties. Integration of third party content was lacking in prior art systems. "[A] buyer will have to move from e-shop to e-shop in the e-mall. Time is thus wasted and sales can be lost. Furthermore, the dynamic e-mall concept cannot be created without an elaborate and expensive e-commerce infrastructure."[5]

6. Websites have adopted Mr. Almeida's inventions without his consent. The patents-in-suit and their underlying patent applications have been cited by over 200 issued United States patents and published patent applications.[6]

7. AOL Chief Executive Tim Armstrong has described the internet as creating significant changes in the distribution of content that produced unique challenges.

> I'm a really big believer in what Sergei [Brin] was just saying that the internet is going to change a lot in the future and I'm a big believer that it's just beginning. . . I don't know many companies that have taken content management systems seriously, and we see this as a tremendous opportunity.

Tim Armstrong, *A Conversation with Time Armstrong*, WEB 2.0 SUMMIT (October 11, 2009), available at: http://www.web2summit.com/web2009/public/schedule/speaker/61011.

8. In developing UnoWeb, Mr. Almeida developed inventions directed to web content management. These inventions led to five patents that disclose systems and methods for distributing and managing access to data where data is stored in multiple external servers or independent content hosts in the same server location. These web content management patents

[5] U.S. Patent App. 10/029,073 (filed December 20, 2001).

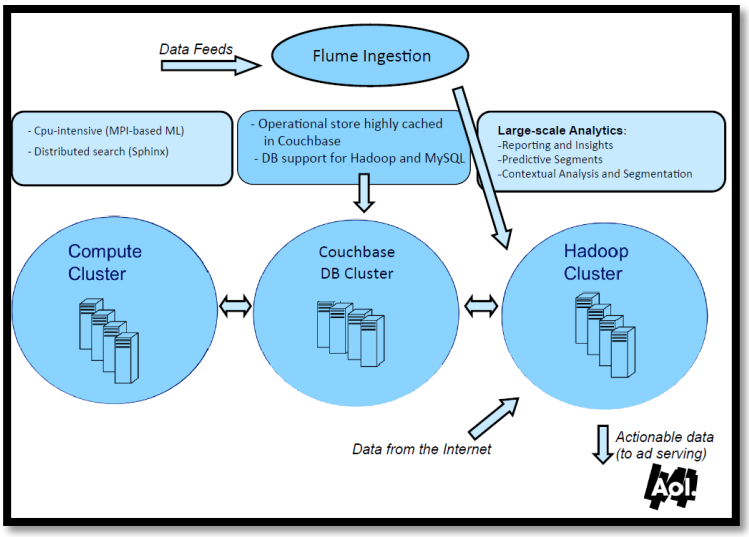
[6] *See e.g.*, U.S. Patent Nos. 9,092,792 (assigned to eBay, Inc.), 8,356,277 (assigned to Adobe Systems, Inc.), 8,560,955 (assigned to AT&T, Intellectual Property L.P.), 8,370,370 (assigned to International Business Machines Corp.), 9,210,202 (assigned to Qualcomm, Inc.), 8,832,059 (assigned to CBS Interactive, Inc.), 8,688,669 (assigned to Google, Inc.), 8,874,639 (assigned to Facebook, Inc.), 8,589,292 (assigned to Hewlett-Packard Company L.P.), 9,235,861 (assigned to Apple, Inc.), 8,639,817 (assigned to Amazon Technologies, Inc.), 8,700,609 (assigned to Yahoo!, Inc.), 9,196,000 (assigned to Xerox Corporation), 8,370,948 (assigned to Websense, Inc.), 8,938,073 (assigned to Sony Corporation), 9,253,177 (assigned to Panasonic Intellectual Property Management Co., Ltd.), 9,015,842 (assigned to Raytheon Company), 7,124,093 (assigned to Ricoh Co., Ltd.).

address the difficult problem of managing access to data supplied by third parties. Moreover, the UnoWeb patents teach unconventional technologies to solve content management problems unique to the internet.

9. When the inventions disclosed in the UnoWeb patents were conceived, conventional websites failed to aggregating content from a variety of hosts. AOL's own patents describe contemporaneous systems for content management as cumbersome. "However, ***conventional processes*** for identifying and making accessible an embedded or attached object ***generally have required manual actions*** by a user, rendering them cumbersome and inconsistent."[7]

10. Pero Subasic, Chief Architect of AOL has described web content management systems, particularly those that interact with advertising systems, as presenting "new problems" that reflect networked computing architecture.

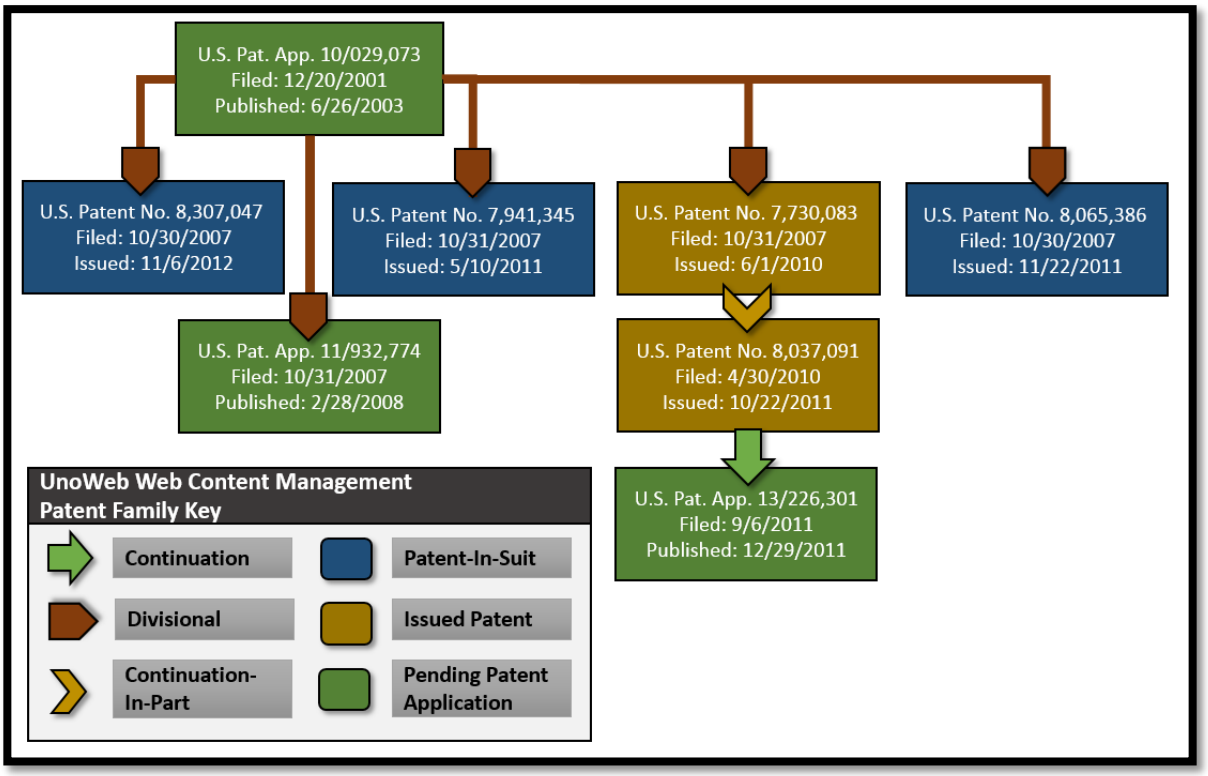
[7] By automating the process for content aggregation between hosts the UnoWeb patents teach a system that fundamentally differs from the routine functioning of contemporaneous websites described in AOL's patents. U.S. Patent No. 7,774,410, col. 1:34-37 (this patent was initially assigned to AOL, Inc. and later acquired by Facebook, Inc.) (emphasis added); *see also* U.S. Patent No. 7,213,027, col. 1:41-45, 1:67-2:3 (This patent contemporaneous to the UnoWeb patents was assigned to AOL and later Microsoft. The patent describes limitations in existing systems wherein content is balkanized and not aggregated between servers. "Further, it is difficult to find and compare the same information available at multiple individual web sites because the same information can be organized in many different ways. . . . [It] is desirable to provide a system and method which transforms and canonicalizes semantically structured data such that data can be transposed to and from internet sources."); U.S. Patent No. 7,805,332, col. 1:48-53 ("Some ***known systems, however, are only adapted to receive information from a single source*** (e.g., registration information provided by the consumer). Other systems may receive information from multiple sources, but are ***unable to usefully combine information*** relating to the same consumer and communicate it to the necessary content delivery system.") (emphasis added).



Pero Subasic and John Kreisa, *How AOL Accelerates Ad targeting Decisions with Hadoop Membase Server*, AOL AND CLOUDERA JOINT WEBINAR (February 9, 2011), *available at*: http://www.cloudera.com/resources/recordedwebinar/video-webinar-how-aol-accelerates-targeting-decisions-with-hadoop-and-membase-server.html (showing a content management system utilized by AOL to manage the ingestion of data feeds for ad serving).[8]

11. The following diagram shows the UnoWeb Web Content Management patent family tree, pending patent applications, and UnoWeb Web Content Management patents AOL infringes.

[8] *See also NoSQL and Ad Targeting*, COUCHBASE WHITEPAPER at 1 & 2013) ("AOL faced three data management challenges when building their ad serving platform." The whitepaper goes onto argue that internet ad serving applications are directed at - new problems. "These systems solve ***new problems*** for potentially vastly larger user populations, and they execute atop a computing infrastructure that has changed even more radically over the years.") (emphasis added).



12. Mr. Almeida's UnoWeb web system led to the development of additional technologies relating to managing internet advertising,[9] preventing click fraud,[10] filtering undesired electronic messages,[11] symmetric and asymmetric encryption,[12] and global resource sharing between networked servers enabling web applications.[13] The following diagram shows

[9] *See e.g.*, U.S. Patent No. 7,987,139, col. 1:22-26 ("Currently, content writers write content that are integrated onto a blog-portal, virtual community and others, the content writer does all the intellectual work and the hosting environment inserts advertisings and other paid content along the user-provided content without compensating the intellectual-proprietor whatsoever.").

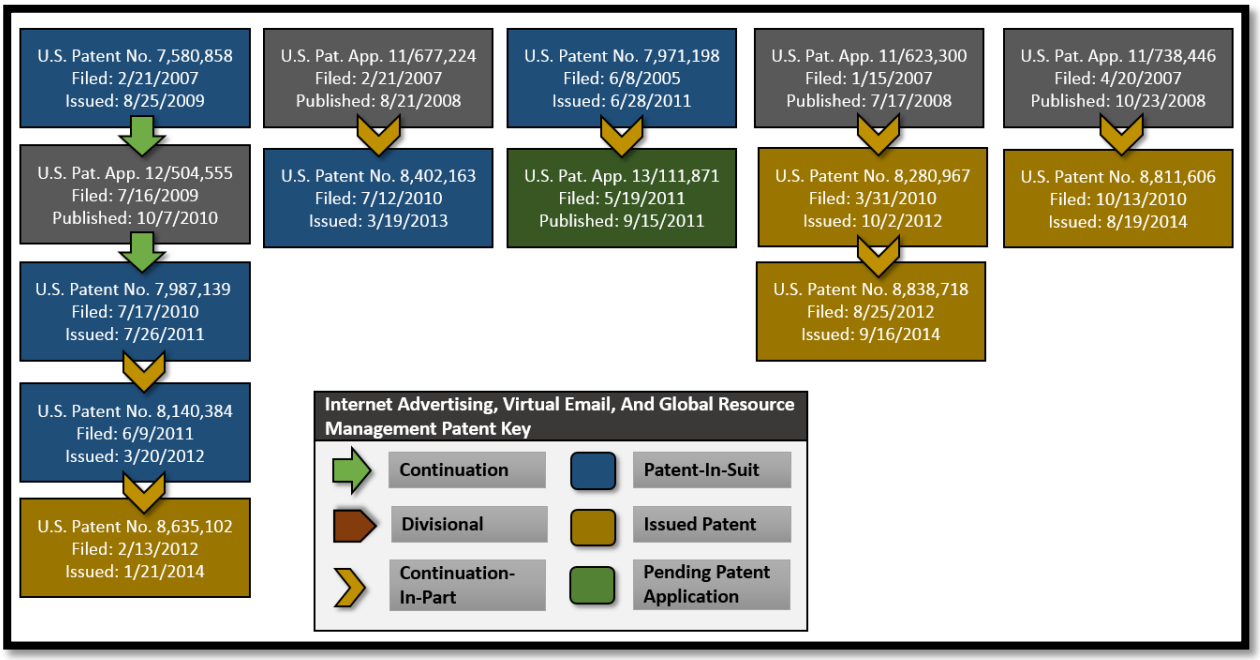
[10] *See e.g.*, U.S. Patent No. 7,580,858, col. 5:5-7 (Referring to the challenges posed by the internet "as never before possible and offering a tremendous potential for the content provider, content host, content distributor and clicker.").

[11] *See e.g.*, U.S. Patent No. 8,280,967, col. 10:14-16 ("the invention may be used to stop spammers and to save resources that would otherwise be wasted on spam").

[12] *See e.g.*, U.S. Patent No. 8,811,606, col. 3:53-56 ("Existing encryption techniques fails to teach a secure means where values other than prime numbers can be used in cryptographic process.").

[13] *See e.g.*, John Almeida, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS MODEL (describing the technologies of the UnoWeb web application); *Instructions on Using UnoWeb OpenCommerce*, UNOWEB OPENCOMMERCE DOCUMENTATION (2002); U.S. Patent No. 7,971,198, col. 1:16-17 (Describing the inventions disclosed as including "sharing of page-

the UnoWeb patents that relate to these technologies, including a pending patent application, and the patents AOL infringes.



UNOWEB'S LANDMARK WEB CONTENT MANAGEMENT SYSTEMS

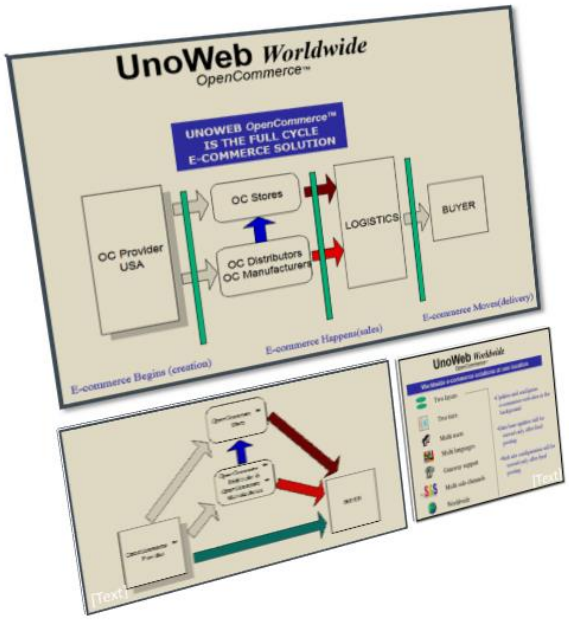
13. Mr. Almeida founded UnoWeb in 2001 in response to a need for systems and methods that would allow an e-commerce system to manage data supplied by third parties (*e.g.*, remote servers communicating over the internet). One of Mr. Almeida's insights was that manufacturers and distributors of goods needed a simple way to make goods and content available to a broad audience of users. "Today's e-commerce requires solutions where seller can have their products/services available to a broad base of buyers, also, virtually available to other e-shops, satellite e-malls and e-malls where they will be offered to a broader clientele base."[14]

14. Mr. Almeida created UnoWeb's OpenCommerce system. UnoWeb OpenCommerce enabled providers and distributors of content to make products available over a shared infrastructure, "offering solutions with a single e-commerce infrastructure at one location.

source code and settings parameters that can be logically linked at the global resource sharing level.").

[14] U.S. Patent App. 10/029,073 at ¶ 10.

All the required solutions are available to every OpenCommerce Provider, OpenCommerce Stores, OpenCommerce Distributor, OpenCommerce Manufactures, and E-Services within the virtual OpenCommerce Network."[15]



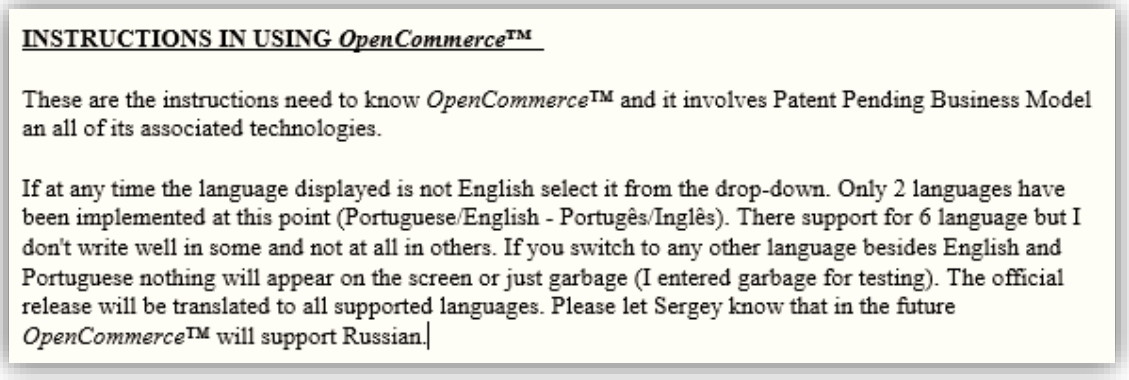
John Almeida, *UnoWeb OpenCommerce Architecture*, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS PLAN (2002).

15. UnoWeb's solutions overcame problems unique to the internet and inherent in the state of the art at the time. "At the present, there are needs for easy and affordable worldwide e-commerce solutions where seller can have their goods and services sold without the expertise or the expenses that today's e-commerce requires."[16] Existing e-commerce web sites required providers of content to update services and products directly on [a specific and predetermined] e-commerce platform.[17]

[15] John Almeida, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS MODEL at 2 (2002).

[16] U.S. Patent App. 10/029,073 at ¶ 4.

[17] *See e.g.*, U.S. Patent No. 6,901,378 (this patent was cited in the UnoWeb U.S. Patent App. 10/029,073 and describes limitations in existing systems contemporaneous to Mr. Almeida's inventions as "none of the prior art methods have provided for associating information with an image that indicated which products were available for that particular image. Typically, different types of products were separately displayed and only after a user chose a particular type of product."); *see also* U.S. Patent No. 5,745,681 (this patent assigned to Sun Microsystems and cited in UnoWeb's U.S. Patent App. 10/029,017 and published in April 1998, described



INSTRUCTIONS IN USING *OpenCommerce™*

These are the instructions need to know *OpenCommerce™* and it involves Patent Pending Business Model an all of its associated technologies.

If at any time the language displayed is not English select it from the drop-down. Only 2 languages have been implemented at this point (Portuguese/English - Portugês/Inglês). There support for 6 language but I don't write well in some and not at all in others. If you switch to any other language besides English and Portuguese nothing will appear on the screen or just garbage (I entered garbage for testing). The official release will be translated to all supported languages. Please let Sergey know that in the future *OpenCommerce™* will support Russian.

Instructions on Using UnoWeb OpenCommerce, UNOWEB OPENCOMMERCE DOCUMENTATION at 1 (2002) (user guide for using UnoWeb's OpenCommerce system).

16. Patent Applications from leading technology companies identified the inability of e-commerce websites to aggregate content from a variety of sources. For example, a 2001 International Business Machines patent application (cited in the prosecution history of the patents-in-suit) identified the inability of web sites to gather content from third parties.

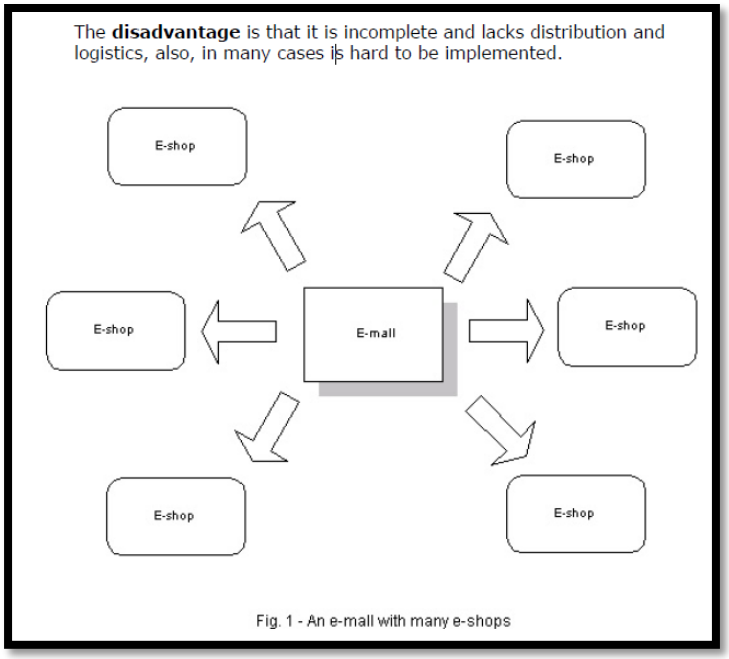
> Furthermore, while the foregoing e-shopping model could provide a combined search result and an incentive for purchasing items from multiple vendors, this purpose is practically defeated because the foregoing e-shopping model does not facilitate the shopping experience. . . . Accordingly, the foregoing e-shopping model, which is representative of current e-shopping services, ***does not adequately address the shoppers' need for an intuitive interface with the vendors' sites to complete numerous purchases from heterogeneous vendors***.[18]

U.S. Patent App. 09/780,636 (filed February 10, 2001 and assigned to IBM) (emphasis added).

limitations in the prior art as currently including "no reliable means to deduce the user's account information from the information accompanying a random request for a page.").

[18] *See also* U.S. Patent No. 6,907,401 (Cited on the face of the patents-in-suit, this patent identified limitations in the state of the art including, efficiently aggregating content from heterogeneous sources. "[A]dditional effort and time may be involved in signing a merchant up for service and manually or periodically updating the merchant's listing."); U.S. Patent No. 7,249,056 ("Therefore, the affiliate sites need to receive and store the most current product (or service) data from a variety of merchants, each of which may make independent decision about how to store and transmit data internally.").

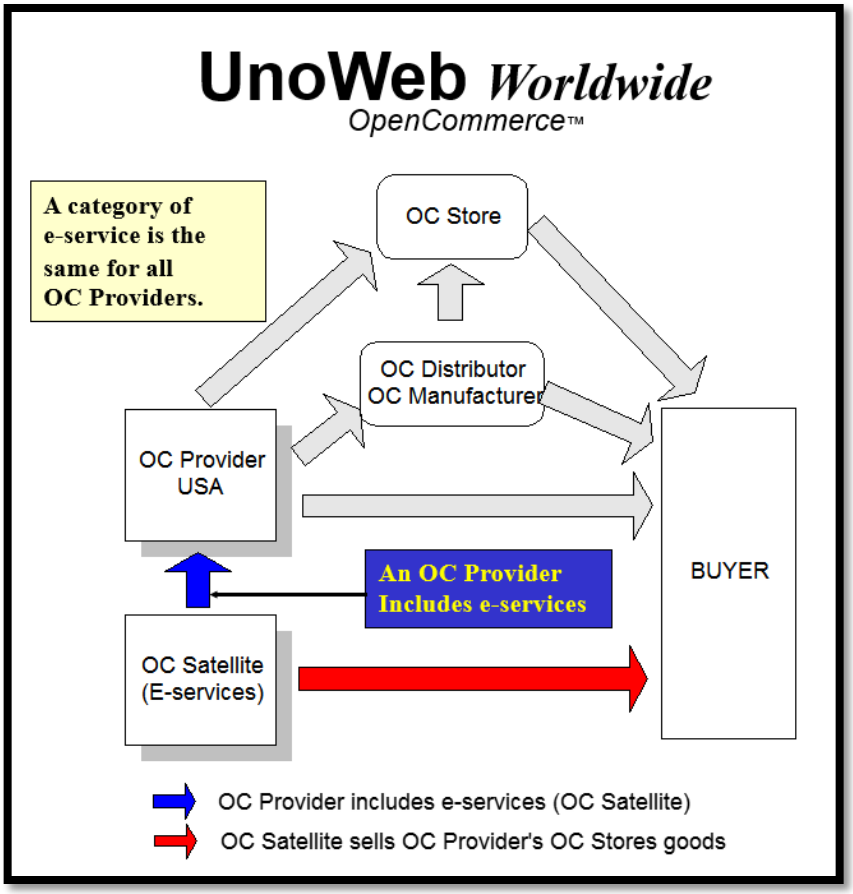
17. Existing systems for e-commerce offered providers the ability to create separate e-shops but required that providers use the same platform and commonly the same server. Limitations in existing systems severely restricted the ability to scale the aggregation of content and were difficult to implement. The below figure from a 2002 Overview of the UnoWeb OpenCommerce system shows one of the problems with existing systems where e-shops were required to be hosted on the same platform.



John Almeida, *UnoWeb OpenCommerce Architecture*, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS PLAN at 3 (2002).

18. UnoWeb's OpenCommerce system enabled the transmission of data by content providers using a shared infrastructure. Further, as outlined in a 2001 document from UnoWeb, the use of a virtual network resource infrastructure allows the exchange of content from remote servers without the need for the providers of content to directly update content or handle the creation of e-commerce infrastructure tasks such as "e-commerce web site hosting, credit card gateway, [and] logistics."[19]

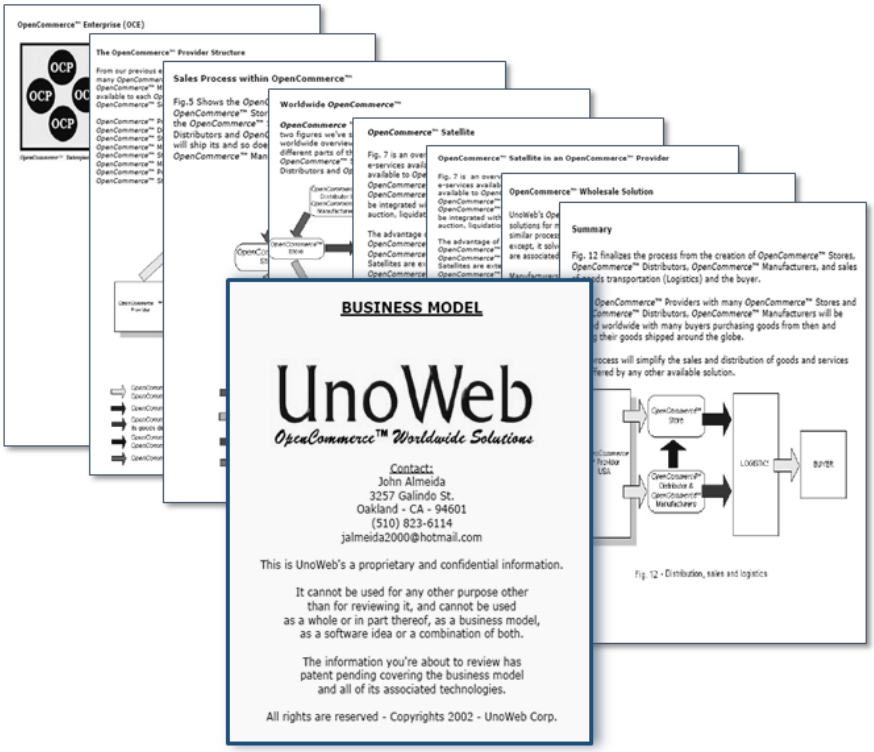
[19] John Almeida, UNOWEB OPENCOMMERCE OVERVIEW PRESENTATION at 10 (2001).



John Almeida, UNOWEB WORLDWIDE OPENCOMMERCE PLATFORM at 23 (July 2001).

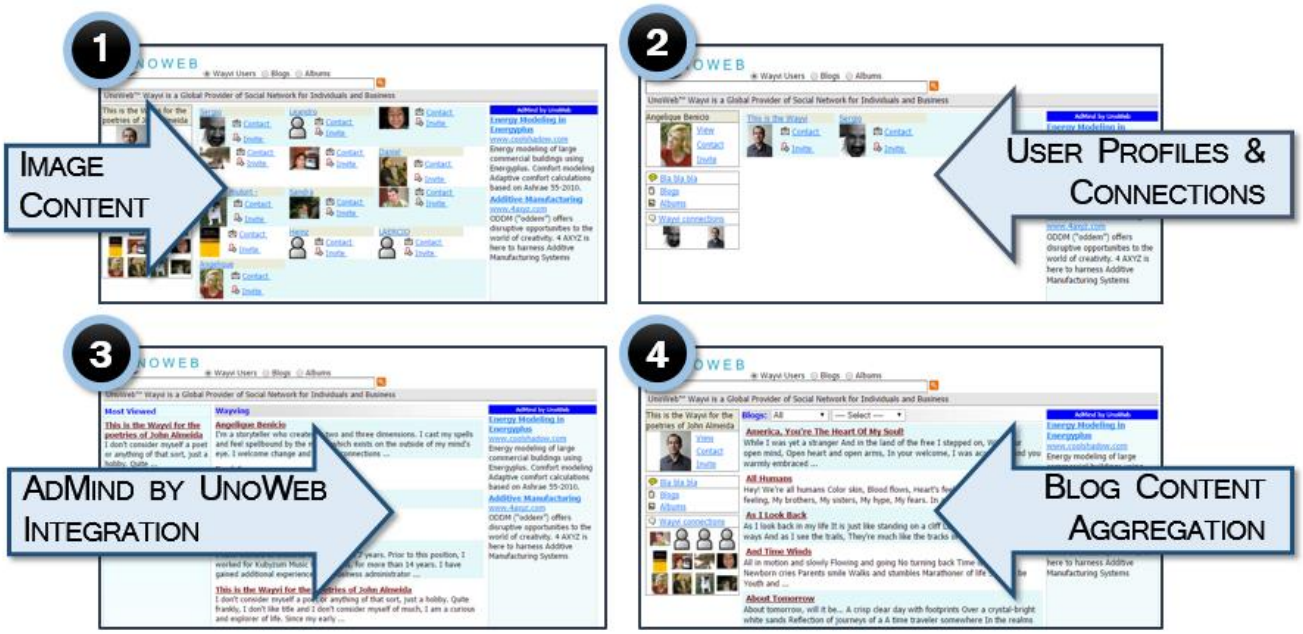
19. John Almeida filed U.S. Patent App. 10/029,073 in December 2001, which disclosed inventions relating to the UnoWeb system. The patent application described a system where "[r]equests are sent and data received from different servers in the network or over the Internet. And they are requests for database objects (table rows) from each server. Once they're received, they are combined and a single dynamic table is formed, then it is related with the virtual table 1502 (ID column) at virtual server 1500."[20]

[20] U.S. Patent App. 10/029,073 at ¶ 138.



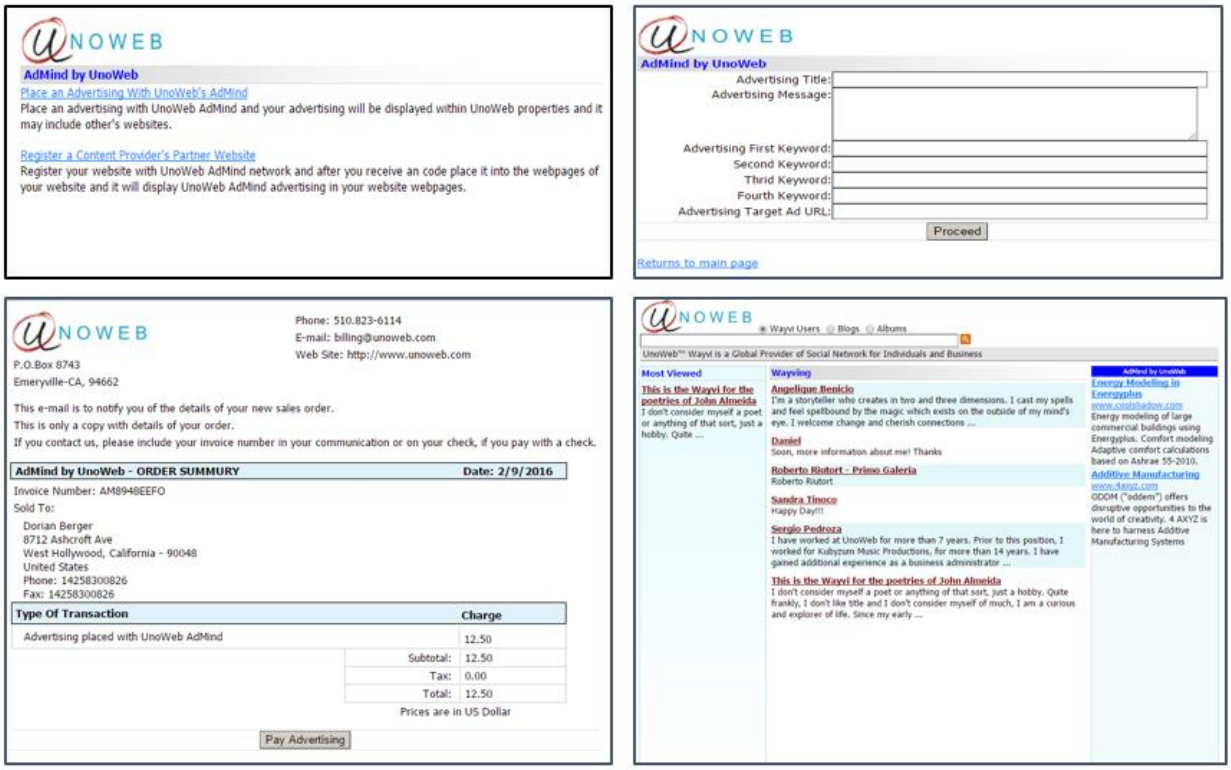
John Almeida, *UnoWeb OpenCommerce Architecture*, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS PLAN (2002) (describing the architecture of the UnoWeb OpenCommerce system).

20. UnoWeb developed a variety of technologies that have been widely adopted by leading internet companies. These UnoWeb systems are available at www.unoweb.com and www.unowebdemo.com. The UnoWeb inventions included the development of a social networking platform that allowed the aggregation of content from a variety of sources. For example, UnoWeb's WayVi system is a Social Network for individuals and businesses that enables the consolidation of third party content on a single webpage. UnoWeb WayVi enables the aggregation of images, photos, blogs, shopping carts, and connection information on one page that is displayed to a user. The below screenshot shows the ability of the UnoWeb WayVi system to retrieve data from a variety of sources for display on a single webpage.



UnoWeb WayVi Webpages, UNOWEBDEMO.COM WEBSITE (showing the aggregation of content including (1) photo albums (2) blog entries (3) applications and (4) user connections).

21. Mr. Almeida recognized that the growing adoption of the internet and the increasingly distributed nature of content on remote web servers presented unique challenges to making relevant content accessible to users. Mr. Almeida also had the insight that the challenges presented in controlling access to third party content could be applied outside the context of e-commerce, with wide applicability to internet advertising where a third party could take advantage of the internet to provide relevant contextual advertising. To address the need for third parties to utilize contextual advertising, UnoWeb developed AdMind and integrated AdMind into UnoWeb's WayVi System. UnoWeb WayVi is UnoWeb's social networking application. The below screenshot shows how advertisements from third parties are linked to relevant content using the UnoWeb platform.



UnoWeb AdMind System, UNOWEB.COM WEBSITE (Showing the UnoWeb AdMind system that enable advertisers to place contextual advertisements. This screenshot also shows how the UnoWeb system enables users to be charged for their context based advertising.).

22. UnoWeb AdMind enables advertisers to purchase advertising that is displayed with contextually relevant content supplied by third parties. The below screenshot from the UnoWeb system shows how advertising is associated to third party supplied content furnished by content providers. UnoWeb provides a mechanism for associating advertising with relevant content.[21]

[21] At the time the inventions disclosed in the patents-in-suit were conceived, the ability to provide contextual advertising was described by major technology companies as directly relating to the unique nature of providing relevant advertising on the internet. *See e.g.*, U.S. Patent No. 8,700,609 (this patent which references the UnoWeb patents and was assigned to Yahoo!, Inc. states "[t]he present invention relates to online communities, and more particularly to advertising in an online community. The Internet has become a major platform for exchanging goods and information, and has been used for, e.g., online shopping, online auction, photo album sharing and social networking."); *see also* U.S. Patent No. 8,380,576 (This patent assigned to Microsoft Corporation and citing the UnoWeb patents describes the challenges of allocating revenue between paid and non-paid content in the context of the internet. "While cooperation of these different entities in creating and maintaining the mobile marketplace can provide a tremendous marketing and purchasing resource, allocating revenue resulting from mobile marketplace transactions can be challenging.").

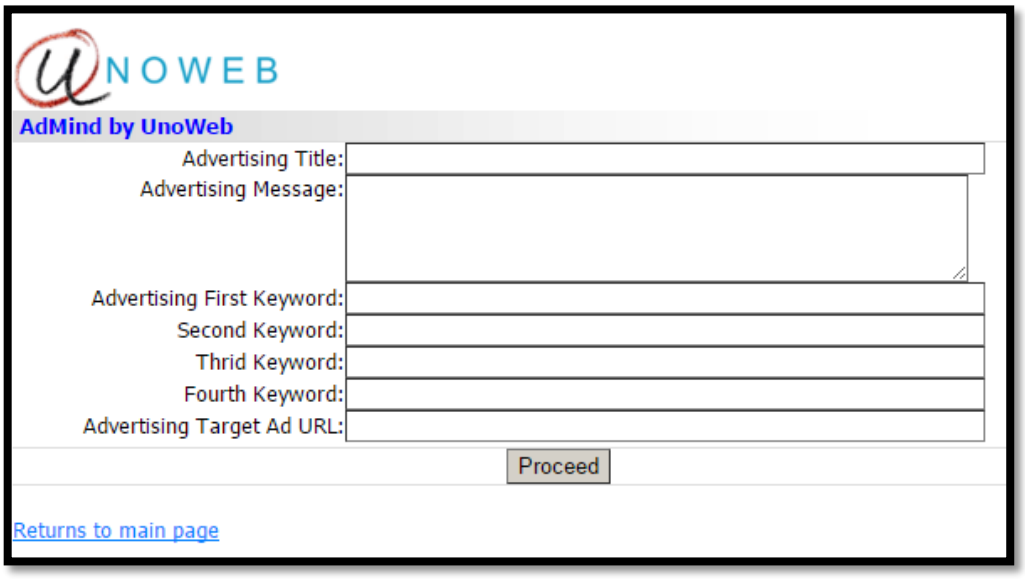
UnoWeb AdMind Associated Content, UNOWEB.COM WEBSITE (showing the association of AdMind advertising with third party content).

23. UnoWeb's AdMind system overcame a problem unique to the internet by allowing third party content to be associated with paid advertising and enabling content providers to be compensated for provisioning content relevant to associated advertising.[22]

[22] Relating paid content (*e.g.*, advertising) with unpaid content (*e.g.* a content provider such as a blogger) was a problem that arose from and was unique to the architecture of the internet. Efficiently relating paid and unpaid content over a computer network has been recognized by companies such as IBM and Yahoo as being specific to the internet. *See e.g.*, U.S. Patent App. 12/826,924 (This patent application (assigned to IBM) cites the UnoWeb patents in its prosecution history and states, "In addition, it is difficult for advertisers to determine where to best place advertisements, since content is diffusely spread over the Internet. A need therefore exists for methods and apparatus for dynamic placement, management and monitoring of blog advertising."); U.S. Patent No. 9,196,000 (This patent, assigned to Yahoo, likewise identifies the unique challenges created by the internet "dynamic digital solutions or products create issues with respect to collection of fees and the distribution of such fees to the appropriate entities because conventionally, the conventional form of payment for digital content and/or services has been a single payment mechanism.").

UnoWeb AdMind Administration Screens, UNOWEB.COM WEBSITE (showing the signup process for UnoWeb AdMind).

24. UnoWeb's AdMind also developed the use of keyword-based associations between advertisements and third party created content. For example, during the signup process for AdMind, an advertiser can associate an advertisement with various key words. These keywords are subsequently used to associate content with advertisements that are displayed to users.



AdMind by UnoWeb, UNOWEBDEMO.COM WEBSITE (this screen shot shows how the UnoWeb system enables the inputting of key words that are used to match advertising content from third parties to content providers).

