

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

**UNOWEB VIRTUAL, LLC,**

*Plaintiff,*

v.

**MICROSOFT CORPORATION,**

*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. 7,730,083 (“the ‘083 patent”); 7,941,345 (“the ‘345 patent”); 8,037,091 (“the ‘091 patent”); 8,065,386 (“the ‘386 patent”); 7,580,858 (“the ‘858 patent”); 7,987,139 (“the ‘139 patent”); and 8,140,384 (“the ‘384 patent”) (collectively, the “patents-in-suit” or the “UnoWeb Patents”). Defendant Microsoft Corporation (“Microsoft” or “Defendant”) infringes 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. Microsoft in an effort to expand its product base and profit from the sale of specific e-commerce systems, including methods of advertising and content distribution that, prior to the development of the UnoWeb Patents, were unknown, has undertaken to copy the technologies disclosed in the UnoWeb Patents.

2. John Almeida is the inventor of the ‘083, ‘345, ‘091, ‘386, ‘858, ‘139, and ‘384 patents.<sup>1</sup> Mr. Almeida developed the technologies at issue in this case in response to his

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<sup>1</sup> 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is the inventor and owner of 14 issued U.S. patents, 38 published U.S. patent applications, and numerous pending unpublished patent applications before the United States Patent and Trademark Office (“USPTO”).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](http://www.unoweb.com) and [www.unowebdemo.com](http://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<sup>2</sup> and Roidirect.com.<sup>3</sup> These early internet companies exposed Mr. Almeida to problems that were unique to content distribution and advertising on the internet.<sup>4</sup> Problems such as internet server resource allocation, third-party content integration on the World Wide Web, and internet advertising click-fraud 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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<sup>2</sup> 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).

<sup>3</sup> 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.").

<sup>4</sup> 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.”<sup>5</sup>

6. Companies such as Defendant Microsoft have identified the internet as creating “disruptive technologies” that present unique problems related e-commerce. “The Internet has introduced *disruptive technologies* to the retail shopping domain . . . For instance, in an online shopping experience a consumer can browse items, perform text searches at home, office, etc., rather than having to expend valuable time and resources commuting to a store. Additionally, online stores are open continuously allowing consumers to shop at times convenient for them.”<sup>6</sup>

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<sup>5</sup> U.S. Patent App. No. 10/029,073 (filed December 20, 2001).

<sup>6</sup> U.S. Patent App. No. 12/406,903 ¶¶ 2-3 (this patent application is assigned to Microsoft and cites the UnoWeb ‘345 patent as relevant prior art) (emphasis added).

7. 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.<sup>7</sup> Microsoft has cited the UnoWeb patents and patent applications as relevant prior art in 17 issued patents and published patent applications, including:

- U.S. Patent No. 8,380,576 (citing U.S. Patent No. 7,580,858)
- U.S. Patent App. No. 12/816,868 (citing U.S. Patent No. 7,580,858)
- U.S. Patent App. No. 12/701,192 (citing U.S. Patent No. 7,580,858)
- U.S. Patent No. 9,047,103 (citing U.S. Patent No. 7,971,198)
- U.S. Patent No. 8,495,570 (citing U.S. Patent No. 7,971,198)
- U.S. Patent No. 9,021,434 (citing U.S. Patent No. 7,971,198)
- U.S. Patent App. No. 12/406,903 (citing U.S. Patent No. 7,941,345)
- U.S. Patent App. No. 13/527,645 (citing U.S. Patent App. No. 13/157,291)
- U.S. Patent No. 8,806,590 (citing U.S. Patent App. No. 11/623,300)
- U.S. Patent App. No. 12/143,819 (citing U.S. Patent App. No. 11/623,300)
- U.S. Patent App. No. 12/977,113 (citing U.S. Patent No. 7,971,198)
- U.S. Patent App. No. 13/926,861 (citing U.S. Patent No. 7,971,198)
- U.S. Patent App. No. 12/163,566 (citing U.S. Patent App. No. 11/160,099)
- U.S. Patent App. No. 13/440,012 (citing U.S. Patent App. No. 11/160,099)
- U.S. Patent No. 9,176,937 (citing U.S. Patent App. No. 11/160,099)
- U.S. Patent App. No. 13/290,911 (citing U.S. Patent App. No. 13/372,267)
- U.S. Patent App. No. 12/107,771 (citing U.S. Patent App. No. 11/932,774)

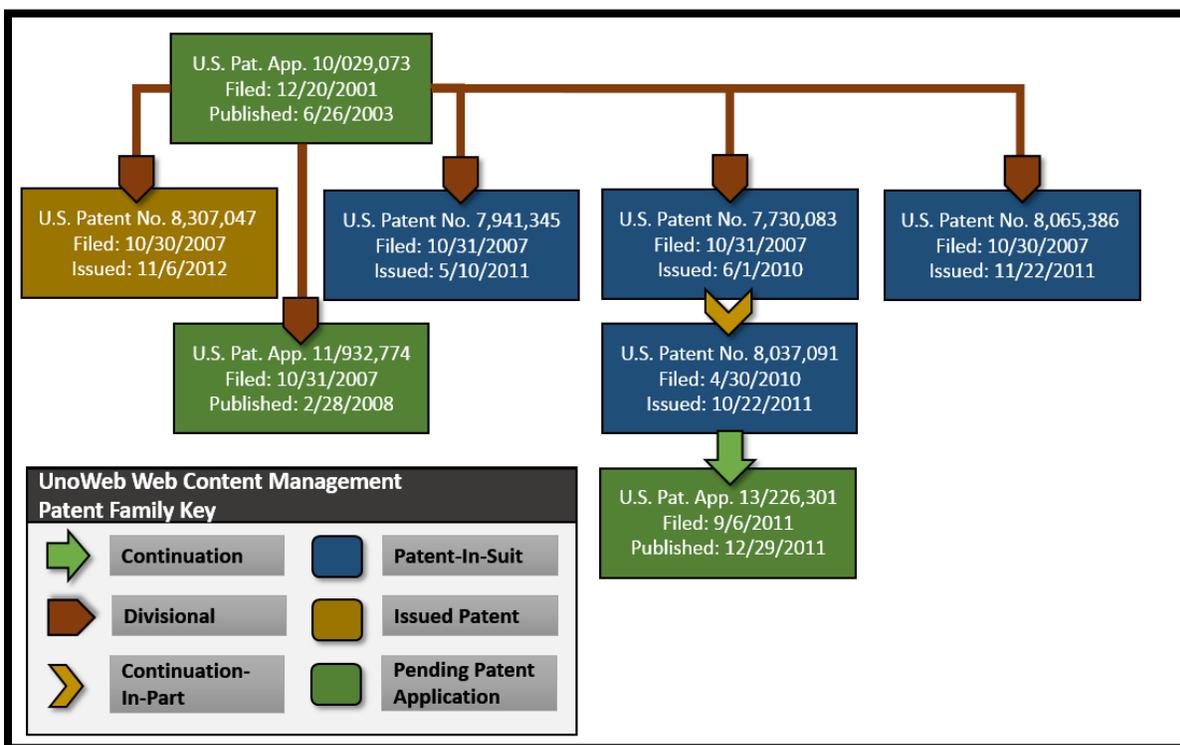
8. In developing UnoWeb, Mr. Almeida developed inventions directed to web content management. These inventions led to five patents that disclose systems and methods for distributing and managing access to data where data is stored in multiple external servers or

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<sup>7</sup> 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.).

independent content hosts in the same server location. These web content management patents address the difficult problem of managing access to data supplied by third parties.

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



10. Mr. Almeida’s UnoWeb web system led to the development of additional technologies relating to managing internet advertising,<sup>8</sup> preventing click fraud,<sup>9</sup> filtering undesired electronic messages,<sup>10</sup> symmetric and asymmetric encryption,<sup>11</sup> and global resource sharing between networked servers enabling web applications.<sup>12</sup> The following diagram shows

<sup>8</sup> 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 advertisements and other paid content along the user-provided content without compensating the intellectual-proprietor whatsoever.”).

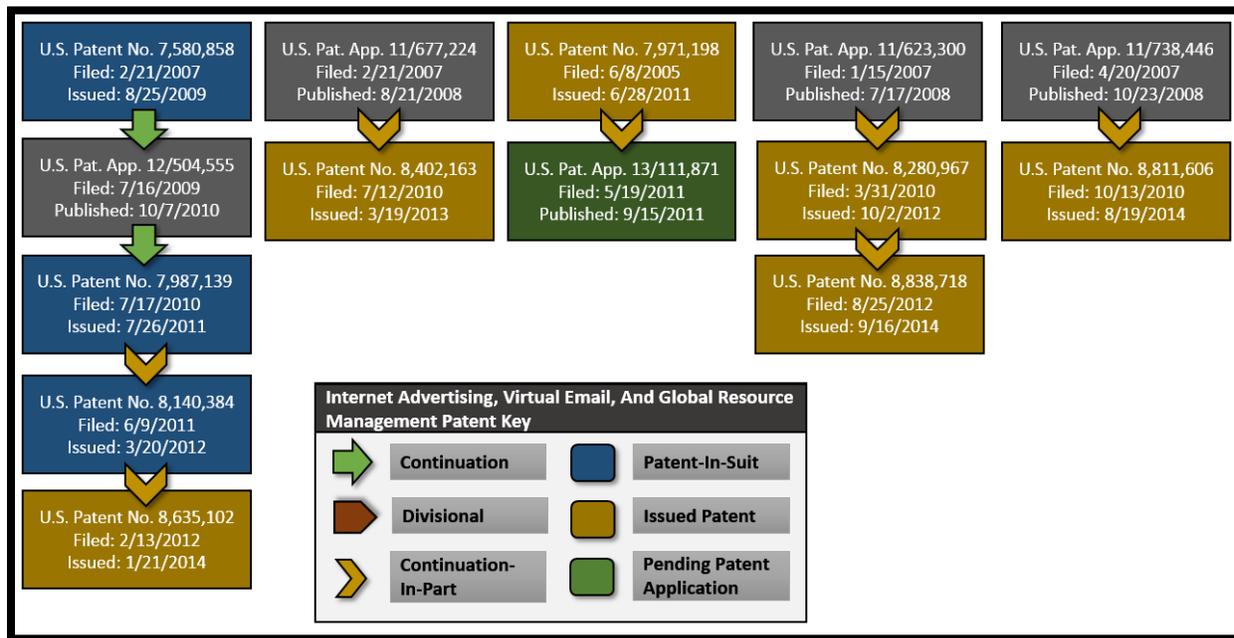
<sup>9</sup> See e.g., U.S. Patent No. 7,580,858, col. 5:5-7 (Referring to the challenges posed by the internet “as never before possible and offering a tremendous potential for the content provider, content host, content distributor and clicker.”).