25. UnoWeb's patents and published patent applications have been cited in over 200 United States patents and published patent applications as prior art before the United States Patent and Trademark Office.[23] Companies whose patents and patent applications cite the UnoWeb patents include:

- eBay, Inc.
- Amazon.com, Inc.
- Adobe Systems, Inc.
- Microsoft Corporation
- International Business Machines Corporation
- Xerox Corporation
- AT&T Corporation
- Yahoo!, Inc.
- Facebook, Inc.
- Hewlett- Packard Development Company, L.P.
- Raytheon Company
- CBS Interactive, Inc.
- Apple, Inc.
- Demandware, Inc.
- Symantec Corporation
- Websense, Inc.
- Sony Corporation
- Panasonic Corporation
- Netapp, Inc.
- Vodafone Group PLC
- Google, Inc.
- Qualcomm, Inc.
- Alibaba Group Holding Limited
- Ericsson Television, Inc.

THE PARTIES

UNOWEB VIRTUAL, LLC

26. Plano, Texas based UnoWeb provides information management solutions that allow companies and individuals to manage internet content, provide contextual internet advertising, and conduct internet based social networking services.

[23] The 200 forward citations to the UnoWeb Patents do not include patent applications that were abandoned prior to publication in the face of the UnoWeb Patents.

27. John Almeida, the inventor of the patents-in-suit and owner of UnoWeb, resides in the Eastern District of Texas.

28. UnoWeb is committed to advancing the current state of internet content management and internet advertising solutions. UnoWeb's principal place of business is located in the Eastern District of Texas at 5761 Robbie Road, # 3403, Plano, Texas 75024.

29. One of UnoWeb's core markets is internet web-advertising solutions, which refers to a variety of solutions for managing online advertising. One such solution, UnoWeb AdMind provides a platform for managing paid content (*e.g.*, advertisements), matching paid content to relevant unpaid content (*e.g.*, publisher provided content), and handling revenue sharing between the paid and unpaid content. Another such solution is UnoWeb WayVi which provides a social networking platform for exchanging, gathering, and distributing data.

30. UnoWeb is a small, Texas based company. UnoWeb depends on patent protection to effectively license its innovative technologies and sell its UnoWeb systems. Like Defendant AOL, UnoWeb relies on its intellectual property for its financial viability.

> Our intellectual property and other proprietary assets include copyrights, trademarks and trademark applications, patents and patent applications, domain names, trade secrets, other proprietary rights and licenses of intellectual property rights of various kinds. These assets and rights, both in the United States and in other countries around the world, ***are collectively among our most valuable assets***.[24]

31. AOL's sale and distribution of products and services that infringe the patents-in-suit has caused and continues to cause UnoWeb irreparable harm. As a result of AOL's unlawful competition in the Eastern District of Texas and elsewhere in the United States, UnoWeb has lost sales and profits and suffered irreparable harm, including lost market share and goodwill.

AOL INC.

32. AOL is a Delaware corporation with a principal place of business at 770 Broadway, 4th Floor, New York, NY 10003. AOL Inc. can be served through its registered

[24] AOL, INC. 2014 ANNUAL REPORT AT 11 (2014) (emphasis added).

agent, Corporation Service Company, doing business as CSC – Lawyers Incorporating Service Company, 211 E. 7th Street, Suite 620, Austin, TX 78701.

33. AOL provides web-advertising solutions in the form of its Advertising.com system and the One by AOL platform. AOL's customers infringe the patents-in-suit by using infringing products such as One by AOL and Advertising.com. Further, AOL encourages customers to use infringing software at least by making its content-sharing services available on its website, widely advertising those services, providing applications that allow users to access those services, and providing technical support to users.

34. AOL and its corporate parent (Verizon Communications, Inc.) have asserted claims of patent infringement in federal district courts throughout the country. *See e.g., AOL Inc., et al v. Yahoo! Inc. et al*, 1-09-cv-03774 (N.Y.S.D. 2009); *Verizon Communications Inc. et al v. Cablevision Systems Corp*., 1-10-cv-00216 (D. Del. 2010); *Verizon Services Corporation et al v. Charter Fiberlink TX-CCO LLC et al*, 5-08-cv-00025 (E.D. Tex. 2008); *Verizon Services Corp. et al v. Cox Fibernet Virginia, Inc. et al*; 2-08-cv-00020 (Va. E.D. 2008).

35. In court filings AOL's corporate parent identified the Eastern District of Texas as a "proper" venue based on a defendant: (1) transacting business extensively in Texas (2) having "customers in Texas," (3) maintaining a website "which promotes Defendants' products in this District," and (4) "making, using, selling, offering for sale" products in this district.[25] Similarly, here AOL has transacted business extensively in Texas, has customers in Texas, and maintains multiple websites offering its advertising products and content management products to customers in the Eastern District of Texas.

36. AOL has placed significant emphasis and value on its portfolio of business method patents.

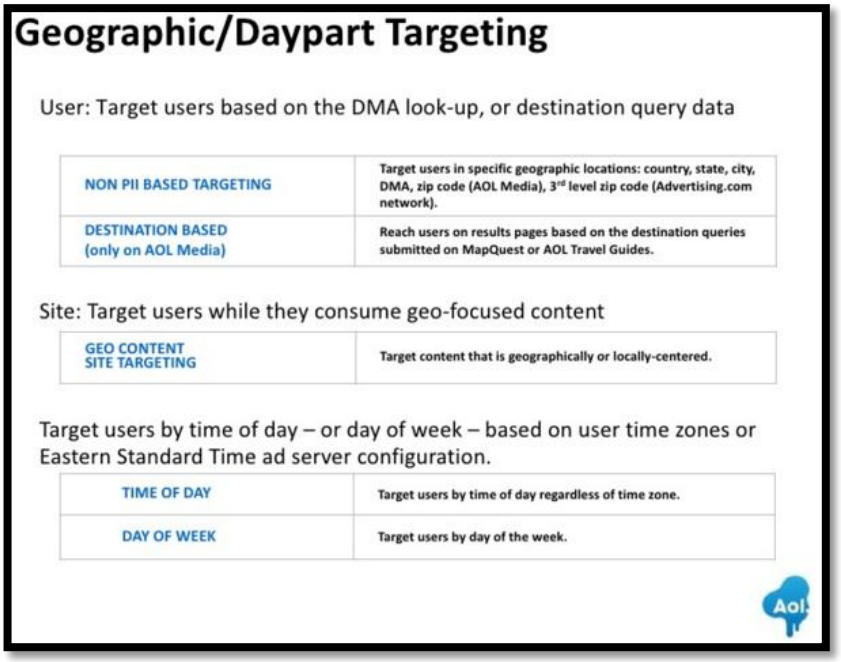
> Following the sale, AOL will continue to hold a significant patent portfolio of over 300 patents and patent applications spanning core and strategic technologies, including advertising, search, content generation/management, social networking,

[25] *Verizon Services Corporation et al v. Charter Fiberlink TX-CCO LLC et al*, Case No. 5-08-cv-00025, Dkt. No. 53 at 4 (E.D. January 15, 2009).

mapping, multimedia/streaming, and security among others. AOL also received a license to the patents being sold to Microsoft.[26]

37. AOL's Chief Executive Tim Armstrong has stated that AOL's business is directed to the marriage of content and advertising technology. "You know I don't think I have ever said this before. But basically we sit around in our industry and everybody either wants to do ad [advertising] tech or content and our strategy is to borrow the best from both.[27]

38. AOL specifically targets its internet advertising and content management systems to the Eastern District of Texas, including through providing detailed demographic information for residents of the district and enabling AOL advertisers to use demographic information about residents of the district to develop targeted internet advertising programs.



Senthil Mohan, *AOL and Netezza-Powered Web Analytics*, PRESENTATION AT MARKETING OPTIMIZATION SUMMIT at 23 (October 2010) ("Target users in specific geographic locations, country, state, city, DMA, zip code (AOL Media), 3rd level zip code (Advertising.com network).").

[26] *AOL and Microsoft Announce $1.056 Billion Patent Deal*, AOL PRESS RELEASE (April 9, 2012).

[27] Tim Armstrong, *Industry Preview 2015*, ONLINE MARKETING MEDIA AND ADVERTISING (OMMA) GLOBAL AT ADVERTISING WEEK 2012 (October 1, 2012), *available at:* https://www.youtube.com/watch?v=hEzj9tok-1c.

39. AOL competes directly with UnoWeb in the web advertising market by offering for sale and selling the infringing AOL advertising solutions. AOL also provides additional demographic targeting information for advertisers in the Eastern District of Texas. "Target users based on specific geographic locations: country, state, city, DMA, zip code."[28]

40. Because AOL actively targets customers in the Eastern District of Texas, AOL's infringement adversely affects UnoWeb and UnoWeb employees who live and work in the Eastern District of Texas (*e.g.*, John Almeida, UnoWeb's founder and owner).

41. On information and belief, AOL's corporate parent, Verizon, maintains retail stores and offices throughout the State of Texas and the Eastern District of Texas. On information and belief, Verizon maintains a 400,000 square foot campus in Richardson, Texas, which includes employees and business units possessing information relevant to Verizon's product development, engineering, and marketing of Verizon network security products and services.[29]

42. Upon information and belief, Verizon also has a significant presence in Texas. Verizon represents on its website, https://www.verizon.com/about/community/txabout.html, that it has "invested more than $1 billion in plant and equipment" and "owns or manages 939 buildings or locations in Texas." In addition, Verizon claims to employ 12,118 employees throughout Texas.

[28] *Advertising.com Targeting*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://www.advertising.com/advertiser/targeting

[29] *See, e.g.*, Steve Brown, *Verizon Campus in Richardson Changes Hands*, DALLAS NEWS (July 26, 2015), available at: http://www.dallasnews.com/business/commercial-real-estate/headlines/20150726-verizon-campus-in-richardson-changes-hands.ece; *Verizon Job Listings for Richardson, Texas Facility*, VERIZON WEBSITE.COM (last visited March 2016); available at: http://www.verizon.com/about/work/jobs/search?q=&location_state=TX&location_country=United%20States&v_location=Texas,%20United%20States&v_dist=50;

JURISDICTION AND VENUE

43. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

44. Upon information and belief, this Court has personal jurisdiction over AOL in this action because AOL has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over AOL would not offend traditional notions of fair play and substantial justice. Defendant AOL, directly and/or through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the patents-in-suit. Moreover, AOL is registered to do business in the State of Texas and actively directs its activities to customers located in the State of Texas. AOL's corporate parent has offices and facilities in the State of Texas.

45. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). Defendant AOL is registered to do business in the State of Texas and upon information and belief, has transacted business in the Eastern District of Texas and has committed acts of direct and indirect infringement in the Eastern District of Texas.

TECHNOLOGY BACKGROUND

46. Advances in computational power and the explosive growth of the internet have led to the development of web content management and advertising systems that aggregate data from third party servers on a network and enable the provisioning of advertising content so the paid advertising content is contextually relevant to users.

- ***The UnoWeb Web Content Management patents*** teach specific computer based web content management systems, including systems that use a virtual network resource infrastructure for hosting and managing heterogeneous data from third party providers.
- ***The UnoWeb Internet Advertising patents*** teach specific computer based web content management systems, including systems that enable revenue sharing

between all parties that are involved in the process of interacting with paid content and helping generate revenues.

- ***The UnoWeb Global Resource Sharing patent*** teaches specific methods and systems for networked servers to enable global resource sharing using logically linked software code blocks, application pages and application settings.

47. Mr. Almeida invented ways of overcoming drawbacks arising from web content management and internet advertising systems. Mr. Almeida's inventions improved upon the then-available technology, enabled the production and generation of more effective communications, distribution of applications over a computer network, reduced costs, and resulted in improvements to Web Content and Internet Advertising systems.

48. Mr. Almeida disclosed his inventions to the public, had the claims in the patents-in-suit repeatedly scrutinized on grounds of eligibility, novelty, non-obviousness, written description, and enablement by examiners at the U.S. Patent Office, overcame hundreds of prior art references through prosecution proceedings, paid and continues to pay filing and maintenance fees to the U.S. Patent Office, and was awarded the UnoWeb patents. Because of those actions, the public has benefitted from Mr. Almeida's disclosures, and each claim of each patent is statutorily protected by a presumption of validity that can be rebutted only by clear and convincing evidence.

49. The examiners who issued the UnoWeb patents examined claims in parent and related applications, and repeatedly cited many prior art references, before satisfying themselves that the claims of the patents differed substantially from the paradigm of earlier technology.

50. During examination of the UnoWeb patents, the U.S. Patent Office had access to and knowledge of the then-current state of the art and earlier technology. For the patents-in-suit alone, the materials cited on the face of the patents and considered by the examiners include hundreds of U.S. patents and published applications, foreign patent documents, and non-patent references.

51. The U.S. Patent Office's examination of the UnoWeb patents has extended over fifteen years and continues today in pending patent applications. Six of the UnoWeb patents

issued after *Bilski v. Kappos*, 561 U.S. 593 (2010), and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012) (UnoWeb '047, '102, '163, '967, '718, and '606 patents).[30]

52. The UnoWeb patents claim technical solutions to technological problems including using thresholds to prevent internet "click fraud," enabling content aggregation where the content is generated by two or more web servers, managing how interactions with the Internet are manipulated to yield a desired result such as content aggregation or advertising revenue sharing, monitoring and accurately logging the display of internet advertising, mapping out relationships between content hosts, and indexing objects and relating objects for display on a web page. District Courts throughout the United States have found claims directed to concepts similar to those contained in the UnoWeb patents to be patent eligible.[31] In *Improved Search*

[30] Although the examinations of four of these UnoWeb patents predated *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), *Alice* applied the *Mayo* framework and stated that its holding "follows from our prior cases, and *Bilski* in particular."

[31] *See e.g., BitTitan, Inc. v. SkyKick, Inc*., Case No. 15-cv-754, Dkt. No. 50 at 3 (W.D. Wash. August 27, 2015) (Denying dismissal of claims prior to claim construction where plaintiff alleged that "the claim is patentable because it is directed to an idea 'necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks' and also because the claims specify 'how interactions with the Internet are manipulated to yield a desired result.'"); *Versata Software, Inc. et al v. Zoho Corporation*, Case No. 13-cv-371, Dkt. No. 101 at 4 (W.D. Tex. August 11, 2015) (Denying Defendants' motion for summary judgment where the patent-in-suit was directed to allowing systems updates as "the growth of mobile device usage led to a corresponding increase in the demand for rich information content; however, the 'inevitable' space constraints on mobile devices 'limit[ed] the richness of information content available to a user.'"); *TimePlay, Inc. v. Audience Entertainment LLC*, Case No. 15-cv-5202, Dkt. No. 28 at 7 (N.D. Cal. November 10, 2015) (Denying motion to dismiss and finding the concept of "idea of multi-player gaming using a hand-held controller that has a display screen where the players are also in front of a shared display," to not be abstract.); *DataTern, Inc. v. MicroStrategy, Inc. et al*, Case No. 11-cv-12220, Dkt. No. 123 at 16 (D. Mass. September 4, 2015) (Denying Defendants' motion for summary judgment and finding that the patent "could be described as encompassing the abstract concept of 'mapping out relationships between two databases,' the claims of the patent would appear to be sufficiently limited in scope as to supply an 'inventive concept.'"); *Klaustech, Inc. v. AdMob, Inc.*, Case No. 10-5899, Dkt. No. 145 at 5 (N.D. Cal. August 31, 2015) (Finding claims direct to "address[ing] the prevailing problem of advertising on the Internet to control the advertising to each web page viewing browser and to monitor accurately the timing of the display, with proof of the advertisement display to the paying advertiser."); *Realtime Data, LLC v. Actian Corporation, et al*, Case No. 15-cv-463, Dkt. No. 256 at 1 (E.D. Tex. March 8, 2016) (Denying defendants' request for early claim construction based on "the patents-in-suit broadly discuss all types of data 'some easily recognizable to humans and some not.'"); *International Business Machines Corporation v. The Priceline Group, Inc. et al*, Case No. 15-cv-137, Dkt. No. 60 at 14 (D. Del. February 16, 2016) (Finding Plaintiff's claims were patent eligible as the complaint alleged that the patents contained the inventive concept of a "division of applications and advertising into discreet

LLC v. AOL Inc., Case No. 15-cv- 262, Dkt. No. 21 (D. Del. Mar. 22, 2016), Judge Sue Robinson confirmed the patentability of two patents including a patent "address[ed] the problem of ensuring that Internet search engines retrieve not only Web pages and documents written in the query language (source), but in foreign (target) languages as well." *Id*. at 18. Judge Robinson concluded the patents did "not perform a business method known from the preInternet world on the computer." *Id*.

53. Entities such as Yahoo have recognized that aggregation of content from third parties is "central" and "fundamental" to their business.

> Yahoo said in a statement to Ars that it is confident it will win the suit. "Yahoo! has invested substantial resources in research and development through the years, which has resulted in numerous patented inventions of technology that other companies have licensed," the company said. "These technologies are the ***foundation of our business*** that engages over 700 million monthly unique visitors and represent the spirit of innovation upon which Yahoo! is built."[32]

54. Defendant AOL.com has confirmed the importance and value of content aggregation systems that enable the integration of third-party data over the internet.

> The company has a two-fronted approach to its business, delivering content in order to build a user base, and offering advertising services for agencies and direct customers looking to connect with those consumers. "We think at the fore about content, aggregation of audience, and making sure that its multi-screen. And so we are endeavoring to ensure that that content is digestible, it's relevant, it's easy, and it's working," Moysey said.[33]

55. Although content aggregation systems that enable a web content management system to access data stored on a third party server are offered by major corporations today, at the time the inventions disclosed in the UnoWeb Web Content Management patents were conceived, no comparable systems existed.

'objects' that are stored locally and at the host computer appears to be a concrete application of the concept of 'local storage.'").

[32] Jon Brodkin, *Yahoo IP lawsuit: We Patented Facebook's Entire Social Network Model*, ARS TECHNICA (March 13, 2012) (emphasis added).

[33] *AOL Seeing Breakneck Adoption of Content on Mobile*, MOBILE WORLD LIVE, available at: http://www.mobileworldlive.com/featured-content/top-three/aol-seeing-breakneck-adoption-content-mobile-exec/ (April 13, 2015).

56. At the time the inventions disclosed in the UnoWeb Web Content Management patents were conceived, the internet, and the state of technology generally, was vastly different from 2016, or even the state of the internet 10 years ago. For example, Facebook.com, Myspace.com, LinkedIn.com, and Twitter.com were years from being launched.

The above images show major internet properties contemporaneous (and later) to the inventions conceived in the UnoWeb Web Content Management patents, including: (1) Facebook (February 2004), (2) Myspace.com (August 2003), (3) LinkedIn.com (December 2002), and (4) Twitter.com (March 2006).

57. During the prosecution history of the ‘386 patent the Examiner distinguished the inventions from the prior art by stating.

> [The prior art reference] does not teach as follows: Indexing the key words forming a database table containing each of the key words (see, e.g., applicant's published specification paragraph [0220]); and Selecting a key word (surf list) from within the database table and identifying a second content (web page) by finding relationship between the second content and the key word selected (the web server uses the list just retrieved from the session variable and searches the database. And

> finally, it will fetch web pages and/or product's page that correspond to the values in the session variable and sent the page to the web browser, see, e.g., applicant's published specification paragraph [0230]). ***No prior art reference was found that discloses this feature***.[34]

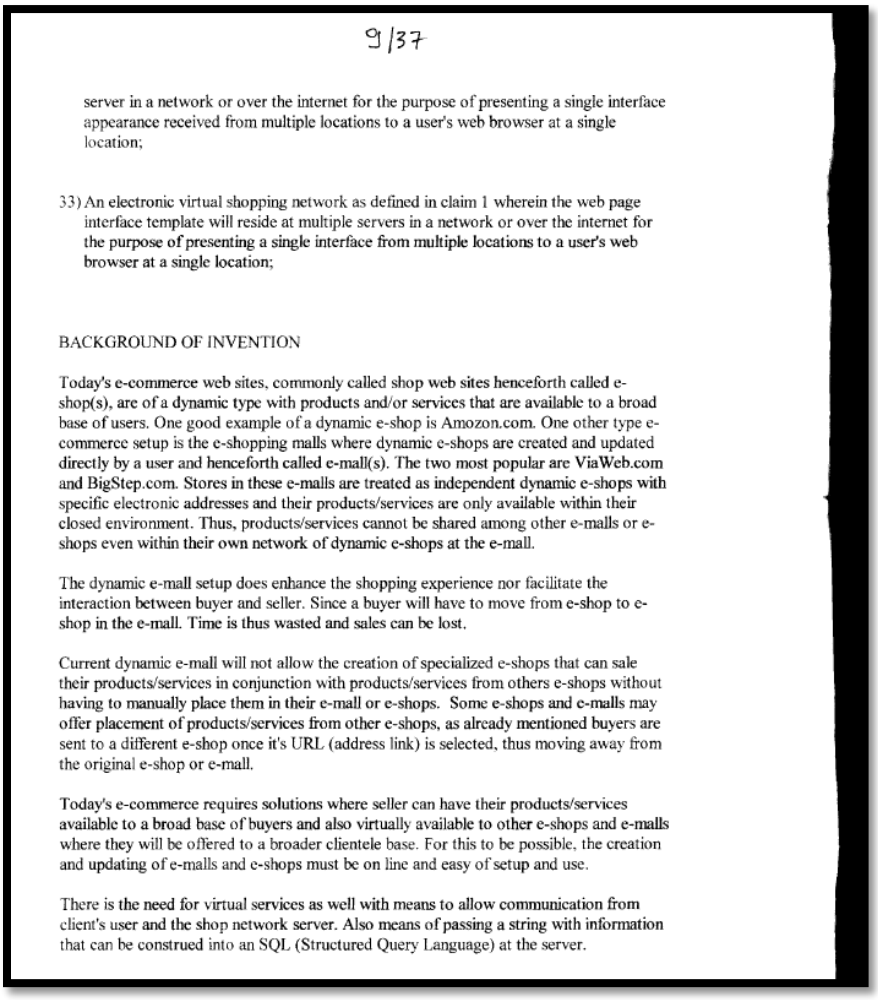
58. Other prior art references were distinguished, on similar grounds, by the U.S. Patent Office in the prosecution of the '047 patent.

> [N]o prior art reference expressly teaches as follows: Displaying the first dynamic content hosted by a first host and the second dynamic content hosted by a second host to a user accessing the second host as if the first dynamic content originated from the second host e.g., applicant's published specification paragraph [0181]); and configuring the server to control interfacing with the user accessing the first dynamic content and the second dynamic content through the second host (see, e.g., applicant's published specification paragraph [0214]). ***No prior art reference was found that teaches this feature.***[35]

59. From the conception of the UnoWeb patents, the inventions were directed at solving problems unique to and arising from the architecture of the internet. Mr. Almeida, in notebooks dating to 2001, identified the inventions disclosed in the UnoWeb Content Management Patents as being directed to problems arising from the technology associated with e-commerce. "Current dynamic email will not allow the creation of specialized e-shops," "e-commerce requires solutions where seller can have their products/services available to a broad base," and "[t]here is a need for virtual services."

[34] *U.S. Patent Office Notice of Allowability***,** Application/Control Number: 11/930,003 at 3 (September 21, 2011) (emphasis added) (this patent application issued as the UnoWeb '386 patent).

[35] *U.S. Patent Office Notice of Allowability*, Application/Control Number: 11/930,044 at 3 (May 30, 2012) (emphasis added).



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server in a network or over the internet for the purpose of presenting a single interface appearance received from multiple locations to a user's web browser at a single location;

33) An electronic virtual shopping network as defined in claim 1 wherein the web page interface template will reside at multiple servers in a network or over the internet for the purpose of presenting a single interface from multiple locations to a user's web browser at a single location;

BACKGROUND OF INVENTION

Today's e-commerce web sites, commonly called shop web sites henceforth called e-shop(s), are of a dynamic type with products and/or services that are available to a broad base of users. One good example of a dynamic e-shop is Amozon.com. One other type e-commerce setup is the e-shopping malls where dynamic e-shops are created and updated directly by a user and henceforth called e-mall(s). The two most popular are ViaWeb.com and BigStep.com. Stores in these e-malls are treated as independent dynamic e-shops with specific electronic addresses and their products/services are only available within their closed environment. Thus, products/services cannot be shared among other e-malls or e-shops even within their own network of dynamic e-shops at the e-mall.

The dynamic e-mall setup does enhance the shopping experience nor facilitate the interaction between buyer and seller. Since a buyer will have to move from e-shop to e-shop in the e-mall. Time is thus wasted and sales can be lost.

Current dynamic e-mall will not allow the creation of specialized e-shops that can sale their products/services in conjunction with products/services from others e-shops without having to manually place them in their e-mall or e-shops. Some e-shops and e-malls may offer placement of products/services from other e-shops, as already mentioned buyers are sent to a different e-shop once it's URL (address link) is selected, thus moving away from the original e-shop or e-mall.

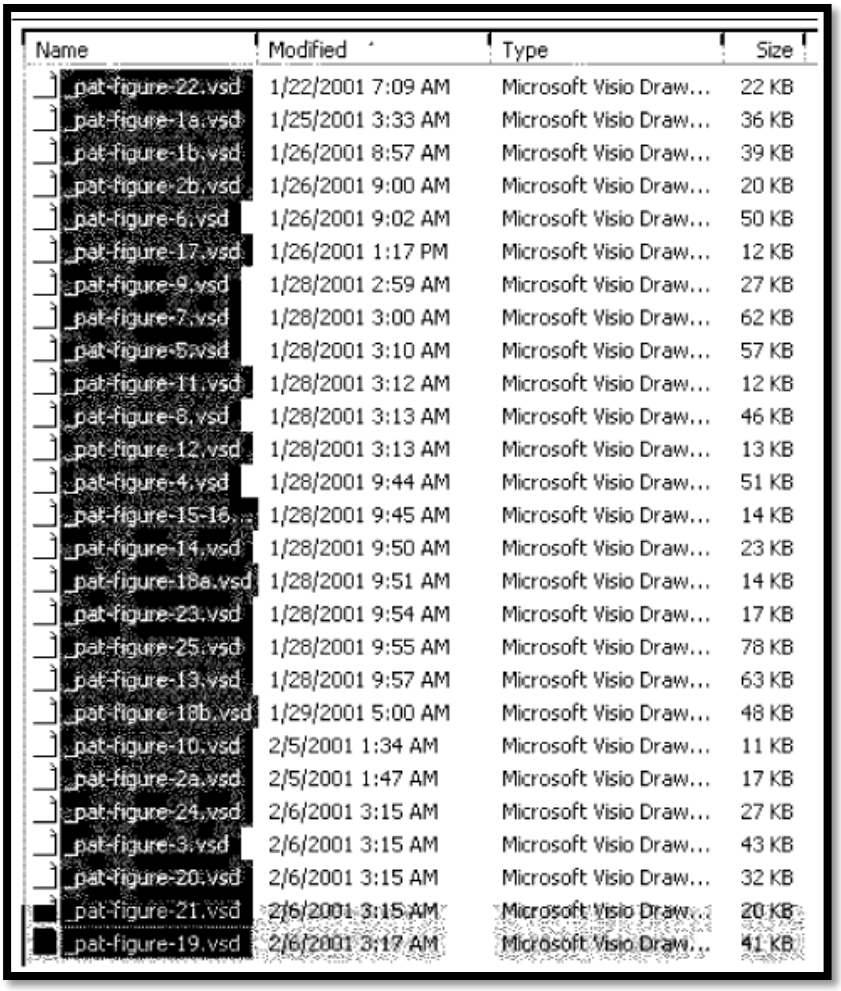
Today's e-commerce requires solutions where seller can have their products/services available to a broad base of buyers and also virtually available to other e-shops and e-malls where they will be offered to a broader clientele base. For this to be possible, the creation and updating of e-malls and e-shops must be on line and easy of setup and use.

There is the need for virtual services as well with means to allow communication from client's user and the shop network server. Also means of passing a string with information that can be construed into an SQL (Structured Query Language) at the server.

JOHN ALMEIDA INVENTOR NOTEBOOK at 9 (January 4, 2001) (cited in the Prosecution History of the '047 patent).

60. Mr. Almeida developed products that led to the inventions disclosed in the UnoWeb Web Content Management products specifically solving technological problems arising from content aggregation on the internet. The inventions disclosed in the patents specify how gathering and processing data stored on third party servers could be manipulated to yield a desired result – a result that overrides the routine and conventional sequence of internet browsing. Instead of a computer network operating in its normal, expected manner (*e.g.*, sending a website visitor to content located on third party web servers). Instead, the claimed system gathers data from third party servers or from third party content hosted on the same physical server and combines this third party data into hybrid web content. Further, the claimed methods

and systems include technologies for combining the web content based on content aggregation tools. When the limitations of the UnoWeb Web Content Management patent claims are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the internet.



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JOHN ALMEIDA INVENTOR NOTEBOOK Files at 9 (January 4, 2001) (cited in the Prosecution History of the '047 patent) (showing the initial computer figures outlining the systems and methods described in the UnoWeb Web Content Management patents).

61. At the time the inventions disclosed in the UnoWeb Web Content Management patents were conceived, there was a need for technologies that addressed problems arising from the "architecture of the internet." Patent applications cited in the prosecution of the '345, '047, and '386 patents identified this as a "fundamental problem."

> Thus, the ***architecture of the internet is a significant burden*** to both users looking for consumer services and the providers of those products over the internet. ***There***

> ***is a need to address this fundamental problem*** by providing a way for users and service providers to find each other when and where they are most needed.[36]

62. The claims in the UnoWeb Web Content Management patents are directed at problems arising from technologies specific to the internet including "bookmarking" content in a web browser. These "frustrating" problems were identified in a patent application cited in the prosecution history of the '345, '047, and '386 patents.

> With the internet's exploding growth it is extremely frustrating for customers to try to keep track of all the various services that are available to them and to remember which service providers they liked the most. While more modern browsers provide "Favorites" or "Bookmarks" for retaining information that allows quick access to sites, the user must 1) at the time of the visit to the site request the URL of the 20 site to be stored 2) organize those bookmarks in such a way that they are organized optimally. ***Unless, the user remembers the Bookmark and recalls to use it while making a relevant search***, the information can be lost. Thus, ***the Internet is not designed to provide ways for companies to reach prior customers at points of need*** and it does not facilitate alerting past customers to new services provided by the company.[37]

63. Patents that have cited the UnoWeb patents as relevant prior art have identified the unique challenges presented by internet content where the content comes from third-parties presents challenges unique to the internet. For example, U.S. Patent No. 9,141,713, assigned to Amazon.com, identified content that is aggregated from third parties raising challenges in identifying and displaying relevant content for users. "However, determining the relevancy of a particular web page to a keyword search is an inherently difficult task. If a web page does not happen to use the same terms that a user might include in a search for that web page."[38]

64. Although content aggregation, in some form, has been an objective of individuals for many years, the UnoWeb Web Content Management patents are directed to solving problems unique to the realm of internet content management. The claims in the UnoWeb Web Content Management patents describe a solution that is unquestionably rooted in computer technology to

[36] WO 2002/037,220 A2 to Subramanian (emphasis added) (cited in the prosecution of the '345 '047 and '386 patents).

[37] WO 2002/037,220 A2 to Subramanian (emphasis added) (cited in the prosecution of the '345, '047, and '386 patents).

[38] U.S. Patent No. 9, 141,713 (filed December 30, 2005).

overcome a problem specific to and characteristic of complex computer networks. A 1999 patent assigned to Yahoo.com!, Inc. (cited on the face of UnoWeb Patent App. No. 10/029,073), described the drawbacks inherent in existing systems for making content available from third-parties:

> For example, ***a merchant participating in a virtual shopping mall or local commerce site typically had to establish and had to maintain two separate websites***: (1) one website, the merchant's "mall website," for consumers who were shopping for the merchant's goods through the virtual shopping mall or local commerce site and (2) another website, the merchant's "direct website," for consumers who were shopping for the merchant's goods not through the virtual shopping mall or local commerce site, but rather directly through the merchant's own website.[39]

65. On information and belief, contemporaneous to, and following conception of the inventions disclosed in the UnoWeb Web Content Management patents, academics, and businesses headquartered in Texas actively entered the field of internet content management.[40]

66. The University of Texas at Austin Stan Richards School of Advertising & Public Relations Moody College of Communication created and founded the TexasMedia program focused on the digital media environment.[41] The University of Texas at Dallas founded the Institute of Data Analytics, a center for research on data analysis, which collaborates with private industry. Baylor University in Waco, Texas is the home of the Electronic Commerce Center, which focuses on integrating technology and electronic data with e-commerce.

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[39] U.S. Patent No. 6,499,052 (filed August 11, 1999) (emphasis added).

[40] *See e.g.*, Forcepoint L.L.C. (previously known as Websense, Inc.) is based in Austin, Texas and develops content management systems such as the TRITON APX Suite. Patents assigned to Forcepoint which cite the UnoWeb patents as relevant prior art include: U.S. Patent Nos. 9,130,972, 8,938,773, 9015,842, 8,407,784, 9,130,986, 8,959,634, and 8,370,948; *see also* Hewlett-Packard Development Company, L.P. ("HPDC") based in Houston, Texas provides information technology solutions. Patent and patent applications assigned to HPDC which cite the UnoWeb patents as relevant prior art include U.S. Patent No. 8,589,292 and U.S. Patent App. No. 13/791,911.

[41] *Interactive Advertising Bureau*, PREPARING THE NEXT GENERATION FOR INTERACTIVE ADVERTISING CAREERS at 5 (July 2013), available at: http://www.iab.net/media/file/IABEducationResearch2013.pdf ("With the strength of the Advertising program and the ability to incorporate business and digital media courses, UT-Austin has in the best situation to develop an interactive advertising program.").

1. U.S. Patent No. 7,941,345

67. U.S. Patent No. 7,941,345 ("the '345 patent") entitled, *Method of Presenting Contents Based on a Common Relationship*, was filed on October 31, 2007, and claims priority to December 20, 2001. UnoWeb is the owner by assignment of the '345 patent. A true and correct copy of the '345 patent is attached hereto as Exhibit A. The '345 patent claims specific methods for retrieving the third-party-supplied content comprising first objects describing a product or service, wherein retrieving is from a third-party-hosting server, said retrieving is performed by the server computer.

68. The '345 patent claims a technical solution to a problem unique to computer networks – easy and affordable worldwide e-commerce solutions where a seller can have its goods and services sold without the expertise or the expenses that today's e-commerce solutions require.

69. The '345 patent addressed a problem faced by web site owners who had a need for providing first content and associated second content to a user of a client computer system. The provider's server receives a request from the client computer system to send a first object in an HTML page for display on the client computer system. The provider examines the requested first object and includes a related second object/content in the HTML page. Like claims that have been found to constitute patent eligible subject matter, the inventions of the '345 patent are directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant.[42]

[42] *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was eligible for patenting because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899 Dkt. No.145 at 5 (N.D. Cal. Aug. 31, 2015) (Upholding the validity of an internet advertising patent that "employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm."); *Mirror World Techs. LLC v. Apple Inc., et al.*, Case No. 13-cv-419 Dkt. No. 346 at 18 (E.D. Tex. July 7, 2015) (Upholding the patent eligibility of claims where "the invention is a method whereby a computer system organizes every data unit that it receives or generates chronologically with time stamps.").

70. The '345 patent is directed at generating specific data structures.[43] The generating of data structures includes the generating of a web page that includes the second content.

71. The '345 patent discloses methods to prevent visitors from being lured away by third-party merchants. The methods disclose a system to retain web site visitors by processing data from third-party servers. "[T]hey will have a broad selection without having to go to many different e-shops to find what they're looking for, and also be able to view web pages in their own native language." '345 patent, col. 1:66-2:2. Instead of transporting a web site visitor away from an owner's site, a user is displayed related content from the third-party merchant, "e-services/contents can be retrieved from different server by another server (secondary server) and this secondary server will make any or all of these e-services available to one or more servers (tertiary servers) and each of the tertiary servers will make these e-services available to a client." *Id*., col. 20:58-62. This allows the host web site to display the third-party merchant's product while still retaining its visitor traffic. Further, the '345 patent discloses methods for enabling content from a first server to be related to content from a second server and present the aggregated content on a single webpage in a seamless manner. "The idea is to allow e-commerce and e-services to be displayed on a single web page although they come from two different locations." '345 patent, col. 19:44-47.

72. The '345 patent discloses methods that are directed to challenges particular to the internet (i.e., retaining web site visitors). The patent's claims did not merely address the performance of a business practice known from the pre-internet world and require it to be performed on the internet. Instead, the claimed solutions are necessarily rooted in computer

[43] *Advanced Marketing Sys., LLC v. CVS Pharmacy, Inc.*, Case No. 15-cv-00134 Dkt. No. 77 at 10 (E.D. Tex. Nov. 19, 2015) (Order Adopted at Dkt. No. 95 January 25, 2016) (Denying without prejudice Defendants' motion to dismiss patents directed to discount coupons: "The presence of these structures counsels away from summarily concluding that the asserted claims are directed to an abstract idea.").

technology and are directed to overcoming a problem specifically arising in the realm of computer networks.

73. Microsoft Corporation, in a 2009 patent application that cites the '345 patent as relevant prior art, describes the internet as "disruptive technologies" that create unique problems arising from the internet displaying content in two-dimensional space.

> [I]mages and inventory are represented in a two-dimensional manner, which ***does not allow a user to fully examine merchandise. Since a two-dimensional interface is presented to the user,*** there can be a learning curve associated with navigating a shopping Internet page since the two-dimensional interface likely differs greatly from an actual brick-and-mortar store. Thus, a shopper is not able to appreciate the goods fully, is limited in an ability to view merchandise, and can lose aspects experienced during traditional shopping.[44]

74. At the time of the inventions claimed in the '345 patent, processing, transmitting, and aggregating third party electronic data in a distributed computing environment presented new and unique issues over the state of the art. As explained in the '345 patent, "products/services cannot be shared among other e-malls or e-shops even within their own network of dynamic e-shops at the e-mall." '345 patent, col. 1:43-45.[45]

75. Although the methods taught in the '345 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '345 patent claims were innovative and novel. "Currently, dynamic e-mall will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops." '345 patent, col. 1:55-57.

76. Further, the '345 patent claims improve upon the functioning of a computer system by allowing the aggregation of third party supplied data. This improves the security of the computer system and allows it to be more efficient.[46]

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[44] U.S. Patent App. 12/406,903 at ¶ 4 (emphasis added).

[45] *See also* U.S. Patent App. 09/947,866 at ¶ 7 (This patent application, assigned to IBM, filed September 6, 2001, and cited on the face of the '345 patent discusses limitations in existing systems "[i]n addition, when retrieving web content from numerous different locations, searching, mining, analyzing, and/or archiving the web content can be a time consuming task.").

[46] *See e.g.*, *Gonzalez v. InfoStream Group, Inc.*, Case. No. 2-14-cv-00906, Dkt. No. 160 at 7 (E.D. Tex. Feb. 6, 2016) (Finding claims that recite steps for "'gathering' one type of data and

77. The '345 patent claims are not directed to a "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," or "a building block of the modern economy." Instead, they are limited to a concretely circumscribed set of methods for retrieving the third-party-supplied content comprising first objects describing a product or service, wherein retrieving is from a third-party-hosting server, said retrieving is performed by the server computer.[47]

78. The '345 patent claims are not directed at the broad concept/idea of "content management." Instead, they are limited to a concretely circumscribed set of methods for retrieving the third-party-supplied content comprising first objects describing a product or service, wherein retrieving is from a third-party-hosting server. These methods are technologies unique to the internet age. Intel, in U.S. Patent No. 6,070,176 (cited on the face of the '345 patent), identified problems unique to internet based systems for data retrieval.

> Web technology still has numerous shortcomings. . . Web documents commonly reference other Web documents using hypertext links. . . . With Web technology of the prior art, the user generally receives no explicit information regarding the relationships between Web documents. . . . One problem with this method of displaying search results is that documents with little or no relevance to the user's objective are often retrieved in a search.[48]

79. The inventive concepts claimed in the '345 patent are technological, not "entrepreneurial." For example, retrieving content from a third-party hosted server is a specific, concrete solution to the technological problem of transferring information from a third party for display on a webpage.

'producing' a 'label.' 'Gathering' data may describe an abstract idea, but 'producing' a 'label' based on that data does not describe an abstract idea.").