<sup>10</sup> 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”).

<sup>11</sup> 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.”).

<sup>12</sup> 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 Microsoft infringes.



**UNOWEB’S LANDMARK WEB CONTENT MANAGEMENT SYSTEMS**

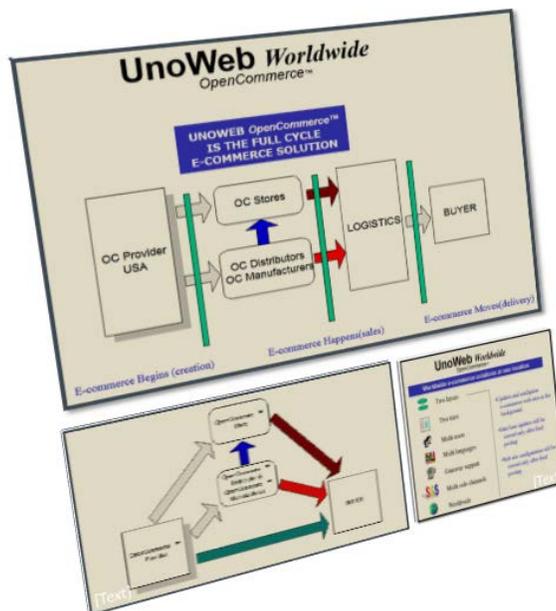
11. Mr. Almeida founded UnoWeb in 2001 in response to a need for systems and methods that would allow an e-commerce system to manage data supplied by third parties (e.g., remote servers communicating over the internet). One of Mr. Almeida’s insights was that manufacturers and distributors of goods needed 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.”<sup>13</sup>

12. 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.”).

<sup>13</sup> 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.”<sup>14</sup>



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

13. UnoWeb’s solutions overcome 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.”<sup>15</sup> Existing e-commerce web sites required providers of content to update services and products directly on [a specific and predetermined] e-commerce platform.<sup>16</sup>

<sup>14</sup> John Almeida, *UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS MODEL* at 2 (2002).

<sup>15</sup> U.S. Patent App. 10/029,073 at ¶ 4.

<sup>16</sup> See e.g., U.S. Patent No. 6,901,378 (this patent was cited on the face of 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 on the face of UnoWeb’s U.S. Patent App. 10/029,017 and published in

**INSTRUCTIONS IN USING *OpenCommerce*<sup>TM</sup>**

These are the instructions need to know *OpenCommerce*<sup>TM</sup> 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*<sup>TM</sup> will support Russian.

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

14. 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.***<sup>17</sup>

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

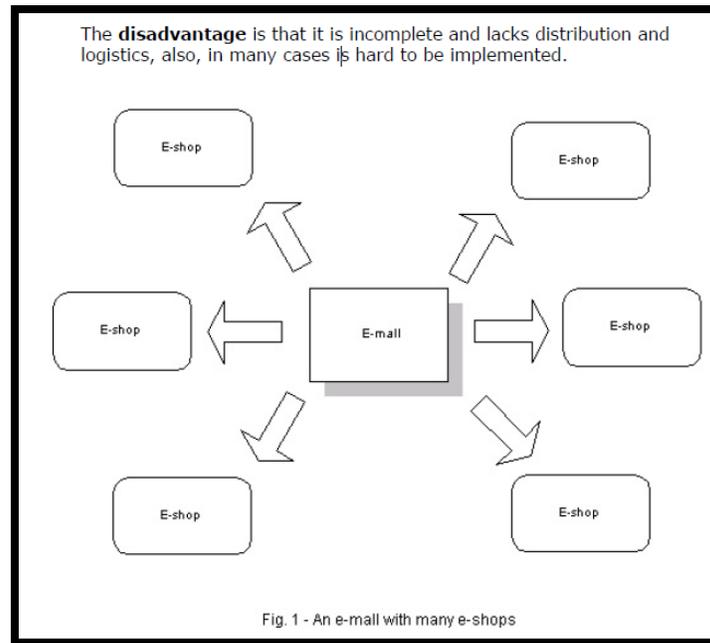
15. Existing systems for e-commerce offered providers the ability to create separate e-shops but required that providers use the same platform and commonly the same server.

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April 1998 described limitations in the prior art as including “[t]here is currently no reliable means to deduce the user's account information from the information accompanying a random .request for a page.”).

<sup>17</sup> 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.”).

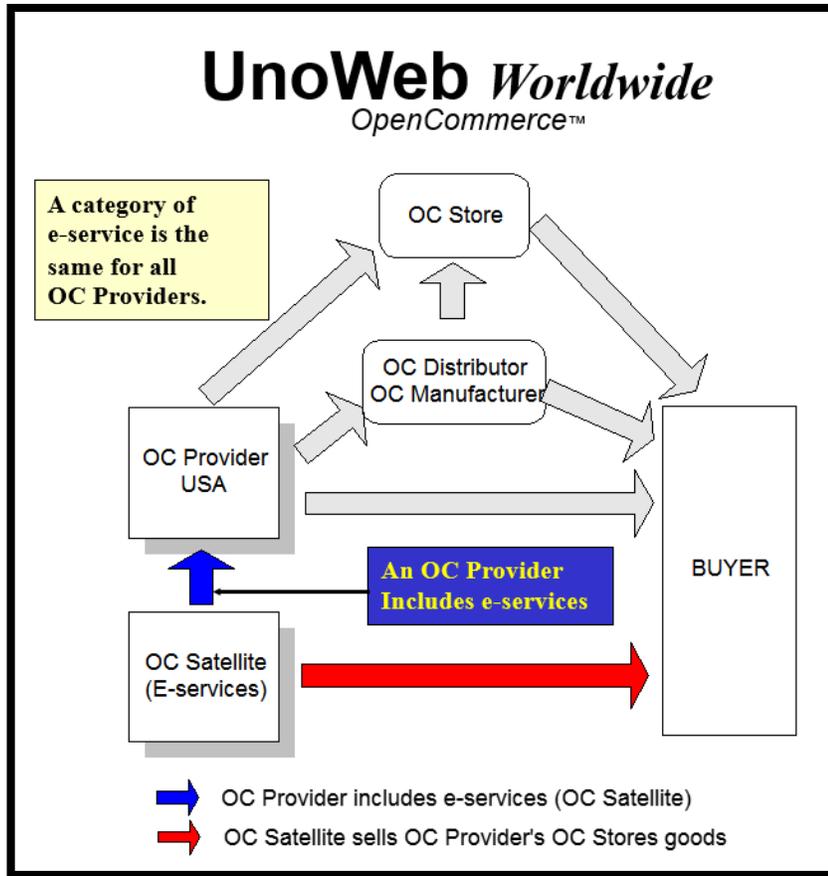
Limitations in existing systems severely restricted the ability to scale the aggregation of content and were difficult to implement. The below figure from a 2002 Overview of the UnoWeb OpenCommerce system shows one of the problems with existing systems where e-shops were required to be hosted on the same platform.



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

16. 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.”<sup>18</sup>

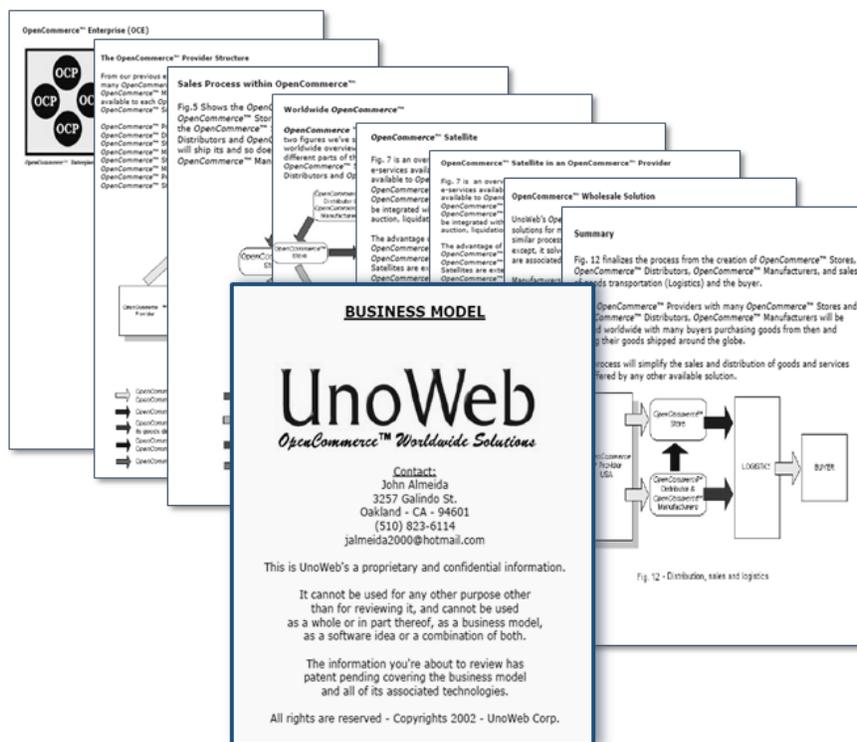
<sup>18</sup> John Almeida, UNOWEB OPENCOMMERCE OVERVIEW PRESENTATION at 10 (2001).