[47] *See e.g., Improved Search LLC v. AOL Inc.,* Case No. 15-cv-00262, Dkt. No. 21 at 17 (D. Del. March 22, 2016) (Confirming the validity of patents directed toward processing web page content. "That a method involving a computer and the internet may be broken down into a series of steps performed by a human does not resolve whether such method is an 'abstract idea.'").

[48] U.S. Patent No. 6,070,176, col. 1:23-56.

80. The '345 patent claims require the use of a "guiding means" for use in identifying third party content.[49]

81. The '345 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of web content management. For example, claims of the '345 patent require hosting on the server computer said third-party-supplied content, said hosting comprises reading said third-party supplied content and making said third-party supplied content available for access by the user—a result that overrides the routine and conventional sequence of events in electronic communications, even electronic communications.

82. The preemptive effect of the claims of the '345 patent are concretely circumscribed by specific limitations. For example, claim 1 of the '345 patent requires:

> A method of providing a plurality of contents to a user of a client computer system, the method comprising the steps of:
>
> providing a server computer;
>
> retrieving the third-party-supplied content comprising first objects describing a product or service, wherein retrieving is from a third-party-hosting server, said retrieving is performed by the server computer;
>
> hosting on the server computer said third-party-supplied content, said hosting comprises reading said third-party supplied content and making said third-party supplied content available for access by the user;
>
> transmitting a web page for display on the client computer system in response to a request from the client computer system, the web page comprising the third-party-supplied content;
>
> selecting guiding means from said third-party-supplied content for use in identifying related second content;
>
> identifying the related second content using the guiding means, wherein the related second content comprises an object that is related to an object within the first objects of the third-party-supplied content;
>
> including the second content in the web page to form a second web page, said including is performed by the server computer; and

[49] Patent claims addressing gathering and/or identifying content using a guiding means have been found patent eligible. *See Gonzalez v. InfoStream Group, Inc.*, Case. No. 2-14-cv-00906, Dkt. No. 160 at 8 (February 6, 2016 E.D. Tex.) ("The 'guiding' limitation, however, describes a more specific and concrete way of processing information. Many ways of gathering information exist besides obtaining it by 'guiding' a subscriber.").

sending the second web page to the client computer system for display on the client computer system with the web page previously transmitted.

83. The ‘345 patent does not attempt to preempt every application of the idea of managing web content transmitted over a computer network, or even the idea of managing web content retrieved from a third-party server.

84. The ‘345 patent does not preempt the field of web content management systems, or prevent use of alternative third-party web content management systems. For example, the ’345 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving content aggregation from third parties, and they ensure that the claims do not preempt other techniques for web content management. Further, the ninety-three patents cited in the prosecution history include numerous systems that are not preempted by the claims of the ‘345 patent.

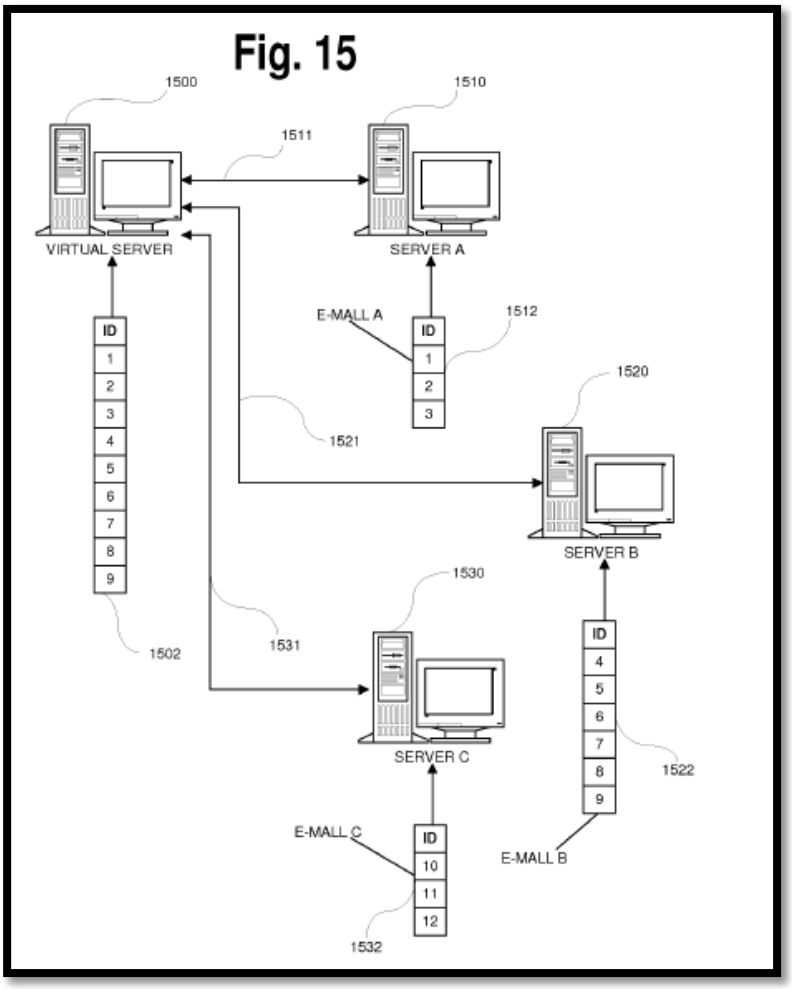
85. The ‘345 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer.

86. The claimed subject matter of the ‘345 patent is not a pre-existing but undiscovered algorithm.

87. The ’345 patent claims require the use of a server computer, client computer system, and a computer network.

88. The methods claimed in the ‘345 patent were not a longstanding or fundamental economic practice at the time of the patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. For example, the ‘345 patent specification describes limitations in the existing systems at the time the inventions disclosed in the ‘345 patent were conceived. “Currently, dynamic e-mail will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops.” ‘345 patent, col. 1:54-59.

89. One or more claims of the ’345 patent require a specific configuration of electronic devices, a network configuration, and the web servers to retrieve third party supplied content. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the ‘345 patent illustrates a specific configuration of hardware disclosed in the patent.



‘345 patent, Fig. 15.

90. One or more of the '345 patent claims require a server to use the guiding means (e.g. keywords, content page's objects, content page's hidden elements, etc.) of first content and locate second content based on the guiding means; this is in the realm of the computer network/Internet to enable one or more contents located at different locations and be associated

based on their objects and the associated contents displayed together on a webpage. This cannot be done by hand or by mind.

2. U.S. Patent No. 8,065,386

91. U.S. Patent No. 8,065,386 ("the '386 patent") entitled, *Method of Presenting Contents Based on a Common Relationship*, was filed on October 30, 2007, and claims priority to December 20, 2001. UnoWeb is the owner by assignment of the '386 patent. A true and correct copy of the '386 patent is attached hereto as Exhibit B. The '386 patent claims specific systems for providing requested contents and unrequested associated contents to a client computer system wherein a website server receives a request from the client computer system to send a web page for display on the client computer and a provider examines the requested web page's content, identifies related content, and includes the related content in the web page.

92. The '386 patent claims a technical solution to a problem unique to computer networks – causing the server computer to provide unrequested content to a client computer based on indexing content in a database table.

93. The inventions disclosed in the '386 patent are directed to solving problems unique to e-commerce. For example, the '386 patent specification describes existing systems "will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops." '386 patent, col. 1:57-60.

94. The '386 patent discloses a specific system for organizing data gathered from third party servers and then relating that data to second gathered data and then sending the second data for display on a webpage. Such gathering, indexing, and generating of content has been found patent eligible.[50]

[50] *See e.g., Mirror World Techs. LLC v. Apple Inc., et al*, Case No. 13-cv-419, Dkt. No. 346 at 18 (E.D. Tex. July 7, 2015) (Upholding the patent eligibility of claims where "the invention is a method whereby a computer system organizes every data unit that it receives or generates chronologically with time stamps."); *Motio Inc. v. BSP Software LLC et al*, Case No. 12-cv-647, Dkt. No. 226 at 10 (E.D. Tex. Jan. 4, 2016) (upholding the patent eligibility of a patent directed at a method for providing version control using an automated agent).

95. The '386 patent addresses a problem faced by web site owners who had a need for providing first content and associated second content to a user of a client computer system. The provider's server receives a request from the client computer system to send a first object/content in an HTML page for display on the client computer system. The provider examines the requested first object and includes a related second object/content in the HTML page. The '386 patent is directed towards generating a composite web page that combines certain aspects of a host website with information from a third-party merchant. Claims that are similar to the '386 patent claims have been found patent eligible.[51]

96. One or more claims of the '386 patent discloses the use of keyword indexing to relate first content with unrequested second content. A patent assigned to Amazon that references the parent application of the '386 patent describes the need to identify content based on keywords as arising from problems particular to the internet.

> Because of the large number of search results, and the correspondingly large number of pages displaying those search results, a user may have difficulty finding websites of interest to the user, particularly if the relevant website is displayed on a fourth, fifth, or even later page of search results.[52]

97. The '386 patent contains limitations including "indexing" via the "server computer," "forming a data base table," "hosted at the third-party's server," and "encoded information," that are specific to specialized computer systems and require more than a general purpose computer.

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[51] *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was eligible for patenting because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899, Dkt. No.145 at 5 (N.D. Cal. Aug. 31, 2015) (Upholding the validity of an internet advertising patent that "employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm."); *Mirror World Techs. LLC v. Apple Inc., et al*, Case No. 13-cv-419, Dkt. No. 346 at 18 (E.D. Tex. July 7, 2015) (Upholding the patent eligibility of claims where "the invention is a method whereby a computer system organizes every data unit that it receives or generates chronologically with time stamps.").

[52] U.S. Patent No. 9,141,713 (this patent, assigned to Amazon Technologies, Inc., references UnoWeb Patent App. 10/029,073 as relevant prior art).

98. At the time of the inventions claimed in the ‘386 patent, processing, transmitting, and identifying content to provide to a webpage presented new and unique issues over the state of the art. As explained in the ‘386 patent: “The e-commerce and the e-services may or may not reside at the same location. They can be at a single or multiple URL addresses, folders, databases or database tables.” ‘386 patent, col. 19:20-22.

99. Although the methods taught in the ‘386 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the ’386 patent claims were innovative and novel. “Currently, dynamic e-mall will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops.” ‘386 patent, col. 1:57-60.

100. Further, the inventions claimed in the ’386 patent improve upon the functioning of a computer system by using key word indexing to identify second content and displaying the second content to a user. This improves the functioning of the computer system by more efficiently identifying relevant second content and reducing computational requests for relevant content.

101. The ‘386 patent claims are not directed to a “method of organizing human activity,” “fundamental economic practice long prevalent in our system of commerce,” or “a building block of the modern economy.” Instead, they are limited to a concretely circumscribed set of methods for retrieving a second piece of content that is on a third-party web server using a keyword index.

102. The ’386 patent claims are not directed at the broad concept/idea of “content management.” Instead, they are limited to a concretely circumscribed set of methods for retrieving the third-party-supplied content, stored on a third-party server, using a key word index stored in a database table. These systems are technologies unique to the internet age.

103. The inventive concepts claimed in the ’386 patent are technological, not “entrepreneurial.” For example, identifying content from a third-party hosted server is a specific, concrete solution to the technological problem of transferring information from a third party for

display on a webpage. The '386 patent solves a problem of content dissemination on the internet by enabling third-party hosted content to be displayed on client computers when the client computer is displaying related content. This enables website visitors to access content that is hosted by a third party server without searching the network and leaving the webpage.

104. The ‘386 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of web content management. For example, claims of the ’386 patent require hosting on the server computer said third-party-supplied content, said hosting comprises reading said third-party supplied content, making said third-party supplied content available for access by the user, identifying a second content by finding a relationship between the second content and the object selected —a result that overrides the routine and conventional sequence of events in electronic communications.

105. The preemptive effect of the claims of the ‘386 patent are concretely circumscribed by specific limitations. For example, claim 4 of the ‘386 patent requires:

> A computer program product having executable instruction codes that are stored on a non-transitory computer-readable medium on a server computer, the instruction codes when executed by the server computer causes the server computer to provide unrequested content to a client computer and perform steps comprising:
>
> receiving a third-party-supplied first content, wherein said receiving is performed by the server computer;
>
> incorporating said third-party-supplied first content into a host on the server computer, wherein said incorporating is done by the server computer;
>
> said third-party-supplied first content comprising a plurality of objects, each object in the plurality of objects selected from the group consisting of text, image, form element, audio, video, link and key word;
>
> indexing said plurality of objects, wherein the indexing is performed by the server computer;
>
> forming a database table containing objects in the plurality of objects, wherein forming is performed by the server computer;
>
> accessing the database table and selecting an object in the plurality of objects using the index, wherein selecting is performed by the server computer;

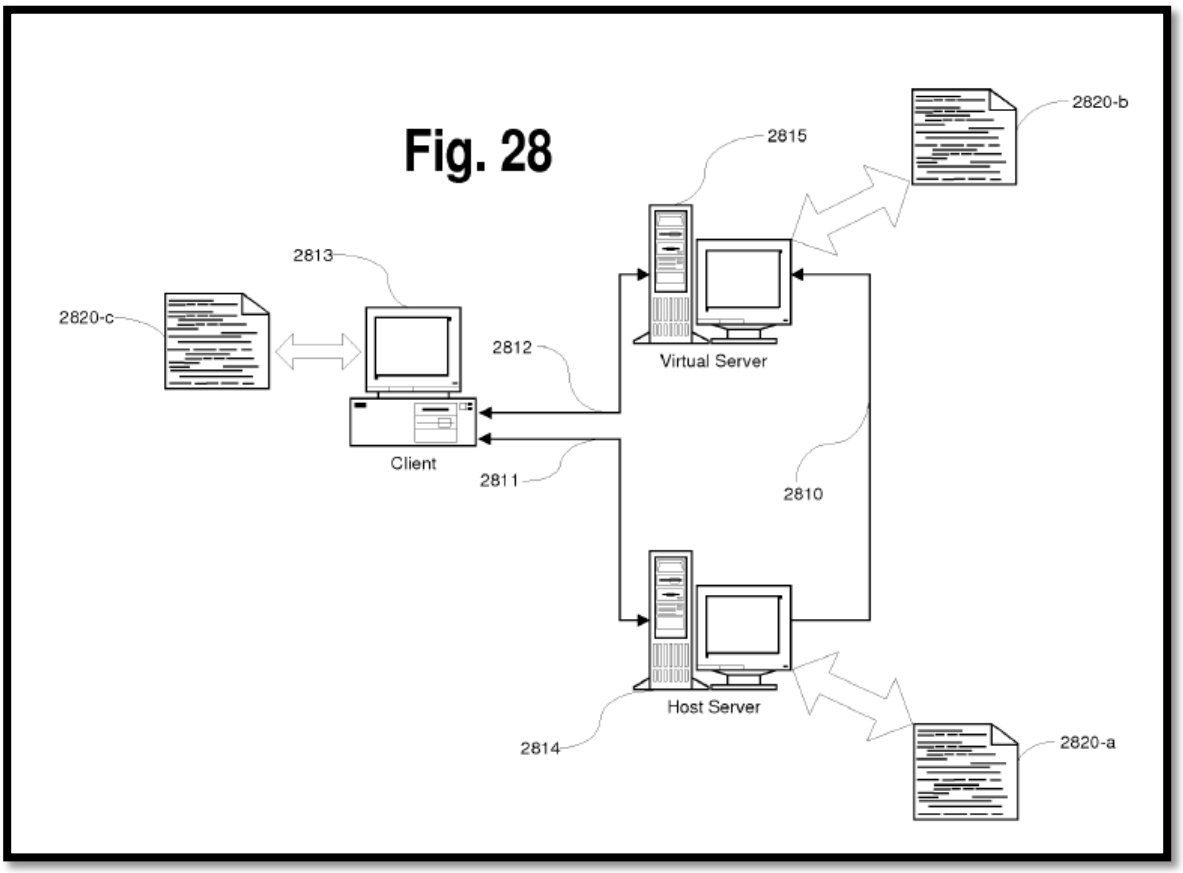
> identifying a second content by finding a relationship between the second content and the object selected, wherein identifying is performed by the server computer; and
>
> sending the second content for receipt and display on the client computer, wherein sending is performed by the server computer.

106. The ‘386 patent does not attempt to preempt every application of the idea of managing web content transmitted over a computer network, or even the idea of managing web content retrieved from a third-party server. The eighty-seven patents cited in the prosecution history of the ‘386 patent provide numerous examples of identifying and including related content in a request web page that are not preempted by the claims in the ‘386 patent.

107. The ‘386 patent does not preempt the field of web content management systems, or prevent use of alternative third-party web content management systems. For example, the ’386 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving content aggregation from third parties, and they ensure that the claims do not preempt other techniques for web content management.

108. The ‘386 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer. Nor is the claimed subject matter of the ‘386 patent a pre-existing but undiscovered algorithm.

109. The systems claimed in the ‘386 patent were not a longstanding or fundamental economic practice at the time of the patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the ’386 patent require a specific configuration of electronic devices, a network configuration, and the web servers to retrieve third party supplied content. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the ‘386 patent illustrates a specific configuration of hardware disclosed in the patent.



'386 patent, Fig. 28.

3. U.S. Patent No. 8,307,047

110. U.S. Patent No. 8,307,047 ("the '047 patent") entitled, *Method of a First Host of First Content Retrieving Second Content from a Second Host and Presenting Both Contents to a Use*r, was filed on October 30, 2007, and claims priority to December 20, 2001. UnoWeb is the owner by assignment of the '047 patent. A true and correct copy of the '047 patent is attached hereto as Exhibit C. The '047 patent claims specific systems for managing a plurality of content hosts on a server wherein the hosted content is combined and displayed together to website users.

111. The '047 patent claims a technical solution to a problem unique to computer networks – a program of instructions executable by the server to perform method steps for managing a plurality of content hosts on the server. The '047 patent is directed at addressing the need for an easy and affordable worldwide e-commerce solution where a seller can have its

goods and services sold without the expertise or the expenses that existing e-commerce solutions required.

112. The '047 patent addressed a problem faced by web site owners who had a need for providing internet users with content from a one or more data stores located at a first and second server in a seamless manner. Specifically, the '047 patent describes requesting a first dynamic content hosted by a first host, requesting a second dynamic content hosted by a second host, and displaying the first dynamic content and the second dynamic content to a user accessing the second host as if the first dynamic content originated from the second host. Further, the '047 patent discloses the use of a server to control a web client's interaction with the first dynamic content by causing the second host to retrieve the first dynamic content from the first host and control interfacing with the web client accessing the first dynamic content and the second dynamic content through the second host. Like claims that have been found to constitute patent eligible subject matter, the inventions of the '047 patent are directed towards generating a composite web page that combine data from a first and second server and enable the server generating the composite webpage to maintain web client interaction that is accessing information from a third-party merchant.[53]

113. The '047 patent teaches a system that transforms data from a first and second server (or from a first and a second host on the same physical server) to generate a wholly new web page.

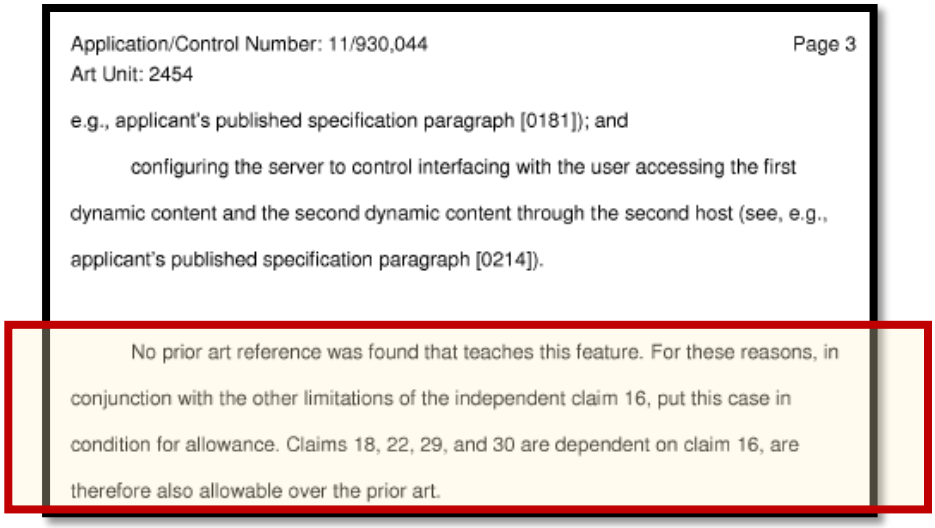
[53] *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was eligible for patenting because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899 Dkt. No.145 at 5 (N.D. Cal. Aug. 31, 2015) (Upholding the validity of an internet advertising patent that "employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm."); *Mirror World Techs. LLC v. Apple Inc., et al.*, Case No. 13-cv-419 Dkt. No. 346 at 18 (E.D. Tex. July 7, 2015) (Upholding the patent eligibility of claims where "the invention is a method whereby a computer system organizes every data unit that it receives or generates chronologically with time stamps.").

114. The ‘047 patent is directed toward transforming data from two or more servers (or from a first and second host on the same physical server) to create specific data structures that are displayed to a web client.[54] The generating of data structures includes the generating of a web page that includes data from a first and second server. The ‘047 patent teaches a system that enables a single resource infrastructure to be used by a broad base of users on the internet (e.g., buyers and sellers of e-commerce products). “There are needs for easy and affordable worldwide e-commerce solutions where seller can have their goods and services sold without the expertise or the expenses that today's e-commerce requires.” Patent '047, col. 1:27-32.

115. The ‘047 patent discloses a system that is directed toward the problem of web site operators needing a mechanism to make their content available on a variety of web sites without having to develop separate web sites and separate e-commerce infrastructure. The systems disclose a solution that prevents the need to create independent web sites and thus prevent internet users being lured away by third-party merchants. The methods disclose a system to retain web site visitors by processing data from third-party servers to generate a composite web page. “The Internet has tremendous potential with its worldwide reach; also, there are a lot of challenges and opportunities. . . . Today’s e-commerce requires solutions where seller can have their products/services available to a broad base of buyers, also available to other e-shops.” ‘047 patent, col. 1:27-28 and 1:61-63. Instead of transporting a web site visitor away from an owner's, “[i]t is the object of this invention to demonstrate a virtual electronic shopping mall where on-line users can create and update e-malls which in turn offers others the ability to host e-shops and web sites offering products/services.” *Id*., col. 2:14-17. This allows the virtual electronic network environment to make products and service available to a broader base for both, sellers and buyers.

[54] *Advanced Marketing Sys., LLC v. CVS Pharmacy, Inc.*, Case No. 15-cv-00134 Dkt. No. 77 at 10 (E.D. Tex. Nov. 19, 2015) (Order Adopted at Dkt. No. 95 January 25, 2016) (Denying without prejudice Defendants’ motion to dismiss patents directed to discount coupons: “The presence of these structures counsels away from summarily concluding that the asserted claims are directed to an abstract idea.”).

116. The ‘047 patent discloses a system that addresses the need for configuring a server to control a web client’s interaction with dynamic content provided from a first server and causing a second server to gather content from the first server and configuring the server to control interfacing with the web client accessing the content from the first server and content the second server through the second server. The U.S. Patent and Trademark Office confirmed the patentability of the claims in the ‘047 patent over 117 prior art references and concluded:



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e.g., applicant's published specification paragraph [0181]); and

configuring the server to control interfacing with the user accessing the first dynamic content and the second dynamic content through the second host (see, e.g., applicant's published specification paragraph [0214]).

No prior art reference was found that teaches this feature. For these reasons, in conjunction with the other limitations of the independent claim 16, put this case in condition for allowance. Claims 18, 22, 29, and 30 are dependent on claim 16, are therefore also allowable over the prior art.

U.S. Patent App. 11/930,044 Notice of Allowance at 3 (July 19, 2012).

117. The ‘047 patent discloses methods that are directed to challenges particular to the internet (i.e., enabling content aggregation from multiple servers or multiple content hosts on a single physical server) and managing user interaction with content from an external server. The patent's claims did not merely address the performance of a business practice known from the pre-internet world and require it to be performed on the internet. Instead, the claimed solutions are necessarily rooted in computer technology and are directed to overcoming a problem specifically arising in the realm of computer networks. For example, configuring a server to control interfacing with a user accessing dynamic content from a first and second server and configuring the server to maintain user interaction with dynamic content provided by the first server at the second server is directed at solving a problem unique to the internet.

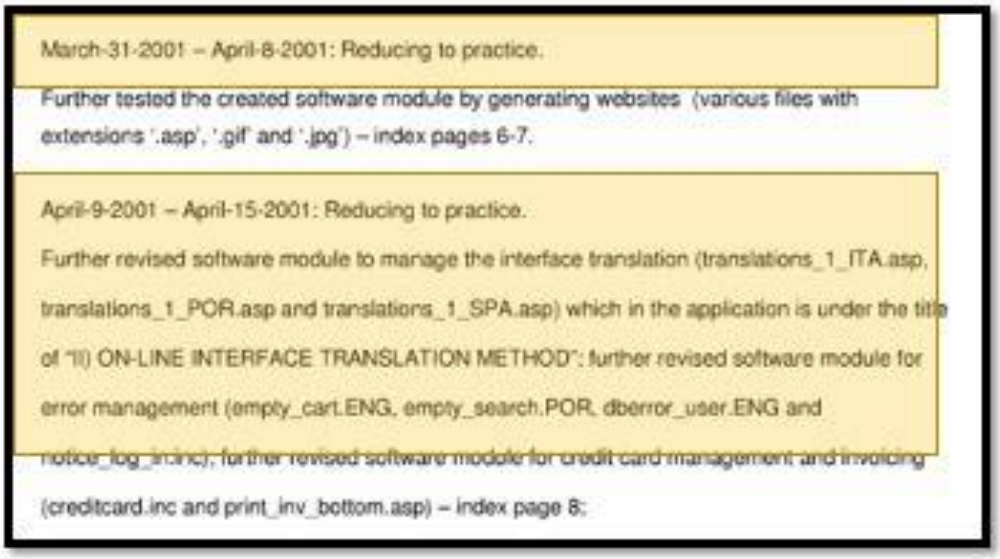
118. AT&T Corporation, in a patent filed in 2008 (which cites the '047 patent as relevant prior art), describes virtual network communication as creating a unique "networked virtual environment," which created unique problems relating to the "software-generated" nature of the internet environment.

> ***A networked virtual world is a software-generated environment*** that allows network-connected users to share real-time interactions with each other. Networked virtual environments are used for collaborative design and engineering, massively multi-player on-line role-playing games, distance learning, and three-dimensional simulations such as "Second Life."[55]

119. At the time of the inventions claimed in the '047 patent were conceived, requesting, displaying, and configuring data from third party servers in a distributed computing environment presented new and unique issues over the state of the art. As explained in the '047 patent: "Buyers . . . need a solution where they will have a broad selection without having to go to many different e-shops to find where they're looking for." '047 patent, col. 2:1-3.

120. From inception, the inventions disclosed in the '047 patent were directed at solving a technological problem relating to the internet using technological solutions. Mr. Almeida, during the process of reducing to practice the inventions disclosed in the '047 patent, described the process as involving specific internet based technologies.

[55] U.S. Patent No. 8,560,955.


March-31-2001 – April-8-2001: Reducing to practice.

Further tested the created software module by generating websites (various files with extensions '.asp', '.gif' and '.jpg') – index pages 6-7.

April-9-2001 – April-15-2001: Reducing to practice.

Further revised software module to manage the interface translation (translations_1_ITA.asp, translations_1_POR.asp and translations_1_SPA.asp) which in the application is under the title of "II) ON-LINE INTERFACE TRANSLATION METHOD"; further revised software module for error management (empty_cart.ENG, empty_search.POR, dberror_user.ENG and notice_log_in.inc); further revised software module for credit card management and invoicing (creditcard.inc and print_inv_bottom.asp) – index page 8;

U.S. Patent App. 11/930,044, Inventor Declaration at 7 (February 28, 2011) (yellow highlighting indicating that from conception the inventions disclosed in the UnoWeb Web Content Management patents were directed to technological solutions to technological problems)

121. Although the methods taught in the '047 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '047 patent claims were innovative and novel. "Currently, dynamic e-mall will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops." '047 patent, col. 1:57-60.

122. Further, the '047 patent claims improve upon the functioning of a computer system by allowing the gathering of third party supplied data and configuring a web server to maintain user interaction with dynamic content from a first server at the second web server. This improves the security of the computer system and allows it to be more efficient.[56]

123. The '047 patent claims are not directed to a "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," or "a building block of the modern economy." Instead, they are limited to a concretely circumscribed set of methods for requesting third-party-supplied content comprising dynamic content hosted on

[56] *See e.g., Gonzalez v. InfoStream Group, Inc.*, Case. No. 2:14-cv-00906, Dkt. No. 160 at 7 (E.D. Tex. Feb. 6, 2016) (Finding claims that recite steps for "'gathering' one type of data and 'producing' a 'label.' 'Gathering' data may describe an abstract idea, but 'producing' a 'label' based on that data does not describe an abstract idea.").

a web server, wherein requesting is from a third-party-hosting server, said requesting is performed by the server computer. Further, the '047 patent claims control interfacing with the web client that accesses the dynamic content that is requested from a third-party server.

124. The '047 patent claims are not directed at the broad concept/idea of "content management." Instead, they are limited to a concretely circumscribed set of methods for requesting the third-party-supplied content wherein retrieving is from a third-party-hosting server. These methods are technologies unique to the internet age. Microsoft, in U.S. Patent No. 6,278,448 (cited on the face of the '047 patent), identified problems unique to internet based systems for data retrieval and content aggregation.

> This type of representation does not scale well to the variety of resources on the World Wide Web, since it is limited in size, strict in form factor, and static (unchanging). The invention described here is designed to provide a way for a GUI desktop to more adequately provide 'entry points' to Internet resources (primarily, HTML-based Web pages).[57]

125. The inventive concepts claimed in the '047 patent are technological, not "entrepreneurial." For example, requesting content from a third-party hosted server is a specific, concrete solution to the technological problem of transferring information from a third party for display on a webpage and managing internet user interaction with the requested data.

126. The '047 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of requesting content from third-party web servers. For example, the claims of the '047 patent require requesting and hosting on the server computer said third-party-supplied content, said hosting comprises requesting said third-party supplied content and making said third-party supplied content available for access by the user and configuring the web server to control interfacing with the third-party supplied content — a result that overrides the routine and conventional sequence of events in electronic communications, even electronic communications.

[57] U.S. Patent No. 6,278,448 at col. 1:21-27.

127. The preemptive effect of the claims of the ‘047 patent are concretely circumscribed by specific limitations. For example, claim 1 of the ‘047 patent requires:

> A program storage device comprising a non-transitory memory storage medium readable by a server, tangibly embodying a program of instructions executable by the server to perform method steps for managing a plurality of content hosts on the server, said method steps comprising the steps of:
>
> requesting a first dynamic content hosted by a first host, wherein requesting is performed by the server, and wherein said first host is selected from the group consisting of an e-mall, e-service, e-portal, satellite e-mall, e-shop, e-distributor and web site;
>
> requesting a second dynamic content hosted by a second host, wherein requesting is performed by the server, and wherein said second host is selected from the group consisting of an e-mall, e-service, e-portal, satellite e-mall, e-shop, e-distributor and web site;
>
> displaying the first dynamic content and the second dynamic content to a user accessing the second host as if the first dynamic content originated from the second host;
>
> configuring the server to control the user's interaction with the first dynamic content by causing the second host to fetch the first dynamic content from the first host;
>
> configuring the server to control interfacing with the user accessing the first dynamic content and the second dynamic content through the second host; and
>
> configuring the server to maintain user interaction with the first dynamic content at the second host.

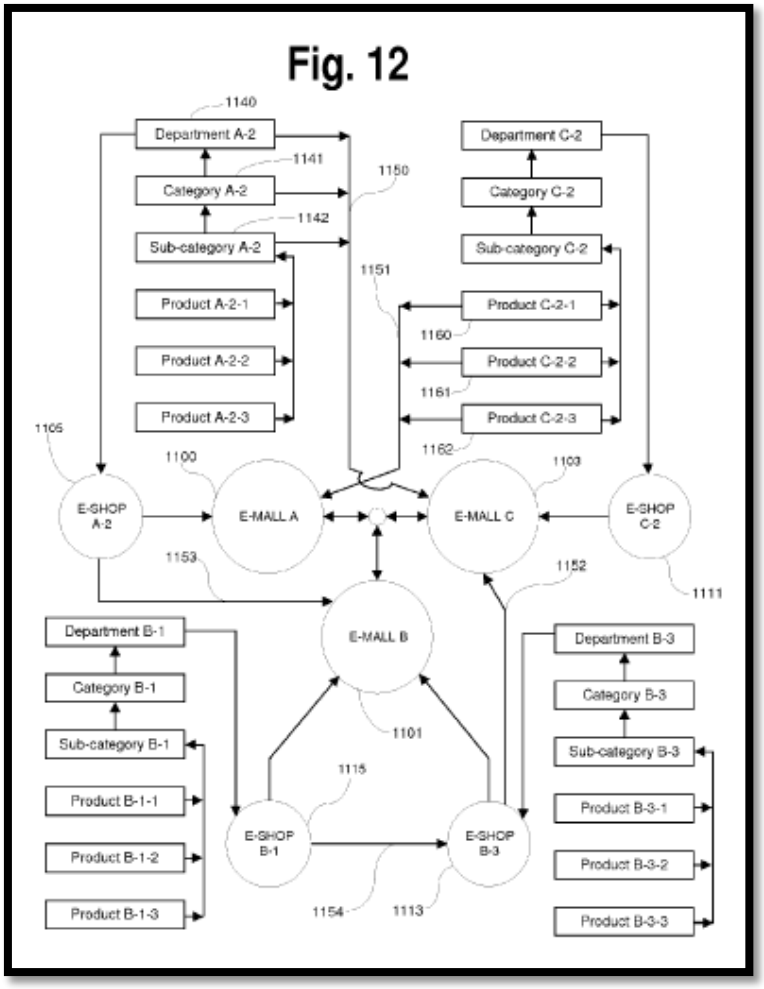
128. The ‘047 patent does not attempt to preempt every application of the idea of managing web content transmitted over a computer network, or even the idea of managing web content retrieved from a third-party server.

129. The ‘047 patent does not preempt the field of web content management systems, or prevent use of alternative third-party web content management systems. For example, the ’047 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving content aggregation from third parties, and they ensure that the claims do not preempt other techniques for web content management. Further, the one hundred and eight patents cited in the prosecution history include numerous systems that are not preempted by the claims of the ‘047 patent.

130. The ‘047 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer. Nor is the claimed subject matter of the ‘047 patent a pre-existing but undiscovered algorithm. And, the ’047 patent claims require the use of a computer system.

131. The methods claimed in the ‘047 patent were not a longstanding or fundamental economic practice at the time of the patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. For example, the ‘047 patent specification describes limitations in the existing systems at the time the inventions disclosed in the ‘047 patent were conceived. “Currently, dynamic e-mail will not allow the creation of specialized e-shops that can sell their products/services in conjunction with similar products/services from others e-shops.” ‘047 patent, col. 1:57-60.

132. One or more claims of the ’047 patent require a specific configuration of electronic devices, a network configuration, and the web servers to retrieve third party supplied content. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the ‘047 patent illustrates a specific configuration of hardware disclosed in the patent.



'047 patent, Fig. 12.

133. The '047 patent claims require a server to request dynamic content hosted on a first host, display dynamic content from a first host and second host on a webpage, and configuring the server to control interacting with the first and second dynamic content. This cannot be done by hand or by mind.

INTERNET ADVERTISING PATENTS

134. UnoWeb's Internet Advertising Patents disclose specific computer based systems and methods for an internet hosting environment to manage advertising and content and compensate content providers. Companies such as Facebook, Google, International Business Machines, and Hewlett-Packard have identified that the internet created "unprecedented" new

challenges unique to internet advertising and arising from problems directly created by the internet.

> ***The recent development of on-line networks***, such as America On-Line, CompuServe, and the Internet, has led to "on-line" advertising. For example, on the Internet, often such on-line advertisements will appear on a web page, such as a banner on the top or the bottom of the page. . . . In addition, if a user of such computer networks ***is continuously exposed to the same advertisement, the response rate to the advertisement will generally decline***. Therefore, it is highly desirable to have a system that controls the frequency of exposure of advertisements to particular users.[58]
>
> A further need exists for methods and apparatus for dynamic placement, management, and monitoring of blog advertising that generate additional revenue for bloggers and provide improved targeting for advertisers.[59]
>
> The proliferation of the Internet has facilitated the sharing and distribution of content and data like never before. Users now flock to websites, search engines, and social networks to access and share content and data. The amount of data available is estimated to be on the order of millions of terabytes. ***Along with this data comes an unprecedented opportunity to explore it for business purposes as well as a responsibility and need to respect the privacy of users***.[60]

135. UnoWeb's Internet Advertising Patents are directed to solving a problem unique to the internet. "Currently, there is no fair and just mechanism for compensating all of the involved parties helping in the generating of the income stream for the hosting site, content provider and user (user is the one who reads, views and clicks over the paid content, or one who is a buyer who buys goods or services associated with the non-paid content . . . ." '384 patent, col. 3:20-25.

136. Internet advertising companies such as Alliance Data and Facebook have recognized the value of providing relevant contextual advertising that compensates content providers.

> Commission Junction's product catalog functionality allows links to your products to be available to the entire CJ Marketplace, or a select few publishers if desired.

[58] U.S. Patent No. 5,948,061, col. 1:29-59 (assigned Google, Inc. and issued September 7, 1999) (emphasis added).

[59] U.S. Patent App. 12/826,924 at ¶ 4 (assigned to International Business Machines Corporation which cites the '139 patent as a relevant prior art reference).

[60] U.S. Patent No. 8,589,292, col. 1:6-13 (citing the '384 patent as relevant prior art) (emphasis added).

> ***Product links enable you to integrate buying opportunities directly within relevant content for immediate purchasing opportunities***. For example, on a Web site about the Caribbean, a publisher could place a CD of Caribbean music from an online record vendor somewhere in an article about the native music.[61]

137. During the prosecution history of the '384 patent, for instance, the examiner distinguished the inventions from the prior art by stating:

> The closest prior art [reference] discloses a method for commercial establishment to advertise directly into proprietary closed circuit networks. However, [this prior art reference] singularly or in combination ***fails to disclose the recited feature***: As per claim 1, 6, 7, 10, 13 and 16 "combining the paid content and the non-paid content on a content page, registering a user to interact with the content page, sending the content page for display on a computer operated by the user, calculating a number equaling all interactions of the user with the paid content, receiving payment from the advertiser for said number, and paying the provider based on a fraction of the payment. . ."

U.S. Patent Office Notice of Allowability, Application/Control Number: 13/157,291 at 3 (November 22, 2011) (emphasis added).

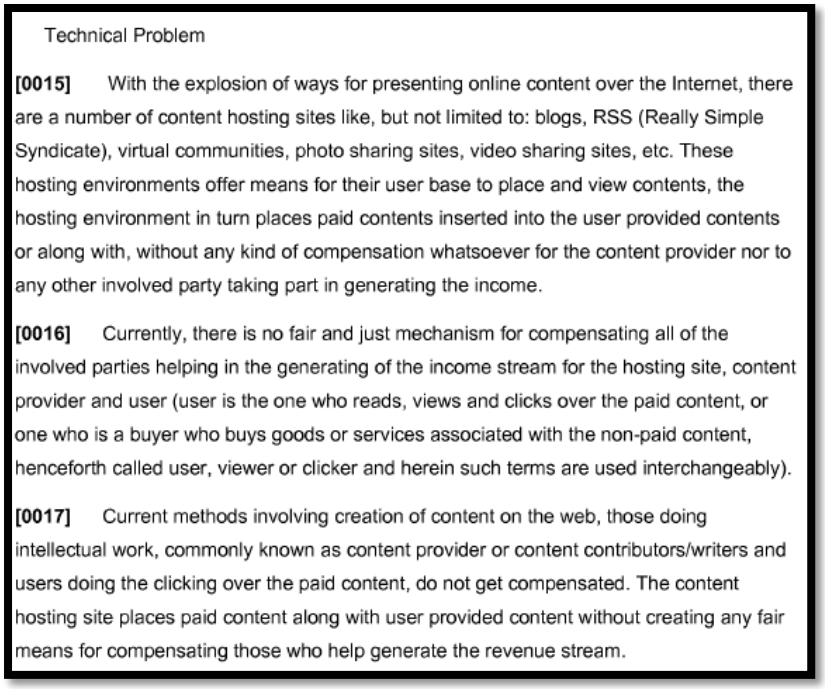
138. Earlier systems were limited to certain specific products or product types and lacked the ability to combine paid and unpaid content on a webpage and pay the provider of the non-paid content based on user interaction with the webpage.

139. Earlier systems were technically incapable of the customization described and claimed in the UnoWeb patents, and thus could not support internet advertising revenue sharing, combining paid and unpaid internet content, and conducting internet advertising revenue sharing. Prior art systems were distinct and not preempted by Mr. Almeida's inventions including, for example, a prior art reference to Dye, that appears on the face of, and was addressed during the prosecution history of, several of the UnoWeb patents. As discussed by the United States Patent Office, Dye fails to disclose the internet advertising revenue sharing inventions disclosed in the UnoWeb patents.

140. The claims of the UnoWeb patents comprise meaningful, technological limitations that, when combined in the claims, define inventions that operate in a "new

[61] *Commission Advertiser Product Data*, COMMISSION JUNCTION DATA TRANSFER GUIDE V 6.0 at 1 (November 2010) (emphasis added); *see also Yahoo! Inc. v. Facebook, Inc.*, Case No. 12-cv-01212 Dkt. No. 16 ¶ 28 (N.D. Cal.) ("Facebook admits it generates revenue through the sale of ads, that it offers a number of methods by which ads can be purchased, and that certain ads on Facebook may be charged on a CPC (cost per click) basis.").

paradigm" compared to earlier ways to conduct internet advertising relating to revenue sharing. From the inception of the UnoWeb patents, the inventions were directed at solving problems that were unique to the architecture of the internet. For example, the patent application that led to UnoWeb's '384 patent identified the patent as directed toward problems relating to the "explosion of ways for presenting online content over the internet," "current methods involving creation of content on the web," and "content hosting sites."



Technical Problem

[0015] With the explosion of ways for presenting online content over the Internet, there are a number of content hosting sites like, but not limited to: blogs, RSS (Really Simple Syndicate), virtual communities, photo sharing sites, video sharing sites, etc. These hosting environments offer means for their user base to place and view contents, the hosting environment in turn places paid contents inserted into the user provided contents or along with, without any kind of compensation whatsoever for the content provider nor to any other involved party taking part in generating the income.

[0016] Currently, there is no fair and just mechanism for compensating all of the involved parties helping in the generating of the income stream for the hosting site, content provider and user (user is the one who reads, views and clicks over the paid content, or one who is a buyer who buys goods or services associated with the non-paid content, henceforth called user, viewer or clicker and herein such terms are used interchangeably).

[0017] Current methods involving creation of content on the web, those doing intellectual work, commonly known as content provider or content contributors/writers and users doing the clicking over the paid content, do not get compensated. The content hosting site places paid content along with user provided content without creating any fair means for compensating those who help generate the revenue stream.

U.S. Patent App. 13/157,291 at 4 (09-JUN-2011) (this application issued as UnoWeb's 384 patent).

141. The limitations of the UnoWeb patents, when taken together or in an ordered combination, recite an invention that is not merely the routine or conventional use of the internet. In the prosecution of the '384 patent, specialized computer structures were identified by Mr. Almeida, including "specialized virtual content hosting sites."

> By having a mechanism to compensate the hosting-site (dynamically/virtually), the content writers and the clicker as well, a broad base of high quality content will be available for the creation of ***specialized virtual content hosting sites and portal***s, thus benefiting everyone along the way. The virtual presentation can be done from a single location or over the Internet by the use of web controls technology.

U.S. Patent App. 13/157,291 at 5 (emphasis added) (this patent application issued as UnoWeb's 384 patent).

1. U.S. Patent No. 7,987,139

142. U.S. Patent No. 7,987,139 ("the '139 patent") entitled, *Advertising Revenue Sharing*, was filed on June 17, 2010, and claims priority to February 21, 2007. UnoWeb is the owner by assignment of the '139 patent. A true and correct copy of the '139 patent is attached hereto as Exhibit D. The '139 patent relates to specific methods for web site development based on advertising revenue sharing.

143. The '139 patent claims a technical solution to a problem unique to internet advertising – revenue sharing between the content provider/writer, website hosting the content, and the user clicking on the advertising associated with said content and content distributor.

144. The '139 patent claims at least three important and concrete innovations that improve internet advertising: (1) registering a content provider to prepare non-paid content for the webpage on a computer; (2) setting a time period before which paid content can be redisplayed to a registered user; and (3) paying the content provider for the number of interactions of the registered user with the paid content.

145. At the time of the inventions claimed in the '139 patent, electronically structuring revenue sharing between content providers and advertisers presented new and unique issues over the state of the art. As explained in the '139 patent: "The content hosting site places paid content along with user provided content without creating any fair means for compensating those who helps generate the revenue stream." '139 patent, col. 1:47-50.

146. The '139 patent is directed at solving a problem that arises from internet advertising where there is a need to compensate third party content providers for displaying on web pages paid advertisements from parties unaffiliated with the content provider. This problem has been identified by major companies such as IBM and Xerox (in patents and patent applications that reference the UnoWeb patents) as unique to the internet.

> In addition, it is difficult for advertisers to determine where to best place advertisements, since content is diffusely spread over the Internet. A need therefore exists for methods and apparatus for dynamic placement, management and monitoring of blog advertising. ***A further need exists for methods and apparatus for dynamic placement, management and monitoring of blog advertising that***

> ***generate additional revenue for bloggers*** and provide improved targeting for advertisers.[62]
>
> However, ***dynamic digital solutions or products create issues with respect to collection of fees and the distribution of such fees*** to the appropriate entities because conventionally, the conventional form of payment for digital content and/or services has been a single payment mechanism, such as the user making a single payment to a single entity for the dynamic digital solution.[63]

147. Although the systems and methods taught in the '139 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '139 patent were innovative and novel. "Currently, content writers write content that are integrated onto a blog-portal, virtual community and others, the content writer does all the intellectual work and the hosting environment inserts advertisings and other paid content along the user-provided content without compensating the intellectual proprietor whatsoever." '139 patent, col. 1:21-27.

148. The '139 patent claims are not directed to a "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," or "a building block of the modern economy." Instead, they are limited to a concretely circumscribed set of methods and systems that provide a conduit for internet advertising revenue sharing between content providers and advertisers.

149. The '139 patent claims are not directed at the broad concept/idea of "advertising." Instead, the '139 patent claims are limited to a concretely circumscribed set of methods and systems for authorizing and managing revenue sharing for internet advertising between content providers and advertisers. These methods and systems are technologies unique to the internet age. A 2013 New York Times article described this problem as rooted in the architecture of providing advertising using the internet.

> But affiliate marketing has a dark side: It can be a sure path to getting defrauded. Even Santa Claus is vulnerable. Within hours of joining an affiliate network, the Santa Claus store had two dozen websites signed on as affiliates and claiming

[62] U.S. Patent App. No. 12/826,924 at ¶ 4 (emphasis added) (assigned to International Business Machines Corporation which cites the '139 patent as a relevant prior art reference).

[63] U.S. Patent No. 9,196,000 (emphasis added) (assigned to Xerox Corporation and referencing UnoWeb's U.S. Patent No. 7,580,858).

> commissions. "We were, like, 'Wow, that was easy,' "said Andy Teare, the store's general manager.[64]

150. The '139 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of distributed computing. For example, one or more claims of the '139 patent require totaling a number of interactions by the registered user with the paid content, wherein the interaction of the registered user comprises viewing the webpage.

151. The '139 patent is directed toward enabling revenue sharing between internet content providers and internet advertisers (*i.e.*, enabling the placement of internet advertising on third party maintained webpages through the use of computer technology). Claims such as those in the '139 patent that are directed at a problem unique to the internet have been found patent eligible by the U.S. Court of Appeals for the Federal Circuit and numerous District Courts.[65]

152. One or more of the '139 patent claims require a time threshold before which paid content can be redisplayed to a registered user. This use of a time threshold to manage the redisplaying of paid content is directed at solving "internet click fraud" a problem unique to the realm of the internet. Thus, one or more of the '139 patent claims are directed toward a problem specific to the internet.[66]

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[64] Mark Cohen, *Surviving the Dark Side of Affiliate Marketing*, NY TIMES (December 4, 2013).

[65] *See e.g.*, *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was eligible for patenting because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899, Dkt. No.145 at 5 (N.D. Cal. Aug. 31, 2015) (Upholding the validity of an internet advertising patents that "employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm."); *Advanced Marketing Sys., LLC v. CVS Pharmacy, Inc.*, Case No. 15-cv-00134 Dkt. No. 77 at 10 (E.D. Tex. November 19, 2015) (Order Adopted at Dkt. No. 95 Jan. 25, 2016) (Denying without prejudice Defendants' motion to dismiss patents directed to discount coupons "The presence of these structures counsels away from summarily concluding that the asserted claims are directed to an abstract idea.").

[66] *See* '139 patent, col. 6:2-7 ("[B]e allowed to appear to the same viewer only a number of times during the session, etc., it will help the server to identify multiple clicks over the same content by the same clicker and invalidate clicks in such situations thus preventing fraud."); see also Lee B. Burgunder, The Legal Aspects of Managing Technology at 446—7 (2010) ("one variant of fraud

153. The preemptive effect of the claims of the ‘139 patent are concretely circumscribed by specific limitations. For example, claim 2 of the ‘139 patent requires:

> A method of web site development based on advertising revenue sharing, comprising the steps of:
>
> enabling a person to become a registered user;
>
> displaying paid content from an advertiser through a webpage of the web site on a computer;
>
> registering a content provider to prepare non-paid content for the webpage on a computer;
>
> setting a time period before which paid content can be redisplayed to a registered user;
>
> setting a maximum number of times that paid content can be displayed to a registered user;
>
> totaling a number of times the paid content is displayed to the registered user;
>
> receiving payment from the advertiser for the number of times the paid content is displayed to the registered user; and,
>
> paying the content provider for the number of interactions of the registered user with the paid content.

154. The ‘139 patent does not attempt to preempt every application of the idea of internet advertising revenue sharing. For example, the prior art cited in the prosecution history of the ‘139 patent provides several examples of systems and methods of internet advertising and revenue sharing that are not preempted by the claims of the ‘139 patent.

155. The ‘139 patent does not preempt the field of internet advertising revenue sharing. For example, the ’139 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving internet advertising revenue sharing, and they ensure that the claims do not preempt other techniques of compensating content providers for internet advertising. For example, the ‘139 patent describes numerous techniques for electronically structuring internet advertising revenue sharing. The techniques inform the invention’s development but do not, standing alone, fall within the scope

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that is more unique to the internet is called click-fraud. Click-fraud results when a person takes steps to imitate legitimate views.”).

of its claims. For example, one or more claims of the '139 patent require: (1) setting a maximum number of times that paid content can be displayed to a registered user; (2) logging-in a registered user to allow the registered user to interact with the paid content on a computer; (3) setting a time period before which paid content can be redisplayed to a registered user; (4) totaling a number of times the paid content is displayed to the registered user; and (5) setting a time period before which paid content can be redisplayed to a registered user.

156. The '139 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer.

157. The '139 patent claims systems and methods not merely for managing revenue sharing for internet advertising, but for making the computer network itself more efficient.

158. The '139 patent claims systems and methods that "could not conceivably be performed in the human mind or pencil and paper." The claimed inventions in the '139 claims are rooted in computer technology and overcomes problems specifically arising in the realm of computer networks, for instance click-fraud. Click fraud has been recognized by companies such as Yahoo!, Inc.,[67] Microsoft,[68] and Cox Communications[69] as being a problem unique to and arising from the internet.

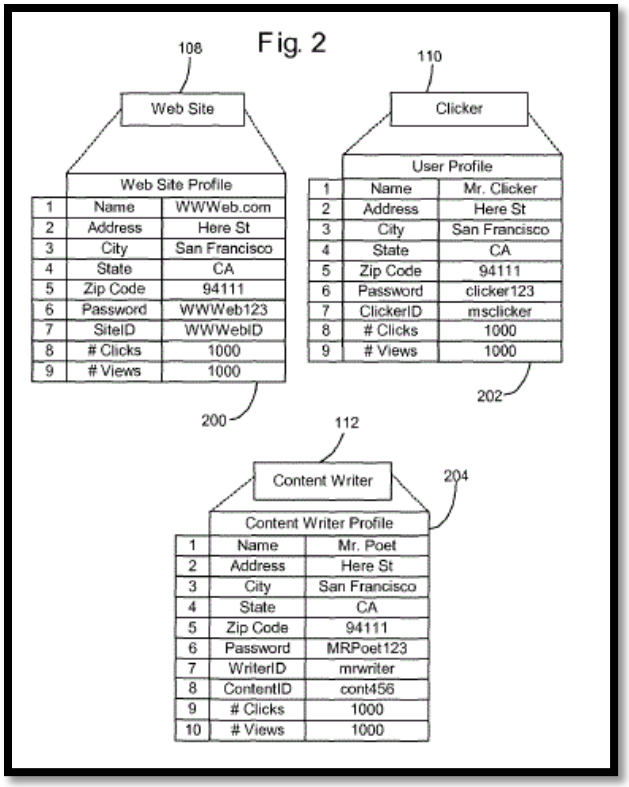
159. The systems and methods claimed in the '139 patent were not a longstanding or fundamental economic practice at the time of patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the '139 patent require a specific configuration of electronic devices, a network configuration,

[67] *See e.g.*, U.S. Patent No. 8,655,724 (This patent assigned to Yahoo! states, "'Click-based' online advertising systems require an advertiser to pay the system operator or its partners each time a user selects or "clicks" on the advertiser's online advertisement or sponsored search link. Unfortunately, the nature of such a system provides opportunities for some to click on ads for improper or fraudulent reasons. This is referred to generally as 'click fraud.'").

[68] *See e.g.*, U.S. Patent App. No. 13/406,532 (This application assigned to Microsoft states, "The present technology is directed to analyzing aspects of advertising traffic in an online advertising system and monitoring.").

[69] *See e.g.*, U.S. Patent No. 8,763,117 (This patent assigned to Cox Communications states, "Click fraud involves the user's computer visiting websites without the user's awareness to create false web traffic for the purpose of personal or commercial gain.").

external databases, a computer network interface, etc. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the '139 patent illustrates a specific configuration of hardware disclosed in the patent.



'139 patent, Fig. 2.

2. U.S. Patent No. 8,140,384

160. U.S. Patent No. 8,140,384 ("the '384 patent") entitled, *Advertising Revenue Sharing*, was filed on June 9, 2011, and claims priority to February 21, 2007. UnoWeb is the owner by assignment of the '384 patent. A true and correct copy of the '384 patent is attached hereto as Exhibit E. The '384 patent relates to specific methods for web site development based on advertising revenue sharing.

161. The '384 patent claims a technical solution to a problem unique to internet advertising – revenue sharing between the content provider/writer, website hosting the content and the user clicking on the advertising associated with said content and content distributor.

162. At the time of the inventions claimed in the ‘384 patent, electronically structuring revenue sharing between content providers and advertisers presented new and unique issues over the state of the art. As explained in the ‘384 patent: “With the explosion of ways for presenting online content over the Internet, there are a number of content hosting sites like, but not limited to: blogs, RSS (Really Simple Syndicate), virtual communities, photo sharing sites, video sharing sites, etc. These hosting environments offer means for their user base to place and view contents, the hosting environment in turn places paid contents inserted into the user provided contents or along with, ***without any kind of compensation whatsoever for the content provider*** nor to any other involved party taking part in generating the income.” ‘384 patent, col. 3:10-19 (emphasis added).

163. Although the methods taught in the ‘384 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the ’384 patent claims were innovative and novel.

> Currently, there is no fair and just mechanism for compensating all of the involved parties helping in the generating of the income stream for the hosting site, content provider and user (user is the one Who reads, views and clicks over the paid content, or one Who is a buyer Who buys goods or services associated With the non-paid content, henceforth called user, viewer or clicker and herein such terms are used interchangeably).

‘384 patent, col. 3:20-27.

164. The ‘384 patent claims are not directed to a “method of organizing human activity,” “fundamental economic practice long prevalent in our system of commerce,” or “a building block of the modern economy.” Instead, they are limited to a concretely circumscribed set of methods that provide a conduit for internet advertising revenue sharing between content providers and advertisers.

165. The ‘384 patent claims at least four important and concrete innovations that improve internet advertising: (1) combining the non-paid content and the paid content into a page; (2) determining if the second click is received after expiration of the time period; (3) providing a clickable link to paid content from a content distributor on the server computer; and

(4) paying the content distributor for the number of times the user interacted with the content page.

166. The ’384 patent claims are not directed at the broad concept/idea of “advertising.” Instead, the ‘384 patent claims are limited to a concretely circumscribed set of methods for authorizing and managing revenue sharing for internet advertising between content providers and advertisers. These methods are technologies unique to the internet age.

167. The ‘384 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of distributed computing. For example, one or more claims of the ’384 patent require totaling a number of interactions by the registered user with the paid content, wherein the interaction of the registered user comprises viewing the webpage.

168. The ‘384 patent is directed to specific problems in the field of internet advertising for web site development. The ‘384 patent is directed toward enabling revenue sharing between internet content providers and internet advertisers (*i.e.*, enabling the placement of internet advertising on third party maintained webpages through the use of computer technology). Claims such as those in the ‘384 patent that are directed at a problem unique to the internet have been found patent eligible by the U.S. Court of Appeals for the Federal Circuit and numerous District Courts.[70]

[70] *See e.g.*, *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was eligible for patenting because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899, Dkt. No.145 at 5 (N.D. Cal. Aug. 31, 2015) (Upholding the validity of an internet advertising patent that “employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm.”); *Advanced Marketing Sys., LLC v. CVS Pharmacy, Inc.*, Case No. 15-cv-00134, Dkt. No. 77 at 10 (E.D. Tex. Nov. 19, 2015) (Order Adopted at Dkt. No. 95 Jan. 25, 2016) (Denying without prejudice Defendants’ motion to dismiss patents directed to discount coupons “The presence of these structures counsels away from summarily concluding that the asserted claims are directed to an abstract idea.”).

169. The preemptive effect of the claims of the ‘384 patent are concretely circumscribed by specific limitations. For example, claim 7 of the ‘384 patent requires:

> A method of web site development based on advertising revenue sharing, comprising the steps of:
>
> providing a server computer;
>
> combining content with an advertisement;
>
> sending the content and advertisement to a user accessing the server computer;
>
> receiving at the server computer a first click on the advertisement, the first click sent by the user;
>
> saving a first indication of receiving the first click;
>
> receiving a second click on the advertisement, the second click sent by the user;
>
> setting a time period;
>
> determining if the second click is received after expiration of the time period;
>
> saving a second indication of the second click if the second click occurs after expiration of the time period; and
>
> charging an advertiser for each saved indication.

170. The ‘384 patent does not attempt to preempt every application of the idea of internet advertising revenue sharing. For example, the prior art cited in the prosecution history of the ‘384 patent provides several examples of systems and methods of internet advertising that are not preempted by the claims of the ‘384 patent.

171. The ‘384 patent does not preempt the field of internet advertising revenue sharing. For example, the ’384 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving internet advertising revenue sharing, and they ensure that the claims do not preempt other techniques of compensating content providers for internet advertising.

172. For example, the ‘384 patent describes numerous techniques for electronically structuring internet advertising revenue sharing. The techniques inform the invention’s development but do not, standing alone, fall within the scope of its claims.

173. The ‘384 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer.

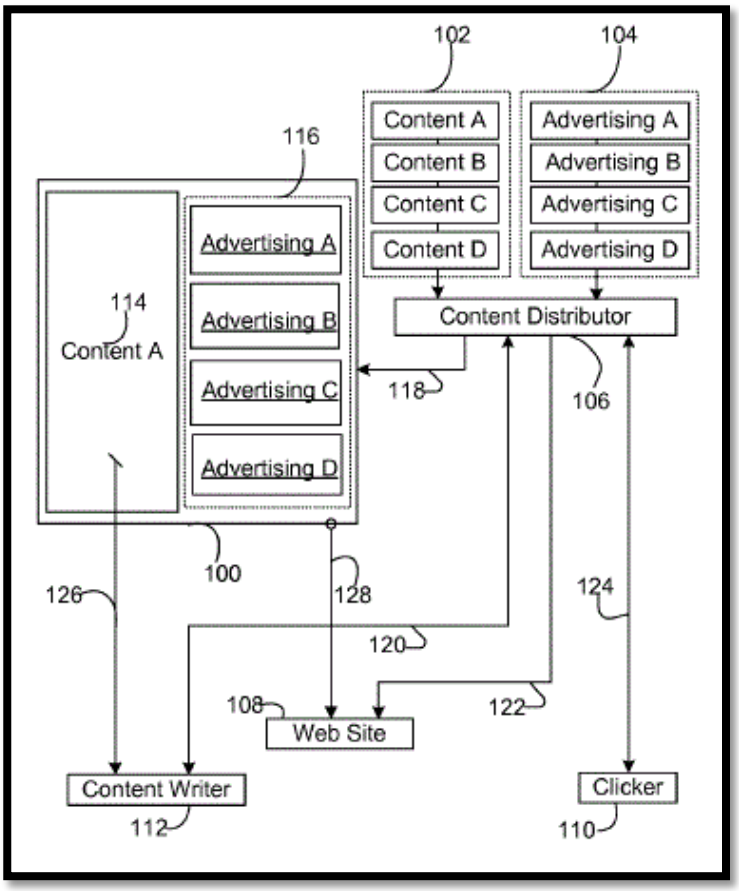
174. The ‘384 patent claims methods that “could not conceivably be performed in the human mind or pencil and paper.”

175. The claimed inventions in the ’384 claims are rooted in computer technology and overcomes problems specifically arising in the realm of computer networks, for instance: click fraud.

176. The methods claimed in the ‘384 patent were not a longstanding or fundamental economic practice at the time of patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general.

177. The asserted claims do not involve a method of doing business that happens to be implemented on a computer; instead, they involve a method for managing internet advertising in a way that will affect the web server system itself, by making it more efficient.

178. One or more claims of the ’384 patent require a specific configuration of electronic devices, a network configuration, external databases, a computer network interface, etc. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the ‘384 patent illustrates a specific configuration of hardware disclosed in the patent.



'384 patent, Fig. 1.

3. U.S. Patent No. 7,580,858

179. U.S. Patent No. 7,580,858 ("the '858 patent") entitled, *Advertising Revenue Sharing*, was filed on February 21, 2007. UnoWeb is the owner by assignment of the '858 patent. A true and correct copy of the '858 patent is attached hereto as Exhibit F. The '858 patent relates to specific methods for web site development based on registering a content provider using a web page, tracking interactions with website visitors with paid web page content, and conducting revenue sharing based on user interactions with the paid web page content.

180. The '858 patent claims a technical solution to a problem unique to internet advertising – revenue sharing between the content provider/writer, website hosting the content, and the user clicking on the advertising associated with said content and content distributor.

181. The inventions disclosed in the '858 patent are directed at a problem unique to internet advertising – click fraud. Facebook's Chief Operating Officer, Sheryl Sandberg, has described the internet as being a completely new platform with challenges that are unique to the platform.

> ***[W]e're a completely new kind of marketing***. We're not TV, we're not search, we are a third medium. And that presents a challenge because the messages that talk at consumers on other platforms need to really be adopted and changed to be more inclusive. The right ad on TV or on search is the wrong ad for Facebook. Facebook marketers need to learn how to make their ads really a two-way dialogue with consumers. We also have a measurement challenge.[71]

182. Researchers at the University of Texas at Dallas have studied the problem of click fraud and identified that it is related to the technological structure of the internet. Only the internet allows detailed measurement of clicks or other user interactions with advertising content. "However, because the pay-per-click model relies on the assumption that a person clicking on an ad has an interest in the advertised product or service, it is vulnerable to click fraud, a practice of imitating a legitimate user to click on an ad to generate a charge per click without having an actual interest in the target of the ad . . . estimates [of] the average click fraud rate to be 18.6% for the second quarter of 2010."[72]

183. Companies, including Facebook, Google, Yahoo, eBay and Defendant AOL have described addressing click fraud as a technological problem requiring a technological solution.

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[71] Sheryl Sandberg, FACEBOOK EARNING CALL TRANSCRIPT Q2 2012 (July 26, 2012) (emphasis added); *see also* U.S. Patent No. 9,196,000 (This patent assigned to Xerox which cites the '858 patent as relevant prior art describes the unique challenges of digital products and services where there is a need for revenue sharing between various parties. "[D]ynamic digital solutions or products create issues with respect to collection of fees and the distribution of such fees to the appropriate entities because conventionally, the conventional form of payment for digital content and/or services has been a single payment mechanism, such as the user making a single payment to a single entity for the dynamic digital solution.").

[72] Min Chen, Varghese S. Jacob, Suresh Radhakrishnan, and Young U. Ryu, *The Effect of Fraud Investigation Cost on Pay-Per-Click Advertising*, 11TH ECONOMICS OF INFORMATION SECURITY CONFERENCE PROCEEDINGS (2012), *available at* http://www.econinfosec.org/archive/weis2012/papers/Chen_WEIS2012.pdf; *see also* Min Chen, Varghese S. Jacob, Suresh Radhakrishnan, and Young U. Ryu, *Can Payment-Per-Click Induce Improvements in Click Fraud Identification Technologies?* INFORMATION SYSTEMS RESEARCH Vol. 26 No. 4 (2015).

Yahoo:

> "Click-based" online advertising systems require an advertiser to pay the system operator or its partners each time a user selects or "clicks" on the advertiser's online advertisement or sponsored search link. Unfortunately, ***the nature of such a system provides opportunities for some to click on ads for improper or fraudulent reasons. This is referred to generally as "click fraud."***[73]

eBay:

> ***Bots, spiders, and other technologies can be used to impersonate human actions, inflate the number of page views, and cause impressions to be rendered***. According to a study commissioned by the Association of National Advertisers, bots are responsible for about 11% of display ad impressions and account for nearly double that in video ad impressions.[74]

Facebook:

> We also ***monitor user click activity over various intervals of*** time and we use this information and several other signals to inform what clicks we do or do not charge for. For example, a user who repeatedly clicks on ads is not likely providing real value, so we don't charge for those clicks. ***When our systems detect click activity that we think is invalid***, we mark it as such and do not charge for those clicks.[75]

Google:

> And so we approach ***it as an industry-wide system-wide sort of problem*** and it's an area in that we've investing in very heavily. . . . [W]e want to extend those capabilities to things like impression and view fraud, which is a challenge in the display and video space. ComScore had a recent study I think that said that about ***half the ads on the Internet are never actually seen by human being***.[76]

AOL:

> Online ad revenue has grown exponentially over the last couple of years. Fraudsters are finding inefficiencies in the system, and manipulating those inefficiencies to make money. . . . At AOL, combatting bot fraud is a top priority. We have several teams that are 100% dedicated to the effort, and we will continue

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[73] U.S. Patent App. 12/240,675 at ¶ 2 (published April 1, 2010) (emphasis added) (This patent application, assigned to Yahoo, Inc., was co-authored by Research Scientists who at the time were employed by Yahoo.).

[74] *Are Your Display Ads Viewable*, EBAY MARKETING WEBSITE (2015), *available at*: http://cc.ebay.com/eap/ (emphasis added) (This is a study conducted by Moat of eBay's display advertising program.).

[75] Robert Hof, *Stung By Click Fraud Allegations, Facebook Reveals How It's Fighting Back*, FORBES WEBSITE (August 8, 2012), *available at*: http://www.forbes.com/sites/roberthof/2012/08/08/stung-by-click-fraud-allegations-facebook-reveals-how-its-fighting-back/ (emphasis added) (interview with Mark Rabkin, an engineering director on Facebook's ads team).

[76] Neal Mohan, GOOGLE MANAGEMENT PRESENTS AT CREDIT SUISSE TECHNOLOGY CONFERENCE (December 2, 2014), *available at*: http://seekingalpha.com/article/2725055-googles-goog-management-presents-at-credit-suisse-technology-conference-transcript (emphasis added) (Neal Mohan is the senior vice president of display and video ads at Google.).

> to make significant investments to lead the industry in this battle. ***Our focus is on creating and integrating the best technologies***–both proprietary and best-of-breed through 3rd party partnerships (including the Integral Ad Science, Forensiq, DoubleVerify, MOAT, and more)—that stay ahead of organized criminals.[77]

184. The '858 patent has been cited by 16 United States patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '858 patent as relevant prior art.

- International Business Machines Corporation
- Yahoo! Inc.
- Microsoft Corporation
- Xerox Corporation
- Hewlett-Packard Development Company, L.P.

185. The '858 patent addresses the technological challenge of preventing "click fraud" using technological solutions that include the use of (1) waiting time thresholds, (2) ContentIDs associated with each piece of web content, (3) a registering and logging in a user to a website, and (4) registering a provider of web content.

> The column "ContentID" depicts the ID for each content and a Waiting time threshold can be setup for it as Well (not shown) as not to allow a paid content to be charged for multiple appearance during a time frame or to be allowed to appear to the same viewer only a number of times during the session, etc., it Will help the server to identify multiple clicks over the same content by the same clicker and invalidate clicks in such situations thus preventing fraud.

'858 patent, Col. 5:55-63.

186. At the time of the inventions claimed in the '858 patent, electronically structuring revenue sharing between content providers and advertisers presented new and unique challenges over the state of the art. As explained in the '858 patent: "Currently, content writers write content that are integrated onto a blog-portal, virtual community and others, the content writer does all the intellectual work and the hosting environment inserts advertisings and other paid content along the user-provided content Without compensating the intellectual proprietor Whatsoever." '858 patent, col. 1:11-16.

[77] Olivia Oshry, *A Seller's Perspective: Solving Inventory Quality and Ad Fraud*, AOL ADVERTISING BLOG (March 13, 2015), *available at*: http://advertising.aol.com/blog/seller%E2%80%99s-perspective-solving-inventory-quality-and-ad-fraud (emphasis added).

187. The '858 patent claims three important and concrete innovations that improve internet advertising: (1) registering a content provider to prepare non-paid content for the webpage on a computer; (2) using waiting-time thresholds to prevent click-fraud; and (3) paying the content provider for the number of interactions of the registered user with the paid content.

188. The '858 patent is directed at solving a problem that arises from internet advertising where there is a need to compensate third party content providers for displaying on web pages paid advertisements from parties unaffiliated with the content provider. This problem has been identified by major companies such as Microsoft and Xerox (in patents and patent applications that reference the '858 patent as relevant prior art) as unique to the internet.

> [C]omputing devices have traditionally stored information and associated applications and data services locally to the device. Yet, ***with the evolution of on-line and cloud services, information is increasingly being moved to network providers*** who perform none, some or all of the services on behalf of devices. However, no cloud service or network storage provider has been able to effectively provide information as a service on any platform, with publishers, developers, and consumers easily publishing, specializing applications for and consuming any kind of data, in a way that can be tracked and audited for all involved. ***This lack of an effective tracking mechanism makes it difficult to valuate information over time since the consumption of particular information may vary and is often unpredictable.***[78]

> However, ***dynamic digital solutions or products create issues with respect to collection of fees and the distribution of such fees*** to the appropriate entities because conventionally, the conventional form of payment for digital content and/or services has been a single payment mechanism, such as the user making a single payment to a single entity for the dynamic digital solution.[79]

189. The '858 patent claims are not directed to a "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," or "a building block of the modern economy." Instead, they are limited to a concretely circumscribed set of methods and systems that provide a conduit for internet advertising revenue sharing between content providers and advertisers.

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[78] U.S. Patent App. No. 12/816,868 (emphasis added) (assigned to Microsoft Corporation and published September 15, 2011).

[79] U.S. Patent No. 9,196,000 (emphasis added) (assigned to Xerox Corporation and referencing the '858 patent).

190. The ‘858 patent presents unconventional solutions to existing conventional systems. The unconventional nature of the claims in the ‘858 patent is evidenced by descriptions in patents that cite the ‘858 patent as relevant prior art.

> ***Conventional systems***, however, do not provide an adequate infrastructure for valuating individual contributions to an aggregated dataset. Indeed, unless data is particularly valuable by itself as a single data consuming experience (e.g., data provided via Westlaw®, LexisNexis®, Microsoft Virtual Earth®, the OpenGIS® Web Map Service Interface Standard (WMS), etc.), ***it is difficult to monetize or otherwise build on the experience*** beyond the four corners of that valuable data set.[80]

> ***Typically, an advertiser may pay a publisher websites*** (e.g., www.ebay.com or www.amazon.com) ***a certain amount of money for displaying its advertisement for a certain period of time***, assuming that users of the publisher website may be interested in its advertisement.”[81]

191. The ’858 patent claims are not directed at the broad concept/idea of “advertising.” Instead, the ‘858 patent claims are limited to a concretely circumscribed set of methods and systems for authorizing and managing revenue sharing for internet advertising between content providers and advertisers and controlling for click fraud. These methods and systems are technologies unique to the internet age.

192. A January 2016, a Tech Crunch article described the problem of click fraud as rooted in the architecture of the internet where “bot traffic” comprises roughly half of internet traffic.

> The “non-human traffic” part stems from the fact that few people do not understand the true definition of an “impression.” The term does not refer to one human being seeing an advertisement one time. In reality, it is one web browser making one request to be served with one advertisement from one ad network. That’s all. ***Essentially, human eyeballs have little to do with requests*** — and that fact makes the impressions data in ad reports essentially worthless. Why is this important? ***Just under half of all Internet traffic is bot traffic. Every time that a bot loads a webpage, the browser makes a request for an ad network*** to load an advertisement

[80] U.S. Patent App. No. 2011/0255171 at ¶ 7 (emphasis added) (assigned to Microsoft Corporation and referencing the ‘858 patent as relevant prior art).

[81] U.S. Patent No. 8,700,609, Col. 1:23-27 (emphasis added) (citing the ‘858 patent as relevant prior art and assigned to Yahoo! Inc.).

> — and that action counts as a paid-for impression even though no human being will see it.[82]

193. Companies such as Google have identified "click fraud" as uniquely tied to computer technologies including automated "bots."

> ***Google disabled 49% more ads in 2015 than the prior year***, as the Internet giant developed new ways to detect a rising tide of dubious online marketing tactics. In 2016, Google said it would work to crack down on ***fraudulent clicks by automated computers known as bots***. The bots can be costly to advertisers, who pay Google each time a user clicks on their ad.[83]

194. The '858 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of distributed computing. For example, one or more claims of the '858 patent require paying the website content provider based on user interactions with content provided that the interaction does not include interactions that exceed a waiting-time threshold.

195. The '858 patent is directed toward enabling revenue sharing between internet content providers and internet advertisers (*i.e.*, enabling the placement of internet advertising on third party maintained webpages through the use of computer technology). Claims such as those in the '858 patent that are directed at a problem unique to the internet have been found patent eligible by the U.S. Court of Appeals for the Federal Circuit and numerous District Courts.[84]

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[82] Samuel Scott, *The $8.2 Billion Adtech Fraud Problem That Everyone Is Ignoring*, TECH CRUNCH WEBSITE (January 6, 2016), available at: http://techcrunch.com/2016/01/06/the-8-2-billion-adtech-fraud-problem-that-everyone-is-ignoring/ (emphasis added); *see also* Cynthia Littleton, *10 Things We Learned at Variety's Big Data Summit*, VARIETY MAGAZINE (November 4, 2015), available at: http://variety.com/2015/digital/news/10-things-we-learned-at-varietys-big-data-summit-1201634065/ ("Fraud is the scourge of digital advertising, buyers and sellers agreed. "It's funny that we're so focused on looking for the one guy who's ready to buy a car when there's $6 billion worth of click fraud going on right now," said Amy Carney, Sony Pictures TV's president of advertiser sales, strategy and research.").

[83] Alistair Barr, *Google Disabled 49% More Ads in 2015*, WALL STREET JOURNAL – DIGITS BLOG (January 21, 2016), *available at*: http://blogs.wsj.com/digits/2016/01/21/google-disabled-49-more-ads-in-2015/ (emphasis added).

[84] *See e.g.*, *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014) (Invention directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant was patent eligible because the invention addressed an important challenge (*i.e.*, retaining website visitors through the use of computer technology).); *KlausTech, Inc. v. Admob, Inc.*, Case. No. 10-cv-05899, Dkt. No.145 at 5 (N.D. Cal. Aug. 31,

196. One or more of the '858 patent claims require a "waiting-time threshold" before which paid content can be redisplayed to a registered user and/or user interactions are counted for the purpose of paying the web content provider. This use of a "waiting-time threshold" to manage revenue sharing between paid content and non-paid content providers is directed to solving "internet click fraud," a problem unique to the realm of the internet.

197. The preemptive effect of the claims of the '858 patent are concretely circumscribed by specific limitations. For example, claim 3 of the '858 patent requires:

> A method of Web site development based on advertising revenue sharing, comprising the steps of:
>
> displaying paid content from an advertiser through a webpage of the web site on a computer;
>
> registering a content provider to prepare non-paid content for the webpage on a computer;
>
> totaling a number of interactions by the user with the paid content;
>
> receiving payment from the advertiser for the number of interactions of the user with the paid content; and,
>
> paying the content provider for the number of interactions of the user with the paid content,
>
> wherein the user is a registered user, and wherein the interaction of the registered user comprises clicking on a link to a new link destination within the paid content, provided that a second and subsequent clicking on the link by the same registered user is not an interaction to be counted in the step of totaling a number of interactions unless it exceeds a Waiting-time threshold.

198. The '858 patent does not attempt to preempt every application of the idea of internet advertising revenue sharing. For example, the prior art cited in the prosecution history of the '858 patent provides examples of systems and methods of internet advertising and revenue sharing that are not preempted by the claims of the '858 patent.

2015) (Upholding the validity of an internet advertising patents that "employs a new approach to control and monitor the display of advertisement on Internet browsers and seeks to solve technical problems that do not exist in the conventional advertising realm."); *Advanced Marketing Sys., LLC v. CVS Pharmacy, Inc.*, Case No. 15-cv-00134 Dkt. No. 77 at 10 (E.D. Tex. November 19, 2015) (Order Adopted at Dkt. No. 95 Jan. 25, 2016) (Denying without prejudice Defendants' motion to dismiss patents directed to discount coupons "The presence of these structures counsels away from summarily concluding that the asserted claims are directed to an abstract idea.").

199. The ‘858 patent does not preempt the field of internet advertising revenue sharing. For example, the ’858 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving internet advertising revenue sharing and preventing click-fraud. These limitations ensure that the claims do not preempt other techniques of compensating content providers for internet advertising. For example, the ‘858 patent describes specific narrow techniques for electronically structuring internet advertising revenue sharing and controlling for “click fraud.” For example, one or more claims of the ‘858 patent require: (1) displaying page content through a webpage; (2) logging-in a registered user for the purpose of tracking user interactions with the web page content; (3) generating a total number of interactions for each registered user; (4) registered web content providers; (5) generating a number of interactions that do not exceed a waiting time threshold; and (6) paying an internet content provider based on the generated number of interactions, excluding those interactions falling within a waiting time threshold.

200. By preventing “click fraud,” the ’858 patent claims methods that make the web servers and computer networks more efficient by preventing “click fraud.” Effective technologies to combat “click fraud,” such as those disclosed in the ‘858 patent, have been recognized by numerous academic researchers as improving the functioning of the computer networks and web servers. Technologies such as those disclosed in the ‘858 patent have been found to improve the functioning of computer systems through reducing computational time,[85]

[85] Richard Oentaryo, Ee-Peng Lim, Michael Finegold, *et al*., *Detecting Click Fraud In Online Advertising: A Data Mining Approach*, J. MACHINE LEARNING RESEARCH Vol. 15 at 112, 122 (2014) (“From the data, we observed that many clicks originating from the same IP or an unusually large click to IP ratio tend to be associated with fraudulent behavior, and may place the associated publisher under suspicion. . . . For each publisher and each unique IP address, we investigated the click profile, that is, the time delay between consecutive clicks. For the majority of fraudulent publishers in the training set, we observed that the number of unique IP addresses was below 3000. . . . This approach was of course far from being ideal, but it ***reduced the computational time considerably***.”).

reducing server load and bandwidth requests by reducing fraudulent bot activity,[86] and reducing the number of malware bots placed on machines for the purpose of generating clicks.[87]

201. A 2014 article in the International Journal of Current Engineering and Technology found that "managing click-fraud using a timing threshold defines a timing threshold and only counts identical clicks once within the timing window." This strategy improved the functioning of a computer system by "us[ing] very little space and operation and makes only one pass over the click streams."[88]

202. The '858 patent claims methods that could not conceivably be performed in the human mind or by pencil and paper. The inventions disclosed in the '858 claims are rooted in computer technology and overcome problems specifically arising in the realm of computer networks, for instance click-fraud and revenue sharing. Click fraud has been recognized by

[86] Hadi Asghari, Michel J.G. van Eeten, Johannes M. Bauer, *Economics of Fighting Botnets: Lessons from a Decade of Mitigation*, IEEE SECURITY & PRIVACY Vol.13 No. 5 at 16 (September 2015).