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

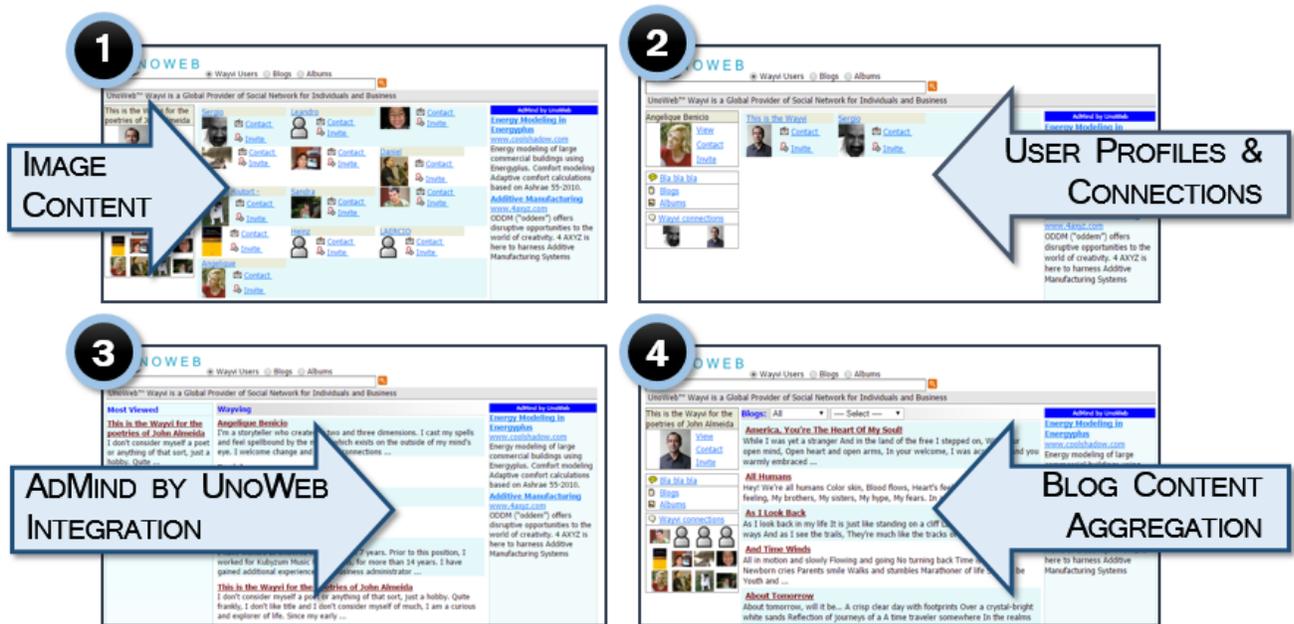
17. John Almeida filed U.S. Patent App. 10/029,073 in December 2001, which disclosed inventions relating to the UnoWeb system. The patent application described a system where “[r]equests are sent and data received from different servers in the network or over the Internet. And they are requests for database 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.”<sup>19</sup>

<sup>19</sup> U.S. Patent App. 10/029,073 at ¶ 138.



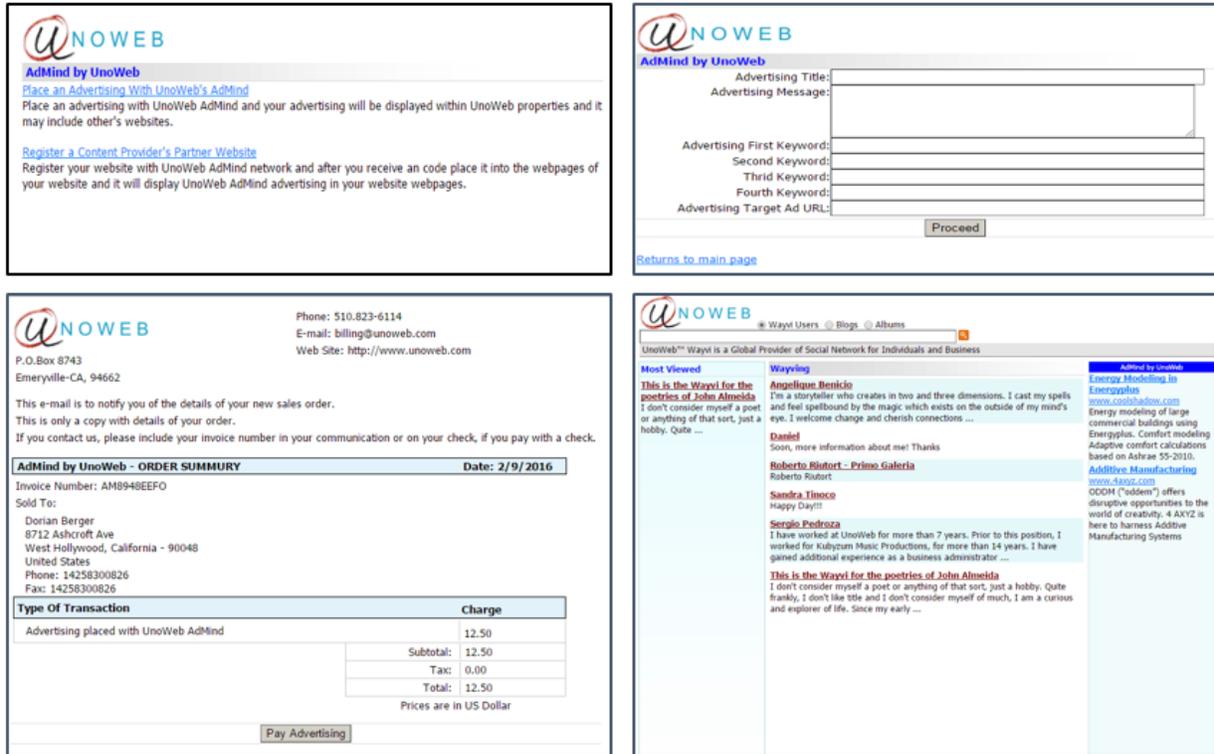
John Almeida, *UnoWeb OpenCommerce Architecture*, UNOWEB OPENCOMMERCE WORLDWIDE SOLUTIONS BUSINESS PLAN (2002) (describing the architecture of the UnoWeb OpenCommerce system).

18. UnoWeb developed a variety of technologies that have been widely adopted by leading internet companies. These UnoWeb systems are available at [www.unoweb.com](http://www.unoweb.com) and [www.unowebdemo.com](http://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).

19. 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.).

20. 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.<sup>20</sup>

<sup>20</sup> 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, which is assigned to Microsoft Corporation and cites 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).

21. 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.<sup>21</sup>

<sup>21</sup> 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).*

22. 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.

The screenshot shows the 'AdMind by UnoWeb' registration form. It features the UnoWeb logo at the top left. Below the logo, the form has several input fields: 'Advertising Title:', 'Advertising Message:', 'Advertising First Keyword:', 'Second Keyword:', 'Thrid Keyword:', 'Fourth Keyword:', and 'Advertising Target Ad URL:'. A 'Proceed' button is located at the bottom right of the form, and a 'Returns to main page' link is at the bottom left.

*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).*

23. 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.<sup>22</sup> 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**

24. 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.

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<sup>22</sup> 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.

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

26. 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.

27. 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.

28. 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 Microsoft, UnoWeb relies on its intellectual property for its financial viability. In a 2015 complaint filed by Microsoft, alleging mobile device maker Kyocera Corporation infringed its patents; Microsoft detailed the importance it places on its intellectual property.

In the 1990s and 2000s, Microsoft developed numerous inventions which later became critical to the operation of today's small computing devices . . . Although research and development comes at great cost and risk, Microsoft was founded on innovation, and the company continues to choose the path of the innovator. But others have a different approach, waiting for innovators like Microsoft to bear the expense of developing new technologies and then incorporating the most successful inventions into their own products – without permission and without paying for the privilege. ***The patent laws prohibit such conduct***, and Microsoft brings this case to vindicate its rights.

*Microsoft Technology Licensing, LLC v. Kyocera Corporation et al.*, 15-cv-00346 Dkt. No. 1 ¶¶ 2-3 (filed March 6, 2015 W.D. Wash.) (emphasis added).

29. Microsoft has asserted its patents in numerous federal courts,<sup>23</sup> including the

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<sup>23</sup> *Microsoft Technology Licensing, LLC v. Kyocera Corporation et al.*, No. 15-cv-00346 (filed March 6, 2015 W.D. Wash.); *Microsoft Corporation v. 5009 8<sup>th</sup> Ave Corp. et al.*, No. 05-cv-04388 (filed Sept. 16, 2005 E.D.N.Y.); *Microsoft Corporation v. Alcatel-Lucent*, No. 06-cv-

Eastern District of Texas.<sup>24</sup>

**MICROSOFT CORPORATION**

30. On information and belief, Microsoft Corporation is a Washington corporation with a principal place of business at 1 Microsoft Way, Redmond, Washington 98052. Microsoft is registered to do business in the State of Texas and it may be served with process by delivering a summons and a true and correct copy of this complaint to its registered agent for receipt of service of process, Corporation Service Company, 211 East Seventh Street, Suite 620, Austin, Texas 78701.