[87] Haitao Xu, Daiping Liu, and Aaron Koehl *et al.*, *Click Fraud Detection on the Advertiser Side*, in PROCEEDINGS OF THE 19TH EUROPEAN SYMPOSIUM ON RESEARCH IN COMPUTER SECURITY at 419 (2014) ("As online advertising has evolved into a multi-billion dollar business, click fraud has become a serious and pervasive problem. For example, the botnet 'Chameleon' infected over 120,000 host machines in the U.S. and siphoned $6 million per month from advertisers."); Anderson Ross; Barton Chris; Böhme Rainer, *et al.*; *Measuring The Cost Of Cybercrime*, in PROCEEDINGS OF THE WORKSHOP ON THE ECONOMICS OF INFORMATION SECURITY at 20-21 (2012) ("There are also the costs the botnets themselves inflict on society. These losses occur first and foremost in the cost of dealing with the infected machines. . . Another loss is borne by ISPs and hosting providers, who may have to act against infected machines in their networks.").

[88] Bhavini Kanoongo, Puja Jagania, and Khushali Deulkar, *Collation of Strategies for Click Fraud Detection Using Same IP Address*, INTERNATIONAL JOURNAL OF CURRENT ENGINEERING AND TECHNOLOGY at 3118 (October 2014).

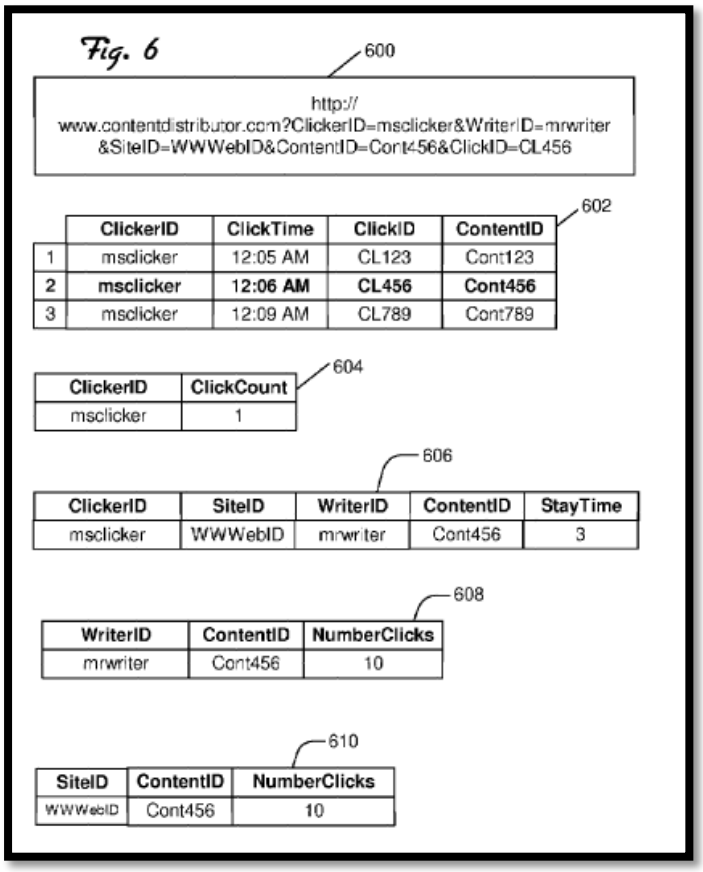
companies such as Yahoo!, Inc.,[89] Microsoft,[90] and Cox Communications[91] as unique to and arising from the fundamental structure of the internet.

203. The systems and methods claimed in the '858 patent were not a longstanding or fundamental economic practice at the time of the patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the '858 patent require a specific configuration of electronic devices, logging functionality, a network configuration, external databases, a computer network interface, etc. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the '858 patent illustrates a specific configuration of hardware disclosed in the patent.

[89] *See e.g.*, U.S. Patent No. 8,655,724 (This patent assigned to Yahoo! states, "'Click-based' online advertising systems require an advertiser to pay the system operator or its partners each time a user selects or "clicks" on the advertiser's online advertisement or sponsored search link. Unfortunately, the nature of such a system provides opportunities for some to click on ads for improper or fraudulent reasons. This is referred to generally as 'click fraud.'").

[90] *See e.g.*, U.S. Patent App. No. 13/406,532 (This application assigned to Microsoft states, "[t]he present technology is directed to analyzing aspects of advertising traffic in an online advertising system and monitoring.").

[91] *See e.g.*, U.S. Patent No. 8,763,117 (This patent assigned to Cox Communications states, "Click fraud involves the user's computer visiting websites without the user's awareness to create false web traffic for the purpose of personal or commercial gain.").



'858 patent, Fig. 6.

TARGETING COMPUTER NETWORK CONTENT & GLOBAL RESOURCE MANAGEMENT PATENTS

1. U.S. Patent No. 8,402,163

204. U.S. Patent No. 8,402,163 ("the '163 patent") entitled, *Target Advertising To A Specific User Offered Through An Intermediary Internet Service Provider, Server Or Wireless Network*, was filed on July 12, 2010, and claims priority to February 21, 2007.[92] UnoWeb is the owner by assignment of the '163 patent. A true and correct copy of the '163 patent is attached hereto as Exhibit G.

205. The '163 patent claims a technical solution to a problem unique to internet advertising and internet content management – targeting advertising and internet content to a

[92] The '163 patent claims priority to U.S. Patent App. No. 11/677,224.

user accessing the content through a client computer accessing a server computer through an Internet Service Provider ("ISP") or a wireless node.

206. The '163 patent claims at least three important and concrete innovations that improve targeting of advertising and web content to an internet client: (1) parsing and hosting on a server an object; (2) selecting an object to host on the server from a word, a name of an image, an invisible object, code embedded on a webpage, or an audio/video player embedded on a web page; (3) creating a link reference to a second content; (4) indexing content to enable identifying related web content; (5) generating formatted web content containing the object hosted on the server and a link reference.

207. The '163 patent and its underlying patent applications[93] have been cited by thirty United States patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '163 patent as relevant prior art.

- Yahoo! Inc.
- Google, Inc.
- Radius Networks, Inc.
- Qualcomm, Inc.
- CBS Interactive, Inc.
- Bottlenose, Inc.
- Lexmark International, Inc.
- Alibaba Group Holding Limited.
- CNET Networks, Inc.[94]
- Ericsson Television, Inc.

208. At the time of the inventions claimed in the '163 patent, targeting internet advertising and web content presented new and unique issues over the state of the art. As explained in the '163 patent specification, "[existing systems] fail[ed] to teach a comprehensive way of targeting advertising or content to a specific audience without noticeable intrusions. . . . [Existing systems] may be problematic because it teaches changing advertisements that are already rendered into a Webpage and this may lead to a false sense on the part of the user as to the sponsorship or legitimacy of the content." '163 patent, Col. 2:-28-40.

[93] *See* U.S. Patent App. Nos. 13/769,367 and 12/834,103.

[94] CNET Networks, Inc. is a subsidiary of CBS Interactive, Inc.

209. The '163 patent is directed at solving a problem that arises from the architecture of the internet – a need to target internet advertising and content to client computers. Evidencing the groundbreaking inventive nature of the '163 patent, patents citing the '163 patent (from Yahoo, CBS Interactive, and Ericsson) as relevant prior art have identified limitations in the prior art as requiring "significant oversight and maintenance," having "limit[ations on] the scalability," and being "inefficient."

> ***Traditionally, each individual who visits a website obtains the same information***. In slightly more advanced systems, sections of content provided via the website may be password protected to limit access to the information. However, these types of systems typically involve ***significant oversight and maintenance***.[95]
>
> ***Conventional methods of displaying descriptive content*** relevant to particular assets involve mapping descriptive content directly to a particular asset. FIG. 1 is a schematic representation of a conventional relationship between descriptive content and a particular asset according to such a conventional method. A content is mapped directly to an asset. ***Such an approach may limit the scalability of the descriptive content, since the descriptive content often may apply to similar assets that may exist in the same database*** at the same time, or that may come into existence after the descriptive content has been published.[96]
>
> ***A traditional way of increasing the effectiveness of any particular advertising campaign is simply to present the advertising content to as many- people as possible***. The effectiveness of this strategy relies on the advertising content being relevant to only a fraction of the population that receives it. . . . ***[T]raditional techniques for providing advertising content are at best inefficient***. Furthermore, as technological advances create more and. more media outlets for users to select from (e.g., hundreds of possible cable television channels, many thousands of potential websites for Interact users to select from), it is increasingly impractical to reach a wider audience.[97]

210. Although the systems and methods taught in the '163 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '163 patent were innovative and novel. "A further advantage of the present invention over currently available prior art is that the user will have a greater content availability related to the user' s interest by

[95] U.S. Patent App. No. 13/315,028 at ¶ 2 (this patent application cites the '163 patent as relevant prior art and was assigned to Yahoo! Inc.).

[96] U.S. Patent No. 8,195,679, Col. 1:25-35 (emphasis added) (this patent cites the '163 patent as relevant prior art and was assigned to CBS Interactive, Inc.).

[97] W.O. Patent App. No. 2012/090,082 (emphasis added) (this patent application cites the '163 patent as relevant prior art and was assigned to Ericsson Television, Inc.).

having the Internet Service Provider associating relevant content to the user." '163 patent, Col. 4:40-43.

211. The '163 patent claims are not directed to a "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," or "a building block of the modern economy." Instead, the '163 patent claims are limited to a concretely circumscribed set of methods to generate and display related web content on a web page using indexing and parsing.

212. The '163 patent claims are not directed at the broad concept/idea of "content management." Instead, the '163 patent claims are limited to a concretely circumscribed set of methods for indexing content, identifying related content, generating link references, and formatting content for display to a user. These methods and systems are technologies unique to the internet. The following excerpt from a patent application assigned to IBM that cites the UnoWeb patents as relevant prior art identifies the unique challenges presented by the internet.

> In addition, it is difficult for advertisers to determine where to best place advertisements, since content is diffusely spread over the Internet. A need therefore exists for methods and apparatus for dynamic placement, management and monitoring of blog advertising.[98]

213. Moreover, displaying relevant related content to a user based on a "first content" presented challenges that are unique to the internet. Companies such as Facebook, Google, and SalesForce.com identified the challenges the '163 patent was directed at overcoming as involving problems unique to and arising from the internet.

> Additionally, ***conventional social networking systems do not generate stories associated with a user's collection of items*** for presentation to other users of the social networking system, such as on a timeline or newsfeed, which may increase public awareness about products associated with the items.[99]
>
> Publications (e.g., electronic publications, websites, mobile applications, Internet browser applications, IPTV, digital video, etc.) may include third party content items (e.g., advertisements), for example, to financially support a resource

[98] U.S. Patent App. No. 12/826,924 at ¶ 4 (emphasis added) (assigned to International Business Machines Corporation which cites the '139 patent as a relevant prior art reference).

[99] U.S. Patent App. No. 13/767,810 (this patent is assigned to Facebook and lists Facebook's director of monetization product marketing as an inventor).

> provider's (e.g., publication provider) operations. ***Some resource providers do not maintain a third party content infrastructure***, and thus depend on content serving entities to recruit third party content sponsors (e.g., advertisers, etc.) and to serve the sponsored content items.[100]
>
> Unfortunately, c***onventional database approaches to entering a relationship confuse the user***. For example, when presented with the ability to select and relate data objects for the purpose of building reports, it can be difficult to understand the resulting data set and how it might be represented in a report. . . . As a result, the process of constructing these relationships can be bewildering or error-prone. Erroneous relationships may or may not become obvious upon reviewing report data. Even when the error is obvious from looking at the report, it may take several tries before the relationship is debugged and corrected.[101]

214. The limitations of the '163 patent, when taken together or in an ordered combination, recite an invention that is not merely the routine or conventional use of the internet. At the time the inventions disclosed in the '163 patent were conceived, the association of content using indexing and link references was not conventional or routine. Patent applications and issued patents contemporaneous to the '163 patent provide further substantiation that the methods disclosed in the '163 patent were far from the conventional use of the internet.

> [I]f a user adds an image of a Maserati to his "cool cars" collection, information associated with the item in the image, such as the price of the car, will not be updated when the user views the image of the Maserati in his collection when the price of the car changes. Likewise, other users viewing the image via the collection and adding the image to another user's collection are not presented with updated information associated with the item shown in the image. Additionally, ***conventional social networking systems typically do not present stories associated with a user's collection of items*** to other users including options such as purchasing an item or adding an item to their own collections.[102]
>
> These advertisements often include links to the web page where the asset being advertised can be acquired. ***This method of offering assets for sale and advertising provides only one method for the user to acquire the given asset***, regardless of the user, asset, relationships among manufacturer, retailer and initiating party (e.g., news website), etc.[103]

[100] U.S. Patent No. 8,688,669 (emphasis added) (this patent application cites the '163 patent as relevant prior art and was assigned to Google, Inc.).

[101] U.S. Patent App. No. 11/701,316 at ¶ 4 (emphasis added) (this patent application is cited on the face of the '163 patent and assigned to SalesForce.com).

[102] U.S. Patent App. U.S. Patent App. No. 13/767,810 (this patent is assigned to Facebook and lists Facebook's director of monetization product marketing as an inventor).

[103] U.S. Patent App. No. 12/268,347 at ¶ 7 (emphasis added) (this patent application cites the '163 patent and was assigned to CBS Interactive, Inc.).

> Content provided by the user may be presented to other social networking system users in a story displayed on a newsfeed presented to other social networking system users. However, ***conventional social networking systems do not identify additional content related to the story that may be of interest to the user viewing the story***.[104]

215. The '163 patent claims are directed to a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of distributed computing. For example, one or more claims of the '163 patent require formatting the first content and first link reference for display on the client computer and redirecting a user to the hosting location of the second content.

216. Claims such as those in the '163 patent that are directed to a problem unique to the internet have been found patent eligible by the U.S. Court of Appeals for the Federal Circuit and numerous District Courts.[105] Further, UnoWeb's competitors have sought patent protection for claims directed toward content association and targeting.[106]

217. The preemptive effect of the claims of the '163 patent are concretely circumscribed by specific limitations. For example, claim 1 of the '163 patent requires:

> A method of controlling the display of information on a client computer operated by a user, the method implemented by a server computer and comprising the steps of:
>
> hosting a first content on the server computer, the first content comprising material that can be parsed into a plurality of objects, said objects selected from the group consisting of:
>
> a word the word comprising: a word within a link, a word within a title, a bolded word, an underlined word, and an italicized word;
>
> a name of an image;

[104] U.S. Patent App. No. 13/772,818 at ¶ 3 (this patent application is assigned to Facebook).

[105] *See e.g., Mirror World Techs. LLC v. Apple Inc., et al*, Case No. 13-cv-419, Dkt. No. 346 at 18 (E.D. Tex. July 7, 2015) (Upholding the patent eligibility of claims where "the invention is a method whereby a computer system organizes every data unit that it receives or generates chronologically with time stamps."); *Motio Inc. v. BSP Software LLC et al*, Case No. 12-cv-647, Dkt. No. 226 at 10 (E.D. Tex. Jan. 4, 2016) (upholding the patent eligibility of a patent directed at a method for providing version control using an automated agent).

[106] *See e.g.*, U.S. Patent No. 8,504,910 (This patent is assigned to Facebook and teaches a "flexible mechanism to allow user interaction with content from a web page associated with a third-party web site or presentation of data from a web page associated with a third-party web site using format determined by the social networking system.").

an invisible object used by a web browser, but not displayable to a user of the web browser;

coding embedded in a web page; and

an audio/video player embedded in a web page;

indexing the plurality of objects, said indexing performed by the server computer;

identifying a second content that is related to the first content, said identifying performed by the server computer using an object in the plurality of objects;

enabling the client computer to access the server computer;

creating a first link reference to the second content;

formatting the first content and the first link reference for display on the client computer wherein said formatting displays the first link reference in a:

link display area that is separated from the first content that will display in a content display area;

style that is indicative that other additional related content is available to the user;

configuration selected from the group consisting of a tab; a link; a bar; a floating bar; a browser bar; a user downloaded bar; and a menu;

transmitting the first content that was formatted and the first link reference to the client computer;

responding to user interaction with the first link reference by:

sending the second content to replace the first content on the client computer; the second content comprising a second link reference; and,

redirecting the user to the hosting location of the second content when the user clicks on the second link reference.

218. The ‘163 patent does not attempt to preempt every application of the idea of targeting internet advertising and web content to a user using an ISP, Server, or Wireless Network. For example, the prior art cited in the prosecution history of the ‘163 patent provides several examples of systems and methods of internet advertising and revenue sharing that are not preempted by the claims of the ‘163 patent.

219. The ‘163 patent does not preempt the field of internet content targeting. For example, the ’163 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving internet content targeting, and they

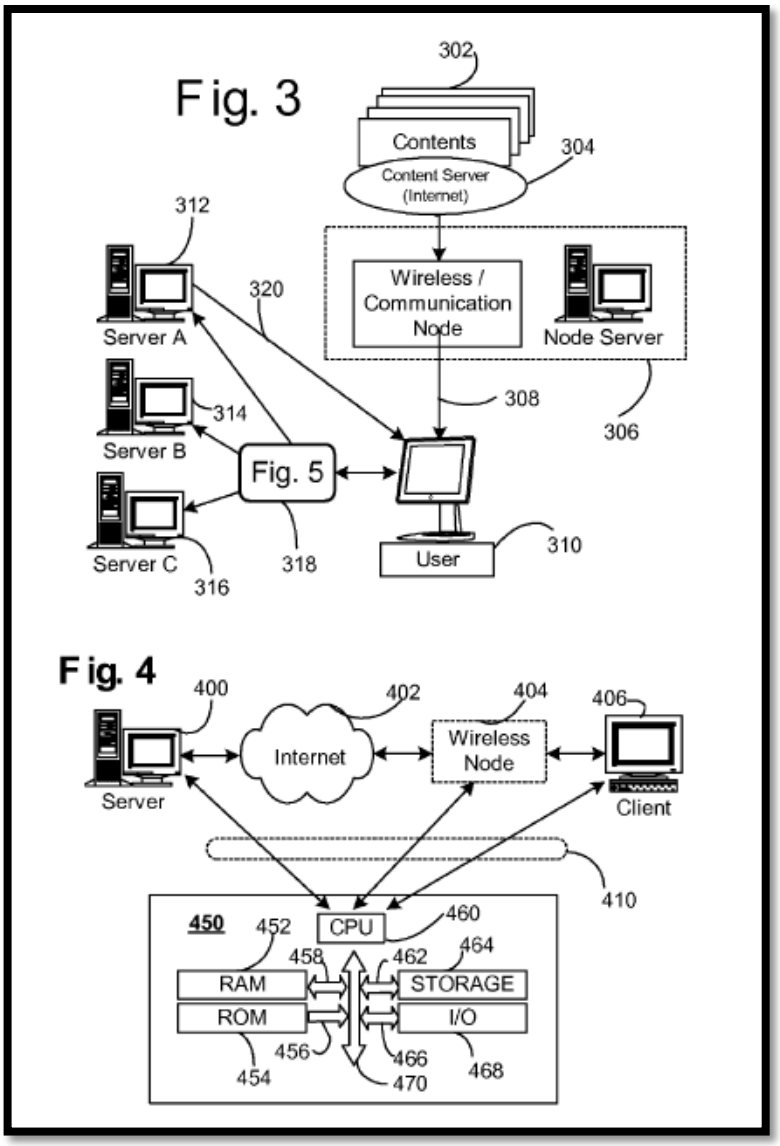
ensure that the claims do not preempt other techniques of compensating content providers for internet advertising. For example, the '163 patent describes numerous techniques for electronically parsing, formatting, and displaying related web content. The techniques inform the invention's development but do not, standing alone, fall within the scope of its claims. For example, one or more claims of the '163 patent require: (1) content parsed into a plurality of objects; (2) indexing the plurality of objects; (3) using a server computer to identify related second content; (4) creating a first and second link reference; and (5) sending web content to replace first web content on a client computer. Moreover, the '163 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer.

220. The '163 patent claims systems and methods not merely for internet advertising and web content targeting, but for making the computer network itself more efficient. "[T]he present invention offers advantageous improvement over others Internet Service Provider servers since it is able to directly cooperate with the Indexing Server and wireless devices, a further advantage is that the Internet Service Provider server, the Indexing Server, wireless devices or wireless-server devices of the present invention are able to associate other contents to the contents being served without interfering with content's integrity." '163 patent, col. 4:19-27.

221. The '163 patent claims systems and methods that "could not conceivably be performed in the human mind or pencil and paper." The claimed inventions in the '163 claims are rooted in computer technology and overcomes problems specifically arising in the realm of computer networks, for instance providing related content hosted on a web server.

222. The systems and methods claimed in the '163 patent were not a longstanding or fundamental economic practice at the time of patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the '163 patent require a specific configuration of electronic devices, a network configuration, web content hosts, wireless nodes, a computer network interface, etc. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the

below diagrams from the '163 patent illustrates specific configurations of hardware disclosed in the patent.



'163 patent, Figs. 3 & 4.

2. U.S. Patent No. 7,971,198

223. U.S. Patent No. 7,971,198 ("the '198 patent") entitled, *Method for Global Resource Sharing Having Logically Linked Means and Integrated Functionality for Building Solutions*, was filed on June 8, 2005. UnoWeb is the owner by assignment of the '198 patent. A true and correct copy of the '198 patent is attached hereto as Exhibit H. The '198 patent relates to specific methods and systems for a resource sharing container having a logic-linking

mechanism for logically linking program code to pages, pages to applications, and applications to solutions.

224. The '198 patent claims a technical solution to a problem unique to computer networks – sharing of page source code and settings parameters through linking at the global resource sharing level.

225. The '198 patent claims at least three important and concrete innovations that improve sharing of software logic code blocks: (1) a resource sharing container comprising a plurality of relational database tables, (2) virtually replicating an application resource for each retrieved application ID, and (3) rendering a web page by executing integrated page resources and code blocks of the virtually replicated application resource.

226. The '198 patent and its underlying patent application[107] have been cited by 18 United States patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '198 patent as relevant prior art.

- International Business Machines Corporation
- Microsoft Corporation
- Midway Technology Company LLC
- UsableNet, Inc.

227. At the time of the inventions claimed in the '198 patent were conceived, existing systems failed to enable "software logic code blocks that can be logically linked and shared by any application and any solution at the resource level." '193 patent, col. 1:49-51. It is the objective of the patent to enable the sharing of "settings parameters, foreign language translation, securities and other future solutions as well at the resource level and at a single global location." *Id*., col: 2:11-14. Moreover, patents citing the '198 patent identify limitations in existing systems such as "[c]urrent development environments have an important limitation. They do not take into account the dependencies created by the moved/copied files."[108]

[107] *See* U.S. Patent App. No. 11/160,099.

[108] U.S. Patent No. 8,302,073, col. 1:44-46 (citing the '198 patent and assigned to IBM); *see also* U.S. Patent No. 8,495,570, col. 1:29-32 ("In many instances, only a subset of the application resources is appropriate for a given user. Developers do not have an efficient and automatic technique to partition application resources in order to limit the resources deployed to users.").

228. The ‘198 patent is directed at solving a problem that arises from multiple users accessing an application over a computer network (e.g., linking a global application available over a network to a user’s settings). “[B]y having a logically linking mechanism at the resource level, once a solution is integrated it can be virtually replicated by simply registering it to a different user.” ‘198 patent, col. 3:58-61.

229. Although the systems and methods taught in the ‘198 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the ’198 patent were innovative and novel. At the time the inventions disclosed in the ‘198 patent were conceived, there was a need for a “resource[] sharing container [that had] pieces of program code, settings, interfacing, rendering parameters, etc. [The resource sharing container] can be located in the database, user supplied files or user input.” ‘198 patent, col. 4:5-8.

230. The ‘198 patent claims are not directed to a “method of organizing human activity,” “fundamental economic practice long prevalent in our system of commerce,” or “a building block of the modern economy.” Instead, they are limited to a concretely circumscribed set of methods and systems that provide for global resource sharing through logically linking a resource sharing container.

231. The ’198 patent claims are not directed to the broad concept/idea of “linking resources.” Instead, the ‘198 patent claims are limited to a concretely circumscribed set of methods and systems for enabling a resource sharing container to be logically linked to specific users. These methods and systems are technologies unique to the internet age. It was a goal of the ‘198 patent to demonstrate a global resource sharing of logically linked software code blocks, application pages, and application pages’ settings that can be shared in-house over a network or globally over the Internet without requiring any further programming efforts and without requiring recompiling application code. The solutions taught in the ‘198 patent (e.g., enabling global resource sharing using a logic-linking mechanism) reduce computer usage by allowing an application to be shared globally over a network.

232. The ‘198 patent claims are directed toward a solution rooted in computer technology and use technology unique to computers and computer networking to overcome a problem specifically arising in the realm of distributed computing. For example, one or more claims of the ’198 patent require providing a resource sharing container comprising a plurality of relational database tables and executing the integrated page resources and code blocks of the virtually replicated application resource at the server.

233. One or more of the ‘198 patent claims require retrieving one or more application IDs associated with the one or more retrieved solution IDs and virtually replicating an application resource for each of the one or more retrieved application IDs. This use of virtual replication of application resources is directed to solving the problem of making an application available to multiple users over a computer network and allowing users to have specific settings for the application saved and replicated. Thus, one or more of the ‘198 patent claims are directed toward a problem specific to computer networks.

234. The preemptive effect of the claims of the ‘198 patent are concretely circumscribed by specific limitations. For example, claim 3 of the ‘198 patent requires:

> A server computing system configured to share software logic code blocks with an application that may be incorporated into a solution, the server computing system comprising:
>
> a processor;
>
> a memory coupled to the processor, wherein the memory comprises program instructions configured to:
>
> register a plurality of users with the server;
>
> provide each registered user with a user ID stored in the memory;
>
> provide a resource sharing container comprising a plurality of relational database tables including a user resources table, an application resources table, and a solution resources table;
>
> wherein the user resources table associates each of the user IDs with at least one of a plurality of solution IDs and associates each of the solution IDs with one or more of a plurality of application IDs;
>
> wherein the application resources table associates each of the application IDs and the solution IDs with a plurality of logic links and logic nodes, wherein each of the logic links identifies a page resource stored in the solution resource table and each of the logic nodes identifies a code block;

receive a login request from a first user of the plurality of registered users over a network;

locate a first user ID of the first user in the user resources table and retrieving the one or more solution IDs corresponding to the first user ID;

retrieve the one or more application IDs associated with the one or more retrieved solution IDs and virtually replicate an application resource for each of the one or more retrieved application IDs, wherein virtually replicating the application resource comprises:

accessing the application resources table and retrieving the logic links and logic nodes associated with the retrieved application ID;

loading one or more page resources from the solution resources table according to a database query formulated from the retrieved logic links; and

integrating code blocks identified by the retrieved logic nodes into the loaded page resources; and

execute the integrated page resources and code blocks of the virtually replicated application resource at the server according to input received from the first user to render one or more web pages at the computer operated by the first user

235. The ‘198 patent does not attempt to preempt every application of the idea of resource sharing over a network. For example, the prior art cited in the prosecution history of the ‘198 patent provides several examples of systems and methods of resource sharing that are not preempted by the claims of the ‘198 patent.

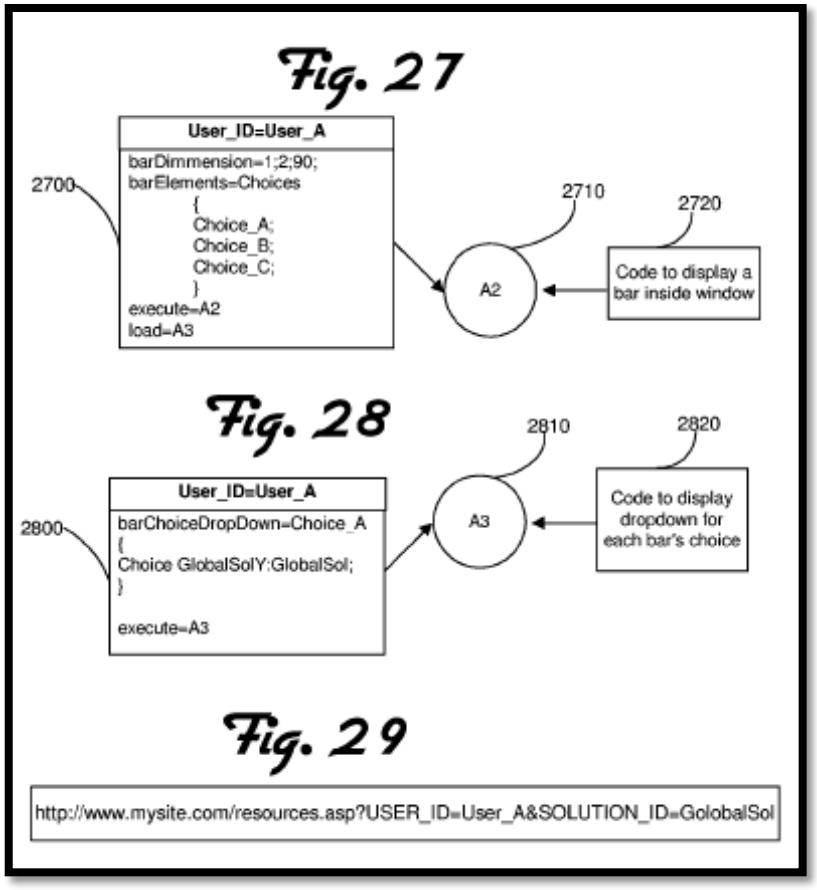
236. The ‘198 patent does not preempt the field of global resource sharing over a computer network. For example, the ’198 patent includes inventive elements—embodied in specific claim limitations—that concretely circumscribe the patented invention and greatly limit its breadth. These inventive elements are not necessary or obvious tools for achieving global resource sharing, and they ensure that the claims do not preempt other techniques of compensating content providers for internet advertising. For example, one or more claims of the ‘198 patent require: (1) an application resources table associated with application IDs and solution IDs wherein each of the logic links identifies a page resource stored in the solution resource table and each of the logic nodes identifies a code block; (2) retrieving application IDs associated with a retrieved solution ID and virtually replicating an application resource for each

of the retrieved application IDs; and (3) executing the integrated page resources and code blocks of the virtually replicated application resource on a server.

237. The ‘198 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer. The ’198 patent claims systems and methods not merely for managing global resource sharing over a computer network, but for making the computer network itself more efficient. “By having code-logic blocks that are logically linked to pages, it allows any common used code block to be integrated in more than one page, thus, ***reducing code replication and maintenance***.” ‘198 patent, col. 5:49-52 (emphasis added).

238. The ‘198 patent claims systems and methods that “could not conceivably be performed in the human mind or pencil and paper.” The claimed inventions in the ’198 claims are rooted in computer technology and overcomes problems specifically arising in the realm of computer networks. One or more claim elements (*e.g.*, executing the integrated page resources and code blocks of the virtually replicated application resource at the server) are unique to computer systems and have no analog outside of a computer network.

239. The systems and methods claimed in the ‘198 patent were not a longstanding or fundamental economic practice at the time of patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the ’198 patent require a specific configuration of electronic devices, a network configuration, external databases, virtually replicated application resources, a computer network interface, etc. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below figures from the ‘198 patent illustrate specific configurations of hardware disclosed in the patent.



'198 patent, Figs. 27-29.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 7,941,345

240. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

241. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for web content management.

242. AOL makes, sells, offers to sell, imports, and/or uses the websites built on the AOL Platform (http://www.aol.com, http://m.aol.com, http://www.huffingtonpost.com; http://m.huffingtonpost.com; http://www.techcrunch.com; http://m.techcrunch.com; http://www.engadget.com; http://m.engadget.com) (collectively, the "AOL '345 Product").

243. On information and belief, the AOL '345 Product includes web content management software.

244. On information and belief, the AOL '345 Product is available to businesses and individuals throughout the United States.

245. On information and belief, the AOL '345 Product is provided to businesses and individuals located in the Eastern District of Texas.

246. On information and belief, the AOL '345 Product retrieves third-party-supplied content comprising first objects describing a product or service. The AOL '345 Product retrieves content from a third-party-hosting server.

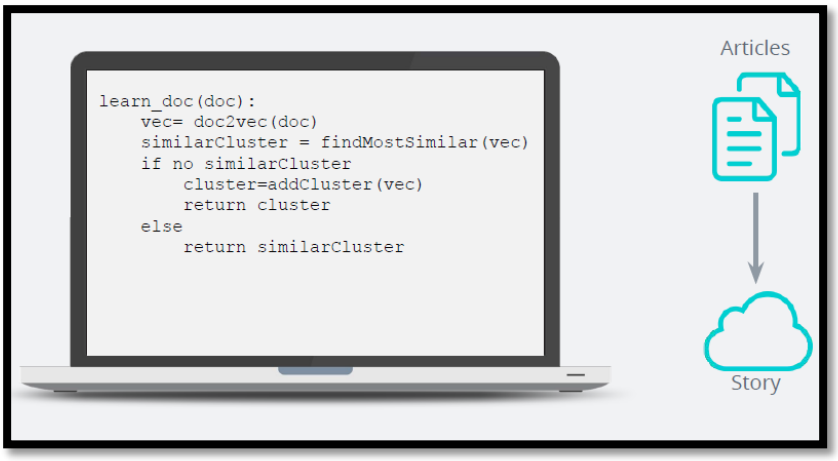
247. On information and belief, the AOL '345 Product uses technology that includes the AOL Relegence system. AOL Documentation states that AOL Relegence enables automated tagging of external content. "Relegence Tagger provides publishers, and content providers the ability to turn unstructured text into meaningful data. The tagger can be used for such features as automated tagging (for navigation or SEO purposes), contextual targeting, microformats addition & more. In combination with other services it can be used to enrich articles with data, provide related content, recirculation (such as interlinking) & more."[109]

248. On information and belief, the AOL '345 Product hosts on AOL computers said third-party-supplied content. AOL reads third-party-supplied content and makes third-party supplied content available to users.

249. On information and belief, documentation from AOL states that AOL Relegence generates tagging data based on the ingestion of content. The tags generated by AOL Relegence "can be used to enrich articles with data, provide related content, recirculation (such as interlinking) & more."[110] The following screenshot from a 2015 presentation by Mattan Tenne (Algorithms and Software Lead at AOL Relegence) illustrates the data ingestion process wherein an article is ingested by AOL Relegence.

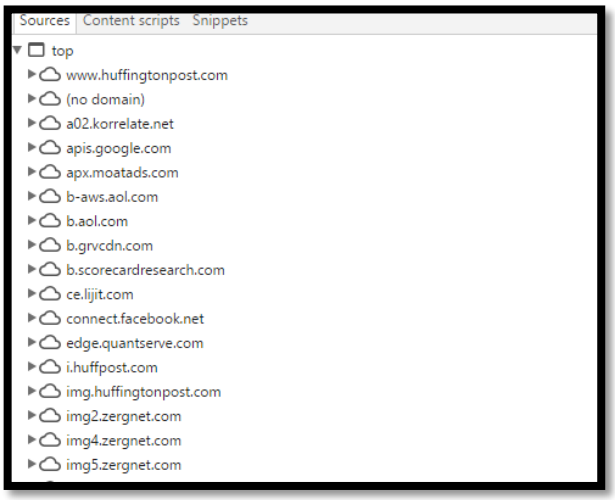
[109] *Relegence Tagger API,* AOL RELEGENCE DOCUMENTATION (last visited March 2016), available at: http://www.relegence.com/docs#api.

[110] *Id*.



Mattan Tenne, *Realtime Clustering – More than Words*, AOL RELEGENCE PRESENTATION at 16 (2015).

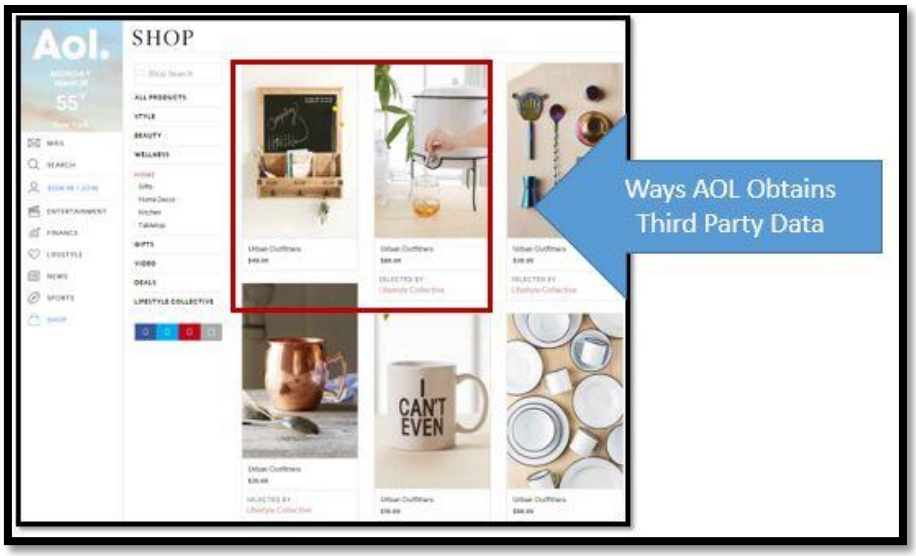
250. On information and belief, the AOL '345 Product enables the transmission of a web page for display on the client computer system in response to a request from the client computer system. The web pages that are transmitted by AOL include third-party-supplied content.



Network Host Report for Huffingtonpost.com, HUFFINGTON POST – SOURCE INSPECTION (generated March 2016) (A partial list of hosts providing content to the www.huffingtonpost.com page).

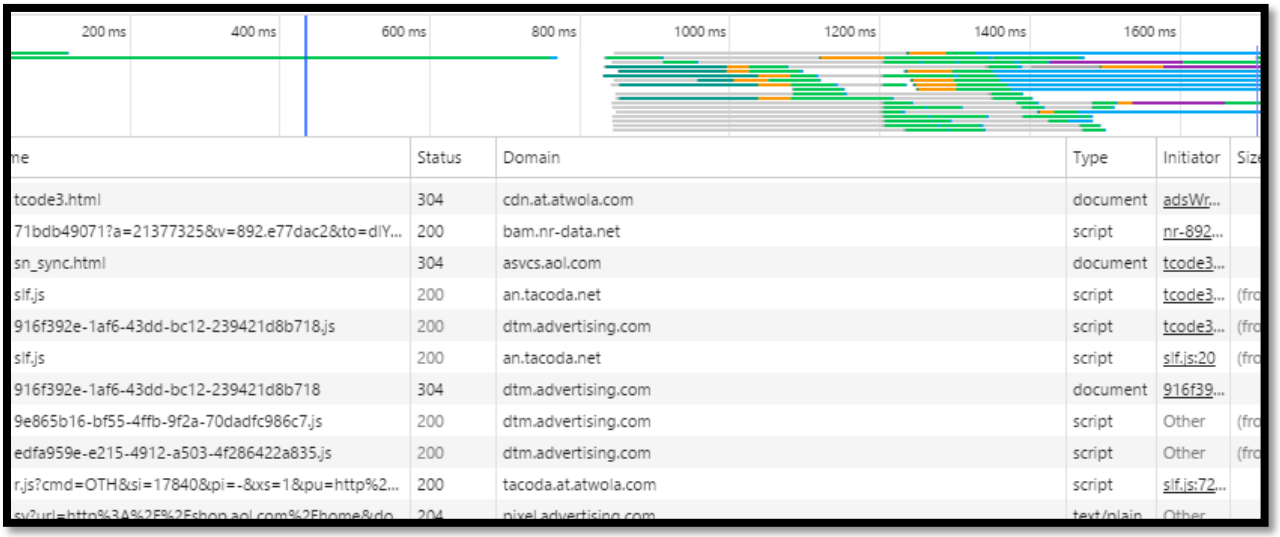
251. On information and belief, AOL gathers third-party content from servers. For example, when the AOL '345 Product requests a webpage, the AOL website's virtual web server retrieves third-party supplied content (e.g., third-party supplied advertising content; third-party supplied image content; third-party supplied video content; third-party supplied audio content;

third-party supplied textual (e.g., news, blog, microblog, etc.) content; etc.) comprising first objects describing a product or service (e.g., advertising, image, video, audio, e-commerce, and/or textual (e.g., news, blog, microblog) product or service).



Shop.AOL.com Website, AOL.COM WEBPAGE (last visited March 2016).

252. On information and belief, the below screen capture shows that the AOL '345 Product enables the retrieval of elements from various hosts using the "GET" method.



Network Traffic Reports for Shop.Aol.com, AOL.COM WEBSITE NETWORK REPORT (prepared March 2016), available at: shop.aol.com (showing network traffic and that data is pulled from a variety of hosts including: dtm.advertising.com, asvcs.aol.com, cdn.at.atwola.com,

tacodo.at.atcola.com, pixel.advertising.com, www.dormifty.com, slimages.macys.com, images.bloomingdales.com, content.nordstrom.com, cdn1.gilt.com, c3.soap.com).

253. On information and belief, the AOL '345 Product hosts, on the server computer, third-party content, said hosting comprises reading third-party supplied content and making said third-party supplied content available for access by the user. For example, AOL hosts on the AOL webpage virtual web server the third-party-supplied content (e.g., third-party supplied advertising content; third-party supplied image content; third-party supplied video content; third-party supplied audio content; third-party supplied textual (e.g., news, blog, microblog, etc.) content; etc.), the hosting comprises reading the third-party supplied content and making the third-party supplied content available for access by the user.

254. On information and belief, AOL transmits a web page for display on the client computer system in response to a request from the client computer system.

Page Inspection Report for Shop.Aol.com, AOL.COM WEBSITE (last visited March 2016) (showing content from the host content.nordstrom.com).

255. On information and belief, the AOL '345 Product selects a guiding means from third-party-supplied content for use in identifying related second content. For example, the AOL virtual web server selects guiding means (e.g., compatible metadata/tag information/code) from the third-party-supplied content for use in identifying related second content.

256. On information and belief, the AOL '345 Product identifies related second content using the guiding means, wherein the related second content comprises an object that is related to an object within the first objects of the third-party-supplied content. For example, the AOL website virtual web server uses the guiding means (e.g., compatible metadata/tag information/code) for an object within the first objects of the third-party-supplied content (e.g., third-party supplied advertising content; third-party supplied image content; third-party supplied video content; third-party supplied audio content; third-party supplied textual (e.g., news, blog, microblog, etc.) content; etc.) to identify the related second content, wherein the related second content comprises an object (e.g., story, article, product, image, comment, etc.) that is related to an object within the first objects of the third-party-supplied content.

257. On information and belief, AOL documentation states that the AOL Relegence generates tagging data that includes fields such as "extractedData," "tags" and "inferredData" that can be used to locate related content. The below screen capture shows some of the tags that can be generated by AOL Relegence.

Field	Type	Description
extractedData	Extracted Data	Article Content including text, url and media
tags	Tags	Entities and Subjects identified in the text
inferredData	Inferred Data	Metadata inferred from text

Where Extracted Data includes:

Field	Type	Description
title	String	Title of article
body	String	Body of article
snippet	String	Few sentences of article's first paragraph
Url	String	Url of article (as provided by caller)
canonicalUrl	String	Unique Url (as provided on html metadata)
images	List[Images]	Images extracted from article including URL, height and width
videos	List[Videos]	Videos extracted from article including URL, height and width

Relegence Tagger API, AOL RELEGENCE DOCUMENTATION (last visited March 2016), available at: http://www.relegence.com/docs#api.

258. On information and belief, the AOL '345 Product identifies the related second content using the guiding means, wherein the related second content comprises an object that is related to an object within the first objects of the third-party-supplied content. For example, the

AOL virtual web server uses the guiding means (e.g., compatible metadata/tag information/code) for an object within the first objects of the third-party-supplied content (e.g., third-party supplied advertising content; third-party supplied image content; third-party supplied video content; third-party supplied audio content; third-party supplied textual (e.g., news, blog, microblog, etc.) content; etc.) to identify the related second content, wherein the related second content comprises an object (e.g., story, article, product, image, comment, etc.) that is related to an object within the first objects of the third-party-supplied content. The below referral header request shows the request from a referrer (shop.aol.com/home) to "GET" content from a host.

```
Cache-Control: max-age=0
Accept: image/webp,image/*,*/*;q=0.8
User-Agent: Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/49.0.2623.87 Safari/537.36
Referer: http://shop.aol.com/home
Accept-Encoding: gzip, deflate, sdch
Accept-Language: en-US,en;q=0.8
Cookie: __cfduid=df181417d50cdc71473fe321c3f38a9901459197656
If-None-Match: "cb85e6fad0927f3514dc7ac3d2be05fd"
If-Modified-Since: Fri, 25 Mar 2016 21:18:08 GMT
```

Referral Header Report for AOL Shop Network, AOL WEBSITE NETWORK TRAFFIC INSPECTION (last visited March 2016), available at: http://shop.aol.com/home (Request header for content requested through a GET request from AOL.com to content located at cdn1.gilt.com.).

259. On information and belief, the AOL '345 Product includes the second content in the web page to form a second web page, where the including is performed by the server computer. For example, the AOL website/web app includes the second content in the web page to form a second web page, the including being performed by the AOL website virtual web server.

260. On information and belief, the AOL '345 Product sends the second web page to the client computer system for display on the client computer with the web page previously transmitted. For example, the AOL website virtual web server sends the second web page to the to the client computer for display on the client computer with the web page previously transmitted.

261. On information and belief, AOL has directly infringed and continues to directly infringe the '345 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for web content management, including but not limited to, the AOL '345 Product, which includes infringing web content management technologies.

262. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the AOL '345 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '345 patent, including at least claims 1-8, pursuant to 35 U.S.C. § 271(a).

263. On information and belief, AOL also indirectly infringes the '345 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

264. On information and belief, AOL has had knowledge of the '345 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '345 patent and knew of its infringement, including by way of this lawsuit.

265. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '345 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '345 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '345 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '345 Product that has the capability of operating in a manner that infringes one or more of the claims of the '345 patent, including at least claims 1-8, and AOL further provides documentation and training materials that cause customers and end users of the AOL '345 Product to utilize the product in a manner that directly infringes one or more claims of the '345 patent. By providing instruction and training to customers and end-users on how to use the AOL '345 Product in a manner that directly infringes one or more claims of the

'345 patent, including at least claims 1-8, AOL specifically intended to induce infringement of the '345 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '345 Product, *e.g.,* through AOL tutorials, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '345 patent.[111] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '345 patent, knowing that such use constitutes infringement of the '345 patent.

266. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '345 patent.

267. As a result of AOL's infringement of the '345 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

268. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '345 patent, UnoWeb will be greatly and irreparably harmed.

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[111] *AOL Engineering Blog*, AOL.COM *WEBSITE* (last visited March 2016), available at: http://engineering.aol.com/; *AOL Help Website*, AOL.COM WEBSITE (last visited March 2016), available at: https://help.aol.com/; Dennis Meyer and Zubair Sheikh, *RTB and Big Data - Where Erlang and Hadoop Meet*, ERLANG FACTORY LITE CONFERENCE PRESENTATION (December 2015), available at: https://www.youtube.com/watch?v=T9gaA9z2J3A; Suren Hiraman, *Scaling ML in Ad Tech*, OPEN SOURCE ANALYTICS MEETUP AT LIGHTBOX (November 2015), available at: https://courses.cit.cornell.edu/cs5304/Lectures/lec2_Scaling_Machine_Learning_in_Ad%20Tech.pdf; George Fletcher and Faday Seeman, *Multi-Tenancy in the Enterprise – An AOL Case Study*, 2015 IDENTITY SUMMIT (May 2015), available at: http://www.slideshare.net/ForgeRock/430thurspmsecond-received-fady-and-george-multi-tenancy-in-the-enterprise-aol-case-study; Durga Nemani, *Building Scalable Big Data Solutions*, AWS RE:INVENT PRESENTATION (October 2015), available at: http://www.slideshare.net/AmazonWebServices/bdt210-building-scalable-big-data-solutions-intel-aol; Durga Nemani and Gaurav Agarwal, *Data Warehouse in Cloud*, GOOGLE DEVELOPER GROUP PRESENTATION (September 2015), available at: https://www.youtube.com/watch?v=bwUfKtoLLPk.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 8,065,386

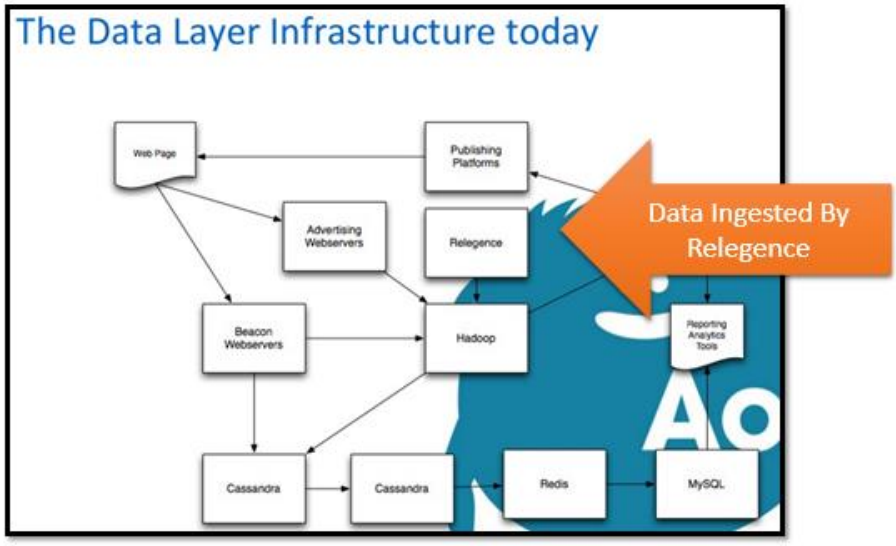
269. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

270. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for web content management.

271. AOL makes, sells, offers to sell, imports, and/or uses the websites built on the AOL Platform (http://www.aol.com, http://m.aol.com, http://www.huffingtonpost.com; http://m.huffingtonpost.com; http://www.techcrunch.com; http://m.techcrunch.com; http://www.engadget.com; http://m.engadget.com) (collectively, the "AOL '386 Product").

272. On information and belief, the AOL '386 Product includes web content management software.

273. On information and belief, documentation regarding AOL's data layer infrastructure includes the receipt of content and related data processed by AOL Relegence. The below screenshot from a presentation by the former chief technical officer of AOL Relegence shows that content is ingested by AOL Relegence.



Ian Holsman, *The Data Layer – Because Data Has Needs*, HADOOP WORLD 2010 at 33 (October 2010).

274. On information and belief, the AOL '386 Product is available to businesses and individuals throughout the United States.

275. On information and belief, the AOL '386 Product is provided to businesses and individuals located in the Eastern District of Texas.

276. On information and belief, the AOL '386 Product receives third-party-supplied first content, wherein said receiving is performed by the server computer.

Page Inspection Report for Shop.Aol.com, AOL.COM WEBSITE (last visited March 2016) (showing content from the host content.nordstrom.com)

277. On information and belief, the AOL '386 Product indexes third-party-supplied content. For example, AOL indexes a plurality of objects using AOL compatible metadata (e.g., key words, API data, tags, etc.). The below screenshots illustrate that AOL Relegence receives content from a host (e.g., shop.nordstrom.com) and generates data associated with fields such as "freebaseMID," "inferredData, "extractedData," "entities," and "mostGranular."

AOL RELEGENCE TAGGER TESTING RESULTS (results from March 2016), *available at:* http://relegence.aol.com/demos/tagger/ (The above screen capture shows the results of the AOL Relegence system indexing a webpage located at http://shop.nordstrom.com/s/boss-trim-fit-plaid-wool-suit/4249911. The screen capture on the right shows the extracted data that is generated from the indexing system.).

278. On information and belief, the AOL '386 Product indexes content using keywords.

279. On information and belief, AOL documentation states that its indexing system enables each tag having a unique ID enabling direct reference to tags and disambiguation between tags that have similar names.

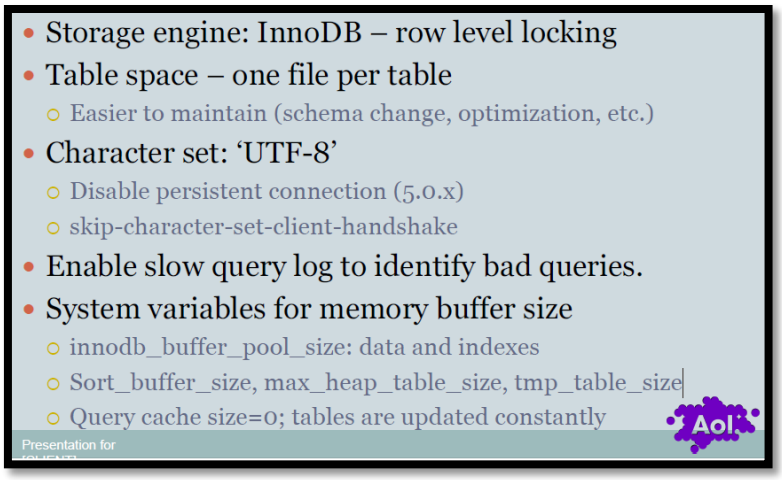
280. On information and belief, the AOL '386 Product forms a database table containing objects in the plurality of objects, wherein forming is performed by the server computer. For example, the AOL website/web app virtual web server computer forms a database table (e.g., FQL, SQL-style, and/or NoSQL database table) containing objects in the plurality of objects.

> We wrote a custom Apache module to do third-party cookies. So the problems we had were (i) getting the data, (ii) making sure we can identify the user across sites – so we created a custom module to create a cookie which is shared across multiple domains. We wrote a custom load processing module to push the data every 15 minutes to a Hadoop cluster. And we wrote MapReduce jobs to ***get the data, crunch through it, and produce reports and MySQL databases with the aggregated data so other groups can use it***.

Ian Holsman, *The Data Layer – Because Data Has Needs*, HADOOP WORLD 2010 at 33 (October 2010).

281. On information and belief, the AOL '386 Product accesses the database table and selects an object in the plurality of objects using the index, wherein selecting is performed by the server computer. For example, the AOL website/web app virtual web server accesses the database table (e.g., the FQL, SQL-style, and/or NoSQL database table) and selects an object in the plurality of objects using the index.

282. On information and belief, AOL documentation describes that the indexed data is stored in database tables. The below slide from an AOL presentation shows a configuration for storing the indexed data in a database table (e.g., InnoDB table).



Tao Cheng, *Building and Deploying Large Scale Real Time News System with MySQL and Distributed Cache*, MYSQL CONFERENCE at 15 (April 2011) (describing the storage of the data in InnoDB (a storage engine from the MySQL database).

283. On information and belief, AOL enables the association of "related articles" to first content that is identified and displayed.

284. On information and belief, AOL documentation states that data objects can be related to each other using vector score values. For example, finding a second related document could be identified through the command "similarCluster = findMostSimilar (vec)." The below slide from an AOL presentation shows the use of vector similarity (generated from the indexed data) to identify related content.

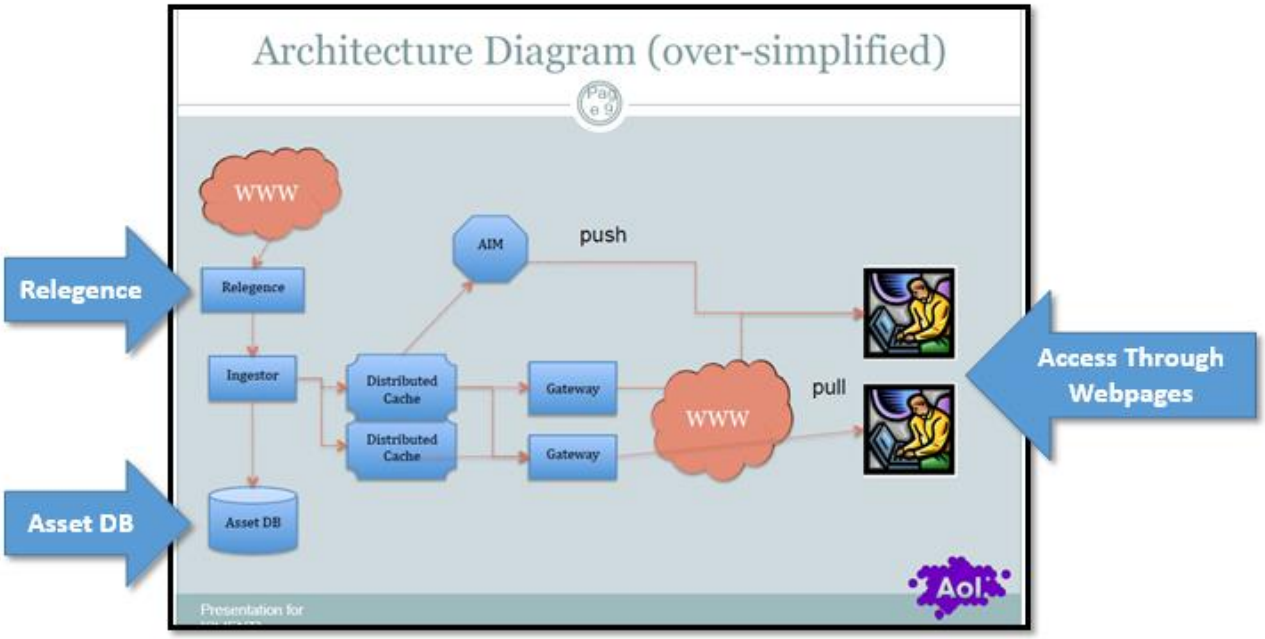
Mattan Tenne, *Realtime Clustering – More than Words*, AOL RELEGENCE PRESENTATION at 24 (2015).

285. On information and belief, the AOL '386 Product identifies a second content by finding a relationship between the second content and the object selected, wherein identifying is performed by the server computer. For example, the AOL website/web app virtual web server computer identifies a second content by finding a relationship between the second content and the object selected.

286. On information and belief, the AOL '386 Product hosts on AOL servers third-party-supplied content.

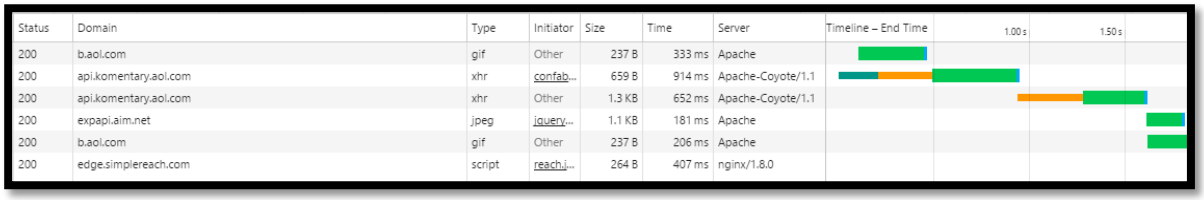
287. On information and belief, the AOL '386 Product reads third-party-supplied content and makes third-party-supplied content available to users.

288. On information and belief, documentation from AOL shows the architecture of the data ingestion system wherein content is ingested from hosts and processed by AOL Relegence. The indexed content is then stored in a database (identified below with the nomenclature "Asset DB") that is capable of being accessed by client devices through AOL webpages.



Tao Cheng, *Building and Deploying Large Scale Real Time News System with MySQL and Distributed Cache*, MYSQL CONFERENCE at 9 (April 2011) (annotations added to show the use of Relegence and storage of assets in the Asset DB).

289. On information and belief, the AOL '386 Product enables the transmitting of a web page for display on the client computer system in response to a request from the client computer system. The web pages that are transmitted by AOL include third-party-supplied content. The below screenshot shows a network traffic report for third party supplied content showing that in response to a series of "GET" requests third party supplied content is transmitted to the client computer.



Status	Domain	Type	Initiator	Size	Time	Server	Timeline – End Time
200	b.aol.com	gif	Other	237 B	333 ms	Apache	
200	api.komentary.aol.com	xhr	confab...	659 B	914 ms	Apache-Coyote/1.1	
200	api.komentary.aol.com	xhr	Other	1.3 KB	652 ms	Apache-Coyote/1.1	
200	expapi.aim.net	jpeg	jquery...	1.1 KB	181 ms	Apache	
200	b.aol.com	gif	Other	237 B	206 ms	Apache	
200	edge.simplereach.com	script	reachj...	264 B	407 ms	nginx/1.8.0	

Network Traffic Report for AOL.com, AOL.COM WEBSITE (last visited March 2016) (Showing that when the second content is selected the network traffic shows that tat a webpage is transmitted to the client computer.).

290. On information and belief, AOL has directly infringed and continues to directly infringe the '386 patent by, among other things, making, using, offering for sale, and/or selling

products and/or services for web content management, including but not limited to, the AOL '386 Product, which includes infringing web content management technologies.

291. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the AOL '386 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '386 patent, including at least claims 1 and 4-8, pursuant to 35 U.S.C. § 271(a).

292. On information and belief, AOL also indirectly infringes the '386 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

293. On information and belief, AOL has had knowledge of the '386 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '386 patent and knew of its infringement, including by way of this lawsuit.

294. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '386 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '386 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '386 patent and with the knowledge that the induced acts would constitute infringement. For example, AOL provides the AOL '386 Product that has the capability of operating in a manner that infringes one or more of the claims of the '386 patent, including at least claims 1 and 4-8, and AOL further provides documentation and training materials that cause customers and end users of the AOL '386 Product to utilize the product in a manner that directly infringes one or more claims of the '386 patent. By providing instruction and training to customers and end-users on how to use the AOL '386 Product in a manner that directly infringes one or more claims of the '386 patent, including at least claims 1 and 4-8, AOL specifically intended to induce infringement of the '386 patent. On information and belief, AOL engaged in such inducement to

promote the sales of the AOL '386 Product, *e.g.*, through AOL user guides, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '386 patent.[112] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '386 patent, knowing that such use constitutes infringement of the '386 patent.

295. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '386 patent.

296. As a result of AOL's infringement of the '386 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and AOL will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

297. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '386 patent, UnoWeb will be greatly and irreparably harmed.

[112] *AOL Engineering Blog*, AOL.COM *WEBSITE* (last visited March 2016), available at: http://engineering.aol.com/; *AOL Help Website*, AOL.COM WEBSITE (last visited March 2016), available at: https://help.aol.com/; Dennis Meyer and Zubair Sheikh, *RTB and Big Data - Where Erlang and Hadoop Meet*, ERLANG FACTORY LITE CONFERENCE PRESENTATION (December 2015), available at: https://www.youtube.com/watch?v=T9gaA9z2J3A; Suren Hiraman, *Scaling ML in Ad Tech*, OPEN SOURCE ANALYTICS MEETUP AT LIGHTBOX (November 2015), available at: https://courses.cit.cornell.edu/cs5304/Lectures/lec2_Scaling_Machine_Learning_in_Ad%20Tech.pdf; George Fletcher and Faday Seeman, *Multi-Tenancy in the Enterprise – An AOL Case Study*, 2015 IDENTITY SUMMIT (May 2015), available at: http://www.slideshare.net/ForgeRock/430thurspmsecond-received-fady-and-george-multi-tenancy-in-the-enterprise-aol-case-study; Durga Nemani, *Building Scalable Big Data Solutions*, AWS RE:INVENT PRESENTATION (October 2015), available at: http://www.slideshare.net/AmazonWebServices/bdt210-building-scalable-big-data-solutions-intel-aol; Durga Nemani and Gaurav Agarwal, *Data Warehouse in Cloud*, GOOGLE DEVELOPER GROUP PRESENTATION (September 2015), available at: https://www.youtube.com/watch?v=bwUfKtoLLPk.

COUNT III
INFRINGEMENT OF U.S. PATENT NO. 8,307,047

298. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

299. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for web content management.

300. AOL makes, sells, offers to sell, imports, and/or uses the websites built on the AOL Platform (http://www.aol.com, http://m.aol.com, http://www.huffingtonpost.com; http://m.huffingtonpost.com; http://www.techcrunch.com; http://m.techcrunch.com; http://www.engadget.com; http://m.engadget.com) (collectively, the "AOL '047 Product").

301. On information and belief, the AOL '047 Product includes web content management software.

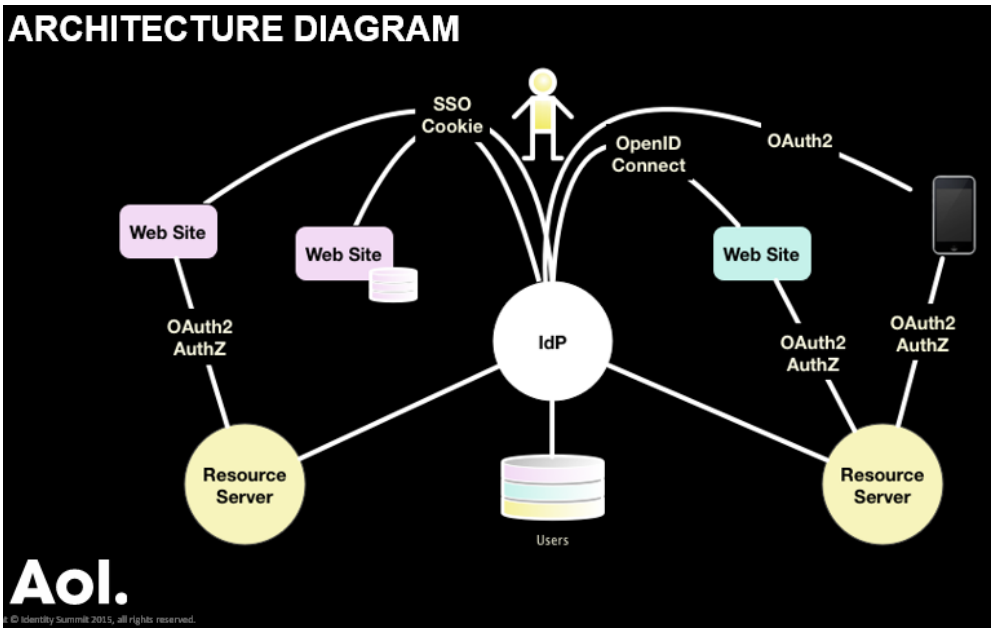
302. On information and belief, the AOL '047 Product is available to businesses and individuals throughout the United States.

303. On information and belief, the AOL '047 Product is provided to businesses and individuals located in the Eastern District of Texas.

304. On information and belief, the AOL '047 Product infringes the '047 patent by making, using, selling, and/or offering for sale in the United States the claimed apparatus—for example, a program storage device as claimed. For example, through operation of the AOL website, AOL makes, uses, sells, and/or offers for sale a program storage device comprising a non-transitory memory storage medium readable by a server, tangibly embodying a program of instructions executable by the server to manage a plurality of content hosts on the server.

305. On information and belief, the AOL '047 Product requests a first dynamic content hosted by a first host, wherein requesting is performed by the server, and wherein said first host is selected from the group consisting of an e-mall, e-service, e-portal, satellite e-mall, e-shop, e-distributor and web site.

306. On information and belief, AOL documentation shows that a user accessing the AOL '047 Product can be authenticated through an "IdP" server. The user is then able to access content through a website (provided by a server) that makes calls to a resource server.

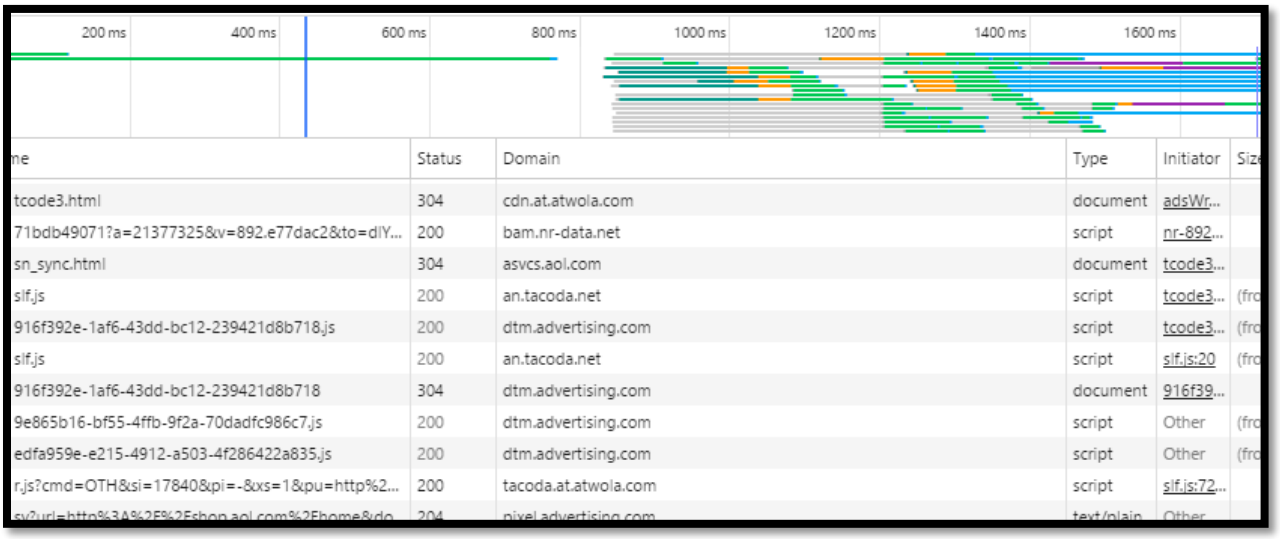


George Fletcher, *Multi-Tenancy in the Enterprise*, 2015 IDENTITY SUMMIT at 15, available at: https://www.youtube.com/watch?v=ZK9D9_oDbSE (presentation from AOL's Chief Architect of Identity Services at AOL).

307. On information and belief, the AOL '047 Product retrieves data from first dynamic content hosted by a first host, the AOL web server and requests dynamic content hosted by an external content host via a GET request, and the first host is selected from the group consisting of an e-mall, e-service, e-portal, satellite e-mall, e-shop, e-distributor and web site.

308. On information and belief, the AOL '047 Product requests second dynamic content hosted by a second host, wherein requesting is performed by the server, and wherein said second host is selected from the group consisting of an e-mall, e-service, e-portal, satellite e-mall, e-shop, e-distributor and web site. For example, when an AOL '047 Product user in the Eastern District of Texas visits an AOL website (e.g., via the webpage https://www.aol.com), an AOL web server requests a plurality of dynamic contents from a plurality of hosts to display and control user interaction with the content.

309. On information and belief, the AOL '047 Product requests content hosted by a second host such as a server. The below screen capture from a network traffic report shows that elements are retrieved from various hosts using the "GET" method.



ne	Status	Domain	Type	Initiator	Siz
tcode3.html	304	cdn.at.atwola.com	document	adsWr...	
71bdb49071?a=21377325&v=892.e77dac2&to=dlY...	200	bam.nr-data.net	script	nr-892...	
sn_sync.html	304	asvcs.aol.com	document	tcode3...	
slf.js	200	an.tacoda.net	script	tcode3...	(fro
916f392e-1af6-43dd-bc12-239421d8b718.js	200	dtm.advertising.com	script	tcode3...	(fro
slf.js	200	an.tacoda.net	script	slf.js:20	(fro
916f392e-1af6-43dd-bc12-239421d8b718	304	dtm.advertising.com	document	916f39...	
9e865b16-bf55-4ffb-9f2a-70dadfc986c7.js	200	dtm.advertising.com	script	Other	(fro
edfa959e-e215-4912-a503-4f286422a835.js	200	dtm.advertising.com	script	Other	(fro
r.js?cmd=OTH&si=17840&pi=-&xs=1&pu=http%2...	200	tacoda.at.atwola.com	script	slf.js:72...	
sv?url=http%3A%2F%2Fshop.aol.com%2Fhome&do...	204	pixel.advertising.com	text/plain	Other	

Network Traffic Reports for Shop.Aol.com, AOL.COM WEBSITE NETWORK REPORT (prepared March 2016), available at: shop.aol.com (showing network traffic and that data is pulled from a variety of hosts including: dtm.advertising.com, asvcs.aol.com, cdn.at.atwola.com).

310. On information and belief, to display and control user interaction with the AOL webpage/user interface, the AOL web server requests at least a second dynamic content hosted by a second host.

311. On information and belief, the AOL '047 Product displays the first dynamic content and the second dynamic content to a user accessing the second host as if the first dynamic content originated from the second host.

312. On information and belief, the AOL '047 Product configures the server to control the user's interaction with the first dynamic content by causing the second host to fetch the dynamic content from the first host. For example, AOL configures a server to control the AOL user's interaction with the first dynamic content (e.g., the external display content) by causing the second host to retrieve the dynamic content from the first host (e.g., the external content host).

313. On information and belief, the AOL ‘047 Product configures the server to maintain user interaction with the first dynamic content at the second host.

314. On information and belief, AOL has directly infringed and continues to directly infringe the ‘047 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for web content management, including but not limited to, the AOL ‘047 Product, which includes infringing web content management technologies.

315. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the AOL ‘047 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the ‘047 patent, including at least claims 1-4, pursuant to 35 U.S.C. § 271(a).

316. On information and belief, AOL also indirectly infringes the ‘047 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

317. On information and belief, AOL has had knowledge of the ‘047 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the ‘047 patent and knew of its infringement, including by way of this lawsuit.

318. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL ‘047 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the ‘047 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘047 patent and with the knowledge that the induced acts would constitute infringement. For example, AOL provides the AOL ‘047 Product that has the capability of operating in a manner that infringes one or more of the claims of the ‘047 patent, including at least claims 1-4, and AOL further provides documentation and training materials that cause customers and end users of the AOL ‘047 Product to utilize the product in a manner that directly infringes one or more

claims of the '047 patent. By providing instruction and training to customers and end-users on how to use the AOL '047 Product in a manner that directly infringes one or more claims of the '047 patent, including at least claims 1-4, AOL specifically intended to induce infringement of the '047 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '047 Products, *e.g.*, through AOL user guides, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '047 patent.[113] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '047 patent, knowing that such use constitutes infringement of the '047 patent.

319. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '047 patent.

320. As a result of AOL's infringement of the '047 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and AOL will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

[113] *AOL Engineering Blog*, AOL.COM *WEBSITE* (last visited March 2016), available at: http://engineering.aol.com/; *AOL Help Website*, AOL.COM WEBSITE (last visited March 2016), available at: https://help.aol.com/; Dennis Meyer and Zubair Sheikh, *RTB and Big Data - Where Erlang and Hadoop Meet*, ERLANG FACTORY LITE CONFERENCE PRESENTATION (December 2015), available at: https://www.youtube.com/watch?v=T9gaA9z2J3A; Suren Hiraman, *Scaling ML in Ad Tech*, OPEN SOURCE ANALYTICS MEETUP AT LIGHTBOX (November 2015), available at: https://courses.cit.cornell.edu/cs5304/Lectures/lec2_Scaling_Machine_Learning_in_Ad%20Tech.pdf; George Fletcher and Faday Seeman, *Multi-Tenancy in the Enterprise – An AOL Case Study*, 2015 IDENTITY SUMMIT (May 2015), available at: http://www.slideshare.net/ForgeRock/430thurspmsecond-received-fady-and-george-multi-tenancy-in-the-enterprise-aol-case-study; Durga Nemani, *Building Scalable Big Data Solutions*, AWS RE:INVENT PRESENTATION (October 2015), available at: http://www.slideshare.net/AmazonWebServices/bdt210-building-scalable-big-data-solutions-intel-aol; Durga Nemani and Gaurav Agarwal, *Data Warehouse in Cloud*, GOOGLE DEVELOPER GROUP PRESENTATION (September 2015), available at: https://www.youtube.com/watch?v=bwUfKtoLLPk.

321. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '047 patent, UnoWeb will be greatly and irreparably harmed.

COUNT IV
INFRINGEMENT OF U.S. PATENT NO. 7,987,139

322. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

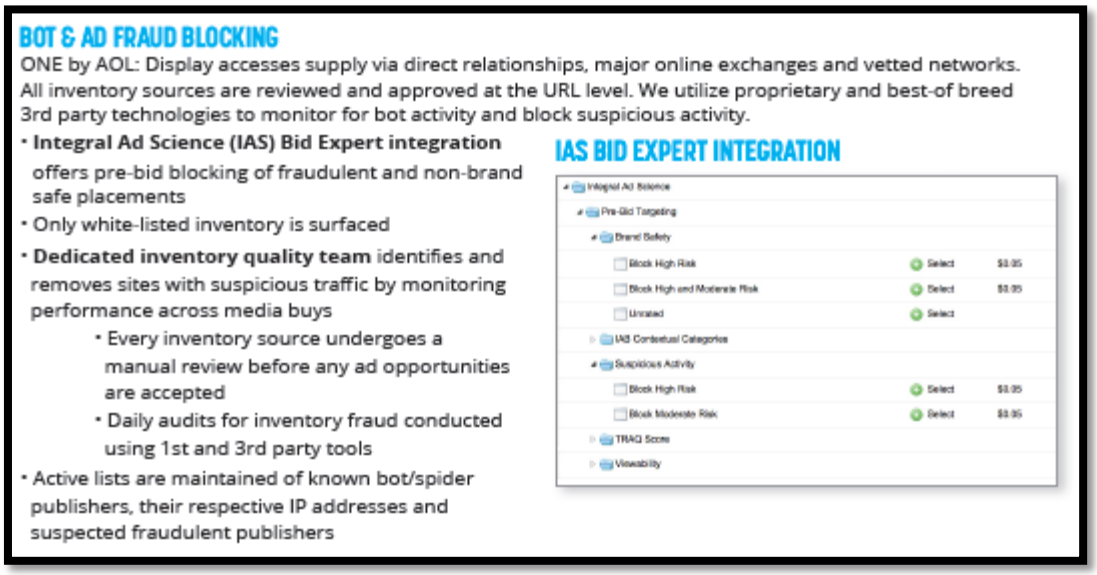
323. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for internet advertising revenue sharing.

324. AOL makes, sells, offers to sell, imports, and/or uses the One by AOL product[114] and Advertising.com (collectively, the "AOL '139 Product").

325. On information and belief, the AOL '139 Product includes internet advertising functionality.

326. On information and belief, AOL documentation states that One by AOL "is committed to providing out clients with best-of-breed technologies and services for viewability, inventory quality, and brand safety." The following excerpt from One by AOL documentation shows this bidding and "fraud blocking" functionality.

[114] One by AOL is AOL's integrated internet advertising product. AOL has repeatedly stated that the One by AOL product although encompassing "multiple technologies" is a "holistic," "unified programmatic platform" that will "consolidate most of its programmatic brands," and "integrates in one place all buying channels . . . and seamlessly connects data throughout the entire process." *AOL Launches One by AOL*, AOL PRESS RELEASE (April 14, 2015), available at: http://www.aolplatforms.com/aol-launches-one-by-aol. The components of AOL's "unified solution" that are particularly relevant to the AOL's infringement includes but is not limited to ONE by AOL: Display, ONE by AOL: Audience, One by AOL: Publishers, and One by AOL: Advertisers.



One by AOL – Display Inventory Quality, ONE BY AOL DOCUMENTATION at 1 (2015).

327. On information and belief, the AOL '139 Product is available to businesses and individuals throughout the United States.