31. On information and belief, Microsoft has offices in Texas where it sells, develops, and/or markets its products including:

- A Microsoft Technology Center located in Irving, Texas.
- A Microsoft South Central District Court office for sales, licensing and product support located in Irving, Texas.
- Offices and retail locations in: Austin, Houston, San Antonio, Friendswood, Frisco, McAllen, Dallas, and Woodland, Texas.
- The supplier of numerous chips and servers used by Microsoft (via Samsung and HP Enterprise Services) are located in or near the Eastern District of Texas.
- Operating datacenters hosting Microsoft Azure in Texas.<sup>25</sup>

32. According to Microsoft's website, Microsoft offers infringing products for sale throughout the United States and Canada,<sup>26</sup> including in the Eastern District of Texas. Further,

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02696 (filed Dec. 12, 2006 S.D. Cal.); *Microsoft Corporation v. Alcatel-Lucent Enterprise et al.*, No. 07-cv-00090 (filed Feb. 16, 2007 D. Del.); *Microsoft Corporation v. Barnes & Noble, Inc. et al.*, No. 11-cv-00485 (filed March 21, 2011 W.D. Wash.); *Microsoft Corporation v. Datal Design and Development Inc., et al.*, No. 10-cv-02065 (filed Dec. 23, 2010); *Microsoft Corporation v. Motorola Inc.*, No. 10-cv-01577 (filed Oct. 1, 2010 W.D. Wash.); *Microsoft Corporation v. Salesforce.com, Inc.*, No. 10-cv-00825 (filed May 18, 2010 W.D. Wash.); *Microsoft Corporation v. Robocast Inc.*, No. 13-cv-00313 (filed Feb. 25, 2013 D. Del.); *Microsoft Corporation v. TiVo, Inc.*, No. 10-cv-00240 (filed January 19, 2010 N.D. Cal.).

<sup>24</sup> See *Alcatel USA Sourcing, Inc. v. Microsoft Corporation*, 06-cv-499 Dkt. No. 238 (claims filed on December 10, 2008 E.D. Tex.) (Microsoft asserted U.S. Patent Nos. 6,674,767 and 6,944,273); see also *Alcatel USA Sourcing, Inc. v. Microsoft Corporation*, 06-cv-00500 Dkt. No. 35 (Microsoft's claims filed on May 3, 2007 E.D. Tex.) (Microsoft asserted U.S. Patent Nos. 5,731,844 and 5,758,258).

<sup>25</sup> *Microsoft Azure Regions*, MICROSOFT AZURE WEBSITE (2015), <https://azure.microsoft.com/en-us/regions/>.

Microsoft advertises its infringing products throughout the Eastern District of Texas and claims financial benefits through its conducting of business in Texas, including: (1) accepting monies from the state of Texas relating to Microsoft's engagements with Texas entities;<sup>27</sup> (2) ongoing contracts with the state of Texas;<sup>28</sup> (3) Microsoft's agreement to be subject to the laws and jurisdiction of Texas;<sup>29</sup> (4) Microsoft's certification that it is licensed to conduct business in Texas;<sup>30</sup> and (5) Microsoft's agreement (in prior contracts with the state of Texas) to make documentation available to residents of Texas.<sup>31</sup>

33. Microsoft provides web-advertising solutions in the form of its Bing Ads system. Microsoft's customers infringe the patents-in-suit by using products that infringe the patents-in-

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<sup>26</sup> *Moving State IT to Microsoft's Cloud for Government*. MICROSOFT GOVERNMENT BLOG (December 11, 2014) ("We've refined what datacenter services mean in Texas and we expect it to continue to expand in terms of the many workloads we can bring online to continuously improve services. Folding Azure Government into these services allows agencies to use a platform they trust.").

<sup>27</sup> Microsoft Corporation TX DIR Contracting Details, MICROSOFT WEBSITE (2015), [http://www.microsoft.com/en-us/government/texas-dir/default.aspx#fbid=w\\_pdDRfykfd](http://www.microsoft.com/en-us/government/texas-dir/default.aspx#fbid=w_pdDRfykfd); State of Texas to Improve Communication and Collaboration by Adopting Office 365 for More Than 100,000 State Employees, Microsoft New Center (February 15, 2013) ("We've worked hard to provide security and privacy solutions the State of Texas can trust."); Michael Donlan, Texas Moves To The Cloud With Microsoft, MICROSOFT GOVERNMENT BLOG (August 7, 2012). ("Both Texas and Microsoft worked closely together to support the state's requirements under the Health Insurance Portability and Accountability Act (HIPAA) and CJIS to ensure the highest standards for security and privacy.").

<sup>28</sup> Microsoft Enterprise Agreement with the University of Texas System, University of Texas Campus Enterprise Agreement (2015), <http://uthscsa.edu/business/genservices/mscea.html>; *DIR Contract No. DIR-SDD-1922*, STATE OF TEXAS DEPARTMENT OF INFORMATION RESOURCES CONTRACT FOR PRODUCTS AND RELATED SERVICES MICROSOFT CORPORATION (2015), <http://publishingext.dir.texas.gov/portal/internal/contracts-and-services/Contracts/Contract%20DIR-SDD-1927.pdf>.

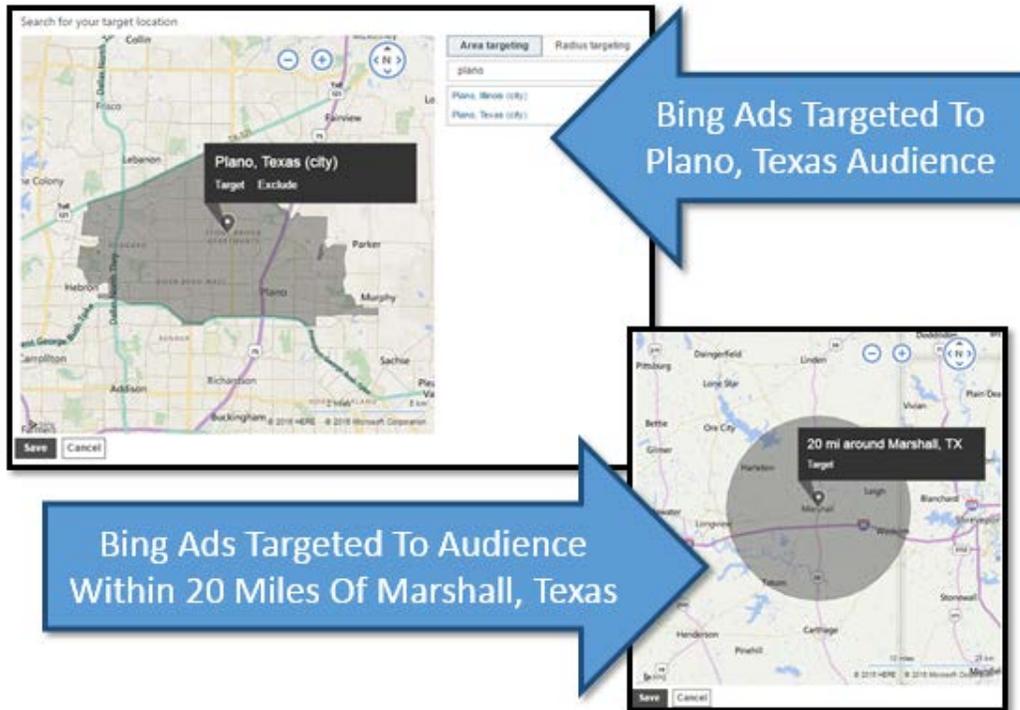
<sup>29</sup> *Id.* at § 15(c) ("This master agreement together with the applicable statement of services will be governed by the laws of the State of Texas.").

<sup>30</sup> *Id.* at § 15(x) ("We certify that we are an entity authorized and validly existing under the laws of our state of organization, and we are authorized to do business in the State of Texas.").

<sup>31</sup> *Id.* at § 5(b) ("We acknowledge that you are a government agency subject to the Texas Public Information Act. We also acknowledge that you will comply with the Public Information Act." Pursuant to S.B. 1368 of the 83rd Texas Legislature, Regular Session, Microsoft is required to make any information created or exchanged with the State pursuant to this Contract, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.").

suit through the Bing Ads system. Further, Microsoft 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.

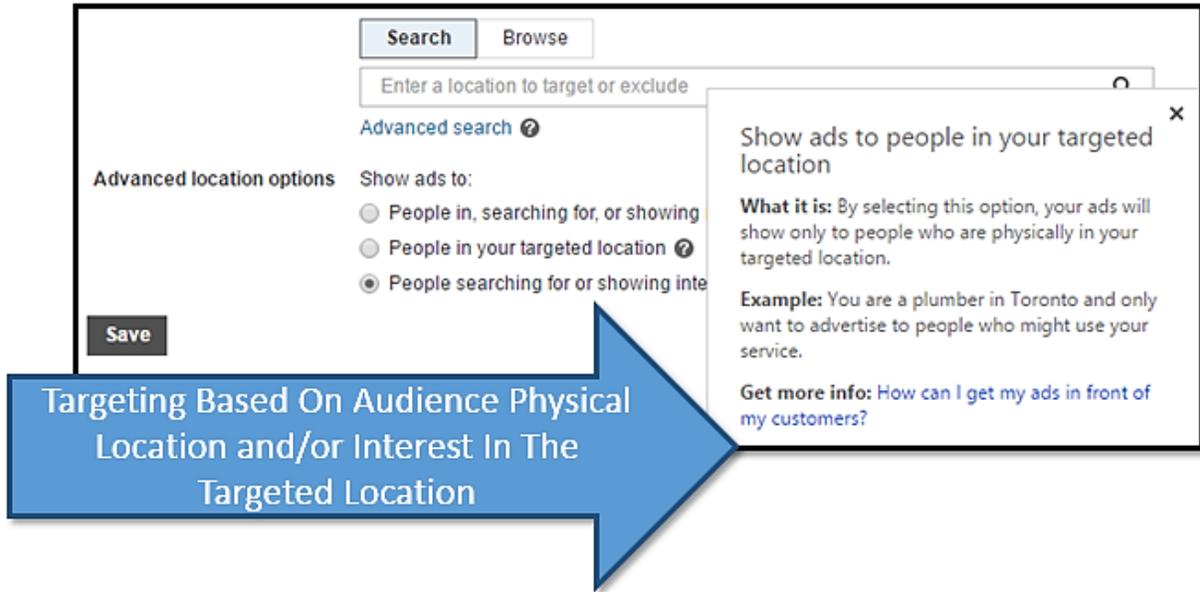
34. Microsoft specifically targets its internet advertising and content management system to the Eastern District of Texas, including through enabling Bing Ads system advertisers to target advertising specifically to residents of this district. For example, the following screen shots show Bing Ads enabling location targeting for Marshall, Texas and Plano, Texas in the Bing Ads internet advertising platform.