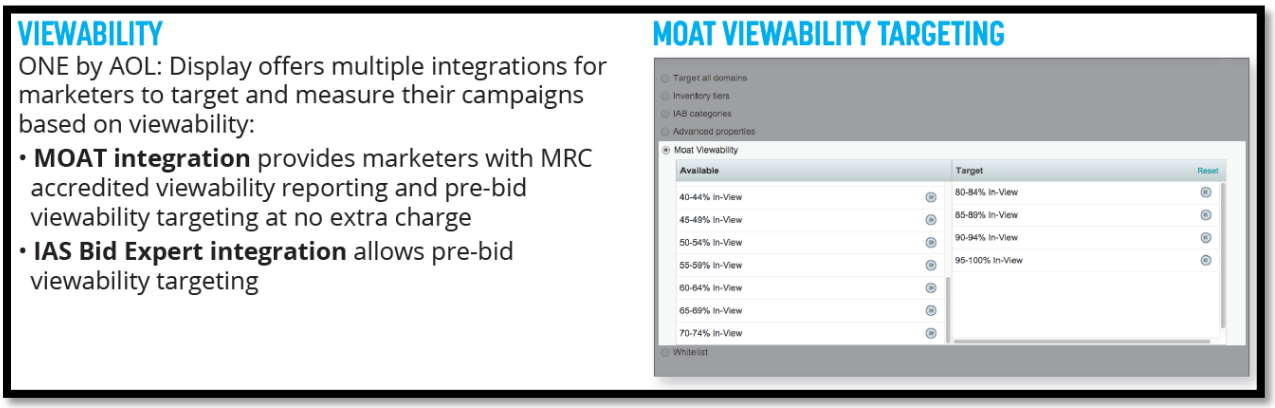
328. On information and belief, the AOL '139 Product is provided to businesses and individuals located in the Eastern District of Texas.

329. On information and belief, the AOL '139 Product enables web site development based on advertising revenue sharing. AOL states that it enables publishers of content to monetize their content. "ONE by AOL: Publishers is a simple, unified programmatic solution designed to help publishers maximize monetization across every format and channel."[115]

330. On information and belief, the AOL '139 Product displays paid content from an advertiser through a webpage on a web site. For example, AOL states that "ONE by AOL: Display MP is a supply-side platform and exchange. It is integrated with ONE by AOL and the industry's leading demand side platform. Monetize audiences by managing and boosting demand across programmatic channels. Maximize the value of every impression with Publisher API, an integrated solution for header bidding."[116]

[115] *One By AOL – Publishers*, AOL PLATFORMS WEBSITE (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers.

[116] *One by AOL – Publishers: Display Advertising*, AOL PLATFORMS WEBSITE (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers.



One by AOL – Display Inventory Quality, ONE BY AOL DOCUMENTATION at 1 (2015).

331. On information and belief, the AOL '139 Product enables registering a content provider to provide non-paid content. For example, AOL infringes the '139 patent by performing, directing, or controlling performance of each and every step of the claimed method—for example, through operation of the Advertising.com and One by AOL.

Pubaccess User Guide, AOL PUBACCESS DOCUMENTATION (last visited March 2016), available at: https://pubaccess.advertising.com/userguide/sect1_pg3.html.

332. On information and belief, the AOL '139 Product registers users through the use of cookies, web beacons, device fingerprinting and device graph. AOL states that the cookies it uses to register users "are text files that are placed in your device's browser, and that can be used to help recognize your browser across different Web pages, websites, and browsing sessions."[117]

333. On information and belief, web beacons are used by AOL to register users and enables AOL to track users across websites. "Web beacons are small pieces of code placed on Web pages, videos, and in emails that can communicate information about your browser and device to a server."[118]

334. On information and belief, AOL's terms of service state that a user that visits its websites and internet properties that incorporate advertising served by AOL ad servers (e.g., websites providing content from Advertising.com) enter into a contract with AOL and are bound by the AOL terms of service. "The AOL Terms of Service (TOS) is a contract between you and AOL."[119]

335. On information and belief, AOL documentation states that a user consents to the AOL terms of service by accessing AOL content and advertisements and having a cookie, web beacon, unique identifier, or other tracking technology placed in their browser.

> This is information we automatically collect and store when you use our Services or other companies' websites and apps in the AOL Advertising Network. It may include, for example: Information about your interactions with the websites, apps, and other services you use, the content you view, the search queries you submit, and information in cookies and similar technologies; Information about how you access those websites, apps, and other services, your browser or operating system,

[117] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/

[118] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/

[119] *Frequently Asked Questions - AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/faq/

> your Internet Protocol ("IP") address, and the website you visited before visiting our Services.

Fully Privacy Policy – AOL Privacy Website, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/privacy-policy/.

336. On information and belief, users register with AOL through AOL's Unique Identifier Header ("UIDH") technology. Users register with AOL by consenting to receiving UIDH data from AOL (or its corporate parent Verizon). Following a user registering with AOL by consenting to and receiving UIDH data, AOL is able to the unique identifier to recognize devices that access AOL web pages and advertisements.

> For example, the presence of the UIDH can be used to authenticate the device as valid on the Verizon network. Moreover, instead of requiring a customer to manually fill in his or her own information on a website, the UIDH could be used as a unique identifier."

Verizon Wireless's Use Of A Unique Identifier Header (UIDH), VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/.[120]

337. Courts have held where a user has had adequate notice of a website's terms of service, the terms will bind a party to the terms of service.[121] Users through agreement to AOL's terms of service and consent to the placement of unique identifiers (e.g., cookies) on their computer register with the AOL website.

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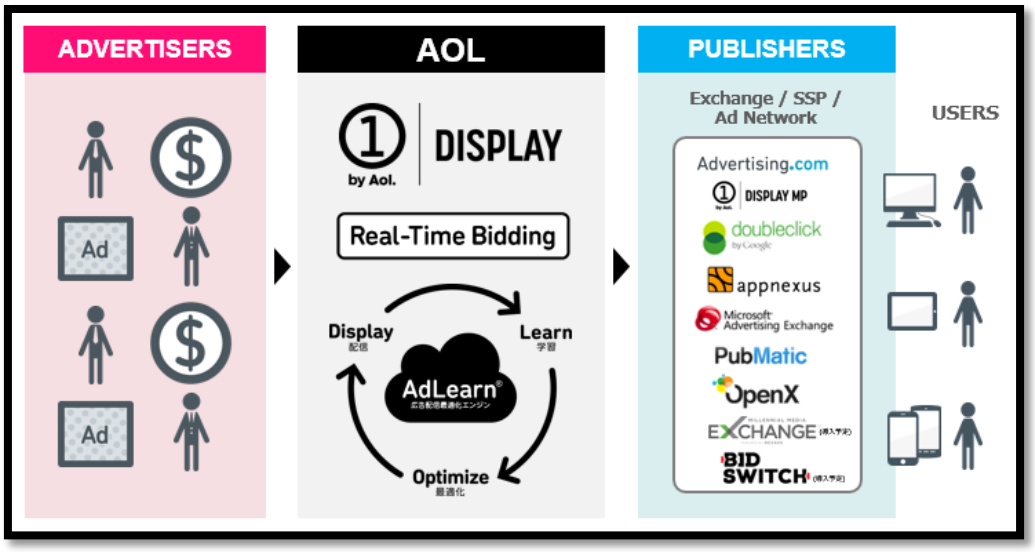
[120] *See also Verizon Wireless's Use of a Unique Identifier Header (UIDH)*, VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/ ("Verizon Wireless includes a Unique Identifier Header (UIDH) in the address information that accompanies some of the Internet (http) requests transmitted over our wireless network. Header information is included in all web traffic and includes information such as the device type, preferred language, and content support so that the site receiving the request knows how to best display the site on the phone or other device that sends the request.").

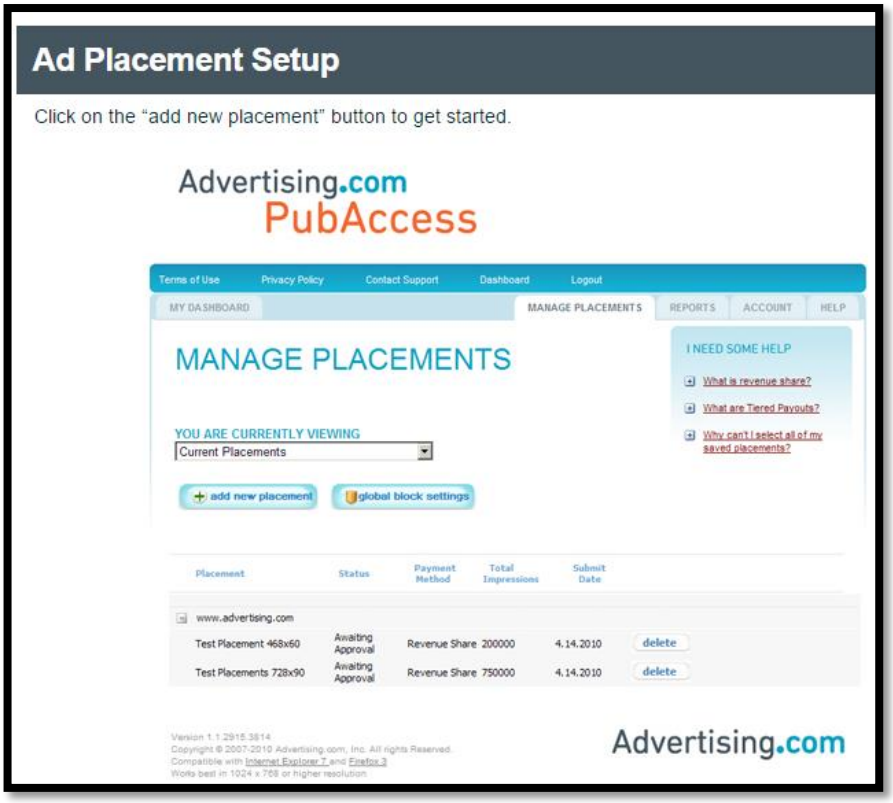
[121] *See e.g.*, *Crawford v. Beachbody, LLC*, No. 14cv1583-GPC (KSC), 2014 U.S. Dist. LEXIS 156658, at *6 (S.D. Cal. Nov. 5, 2014) ("Since there is no affirmative action required by the website user to agree to the terms and conditions of a contract, 'the determination of the validity of the browsewrap contract depends on whether the user has actual or constructive knowledge of a websites' terms and conditions.'"); *Sgouros v. TransUnion Corp.*, No. 14 C 1850, 2015 U.S. Dist. LEXIS 13691, at *16 (N.D. Ill. Feb. 5, 2015) ("A 'browsewrap' agreement is an agreement where users are bound to its terms by merely navigating or using a website."); *Fagerstrom v. Amazon.com, Inc.*, No. 15-cv-96-BAS-DHB, 2015 U.S. Dist. LEXIS 143295, at *32 n.6 (S.D. Cal. Oct. 20, 2015) ("With a browsewrap agreement, a website owner seeks to bind website users to terms and conditions by posting the terms somewhere on the website.").

338. On information and belief, AOL documentation of the AOL Demand Side Platform depicts the interaction between paid content (advertisers) and non-paid content (publishers) in the following excerpt from an AOL presentation.



One by AOL – Display Demand Side Platform, AOL PLATFORM PRESENTATION at 3 (February 22, 2016).

339. On information and belief, the below documentation from AOL shows the process that can be used for the placement of paid content wherein the content comes from a content provider.



Pubaccess User Guide, AOL PUBACCESS DOCUMENTATION (last visited March 2016), available at: https://pubaccess.advertising.com/userguide/sect2_pg3_1.html.

340. On information and belief, the AOL '139 Product displays paid content from an advertiser through a webpage of the website on a computer. For example, paid content is displayed based on the embedding of a "code block." AOL documentation states "choose from tiered CPM or revenue share: You earn a fixed percentage of the revenue generated from the ads placed on your site. With revenue share, you can earn more money on inventory that performs well."[122]

341. On information and belief, the AOL Documentation states that "ONE by AOL: Display MP is a supply-side platform and exchange. It is integrated with ONE by AOL and the industry's leading demand side platform. Monetize audiences by managing and boosting

[122] *Pubaccess User Guide - Ad Placement Setup: Payout Options*, AOL PUBACCESS DOCUMENTATION (last visited March 2016), available at: https://pubaccess.advertising.com/userguide/sect2_pg3_4.html.

demand across programmatic channels. Maximize the value of every impression with Publisher API, an integrated solution for header bidding."[123]

342. On information and belief, the AOL '139 Product registers a content provider to prepare non-paid content for the webpage on a computer. For example, AOL receives non-paid content (e.g., publisher content) from a provider (e.g., an AOL Partner). Moreover, a publisher is subject to a condition that the provider may receive no compensation for the non-paid content. A mandatory Publisher Terms and Conditions agreement requires "THAT THERE IS NO GUARANTEE THAT ANY MINIMUM LEVEL OF REVENUE, OR ANY REVENUE, WILL BE GENERATED AS A RESULT OF THIS AGREEMENT."[124]

343. On information and belief, AOL sets a time period threshold that prevents the redisplay of paid content to a registered user. For example, in determining "Unique Clicks," AOL excludes repetitive and accidental clicks and imposes frequency caps that limit the redisplay of paid content to a user within a time period threshold. "Frequency caps on networks allow you to limit the number of times a user sees your ad. When determining a frequency cap at the start of a campaign, keep in mind your budget as well as your marketing objectives. A frequency cap of 1 ad served per user every 24 hours is a good place to start; network experts can help you adjust this as needed."[125]

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[123] *One by AOL for Publishers*, AOL PLATFORMS DOCUMENTATION (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers

[124] *Advertising.com Publisher Terms and Conditions and Sponsored Listings Addendum*, AOL ADVERTISING WEBSITE (last visited March 2016), available at: http://advertising.aol.com/privacy/advertisingcom-publisher-terms-and-conditions-and-sponsored-listings-addendum#sthash.ECnpAGHv.dpuf (emphasis in original).

[125] *Advertising.com – Campaign Setup*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/campaign-setup/how-tos; *see also Advertising.com – Campaign Improvement*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016); available at: https://www.advertising.com/displayuniversity/campaign-improvement/adjusting-post-launch ("Frequency is your main lever if you are measuring success in terms of the number of people who see your ads, and the number of times they see them. The lower your frequency, the fewer times a user will be able to see your ad each day.").

344. On information and belief, AOL documentation states that a click from a user that occurs within an hour period of a prior click will not be compensated.

> "**Unique Click**" means an instance in which a person viewing the Publisher Website, as identified by cookie or IP address, clicks on a Creative, as measured by Advertising.com (provided however, that a click on a specific Display Creative by a particular person shall only be counted as a Unique Click once every 1-hour period).

Advertising.com Publisher Terms and Conditions and Sponsored Listings Addendum, AOL ADVERTISING WEBSITE (last visited March 2016), available at: http://advertising.aol.com/privacy/advertisingcom-publisher-terms-and-conditions-and-sponsored-listings-addendum#sthash.ECnpAGHv.dpuf.[126]

345. On information and belief, AOL has identified click fraud as a major threat to internet advertising that is "one of the biggest and most widespread issues that digital marketers and publishers face."[127]

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[126] *See also Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx ("Payout models include revenue-share and CPM payouts. Please note that payment options may vary by placement size. CPM payouts are available for the first 5 US or Canadian impressions, per size, per user, per day.").

[127] *AOL's Jim Norton & IAB Spotlight TAG Initiatives at IAB Marketplace Programmatic*, AOL ADVERTISING BLOG (May 11, 2015), available at: http://advertising.aol.com/blog/aols-jim-norton-iab-spotlight-tag-initiatives-iab-marketplace-programmatic#sthash.oQkYB0iI.dpuf; *see also* Olivia Oshry, *A Seller's Perspective: Solving Inventory Quality and Ad Fraud*, AOL ADVERTISING BLOG (March 13, 2015), *available at*: http://advertising.aol.com/blog/seller%E2%80%99s-perspective-solving-inventory-quality-and-ad-fraud (emphasis added) ("We need to make sure that users are actually seeing impressions and we have measurements around those safe impressions."); Vacha Dave, Saikat Guha, Yin Zhang, *ViceROI: Catching Click-Spam in Search Ad Networks*, in 23RD USENIX SECURITY SYMPOSIUM at 3 (August 2014) ("Ad networks focused on their long-term reputation (if they are caught being complicit in syndicate generated clickspam) are driven to filter click-spam and offer discounts to advertisers to reduce the impact of click-spam."); Ben Elgin, Michael Riley, David Kocieniewski, and Joshua Brustein, *How Much of Your Audience is Fake*, BLOOMBERG WEBSITE (September 28, 2015), available at: http://www.bloomberg.com/features/2015-click-fraud/ ("Fake traffic has become a commodity. There's malware for generating it and brokers who sell it. Some companies pay for it intentionally, some accidentally, and some prefer not to ask where their traffic comes from. It's given rise to an industry of countermeasures, which inspire counter-countermeasures."); Ted Dhanik, *We're All Responsible for Click-Fraud and Here's How To Stop It*, ADAGE WEBSITE (June 17, 2014), available at: http://adage.com/article/digitalnext/responsible-click-fraud/293646/ ("For example, we could define click fraud as more than five clicks from a unique user within a single 24-hour window. This could encourage publishers to offer a "unique user click model" that negates the incentives for committing click fraud."); Jennifer Saba and Jim Finkle, *Online Ad Revenue at Risk in War on 'Click Fraud*,' REUTERS NEW SERVICE (March 23, 2016), available at:

346. On information and belief, the AOL '139 Product receives payment from the advertiser for the number of interactions of the user with the paid content. For example, AOL documentation states "CPM is short for cost per thousand impressions. The amount paid per impression is calculated by dividing CPM by 1000 – so a $10 CPM would equal $.01 per impression. There are no ties between performance of the campaign and how ads are served or how they are paid for."[128]

Mike Shields, *With "One," AOL Promises It Can Help Manage Every Dollar a Brand Spends*, WALL ST. J. (April 14, 2015), available at: http://blogs.wsj.com/cmo/2015/04/14/with-one-aol-promises-it-can-help-manage-every-dollar-a-brand-spends ("At the center of the One effort is a new software interface–or a "digital dashboard"–through which an advertiser can gauge the impact and return-on-investment of advertising.") (annotation added).

347. On information and belief, the AOL '139 Product totals a number of times the paid content is displayed to the registered user.

348. On information and belief, the AOL '139 Product receives payment from the advertiser for the number of times the paid content is displayed to the registered user. For example, AOL calculates a number (e.g., impressions, clicks, and/or conversions) equaling all interactions of the publisher content.

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http://www.reuters.com/article/us-advertising-cyberfraud-idUSKBN0MJ0Z820150323 ("A growing number of U.S. companies, including MillerCoors and AIG, are stepping up the battle against online ad fraud by demanding proof that their ads have been seen by real people instead of computers hijacked by cybercriminals.").

[128] *Advertising.com – Pricing and Bidding*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/pricing-and-bidding/types-pricing.

349. On information and belief, the AOL '139 Product pays the content provider for the number of interactions of the user with the paid content. For example, AOL receives payment from an advertiser based on interactions with the content. Moreover, AOL pays the AOL content provider based on a fraction of the payment received from the AOL advertiser (as one particular example, AOL retains a fraction of the advertiser payment for itself as revenue).

350. On information and belief, AOL has directly infringed and continues to directly infringe the '139 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for internet advertising revenue sharing, including but not limited to, the AOL '139 Product, which includes internet advertising revenue sharing technologies.

351. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the AOL'139 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '139 patent, including at least claims 2 and 5-10, pursuant to 35 U.S.C. § 271(a).

352. On information and belief, AOL also indirectly infringes the '139 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

353. On information and belief, AOL has had knowledge of the '139 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '139 patent and knew of its infringement, including by way of this lawsuit.

354. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '139 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '139 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '139 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '139 Product that has the capability of operating in a manner

that infringes one or more of the claims of the '139 patent, including at least claims 2 and 5-10, and AOL further provides documentation and training materials that cause customers and end users of the AOL '139 Product to utilize the products in a manner that directly infringes one or more claims of the '139 patent. By providing instruction and training to customers and end-users on how to use the AOL '139 Product in a manner that directly infringes one or more claims of the '139 patent, including at least claims 2 and 5-10, AOL specifically intended to induce infringement of the '139 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '139 Product, *e.g.*, through advertising guides manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '139 patent.[129] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '139 patent, knowing that such use constitutes infringement of the '139 patent.

355. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '139 patent.

356. As a result of AOL's infringement of the '139 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

[129] *One by AOL for Publishers*, AOL PLATFORMS DOCUMENTATION (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers; *Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx; *Advertising.com – Campaign Setup*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/campaign-setup/how-tos; *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *Advertising.com – Campaign Improvement*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016).

357. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '139 patent, UnoWeb will be greatly and irreparably harmed.

COUNT V
INFRINGEMENT OF U.S. PATENT NO. 8,140,384

358. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

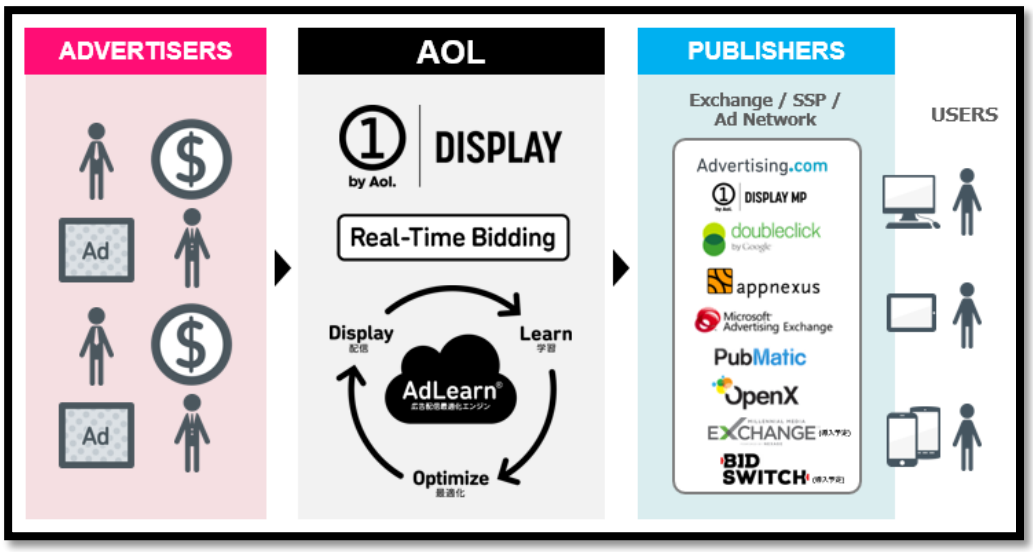
359. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for internet advertising revenue sharing.

360. AOL makes, sells, offers to sell, imports, and/or uses the One by AOL product[130] and Advertising.com (collectively, the "AOL '384 Product").

361. On information and belief, the AOL '384 Product includes internet advertising functionality.

362. On information and belief, AOL documentation of the AOL '384 Product depicts the interaction between paid content (advertisers) and non-paid content (publishers).

[130] One by AOL is AOL's integrated internet advertising product. AOL has repeatedly stated that the One by AOL product although encompassing "multiple technologies" is a "holistic," "unified programmatic platform" that will "consolidate most of its programmatic brands," and "integrates in one place all buying channels . . . and seamlessly connects data throughout the entire process." *AOL Launches One by AOL*, AOL PRESS RELEASE (April 14, 2015), available at: http://www.aolplatforms.com/aol-launches-one-by-aol. The components of AOL's "unified solution" that are particularly relevant to the AOL's infringement includes but is not limited to ONE by AOL: Display, ONE by AOL: Audience, One by AOL: Publishers, and One by AOL: Advertisers.



One by AOL – Display Demand Side Platform, AOL PLATFORM PRESENTATION at 3 (February 22, 2016).

363. On information and belief, the AOL '384 Product is available to businesses and individuals throughout the United States.

364. On information and belief, the AOL '384 Product is provided to businesses and individuals located in the Eastern District of Texas.

365. On information and belief, the AOL '384 Product receives paid content from an advertiser. For example, AOL receives paid advertising content from an AOL advertiser.

366. On information and belief, the AOL '384 Product sends the content and advertisement to a user accessing the server computer.

367. On information and belief, the AOL '384 Product receives non-paid content from a provider subject to a condition that the provider may receive no compensation for the non-paid content.

368. On information and belief, the AOL '384 Product registers a content provider to prepare non-paid content for the webpage on a computer. For example, AOL receives non-paid content (e.g., publisher content) from a provider (e.g., an AOL Advertising Partner). Moreover, a publisher is subject to a condition that the provider may receive no compensation for the non-paid content. AOL's ***mandatory*** Publisher Terms and Conditions agreement requires "THAT

THERE IS NO GUARANTEE THAT ANY MINIMUM LEVEL OF REVENUE, OR ANY REVENUE, WILL BE GENERATED AS A RESULT OF THIS AGREEMENT."[131]

369. On information and belief, the AOL '384 Product combines the paid content and the non-paid content on a content page. For example, paid content is displayed based on embedding a "code block." AOL documentation states "choose from tiered CPM or revenue share: You earn a fixed percentage of the revenue generated from the ads placed on your site. With revenue share, you can earn more money on inventory that performs well."[132]

370. On information and belief, users register with AOL through interacting and/or viewing AOL webpage and AOL advertising placements. For example, AOL users register with AOL through consenting to receive (and/or receiving) cookies, UIHD, web beacons, device fingerprinting and device graph data. AOL states that users register with AOL by consenting to receiving cookies. Cookies "are text files that are placed in your device's browser, and that can be used to help recognize your browser across different Web pages, websites, and browsing sessions."[133]

371. On information and belief, AOL users register with AOL through consenting to receive and have their activities tracked by AOL. Web beacons are described in AOL documentation as enabling AOL to track registered users across webpages. "Web beacons are small pieces of code placed on Web pages, videos, and in emails that can ***communicate information about your browser and device*** to a server."[134]

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[131] *Advertising.com Publisher Terms and Conditions and Sponsored Listings Addendum,* AOL ADVERTISING WEBSITE (last visited March 2016), available at: http://advertising.aol.com/privacy/advertisingcom-publisher-terms-and-conditions-and-sponsored-listings-addendum#sthash.ECnpAGHv.dpuf (emphasis in original).

[132] *Pubaccess User Guide - Ad Placement Setup: Payout Options,* AOL PUBACCESS DOCUMENTATION (last visited March 2016), available at: https://pubaccess.advertising.com/userguide/sect2_pg3_4.html.

[133] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/.

[134] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/ (emphasis added).

372. On information and belief, AOL's terms of service state that a user that visits its websites and websites that incorporate advertising served by AOL ad servers such as those maintained by Advertising.com enter into a contract with AOL and are bound by the AOL terms of service. "The AOL Terms of Service (TOS) is a contract between you and AOL."[135]

373. On information and belief, AOL documentation states that a user consents to the AOL terms of service by accessing AOL content and advertisements. Further, AOL users consent to having a cookie placed in their browser for tracking the user's activities.

> This is information we automatically collect and store when you use our Services or other companies' websites and apps in the AOL Advertising Network. It may include, for example: Information about your interactions with the websites, apps, and other services you use, the content you view, the search queries you submit, and information in cookies and similar technologies; Information about how you access those websites, apps, and other services, your browser or operating system, your Internet Protocol ("IP") address, and the website you visited before visiting our Services.

Fully Privacy Policy – AOL Privacy Website, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/privacy-policy/.

374. On information and belief, users register with AOL by consenting to and receiving Unique Identifier Header ("UIDH") data. The UIDH enables users to register with AOL and enables AOL to use the UIDH data to recognize AOL user devices that access AOL web pages and advertising content (paid content).

> For example, the presence of the UIDH can be used to authenticate the device as valid on the Verizon network. Moreover, instead of requiring a customer to manually fill in his or her own information on a website, the UIDH could be used as a unique identifier."

Verizon Wireless's Use Of A Unique Identifier Header (UIDH), VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/.[136]

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[135] *Frequently Asked Questions - AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/faq/.

[136] *See also Verizon Wireless's Use of a Unique Identifier Header (UIDH)*, VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/ ("Verizon Wireless includes a Unique Identifier Header (UIDH) in the address information that accompanies some of the Internet (http) requests transmitted over our wireless network. Header information is included in all web traffic and includes information such as the device type, preferred language,

375. Courts have held where a user has had adequate notice of a website's terms of service, the terms will bind a user to the terms of service – the user has entered into a contract with AOL.[137] AOL users by agreeing to AOL's terms of service and consenting to the placement of unique identifiers (e.g., cookies, web beacons, UIDH data) on their computer register with the AOL.

376. On information and belief, AOL sends the content page for display on a computer operated by the user.

377. On information and belief, AOL calculates a number equaling all interactions of the user with the paid content. For example, AOL calculates a number (e.g., impressions, clicks, and/or conversions) equaling all interactions of the user with the content. For example, AOL documentation states "CPM is short for cost per thousand impressions. The amount paid per impression is calculated by dividing CPM by 1000 – so a $10 CPM would equal $.01 per impression. There are no ties between performance of the campaign and how ads are served or how they are paid for."[138]

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and content support so that the site receiving the request knows how to best display the site on the phone or other device that sends the request.").

[137] See e.g., *Crawford v. Beachbody, LLC*, No. 14cv1583-GPC (KSC), 2014 U.S. Dist. LEXIS 156658, at *6 (S.D. Cal. Nov. 5, 2014) ("Since there is no affirmative action required by the website user to agree to the terms and conditions of a contract, 'the determination of the validity of the browsewrap contract depends on whether the user has actual or constructive knowledge of a websites' terms and conditions.'"); *Sgouros v. TransUnion Corp.*, No. 14 C 1850, 2015 U.S. Dist. LEXIS 13691, at *16 (N.D. Ill. Feb. 5, 2015) ("A 'browsewrap' agreement is an agreement where users are bound to its terms by merely navigating or using a website."); *Fagerstrom v. Amazon.com, Inc.*, No. 15-cv-96-BAS-DHB, 2015 U.S. Dist. LEXIS 143295, at *32 n.6 (S.D. Cal. Oct. 20, 2015) ("With a browsewrap agreement, a website owner seeks to bind website users to terms and conditions by posting the terms somewhere on the website.").

[138] *Advertising.com – Pricing and Bidding*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/pricing-and-bidding/types-pricing.

Mike Shields, *With "One," AOL Promises It Can Help Manage Every Dollar a Brand Spends*, WALL ST. J. (April 14, 2015), available at: http://blogs.wsj.com/cmo/2015/04/14/with-one-aol-promises-it-can-help-manage-every-dollar-a-brand-spends ("At the center of the One effort is a new software interface–or a "digital dashboard"–through which an advertiser can gauge the impact and return-on-investment of advertising.") (annotation added).

378. On information and belief, the AOL '384 Product determines if the second click is received after expiration of the time period threshold. AOL documentation states that a click occurring within an hour period of a prior click will not be compensated.

> "**Unique Click**" means an instance in which a person viewing the Publisher Website, as identified by cookie or IP address, clicks on a Creative, as measured by Advertising.com (provided however, that a click on a specific Display Creative by a particular person shall only be counted as a Unique Click once every 1-hour period).

Advertising.com Publisher Terms and Conditions and Sponsored Listings Addendum, AOL ADVERTISING WEBSITE (last visited March 2016), available at: http://advertising.aol.com/privacy/advertisingcom-publisher-terms-and-conditions-and-sponsored-listings-addendum#sthash.ECnpAGHv.dpuf.[139]

379. On information and belief, AOL receives payment from the advertiser for said number of interactions. For example, AOL receives payment from the AOL business advertiser.

380. On information and belief, the AOL '384 Product pays the provider based on a fraction of the payment. For example, on information and belief, AOL pays the AOL content

[139] *See also Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx ("Payout models include revenue-share and CPM payouts. Please note that payment options may vary by placement size. CPM payouts are available for the first 5 US or Canadian impressions, per size, per user, per day.").

provider based on a fraction of the payment received from the AOL advertiser (as one particular example, AOL retains a fraction of the advertiser payment for itself as revenue).

381. On information and belief, the AOL '384 Product charges an advertiser for each saved indication.

Mike Shields, *With "One," AOL Promises It Can Help Manage Every Dollar a Brand Spends*, WALL ST. J. (April 14, 2015), available at: http://blogs.wsj.com/cmo/2015/04/14/with-one-aol-promises-it-can-help-manage-every-dollar-a-brand-spends ("At the center of the One effort is a new software interface–or a "digital dashboard"–through which an advertiser can gauge the impact and return-on-investment of advertising.") (annotation added).

382. On information and belief, AOL has directly infringed and continues to directly infringe the '384 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for internet advertising revenue sharing, including but not limited to, the AOL '384 Product, which includes infringing internet advertising revenue sharing technologies.

383. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the AOL'384 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '384 patent, including at least claims 1, 3, 5-7, and 9-12, pursuant to 35 U.S.C. § 271(a).

384. On information and belief, AOL also indirectly infringes the '384 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of October 2014, or alternatively, as of the date of service of this Complaint.

385. On information and belief, AOL has had knowledge of the '384 patent since at least the service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '384 patent and knew of its infringement, including by way of this lawsuit.

386. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '384 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '384 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '384 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '384 Product that has the capability of operating in a manner that infringes one or more of the claims of the '384 patent, including at least claims 1, 3, 5-7, and 9-12, and AOL further provides documentation and training materials that cause customers and end users of the AOL '384 Product to utilize the products in a manner that directly infringes one or more claims of the '384 patent. By providing instruction and training to customers and end-users on how to use the AOL '384 Product in a manner that directly infringes one or more claims of the '384 patent, including at least claims 1, 3, 5-7, and 9-12, AOL specifically intended to induce infringement of the '384 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '384 Product, *e.g.*, through advertising guides manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '384 patent.[140] Accordingly, AOL has induced and

[140] *One by AOL for Publishers*, AOL PLATFORMS DOCUMENTATION (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers; *Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx; *Advertising.com – Campaign Setup*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/campaign-setup/how-tos; *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *Advertising.com – Campaign Improvement*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016).

continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '384 patent, knowing that such use constitutes infringement of the '384 patent.

387. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '384 patent.

388. As a result of AOL's infringement of the '384 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

389. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '384 patent, UnoWeb will be greatly and irreparably harmed.

COUNT VI
INFRINGEMENT OF U.S. PATENT NO. 7,580,858

390. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

391. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for internet advertising revenue sharing.

392. AOL makes, sells, offers to sell, imports, and/or uses the One by AOL product[141] and Advertising.com (collectively, the "AOL '858 Product").

[141] One by AOL is AOL's integrated internet advertising product. AOL has repeatedly stated that the One by AOL product although encompassing "multiple technologies" is a "holistic," "unified programmatic platform" that will "consolidate most of its programmatic brands," and "integrates in one place all buying channels . . . and seamlessly connects data throughout the entire process." *AOL Launches One by AOL*, AOL PRESS RELEASE (April 14, 2015), available at: http://www.aolplatforms.com/aol-launches-one-by-aol. The components of AOL's "unified solution" that are particularly relevant to the AOL's infringement includes but is not limited to ONE by AOL: Display, ONE by AOL: Audience, One by AOL: Publishers, and One by AOL: Advertisers.

393. On information and belief, the '858 Product enables logging-in a registered user wherein the registered user clicks or view the paid content (advertising) on a computer. For example, the AOL '858 Product registers users through the use of cookies, web beacons, device fingerprinting and device graph. AOL states that the cookies it uses to register users "are text files that are placed in your device's browser, and that can be used to help recognize your browser across different Web pages, websites, and browsing sessions."[142]

394. On information and belief, web beacons are used by AOL to register users and enables AOL to track users across websites. "Web beacons are small pieces of code placed on Web pages, videos, and in emails that can communicate information about your browser and device to a server."[143]

395. On information and belief, AOL's terms of service state that a user that visits its websites and internet properties that incorporate advertising served by AOL ad servers (e.g., websites providing content from Advertising.com) enter into a contract with AOL and are bound by the AOL terms of service. "The AOL Terms of Service (TOS) is a contract between you and AOL."[144]

396. On information and belief, AOL documentation states that a user consents to the AOL terms of service by accessing AOL content and advertisements and having a cookie, web beacon, unique identifier, or other tracking technology placed in their browser.

> This is information we automatically collect and store when you use our Services or other companies' websites and apps in the AOL Advertising Network. It may include, for example: Information about your interactions with the websites, apps, and other services you use, the content you view, the search queries you submit, and information in cookies and similar technologies; Information about how you access those websites, apps, and other services, your browser or operating system,

[142] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/

[143] *Cookies, Web Beacons, and Other Technologies, AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/cookies-web-beacons/

[144] *Frequently Asked Questions - AOL Privacy Website*, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/faq/

> your Internet Protocol ("IP") address, and the website you visited before visiting our Services.

Fully Privacy Policy – AOL Privacy Website, AOL WEBSITE (last visited March 2016), available at: http://privacy.aol.com/privacy-policy/.

397. On information and belief, users register with AOL through AOL's Unique Identifier Header ("UIDH") technology. Users register with AOL by consenting to receiving UIDH data from AOL (or its corporate parent Verizon). Following a user registering with AOL by consenting to and receiving UIDH data, AOL is able to the unique identifier to recognize devices that access AOL web pages and advertisements.

> For example, the presence of the UIDH can be used to authenticate the device as valid on the Verizon network. Moreover, instead of requiring a customer to manually fill in his or her own information on a website, the UIDH could be used as a unique identifier."

Verizon Wireless's Use Of A Unique Identifier Header (UIDH), VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/.[145]

398. Courts have held where a user has had adequate notice of a website's terms of service, the terms will bind a party to the terms of service.[146] Users through agreement to AOL's terms of service and consent to the placement of unique identifiers (e.g., cookies) on their computer register with the AOL website.

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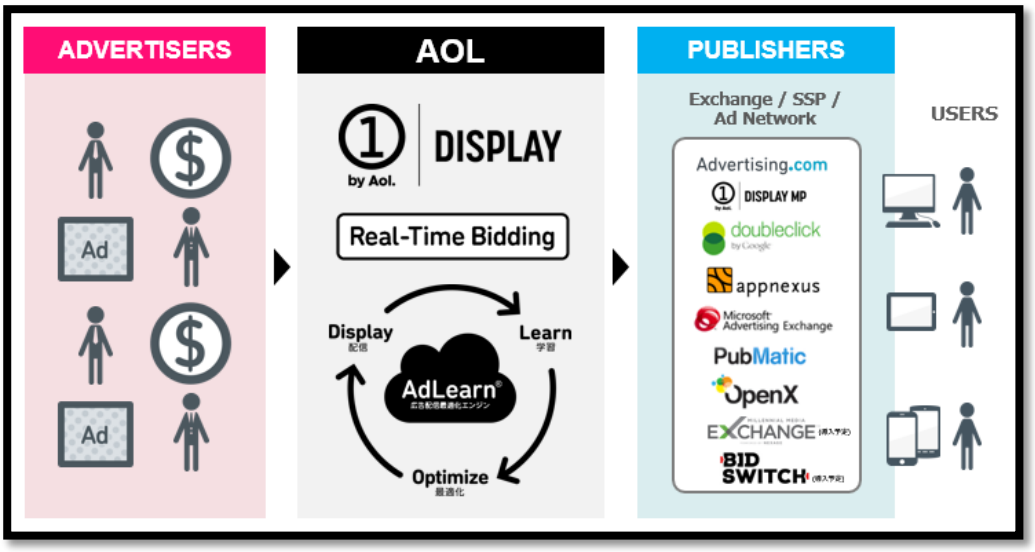
[145] *See also Verizon Wireless's Use of a Unique Identifier Header (UIDH)*, VERIZON.COM WEBSITE (last visited March 2016), available at: http://www.verizonwireless.com/support/unique-identifier-header-faqs/ ("Verizon Wireless includes a Unique Identifier Header (UIDH) in the address information that accompanies some of the Internet (http) requests transmitted over our wireless network. Header information is included in all web traffic and includes information such as the device type, preferred language, and content support so that the site receiving the request knows how to best display the site on the phone or other device that sends the request.").

[146] *See e.g.*, *Crawford v. Beachbody, LLC*, No. 14cv1583-GPC (KSC), 2014 U.S. Dist. LEXIS 156658, at *6 (S.D. Cal. Nov. 5, 2014) ("Since there is no affirmative action required by the website user to agree to the terms and conditions of a contract, 'the determination of the validity of the browsewrap contract depends on whether the user has actual or constructive knowledge of a websites' terms and conditions.'"); *Sgouros v. TransUnion Corp.*, No. 14 C 1850, 2015 U.S. Dist. LEXIS 13691, at *16 (N.D. Ill. Feb. 5, 2015) ("A 'browsewrap' agreement is an agreement where users are bound to its terms by merely navigating or using a website."); *Fagerstrom v. Amazon.com, Inc.*, No. 15-cv-96-BAS-DHB, 2015 U.S. Dist. LEXIS 143295, at *32 n.6 (S.D. Cal. Oct. 20, 2015) ("With a browsewrap agreement, a website owner seeks to bind website users to terms and conditions by posting the terms somewhere on the website.").