*Bing Ads Campaign Setup*, BING ADS SYSTEM, available at: <https://ui.bingads.microsoft.com> (last visited April 2016).

35. Microsoft competes directly with UnoWeb in the web advertising market by offering for sale and selling the infringing Microsoft advertising solutions. The below screen capture provides further evidence that Microsoft directs its internet advertising solutions to residents located in the District. For example, where a customer seeks to advertise

[www.unoweb.com](http://www.unoweb.com) to customers in Plano, Texas the advertiser is prompted to select whether to target customers physically located in Plano, Texas or customers searching for information about Plano, Texas.



*Bing Ads Campaign Setup*, BING ADS SYSTEM, available at: <https://ui.bingads.microsoft.com> (last visited April 2016) (“By selecting this option, your ads will show to people who are physically in your targeted location as well as people outside of your area who search for or view webpages about your targeted location.”).

36. The infringing Microsoft Ads system directly targets this district by automatically retrieving and displaying to potential internet advertisers pertinent keywords and phrases that are generated in response to putting in geographic locations or website URLs that are specific to the Eastern District of Texas. The retrieval and display of suggested keyword specific to locations in this District encourages advertisers to target the Eastern District of Texas. The below screen shot shows that when “Plano” is identified by an advertiser the Bing Ads system will suggest additional phrases and terms (e.g., Plano Hotels). The information shown by Microsoft to advertisers includes the number of times these suggested keyword advertising terms are used in searches and the amount that an advertiser will need to bid to associate their advertisement with the suggested advertising keywords.

The screenshot displays the Bing Ads Research Keywords interface. It features a search input field with the text 'plano' and a 'Research keywords' button. Below the search field, a list of suggested keywords is shown, including 'plano tx', 'plano texas', and 'plano hotels', each with a search volume. The interface also includes a table of suggested keywords with columns for 'Keyword', 'Type', and 'Bid (USD)'. The table shows match types like Broad, Phrase, Exact, and Content, along with bid amounts and first page bid values.

Keyword	Type	Bid (USD)	First page bid
plano tx	Broad	0.26	0.26
	Phrase	2.20	2.20
	Exact	0.05	0.05
	Content	0.26	0.26
plano texas	Broad	0.11	0.11
	Phrase	3.98	3.98
	Exact	0.79	0.79
	Content	0.11	0.11
plano hotels	Broad	1.24	1.24
	Phrase	0.58	0.58
	Exact	1.47	1.47
	Content	1.24	1.24

*Bing Ads Research Keywords Feature*, BING ADS SYSTEM, available at: <https://ui.bingads.microsoft.com> (last visited April 2016) (Users input keywords at (1) and the Bing Ads system automatically generates suggested additional advertising keywords (2) and provides the amount cost of associating their advertisement with the suggested keywords (3)).

37. Because Microsoft actively targets customers in the Eastern District of Texas, Microsoft'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).

#### **JURISDICTION AND VENUE**

38. 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).

39. Upon information and belief, this Court has personal jurisdiction over Microsoft in this action because Microsoft 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 Microsoft would not offend traditional notions of fair play and substantial justice. Defendant Microsoft, 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, Microsoft is registered to do business in the State of Texas, has offices and facilities in the State of Texas, and actively directs its activities to customers located in the State of Texas.

40. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). Defendant Microsoft is registered to do business in the State of Texas, has offices 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**

41. 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.

42. 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.

43. 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.

44. 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.

45. 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.

46. 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).<sup>32</sup>

47. 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.<sup>33</sup>

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<sup>32</sup> 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.”

<sup>33</sup> See e.g., *Improved Search LLC v. AOL Inc.*, Case No. 15-cv- 262, Dkt. No. 21 at 17-18 (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.”); *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

48. Microsoft prizes systems that manage the integration of heterogeneous data and applications from third parties including servers containing data that is aggregated for display to users over the internet.

Microsoft is trying to make it easier to find nearby deals, and today has launched a deals service that aggregates them from around the Web. Bing Deals, which will show up for both desktop and m.bing.com users, aggregates deals from a number of deal providers, including LivingSocial, Groupon, and Restaurant.com. . . In the move to add deals, Weitz said Microsoft was not trying to build its own deals system, or to compete with some of the existing deals businesses.

Josh Lowensohn, *Bing Now Aggregates, Recommends Local Deals*, CNET WEBSITE (March 3, 2011), available at: <http://www.cnet.com/news/bing-now-aggregates-recommends-local-deals/>

49. Microsoft patents have similarly described the aggregation of content from third party servers as unconventional.

This is particularly true for e-commerce websites of companies whose product catalog can be populated with data from providers that are external to their product team. It should be appreciated that the duplicated products information can cause confusion as it relates to ascertaining for which product information actually represents a product. Conventional e-commerce sites do not possess systems that address the causes of such confusion. Moreover, *conventional e-commerce sites do not possess systems to collect information from the disparate sources about a product in a manner that ensures that all of the collected information is fully reflected in the information that is eventually presented about the product.*

U.S. Patent No. 8,086,496, Col. 1:29-41 (this patent is assigned to Microsoft and claims priority to a February 5, 2008 application) (emphasis added).

By way of background concerning some *conventional systems, computing 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. The evolution of network storage farms capable of storing terabytes of data (with potential for petabytes, exabytes, etc. of data in the future) has created an opportunity to mimic

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

the local scenario in a cloud, with separation of the primary device and the external storage.

U.S. Patent App. No. 12/816,868 (assigned to Microsoft and claiming priority to March 12, 2010) (emphasis added).

50. Further, 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.”<sup>34</sup>

51. Microsoft competitors such as AOL.com have 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.<sup>35</sup>

52. 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.

53. 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.

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<sup>34</sup> Jon Brodtkin, *Yahoo IP lawsuit: We Patented Facebook’s Entire Social Network Model*, ARS TECHNICA (March 13, 2012) (emphasis added).

<sup>35</sup> *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).



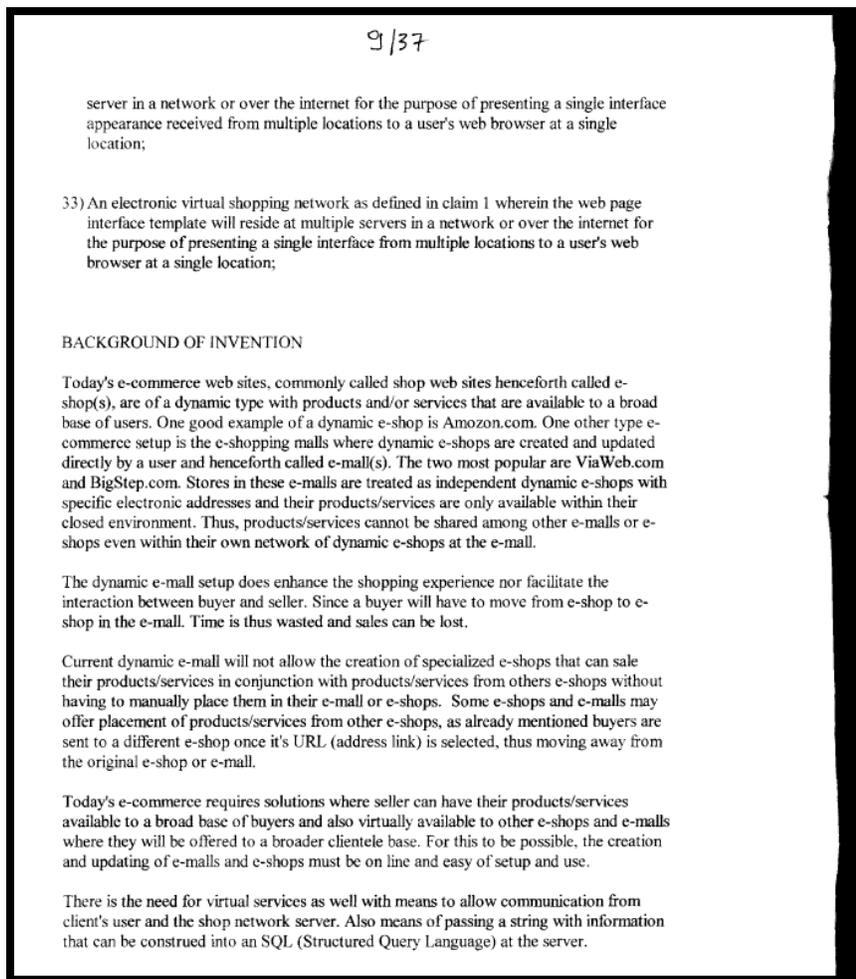
The above images show major internet properties contemporaneous (and later) to the inventions conceived in the UnoWeb Web Content Management patents, including: (1) Facebook (February 2004), (2) Myspace.com (August 2003), (3) LinkedIn.com (December 2002), and (4) Twitter.com (March 2006).

54. During the prosecution history of the '047 patent the Examiner distinguished the inventions from the prior art by stating.

[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.*<sup>36</sup>

<sup>36</sup> U.S. Patent Office Notice of Allowability, Application/Control Number: 11/930,044 at 3 (May 30, 2012) (emphasis added).

55. 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.”



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

56. 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.

Name	Modified	Type	Size
_pat-figure-22.vsd	1/22/2001 7:09 AM	Microsoft Visio Draw...	22 KB
_pat-figure-1a.vsd	1/25/2001 3:33 AM	Microsoft Visio Draw...	36 KB
_pat-figure-1b.vsd	1/26/2001 8:57 AM	Microsoft Visio Draw...	39 KB
_pat-figure-2b.vsd	1/26/2001 9:00 AM	Microsoft Visio Draw...	20 KB
_pat-figure-6.vsd	1/26/2001 9:02 AM	Microsoft Visio Draw...	50 KB
_pat-figure-17.vsd	1/26/2001 1:17 PM	Microsoft Visio Draw...	12 KB
_pat-figure-9.vsd	1/28/2001 2:59 AM	Microsoft Visio Draw...	27 KB
_pat-figure-7.vsd	1/28/2001 3:00 AM	Microsoft Visio Draw...	62 KB
_pat-figure-5a.vsd	1/28/2001 3:10 AM	Microsoft Visio Draw...	57 KB
_pat-figure-11.vsd	1/28/2001 3:12 AM	Microsoft Visio Draw...	12 KB
_pat-figure-8.vsd	1/28/2001 3:13 AM	Microsoft Visio Draw...	46 KB
_pat-figure-12.vsd	1/28/2001 3:13 AM	Microsoft Visio Draw...	13 KB
_pat-figure-4.vsd	1/28/2001 9:44 AM	Microsoft Visio Draw...	51 KB
_pat-figure-15-16	1/28/2001 9:45 AM	Microsoft Visio Draw...	14 KB
_pat-figure-14.vsd	1/28/2001 9:50 AM	Microsoft Visio Draw...	23 KB
_pat-figure-18a.vsd	1/28/2001 9:51 AM	Microsoft Visio Draw...	14 KB
_pat-figure-23.vsd	1/28/2001 9:54 AM	Microsoft Visio Draw...	17 KB
_pat-figure-25.vsd	1/28/2001 9:55 AM	Microsoft Visio Draw...	78 KB
_pat-figure-13.vsd	1/28/2001 9:57 AM	Microsoft Visio Draw...	63 KB
_pat-figure-18b.vsd	1/29/2001 5:00 AM	Microsoft Visio Draw...	48 KB
_pat-figure-10.vsd	2/5/2001 1:34 AM	Microsoft Visio Draw...	11 KB
_pat-figure-2a.vsd	2/5/2001 1:47 AM	Microsoft Visio Draw...	17 KB
_pat-figure-24.vsd	2/6/2001 3:15 AM	Microsoft Visio Draw...	27 KB
_pat-figure-3.vsd	2/6/2001 3:15 AM	Microsoft Visio Draw...	43 KB
_pat-figure-20.vsd	2/6/2001 3:15 AM	Microsoft Visio Draw...	32 KB
_pat-figure-21.vsd	2/6/2001 3:15 AM	Microsoft Visio Draw...	20 KB
_pat-figure-19.vsd	2/6/2001 3:17 AM	Microsoft Visio Draw...	41 KB

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).

57. 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.<sup>37</sup>

<sup>37</sup> WO 2002/037,220 A2 to Subramanian (emphasis added) (cited in the prosecution of the ‘345 ‘047 and ‘386 patents).

58. 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 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.<sup>38</sup>

59. 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.”<sup>39</sup>

60. 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 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),

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<sup>38</sup> WO 2002/037,220 A2 to Subramanian (emphasis added) (cited in the prosecution of the ‘345, ‘047, and ‘386 patents).

<sup>39</sup> U.S. Patent No. 9, 141,713 (filed December 30, 2005).

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.<sup>40</sup>

61. Similarly, Microsoft identified the ability to automatically index content and identify relevant content as constituting a paradigm shift.



Kuansan Wang, *More Productive Research with Intelligent Agent*, 2015 MICROSOFT RESEARCH FACULTY SUMMIT at 5 (July 2015).

62. 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.<sup>41</sup>

<sup>40</sup> U.S. Patent No. 6,499,052 (filed August 11, 1999) (emphasis added).

<sup>41</sup> 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, 9,015,842, 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.

63. 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.<sup>42</sup> 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.

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

64. 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.

65. 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.

66. 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

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<sup>42</sup> *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.”).

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.<sup>43</sup>

67. The '345 patent is directed at generating specific data structures.<sup>44</sup> The generating of data structures includes the generating of a web page that includes the second content.

68. 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

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<sup>43</sup> *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.”).

<sup>44</sup> *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.”).

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.

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

70. 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.<sup>45</sup>

71. 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.<sup>46</sup>

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<sup>45</sup> U.S. Patent App. 12/406,903 at ¶ 4 (emphasis added).

<sup>46</sup> 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.”).

72. 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.

73. 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.<sup>47</sup>

74. 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.

75. 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

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<sup>47</sup> 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.").

displaying search results is that documents with little or no relevance to the user's objective are often retrieved in a search.<sup>48</sup>

76. 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.

77. The '345 patent claims require the use of a "guiding means" for use in identifying third party content.<sup>49</sup>

78. 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.

79. 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;

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<sup>48</sup> U.S. Patent No. 6,070,176, col. 1:23-56.

<sup>49</sup> 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.").

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

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

80. 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.

81. 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.

82. 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.

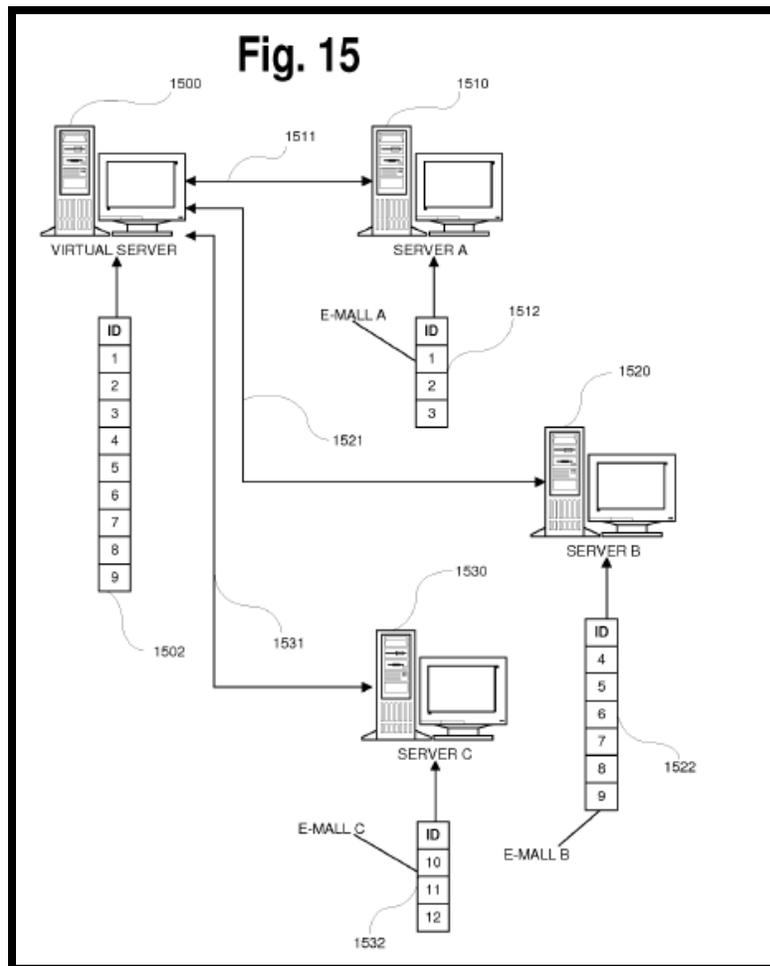
83. The claimed subject matter of the '345 patent is not a pre-existing but undiscovered algorithm.

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

85. 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.

86. 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.

87. 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**

88. 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.

89. 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.

90. 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.

91. 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.<sup>50</sup>

92. 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.<sup>51</sup>

93. 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

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<sup>50</sup> 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).

<sup>51</sup> *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.”).

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.<sup>52</sup>

94. 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.

95. 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.

96. 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.

97. 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.

98. 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.

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<sup>52</sup> 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).

99. 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.

100. 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.

101. 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.

102. 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.

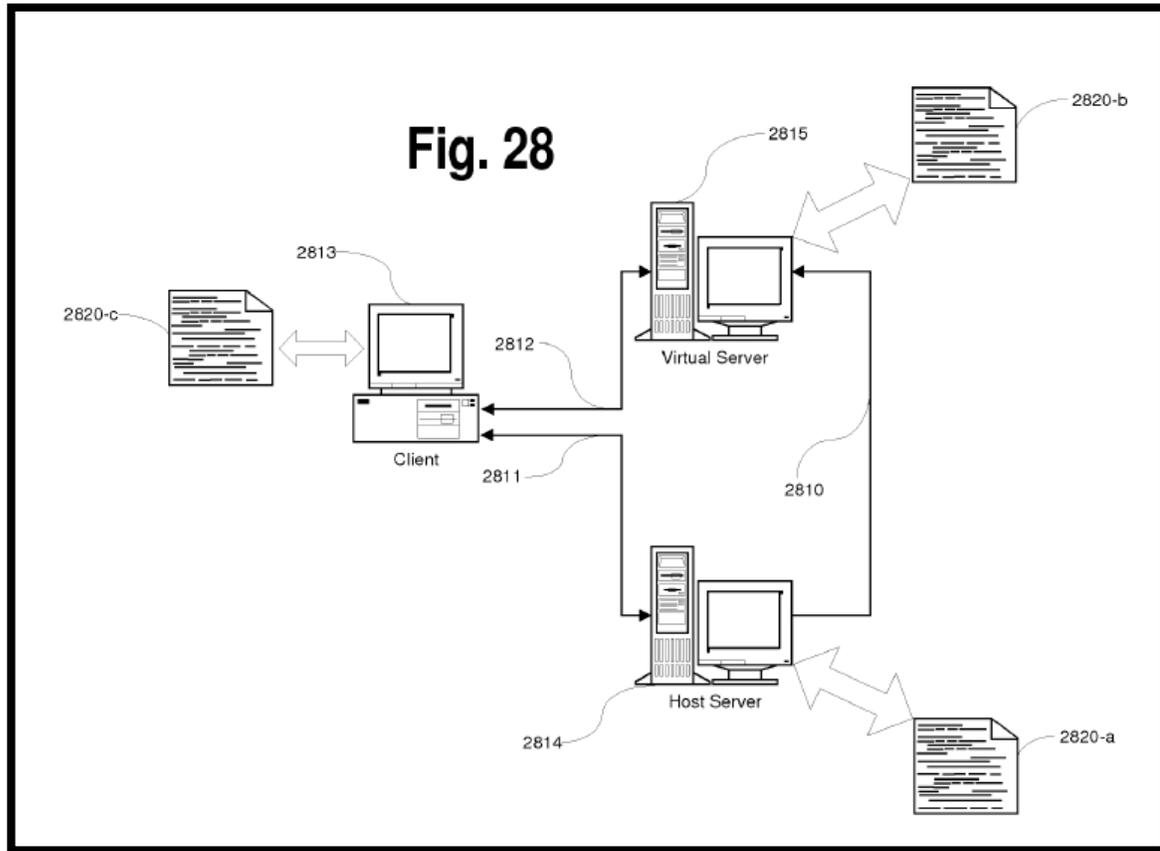
103. The '386 patent does not attempt to preempt every application of the idea of managing web content transmitted over a computer network, or even the idea of managing web content retrieved from a third-party server. The eighty-seven patents cited in the prosecution history of the '386 patent provide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

104. 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.