399. On information and belief, the AOL '858 Product includes internet advertising functionality. AOL documentation of the AOL '858 Product depicts the interaction between paid content (advertisers) and non-paid content (publishers) in the following excerpt from an AOL presentation.



One by AOL – Display Demand Side Platform, AOL PLATFORM PRESENTATION at 3 (February 22, 2016).

400. On information and belief, the AOL '858 Product is available to businesses and individuals throughout the United States.

401. On information and belief, the AOL '858 Product is provided to businesses and individuals located in the Eastern District of Texas.

402. On information and belief, the AOL '858 Product displays paid content from an advertiser through a webpage of the web site on a computer.

403. On information and belief, the AOL '858 Product registers a content provider to prepare non-paid content for the webpage on a computer.

Pubaccess User Guide, AOL PUBACCESS DOCUMENTATION (last visited March 2016), available at: https://pubaccess.advertising.com/userguide/sect1_pg3.html.

404. On information and belief, the AOL '858 Product totals the number of interactions by the user with the paid content.

405. On information and belief, the AOL '858 Product receives payment from the advertiser for the number of interactions of the user with the paid content. For example, AOL documentation states "CPM is short for cost per thousand impressions. The amount paid per impression is calculated by dividing CPM by 1000 – so a $10 CPM would equal $.01 per impression. There are no ties between performance of the campaign and how ads are served or how they are paid for."[147]

[147] *Advertising.com – Pricing and Bidding*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/pricing-and-bidding/types-pricing.

Mike Shields, *With "One," AOL Promises It Can Help Manage Every Dollar a Brand Spends*, WALL ST. J. (April 14, 2015), available at: http://blogs.wsj.com/cmo/2015/04/14/with-one-aol-promises-it-can-help-manage-every-dollar-a-brand-spends ("At the center of the One effort is a new software interface–or a "digital dashboard"–through which an advertiser can gauge the impact and return-on-investment of advertising.") (annotation added).

406. On information and belief, the AOL '858 Product pays the content provider for the number of interactions of the user with the paid content.

407. On information and belief, the AOL '858 Product enables the interaction of a registered user clicking on a link to a new link destination within the paid content, provided that a second and subsequent clicking on the link by the same registered user is not an interaction to be counted in the step of totaling a number of interactions unless it exceeds a waiting-time threshold. For example, in determining "Unique Clicks," AOL excludes repetitive and accidental clicks. "Frequency caps on networks allow you to limit the number of times a user sees your ad. When determining a frequency cap at the start of a campaign, keep in mind your budget as well as your marketing objectives. A frequency cap of 1 ad served per user every 24 hours is a good place to start; network experts can help you adjust this as needed."[148]

[148] *Advertising.com – Campaign Setup*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/campaign-setup/how-tos; S*ee also Advertising.com – Campaign Improvement*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016); available at: https://www.advertising.com/displayuniversity/campaign-improvement/adjusting-post-launch ("Frequency is your main lever if you are measuring success in terms of the number of people who see your ads, and the number of times they see them. The lower your frequency, the fewer times a user will be able to see your ad each day.").

408. On information and belief, AOL documentation states that a click occurring within an hour period of a prior click will not be compensated.

> "**Unique Click**" means an instance in which a person viewing the Publisher Website, as identified by cookie or IP address, clicks on a Creative, as measured by Advertising.com (provided however, that a click on a specific Display Creative by a particular person shall only be counted as a Unique Click once every 1-hour period).

Advertising.com Publisher Terms and Conditions and Sponsored Listings Addendum, AOL ADVERTISING WEBSITE (last visited March 2016), available at: http://advertising.aol.com/privacy/advertisingcom-publisher-terms-and-conditions-and-sponsored-listings-addendum#sthash.ECnpAGHv.dpuf.[149]

409. The inventions disclosed in the '858 patent address "click fraud." On information and belief, AOL has identified click fraud as a major threat to internet advertising that is "one of the biggest and most widespread issues that digital marketers and publishers face."[150]

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[149] *See also Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx ("Payout models include revenue-share and CPM payouts. Please note that payment options may vary by placement size. CPM payouts are available for the first 5 US or Canadian impressions, per size, per user, per day.").

[150] *AOL's Jim Norton & IAB Spotlight TAG Initiatives at IAB Marketplace Programmatic*, AOL ADVERTISING BLOG (May 11, 2015), available at: http://advertising.aol.com/blog/aols-jim-norton-iab-spotlight-tag-initiatives-iab-marketplace-programmatic#sthash.oQkYB0iI.dpuf; *see also* Olivia Oshry, *A Seller's Perspective: Solving Inventory Quality and Ad Fraud*, AOL ADVERTISING BLOG (March 13, 2015), *available at*: http://advertising.aol.com/blog/seller%E2%80%99s-perspective-solving-inventory-quality-and-ad-fraud (emphasis added) ("We need to make sure that users are actually seeing impressions and we have measurements around those safe impressions."); Vacha Dave, Saikat Guha, Yin Zhang, *ViceROI: Catching Click-Spam in Search Ad Networks*, in 23RD USENIX SECURITY SYMPOSIUM at 3 (August 2014) ("Ad networks focused on their long-term reputation (if they are caught being complicit in syndicate generated clickspam) are driven to filter click-spam and offer discounts to advertisers to reduce the impact of click-spam."); Ben Elgin, Michael Riley, David Kocieniewski, and Joshua Brustein, *How Much of Your Audience is Fake,* BLOOMBERG WEBSITE (September 28, 2015), available at: http://www.bloomberg.com/features/2015-click-fraud/ ("Fake traffic has become a commodity. There's malware for generating it and brokers who sell it. Some companies pay for it intentionally, some accidentally, and some prefer not to ask where their traffic comes from. It's given rise to an industry of countermeasures, which inspire counter-countermeasures."); Ted Dhanik, *We're All Responsible for Click-Fraud and Here's How To Stop It*, ADAGE WEBSITE (June 17, 2014), available at: http://adage.com/article/digitalnext/responsible-click-fraud/293646/ ("For example, we could define click fraud as more than five clicks from a unique user within a single 24-hour window. This could encourage publishers to offer a "unique user click model" that negates the incentives for committing click fraud."); Jennifer Saba and Jim Finkle, *Online Ad Revenue at Risk in War*

410. On information and belief, AOL has directly infringed and continues to directly infringe the '858 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for internet advertising revenue sharing, including but not limited to, the AOL '858 Product, which includes infringing internet advertising revenue sharing technologies.

411. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the AOL '858 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '858 patent, including at least claims 1, 3, and 4, pursuant to 35 U.S.C. § 271(a).

412. On information and belief, AOL also indirectly infringes the '858 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

413. On information and belief, AOL has had knowledge of the '858 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '858 patent and knew of its infringement, including by way of this lawsuit.

414. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '858 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '858 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '858 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '858 Product that has the capability of operating in a manner that infringes one or more of the claims of the '858 patent, including at least claims 1, 3, and 4,

on 'Click Fraud,' REUTERS NEW SERVICE (March 23, 2016), available at: http://www.reuters.com/article/us-advertising-cyberfraud-idUSKBN0MJ0Z820150323 ("A growing number of U.S. companies, including MillerCoors and AIG, are stepping up the battle against online ad fraud by demanding proof that their ads have been seen by real people instead of computers hijacked by cybercriminals.").

and AOL further provides documentation and training materials that cause customers and end users of the AOL '858 Product to utilize the products in a manner that directly infringes one or more claims of the '858 patent. By providing instruction and training to customers and end-users on how to use the AOL '858 Product in a manner that directly infringes one or more claims of the '858 patent, including at least claims 1, 3, and 4, AOL specifically intended to induce infringement of the '858 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '858 Product, *e.g.*, through advertising guides manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '858 patent.[151] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '858 patent, knowing that such use constitutes infringement of the '858 patent.

415. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '858 patent.

416. As a result of AOL's infringement of the '858 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

417. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '858 patent, UnoWeb will be greatly and irreparably harmed.

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[151] *One by AOL for Publishers*, AOL PLATFORMS DOCUMENTATION (last visited March 2016), available at: http://www.aolplatforms.com/onebyaol-publishers; *Advertising.com Pubaccess Learn More*, ADVERTISING.COM WEBSITE (last visited March 2016), available at: https://pubaccess.advertising.com/LearnMore.aspx; *Advertising.com – Campaign Setup*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016), available at: https://www.advertising.com/displayuniversity/campaign-setup/how-tos; *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *One by AOL – Display Inventory Quality*, ONE BY AOL DOCUMENTATION (2015); *Advertising.com – Campaign Improvement*, ADVERTISING.COM DISPLAY UNIVERSITY (last visited March 2016).

COUNT VII
INFRINGEMENT OF U.S. PATENT NO. 8,402,163

418. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

419. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for targeting advertising and internet content.

420. AOL makes, sells, offers to sell, imports, and/or uses the websites built on the AOL Platform (http://www.aol.com, http://m.aol.com, http://www.huffingtonpost.com; http://m.huffingtonpost.com; http://www.techcrunch.com; http://m.techcrunch.com; http://www.engadget.com; http://m.engadget.com). These AOL websites include functionality from One by AOL and Advertising.com (collectively, the "AOL '163 Product").

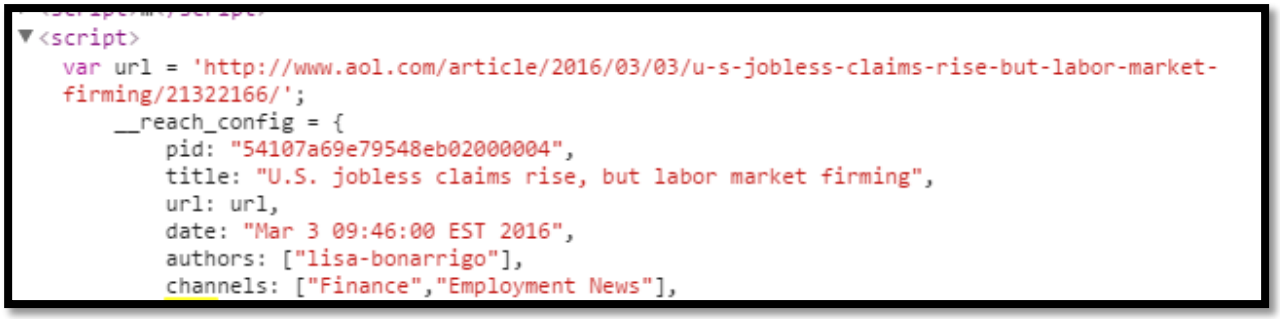
421. On information and belief, the AOL '163 Product enables the hosting of a first content on the server computer, the first content comprising material that can be parsed into a plurality of objects. For example, the AOL website hosts content including articles, products, comments, blog entries, etc.

422. On information and belief, the AOL '163 Product uses technology that includes AOL Relegence. AOL documentation states that AOL Relegence enables automated tagging of external content. "Relegence Tagger provides publishers, and content providers the ability to turn unstructured text into meaningful data. The tagger can be used for such features as automated tagging (for navigation or SEO purposes), contextual targeting, microformats addition & more. In combination with other services it can be used to enrich articles with data, provide related content, recirculation (such as interlinking) & more."[152]

423. On information and belief, the AOL '163 Product hosts on AOL servers content that includes content that can be parsed into a plurality of objects (e.g., text content, image names, tracking data, metadata, and embedded code).

[152] *Relegence Tagger API,* AOL RELEGENCE DOCUMENTATION (last visited March 2016), available at: http://www.relegence.com/docs#api.

424. On information and belief, AOL ingests content and indexes the content before making the content available to users. The below image shows metadata generated by the AOL '163 Product parsing a news article. The AOL '163 Product generates objects based on parsing the content. Objects generated by the AOL '163 Product include: "pid," "authors," "channels," and "url."



Source Inspection of an Article Posted on AOL.com, AOL WEBSITE (last visited March 2016), available at: http://www.aol.com/article/2016/03/03/u-s-jobless-claims-rise-but-labor-market-firming/21322166/

425. On information and belief, documentation from AOL states that AOL Relegence generates tagging data based on the ingestion of content. The tags generated by the AOL Relegence system "can be used to enrich articles with data, ***provide related content,*** recirculation (such as interlinking) & more."[153] The following screenshot from a 2015 presentation by Mattan Tenne (Algorithms and Software Lead at AOL Relegence) illustrates the data ingestion process wherein an article is ingested and parsed by AOL Relegence.

[153] *Id*. (emphasis added).

Mattan Tenne, *Realtime Clustering – More than Words*, AOL RELEGENCE PRESENTATION at 16 (2015).

426. On information and belief, the AOL '163 Product is available to businesses and individuals throughout the United States.

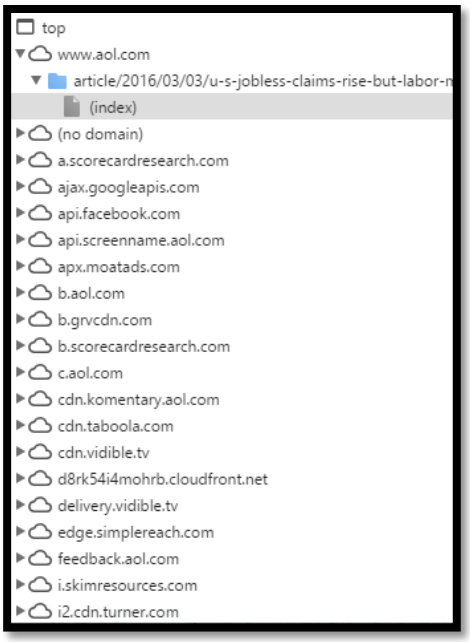
427. On information and belief, the AOL '163 Product is provided to businesses and individuals located in the Eastern District of Texas.

428. On information and belief, the AOL '163 Product enables the display of information on a client computer operated by a user, the method implemented by a server computer. The following image shows the source code for an article hosted by AOL where the article comprises data parsed into a plurality of objects.

```
▼<div class="l-main l-main--rightrail" role="main">
  ▼<div class="p-article">
    ▼<div class="article clearfix mnid-article inlineSS article-finance article-careers" id=
    "article-wrapper" data-readmoretext="READ MORE" data-gallerylabel="SEE PHOTOS" data-countunit=
    "PHOTOS" data-nextslideshowapi="http://aolblog.aol.com/next-slideshow-post/">
        <h1 class="p-article__title">U.S. jobless claims rise, but labor market firming</h1>
      ▶<div id="before-you-go-container" data-max-activation="1" data-side-doors="http://
      mail.google.com;https://www.facebook.com;https://www.twitter.com" data-module-enabled="true"
      data-side-door-detection="true" data-cookie-reset-threshold="1800" class="plid-21181238 mnid-
      before-you-go">…</div>
      ▼<div class="p-article__meta">
        ▼<div class="article-share-top">
          ▶<div data-floatpos="centredown" class="clearfix" id="article-share">…</div>
          </div>
        ▼<div class="p-article__byline">
          ▼<a class="p-article__byline__author__title" href="http://thomsonreuters.com/">
              <img src="http://o.aolcdn.com/hss/storage/midas/3962f27bf8284d0c1be7a1e79d3f4c5f/
              201074189/ThomsonReuters.jpg" alt="Thomson Reuters" title style="padding: 0px 0px
              10px;">
            </a>
          ▶<div class="p-article__byline__author__wrap">…</div>
```

Source Inspection of an Article Posted on AOL.com, AOL WEBSITE (last visited March 2016).

429. On information and belief, the first content although originally hosted on a server outside of AOL is hosted on an AOL server such as an AOL Content Delivery Network ("CDN") server. The below screenshot shows the hosts that transfer content to the user.



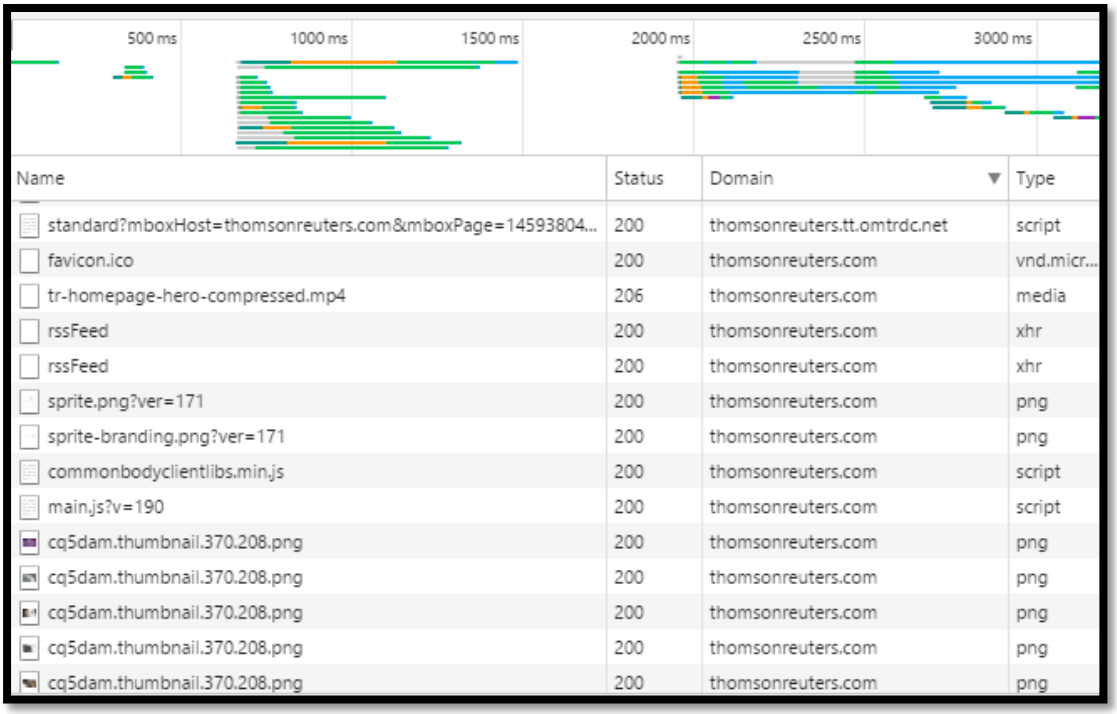
Network Inspection of AOL News Article Page, AOL.COM WEBSITE (last visited March 2016), underlying webpage available at: http://www.aol.com/article/2016/03/03/u-s-jobless-claims-rise-but-labor-market-firming/21322166/ (showing that a various hosts transfer data to the client device on the loadin go fthe initial webpage).

430. On information and belief, the AOL '163 Product indexes third-party-supplied content. For example, AOL indexes a plurality of objects using AOL compatible metadata (e.g., key words, API data, etc.). The below screen captures illustrate AOL Relegence receives content from a host (e.g., shop.nordstrom.com) and generates data associated with fields such as "freebaseMID," "inferredData, "extractedData," "entities," "mostGranular."

AOL RELEGENCE TAGGER TESTING RESULTS (results from March 2016), *available at:* http://relegence.aol.com/demos/tagger/ (The above screen capture shows the results of the AOL Relegence system indexing a webpage located at http://shop.nordstrom.com/s/boss-trim-fit-plaid-wool-suit/4249911. The screen capture on the right shows the extracted data that is generated from the indexing system.).

431. On information and belief, the AOL '163 Product indexes content using keywords.

432. On information and belief, on clicking the second link reference that is displayed on a user's computer the user's computer opens a connection to the content host associated with the link and loads the content as shown in the below image that shows the network traffic logged by a browser after a user selects the second link reference.



Network Inspection Report for AOL.com News Article, AOL WEBSITE (last visited March 2016), available at: http://video.foxnews.com/v/ (Showing that on clicking the second link reference which is displayed with the second content the client is taken to the creator of the second content. In the below network report this is shown as located at thomsonreuters.com.).

433. On information and belief, when sponsored stories are parsed by the AOL '163 Product a plurality of objects are created and indexed. For example, AOL first creates associated metadata associated with an object.

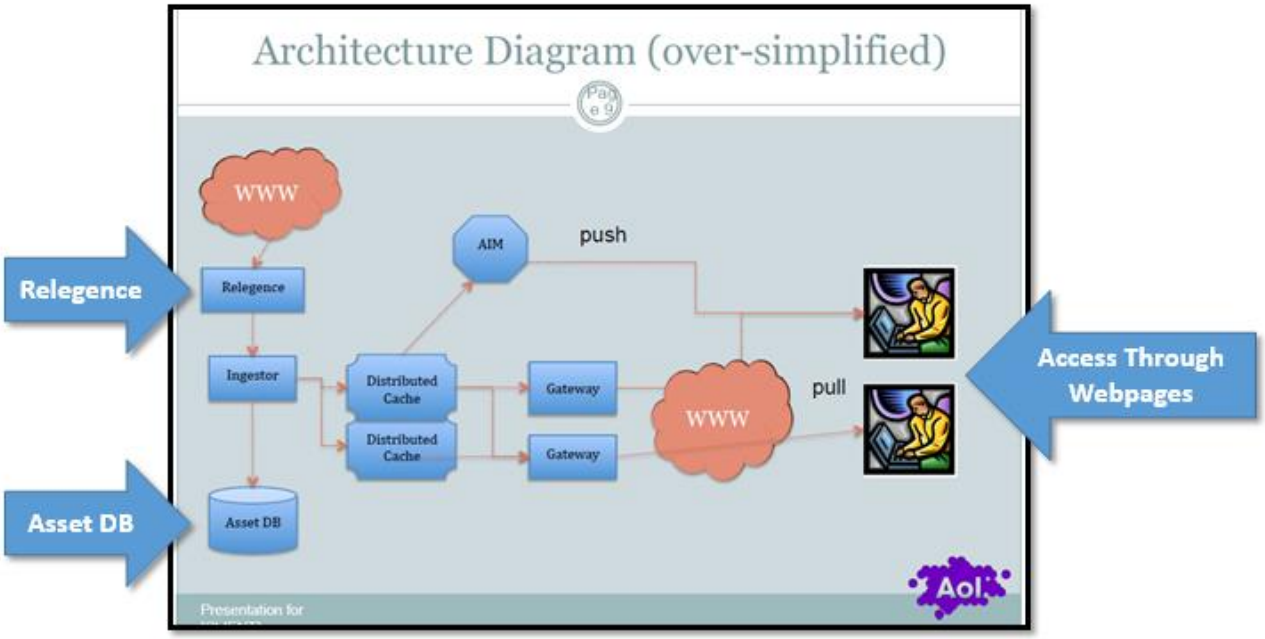
434. On information and belief, the AOL '163 Product enables the server computer to render the first link reference on the client computer using programming code language selected from the group consisting of: JAVASCRIPT, JAVA APPLET, and ACTIVEX.

435. On information and belief, the AOL '163 Product enables a first content on the server computer, the first content comprising material that can be parsed into a plurality of objects.

436. On information and belief, the AOL '163 Product enables parsing of objects including: (1) a word, the word comprising: a word within a link, a word within a title, a bolded word, an underlined word, and an italicized word; (2) the name of an image; (3) invisible objects

used by a web browser (but not displayable to a user of the web browser); (4) code embedded in a web page; and (5) an audio/video player embedded in a web page.

437. On information and belief, the AOL '163 Product enables indexing the plurality of objects, said indexing performed by the server computer. Documentation from AOL shows the architecture of the data ingestion system wherein content is ingested from hosts and processed by "Relegence." The indexed content is then stored in a database "Asset DB" that is accessible to users through AOL webpages.



Tao Cheng, *Building and Deploying Large Scale Real Time News System with MySQL and Distributed Cache*, MYSQL CONFERENCE at 9 (April 2011) (annotations added to show the use of Relegence and storage of assets in the Asset DB).

438. On information and belief, the AOL '163 Product enables identification of a second content related to the first content, said identifying performed by the server computer using an object in the plurality of objects. AOL uses indexing technology including AOL Relegence. AOL documentation states that data objects can be related to each other using vector score values. For example, finding a second related document could be identified through the command "similarCluster = findMostSimilar (vec)." The below slide from an AOL presentation shows the use of semantic similarity to identify related content. For example, Latent Semantic Indexing (LSI) is used to identify from the indexed parsed values related content.

Mattan Tenne, *Real-time Clustering – More than Words*, AOL RELEGENCE PRESENTATION at 24 (2015).

439. On information and belief, the AOL '163 Product enables functionality including allowing a client computer to access the server computer.

440. On information and belief, the AOL '163 Product creates a first link reference to the second content where the first content and the first link reference for display on the client computer wherein said formatting displays the first link reference in a link display area that is separated from the first content that will display in a content display area; style that is indicative that other additional related content is available to the user; and configuration selected from the group consisting of a tab; a link; a bar; a floating bar; a browser bar; a user downloaded bar; and a menu.

Inspection Of The First Link Reference Provided For An Article Featured On AOL.com, AOL WEBSITE (last visited March 2016).

441. On information and belief, the AOL '163 Product enables transmitting formatted and a first link reference to the client computer in response to user interaction with the first link reference. In addition, the AOL '163 Product sends the second content to replace the first content on the client computer wherein the second content comprising a second link reference.

442. On information and belief, the AOL '163 Product enables responding to user interaction with a first reference by redirecting a user to hosting location of the second content when the user clicks on the second link reference.

443. On information and belief, AOL has directly infringed and continues to directly infringe the '163 patent by, among other things, making, using, offering for sale, and/or selling products and/or services for targeting advertising and internet content, including but not limited to, the AOL '163 Product.

444. By making, using, testing, offering for sale, and/or selling products and services for targeting advertising and internet content, including but not limited to the AOL'163 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '163 patent, including at least claims 1, 2, 4, and 5, pursuant to 35 U.S.C. § 271(a).

445. On information and belief, AOL also indirectly infringes the '163 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

446. On information and belief, AOL has had knowledge of the '163 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '163 patent and knew of its infringement, including by way of this lawsuit.

447. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '163 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '163 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '163 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '163 Product that has the capability of operating in a manner that infringes one or more of the claims of the '163 patent, including at least claims 1, 2, 4, and 5, and AOL further provides documentation and training materials that cause customers and end users of the AOL '163 Product to utilize the products in a manner that directly infringes one or more claims of the '163 patent. By providing instruction and training to customers and end-users on how to use the AOL '163 Product in a manner that directly infringes one or more claims of the '163 patent, including at least claims 1, 2, 4, and 5, AOL specifically intended to induce infringement of the '163 patent. On information and belief, AOL engaged in such inducement to promote the sales of the AOL '163 Product, *e.g.*, through advertising guides manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '163 patent.[154] Accordingly, AOL has induced and continues to induce

[154] *AOL Engineering Blog*, AOL.COM *WEBSITE* (last visited March 2016), available at: http://engineering.aol.com/; *AOL Help Website*, AOL.COM WEBSITE (last visited March 2016), available at: https://help.aol.com/; Dennis Meyer and Zubair Sheikh, *RTB and Big Data - Where Erlang and Hadoop Meet*, ERLANG FACTORY LITE CONFERENCE PRESENTATION (December

users of the accused product to use the accused product in its ordinary and customary way to infringe the '163 patent, knowing that such use constitutes infringement of the '163 patent.

448. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '163 patent.

449. As a result of AOL's infringement of the '163 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

450. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '163 patent, UnoWeb will be greatly and irreparably harmed.

COUNT VIII
INFRINGEMENT OF U.S. PATENT NO. 7,971,198

451. UnoWeb references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

452. AOL makes, uses, sells, and/or offers for sale in the United States products and/or services for global resource sharing.

453. AOL makes, sells, offers to sell, imports, and/or uses AOL Identity (the "AOL '198 Product.")

2015), available at: https://www.youtube.com/watch?v=T9gaA9z2J3A; Suren Hiraman, *Scaling ML in Ad Tech*, OPEN SOURCE ANALYTICS MEETUP AT LIGHTBOX (November 2015), available at: https://courses.cit.cornell.edu/cs5304/Lectures/lec2_Scaling_Machine_Learning_in_Ad%20Tech.pdf; George Fletcher and Faday Seeman, *Multi-Tenancy in the Enterprise – An AOL Case Study*, 2015 IDENTITY SUMMIT (May 2015), available at: http://www.slideshare.net/ForgeRock/430thurspmsecond-received-fady-and-george-multi-tenancy-in-the-enterprise-aol-case-study; Durga Nemani, *Building Scalable Big Data Solutions*, AWS RE:INVENT PRESENTATION (October 2015), available at: http://www.slideshare.net/AmazonWebServices/bdt210-building-scalable-big-data-solutions-intel-aol; Durga Nemani and Gaurav Agarwal, *Data Warehouse in Cloud*, GOOGLE DEVELOPER GROUP PRESENTATION (September 2015), available at: https://www.youtube.com/watch?v=bwUfKtoLLPk.

454. On information and belief, the AOL Identity product enables retrieval of settings and user identification information from a global store kept by AOL. Stored values include "language," "loginid," "displayName," "reqRights," "family_name," "gender," and "providerDisplayName."

455. On information and belief, the AOL '198 Product provides ability to authenticate and authorize a mobile app to access user data and invoke additional requests on the users request.

456. On information and belief, AOL documentation states that the AOL '198 Product "leverages [an] identity data store external to [the] identity system."

George Fletcher and Faday Semaan, *Multitenancy in the Enterprise*, IDENTITY SUMMIT 2015 at 6 (September 2015).

457. On information and belief, the AOL '198 Product is available to businesses and individuals throughout the United States.

458. On information and belief, the AOL '198 Product is provided to businesses and individuals located in the Eastern District of Texas.

459. On information and belief, the AOL '198 Product enables sharing of software logic code blocks with an application that may be incorporated into a solution, the method performing, at a server, the steps of: registering a plurality of users with the server.

460. On information and belief, the AOL '198 Product provides each registered user with a loginID stored on a computer readable medium.

Get User Data Request

URL http(s)://api.screenname.aol.com/auth/getUserData **HTTP Method** GET or POST **Arguments**

Field Name	Required/Optional	Description
f	optional	the required format of the response (json or xml or qs)
Authorization: Bearer	required, if bearer_token request parameter is not used	the OAuth2 access token
access_token	required, if Authorization header is not used	the OAuth2 access token
attribute	optional	a comma separated list of names of user attributes
language	optional	the required language and locale of the error/status messages. This is always in "-" format. The lang is the 2 letter language code for I18N (default: en) and the locale is the 2 letter Locale code for I18N (default: us). If not passed in, the language will be extracted from HTTP header (Accept-Language) and if that is not available will default to "en-us". Check below for our current supported language list.

AOL OAuth2 Details, AOL IDENTITY WEBSITE (last visited March 2016), available at: http://identity.aol.com/documentation/start/oauth2/api-details/.

461. On information and belief, the AOL '198 Product enables a resource sharing container comprising a plurality of relational database tables including a user resources table, an application resources table, and a solution resources table.

462. On information and belief, the user resources table incorporated in the AOL '198 Product associates each of the user IDs with at least one of a plurality of solution IDs and associates each of the solution IDs with one or more of a plurality of application IDs.

463. On information and belief, the AOL '198 Product enable "node.js" which contains "applications with AOL or any other social or enterprise credential store."[155]

464. On information and belief, the AOL '198 Product associates each of the application IDs and the solution IDs with a plurality of logic links and logic nodes, wherein each

155

of the logic links identifies a page resource stored in the solution resource table and each of the logic nodes identifies a code block.

465. On information and belief, the AOL '198 Product enables accessing a node.js associated with a user using the following code.

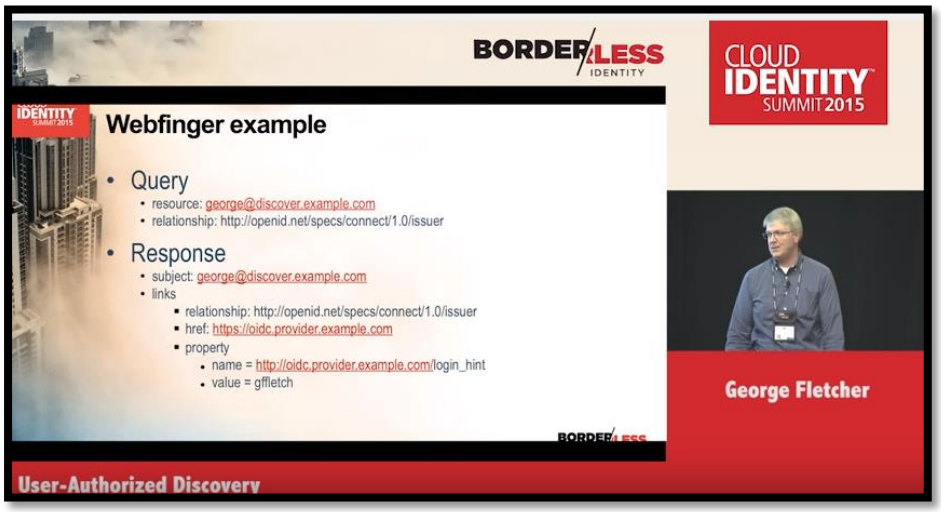
```
<script src="https://cdn.auth0.com/js/lock-9.0.min.js"></script>
<script>
var lock = new Auth0Lock('YOUR_CLIENT_ID', 'YOUR_NAMESPACE');


function signin() {
  lock.show({
      callbackURL: 'http://localhost:CHANGE-TO-YOUR-PORT/callback'
    , responseType: 'code'
    , authParams: {
      scope: 'openid name email' //Details: https://auth0.com/docs/sco
pes
    }
  });
}
</script>

<button onclick="signin()">Login</button>
```

Authenticate Node.js With AOL, AUTHO WEBSITE (last visited March 2016), available at: https://auth0.com/authenticate/nodejs/aol.

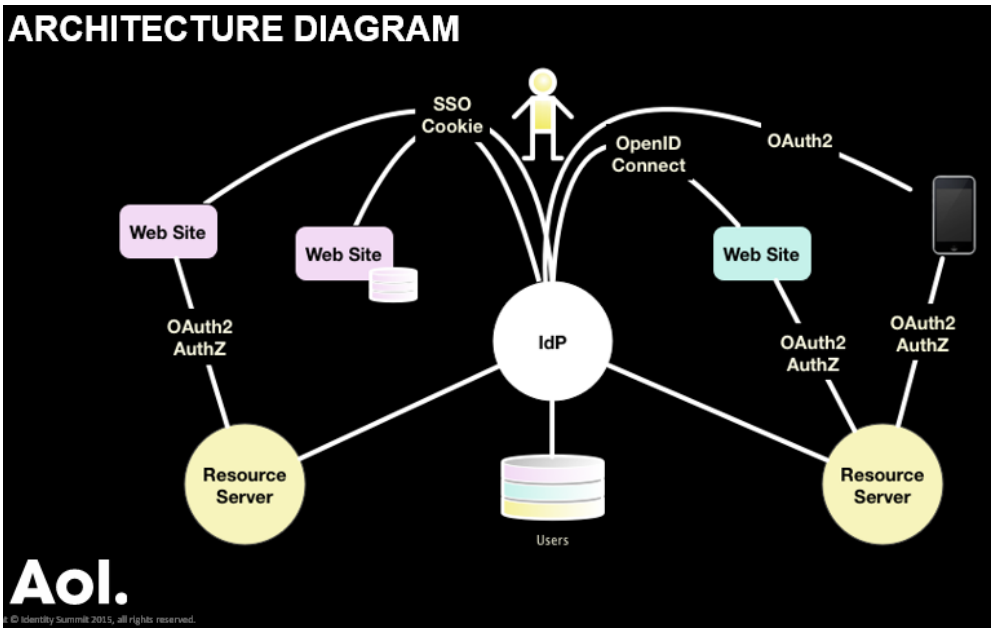
466. On information and belief, the AOL '198 Product enables "webfinger" which enables a resource identifier and a relationship. Wherein a query will find resource identifiers associated with the relationship.



George Fletcher, *User-Authorized Discovery*, CLOUD IDENTITY SUMMIT 2015 (June 9, 2015), available at: https://www.youtube.com/watch?v=WL0YNr4FEi4.

467. On information and belief, the AOL '198 Product receives a login request from a first user of the plurality of registered users over a network.

468. On information and belief, the AOL '198 Product locates a first userID of the first user in the user resources table and retrieving the one or more solution IDs corresponding to the first user ID.



George Fletcher, *Multi-Tenancy in the Enterprise*, 2015 IDENTITY SUMMIT at 15, available at: https://www.youtube.com/watch?v=ZK9D9_oDbSE (presentation from AOL's Chief Architect of Identity Services at AOL).

469. On information and belief, the AOL '198 Product retrieves the one or more application IDs associated with the one or more retrieved solution IDs and virtually replicates an application resource for each of the one or more retrieved application IDs.

470. On information and belief, the AOL '198 Product executes the integrated page resources and code blocks of the virtually replicated application resource at the server according to input received from the first user to render one or more web pages at the computer operated by the first user.

471. On information and belief, AOL has directly infringed and continues to directly infringe the '198 patent by, among other things, making, using, offering for sale, and/or selling

products and/or services for web content management, including but not limited to, the AOL '198 Product, which includes infringing web content management technologies.

472. By making, using, testing, offering for sale, and/or selling products and services for global resource sharing, including but not limited to the AOL '198 Product, AOL has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '198 patent, including at least claims 1-4, pursuant to 35 U.S.C. § 271(a).

473. On information and belief, AOL also indirectly infringes the '198 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

474. On information and belief, AOL has had knowledge of the '198 patent since at least service of this Complaint or shortly thereafter, and on information and belief, AOL knew of the '198 patent and knew of its infringement, including by way of this lawsuit.

475. On information and belief, AOL intended to induce patent infringement by third-party customers and users of the AOL '198 Product and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. AOL specifically intended and was aware that the normal and customary use of the accused products would infringe the '198 patent. AOL performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '198 patent and with the knowledge, that the induced acts would constitute infringement. For example, AOL provides the AOL '198 Product that has the capability of operating in a manner that infringes one or more of the claims of the '198 patent, including at least claims 1-4, and AOL further provides documentation and training materials that cause customers and end users of the AOL '198 Product to utilize the products in a manner that directly infringes one or more claims of the '198 patent. By providing instruction and training to customers and end-users on how to use the AOL '198 Product in a manner that directly infringes one or more claims of the '198 patent, including at least claims 1-4, AOL specifically intended to induce infringement of the '198 patent. On information and belief, AOL engaged in such inducement to promote the

sales of the AOL '198 Product, *e.g.*, through advertising guides manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '198 patent.[156] Accordingly, AOL has induced and continues to induce users of the accused product to use the accused product in its ordinary and customary way to infringe the '198 patent, knowing that such use constitutes infringement of the '198 patent.

476. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '198 patent.

477. As a result of AOL's infringement of the '198 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for AOL's infringement, but in no event less than a reasonable royalty for the use made of the invention by AOL together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless AOL's infringing activities are enjoined by this Court.

478. Unless a permanent injunction is issued enjoining AOL and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '198 patent, UnoWeb will be greatly and irreparably harmed.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff UnoWeb respectfully requests that this Court enter the following prayer for relief:

A. A judgment in favor of Plaintiff UnoWeb that AOL has infringed, either literally and/or under the doctrine of equivalents, the '047, '345, '386, '858, '139, '384, '163, and the '198 patent;

[156] *AOL Mobile Identity Authentication*, AOL IDENTITY WEBSITE (last visited March 2016), available at: http://identity.aol.com/documentation/start/oauth2/mobile-integration/; George Fletcher, *Multi-Tenancy in the Enterprise*, 2015 IDENTITY SUMMIT at 15, available at: https://www.youtube.com/watch?v=ZK9D9_oDbSE (presentation from AOL's Chief Architect of Identity Services at AOL); *AOL OAuth2 Details*, AOL IDENTITY WEBSITE (last visited March 2016), available at: http://identity.aol.com/documentation/start/oauth2/api-details/; *OAuth2 API End Points Implemented By AOL*, AOL IDENTITY WEBSITE (last visited March 2016), available at: http://identity.aol.com/documentation/start/oauth2/.

B. An award of damages resulting from AOL's acts of infringement in accordance with 35 U.S.C. § 284;

C. A permanent injunction enjoining AOL and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation with AOL, from infringing the '047, '345,'386, '858, '139, '384, '163, and the '198 patent;

D. A judgment and order requiring AOL to provide accountings and to pay supplemental damages to UnoWeb including, without limitation, prejudgment and post-judgment interest; and

E. Any and all other relief to which UnoWeb may show itself to be entitled.

JURY TRIAL DEMANDED

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, UnoWeb requests a trial by jury of any issues so triable by right.

Dated: April 8, 2016

Respectfully submitted,

/s/ Elizabeth L. DeRieux

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