105. 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.

106. 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. 7,730,083

107. U.S. Patent No. 7,730,083 ("the '083 patent") entitled, *Method of Using a Code to Track User Access to Content*, was filed on October 31, 2007, and claims priority to December 20, 2001. UnoWeb is the owner by assignment of the '083 patent. A true and correct copy of the '083 patent is attached hereto as Exhibit C. The '083 patent claims specific methods for tracking user internet surfing across a plurality of content hosts using a surf code reference and providing users with access to a list of internet content they had previously viewed.

108. The '083 patent claims a technical solution to a problem unique to computer networks – tracking an internet user's access to content gathered from multiple web servers and providing the internet user with a list of content previously viewed by the user.

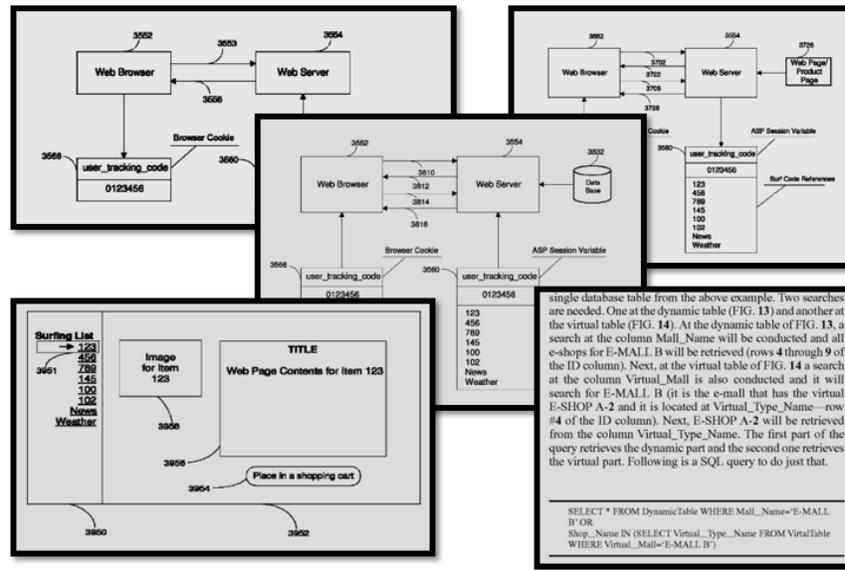
109. A unique feature of the internet is providing users with access to content aggregated from different web servers. The content in some instances might be presented in composite web pages. There was a need to track user access to specific pieces of content that, although displayed on a single web page, was aggregated from different web servers. "From this scenario it is clear that there is a need for a mechanism to track and keep the user surfing experience." '083 patent, col. 21:55-57.

110. The '083 patent is directed at solving a problem unique to the internet – the tracking of internet user access to content aggregated from several hosts and enabling the display of previously accessed content to a user. To accomplish this object, the '083 patent proposed technological solutions including the use of a surf code reference that enabled the tracking of a user as content from different hosts is accessed. The patent specification explains that a surf code reference "is used for automatically storing a reference for each information supplied to each client and it forms the surf user-list. Once the user requests his/her surf user-list, the server will use each surf code reference and create the surf user-list and sent it to the user. A surf user-list will only include information that was previously viewed by the user." '083 patent, col. 21:59-65.

111. Further, Claim 7 of the '083 patent recites means-plus-function claim limitations governed by 35 U.S.C. § 112(f). The corresponding structure(s) in the '083 patent specification includes algorithms that improve the functioning of a computer by improving efficiency: "the web server uses the list just retrieved from session variable 3560 and searches the database." *See, e.g.*, '083 patent cols. 11:4-12:32, 22:4-62, figs. 35-39.

112. The '083 patent discloses computer algorithms in the specification. In addition to the structures and algorithms disclosed throughout the specification, these algorithms correspond to the means-plus-function claim limitation in the '083 patent. Means-plus-function claims such

as Claim 7 in the '083 patent are inherently not abstract ideas. Stanford Law Professor Mark Lemley described his analysis: "If the patent is interpreted as a means-plus-function claim, it will be limited to the particular software implementation the patentee actually built or described. Such a narrow, specific claim should not be an unpatentable 'abstract idea.'" <sup>53</sup>



'083 patent, Col. 22:4-61, Figs. 35, 37-39.

113. The '083 patent addresses a problem faced by web site operators who had a need to track access to internet content that came from multiple web servers. Further, there was a need to allow users to access content that they had viewed even if the content had come from multiple web servers. The '083 patent teaches innovative new technologies that are technological solutions to these problems. The solutions include: (1) enabling users to access a virtual server providing a view of content supplied from multiple web servers, <sup>54</sup> (2) assigning a

<sup>53</sup> Eugene Quinn, *The Ramifications of Alice: A Conversation with Mark Lemley*, IPWATCHDOG BLOG, September 4, 2014, <http://www.ipwatchdog.com/2014/09/04/the-ramifications-of-alice-a-conversation-with-mark-lemley/id=51023/> (emphasis added).

<sup>54</sup> Like claims that have been found to constitute patent eligible subject matter, the inventions of the '083 patent are directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant. *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

surf code reference to each of the pieces of web content that are accessed by a user,<sup>55</sup> and (3) storing a user list comprising the surf code reference such that a user can subsequently access a list of the web content they had accessed.

114. The '083 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 various web 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." '083 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. 20:60-64. This allows a web site to display content from various web servers without risking the loss of visitor traffic.

115. The '083 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 technology and are directed to overcoming a problem specifically arising in the realm of

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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.").

<sup>55</sup> The '083 patent is directed at generating specific data structures. The generation of specific data structures has been found to confer patent eligibility by various courts. *See e.g., 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.").

computer networks. The need to track a user accessing content retrieved from various hosts presented a new challenge. America Online, Inc., in a patent issued in 2000 (that is cited on the face of the '083 patent), describes the challenges presented by tracking user access to content from multiple hosts.

To many people, the Internet and the World Wide Web (WWW) represent a disorganized space. Many computer users wander from site to site hoping to find content that is of interest. Many uninteresting sites may be visited before a site with information of interest is located. *Even sites related to one another by a common theme (e.g., shopping) may be difficult to navigate because so many of the sites do not have content that is of interest to the user.* One of the reasons that the task of navigating the Internet, specifically the WWW portion of the Internet, seems daunting is that *there is no way to pull content from various locations or sites and organize it in a manner meaningful to the individual user.*<sup>56</sup>

116. At the time of the inventions claimed in the '083 patent, processing, transmitting, and aggregating electronic data from various hosts and tracking users' access to specific pieces of content presented new and unique issues over the state of the art. As explained in the '083 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." '083 patent, col. 1:43-45.<sup>57</sup>

117. Although the methods taught in the '083 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '083 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." '083 patent, col. 1:55-57.

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<sup>56</sup> U.S. Patent No. 6,014,638, Col. 1:16-28 (emphasis added).

<sup>57</sup> See also U.S. Patent App. 09/752,058 at ¶ 6 (This patent application, assigned to Hewlett Packard Development Company, L.P., filed on December 29, 2000 and cited on the face of the '083 patent discusses the rudimentary state of internet navigation and tracking systems in existing technologies "Computer users are increasingly accessing the internet, for entertainment, informational, and work purposes using a variety of computing devices. Accessing and using the internet is often referred to as "surfing the net/web." . . . Bookmarks are essentially short cuts that allow a user to quickly access favorite websites. . . . A bookmark, then, is essentially stored navigation data that allows a user to efficiently return to a favorite website.").

118. Further, the '083 patent claims improve upon the functioning of a computer system by using a surf code reference to allow the granular identification of content accessed by a user. The inventions disclosed in the '083 patent improve the functioning of a computer system by improving the security of the system and reducing the amount of data stored (and computer resource utilized). U.S. Patent No. 6,189,024, which was issued in 2001, is cited on the face of the '083 patent and was subsequently assigned to Facebook, described drawbacks in the state of the art at the time. These drawbacks in existing systems prevented a user from accessing an accurate list of web content visited where accessing occurred across multiple web sessions.

This "history" function generally lasts throughout the time that a user instantiates the browser program until the point where the browser is terminated. This time period is what traditionally defines a "session." The session history function on browsers record the current navigation path of the user, i.e. it is a single-threaded path. . . . [A] drawback to this approach is apparent when a user navigates through a path on a typical browser, visiting page A 201 first. Page B 202 is then visited, followed by page C 203. The user backtracks up this path to page B 205 and deviates to page D 207. *Once the user goes off the path, information about the previous path that was deviated from is lost.*<sup>58</sup>

119. U.S. Patent App. 09/752,058, which was assigned to Hewlett Packard (and is cited on the face of the '083 patent), describes drawbacks of existing systems that enabled the tracking of users to web content as including the creation of duplicate data, impairing the amount of computer memory space available on a computer system, and creating security issues from exposing a user's navigation data.

A user's navigation data can, however, create some difficulties. In particular, a user's navigation data can be difficult to manage. . . . Because users often access the internet using different computers, a user's navigation data may become dispersed across the various computers operated by the user thus making access to this data difficult if not impossible. *This can result in a data integrity issue where one user's navigation data overwrites or obscures navigation data for other users. There may also be a security issue when users leave navigation data on a computer they may casually use.* Additionally, the storage of *navigation data locally occupies storage space in the user's computer memory drive thereby limiting the storage available for other uses.*<sup>59</sup>

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<sup>58</sup> U.S. Patent No. 6,189,024, Col. 1:18-33 (emphasis added).

<sup>59</sup> U.S. Patent App. No. 09/752,058 at ¶ 9 (emphasis added).

120. One or more claims of the '083 patent teach the gathering of data from hosts to create a surf code reference. The creation of a label such as a "surf code" has been found to confer patent edibility by various courts.<sup>60</sup>

121. The '083 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 web content located on hosts and assigning the retrieved web content a surf code reference that is used to track user access to the web content.

122. The '083 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 content on a host, assigning the content a surf code reference and using the surf code reference to track user access and generate a list of content accessed by a user. These methods are technologies unique to the internet age. AT&T, in U.S. Patent No. 5,774,123 (cited on the face of the '083 patent), identified problems unique to internet based systems for data retrieval.

Although the Internet provides researchers and other users the ability to access a broad spectrum of information, it is well-appreciated that this amalgam of disparate information resources presents a sizable challenge when attempting to locate specific information of interest contained therein. *Moreover, the inherent lack of organization with respect to the many information resources made accessible through the Internet makes even the apparently simple task of finding a previously located document or information service difficult.*<sup>61</sup>

123. The inventive concepts claimed in the '083 patent are technological, not "entrepreneurial." For example, retrieving content from a host server is a specific, concrete solution to the technological problem of tracking user access to content retrieved from multiple hosts.

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<sup>60</sup> 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.").

<sup>61</sup> U.S. Patent No. 5,774,123, col. 1:37-45 (emphasis added) (the underlying patent application was assigned to AT&T Global Information Solutions Company).

124. The '083 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, one or more claims of the '083 patent require assigning a surf code reference to each of the different contents viewed by a user, storing a user list based on the surf-code reference for each of the different contents, and enabling a user to access a user list identifying the previously viewed contents.

The preemptive effect of the claims of the '083 patent are concretely circumscribed by specific limitations. For example, claim 1 of the '083 patent requires:

A method of using a code to track user access to content, the method comprising the steps of:

providing a computer hosting a plurality of contents provided by a plurality of content hosts, wherein the contents are stored on a computer storage medium, and wherein the computer is configured with all the required software and hardware to support the ability:

to control all interfacing with the user without redirecting the user to any of the plurality of content hosts; and,

to request and receive data from the content hosts;

storing on the computer storage medium an identification of the user to enable the user to log in to the computer;

permitting a logged-in user to access the computer through the requesting client to view at least two different contents in the plurality of contents;

assigning a surf code reference to each of the different contents viewed, the surf code reference comprising information that identifies the contents viewed;

receiving a request from a logged-in user to create a user list of different contents viewed by the logged-in user;

storing the user list on the computer, the user list comprising the surf-code reference for each of the different contents viewed by the logged-in user;

permitting the logged-in user to access the user list to identify the content viewed by the logged-in user; and,

presenting the content viewed by the logged-in user to the requesting client based on the user list.

125. The '083 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 host.

126. The '083 patent does not preempt the field of web content management systems, or prevent use of alternative web content management systems that enable the viewing of previously accessed web content. For example, the '083 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 twenty-two patents cited in the prosecution history include numerous systems that are not preempted by the claims of the '083 patent.

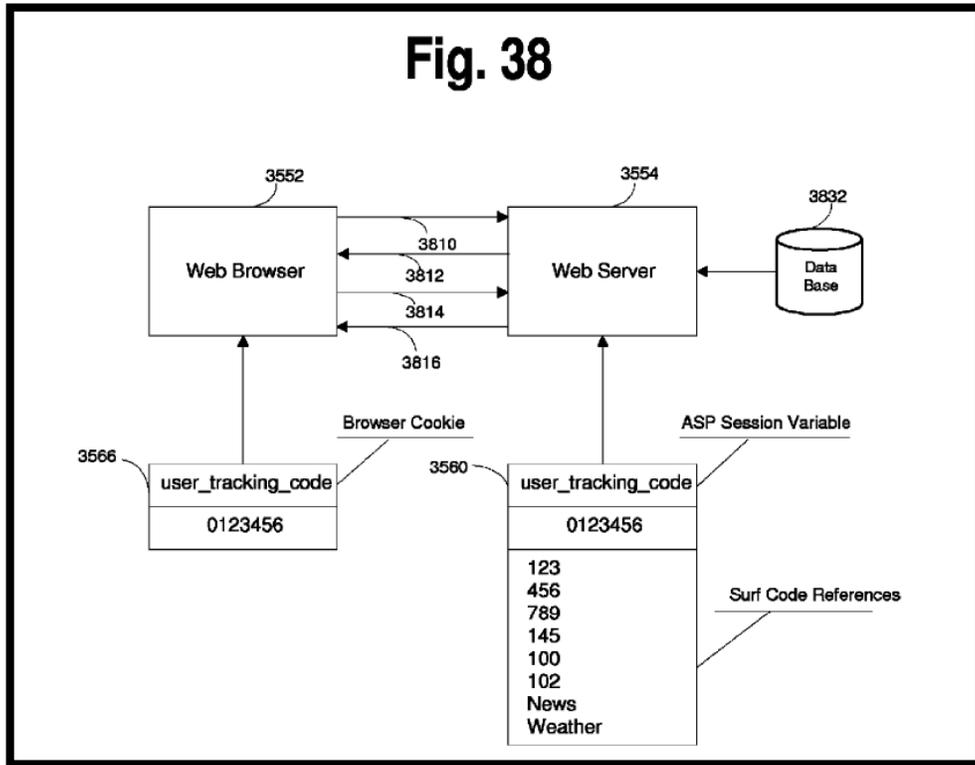
127. The '083 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer. Further, the claimed subject matter of the '083 patent is not a pre-existing but undiscovered algorithm.

128. One or more claims of the '083 patent require the use of a computer system through specific claim limitations including (1) computer hosting, (2) content hosts, (3) computer storage medium, (4) surf code reference, (5) transmitting the user tracking code from the computer, and (6) using a database.

129. The methods claimed in the '083 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 '083 patent specification describes limitations in the existing systems at the time the inventions disclosed in the '083 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.” '083 patent, col. 1:54-59.

130. One or more claims of the '083 patent require a specific configuration of electronic devices, a network configuration, and the web servers to retrieve hosted web content and assign the content a surf code reference that is used to generate a list of accessed content. These are meaningful limitations that tie the claimed methods and systems to specific machines.

For example, the below diagram from the '083 patent illustrates a specific configuration of hardware disclosed in the patent.



'083 patent, Fig. 38.

#### 4. U.S. Patent No. 8,037,091

131. U.S. Patent No. 8,037,091 (“the ‘091 patent”) entitled, *Method of Using a Code to Track User Access to Content*, was filed on October 31, 2007, and claims priority to December 20, 2001. UnoWeb is the owner by assignment of the ‘091 patent. A true and correct copy of the ‘091 patent is attached hereto as Exhibit D. The ‘091 patent claims specific methods for tracking user internet surfing involving a first step of providing a computer hosting contents from content hosts.

132. The ‘091 patent claims a technical solution to a problem unique to computer networks – tracking an internet user’s access to content gathered from multiple web servers and providing the internet user with a list of content previously viewed by the user using a surf code reference.

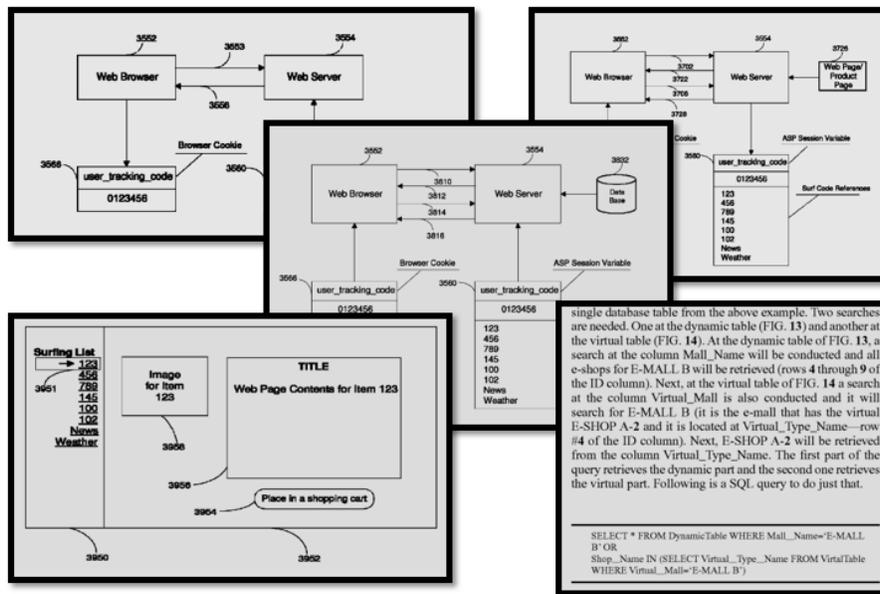
133. The claims in the '091 patent require a server hosting content from three content hosts and the use of a unique Uniform Resource Locator Address. These are technological solutions that are rooted in the internet and have no comparable analog outside the realm of the internet.

134. A unique feature of the internet is providing users with access to content aggregated from different web servers. The content in some instances might be presented in composite web pages. There was a need to track user access to specific pieces of content that although displayed on a single web page was aggregated from different web servers. "From this scenario it is clear that there is a need for a mechanism to track and keep the user surfing experience." '091 patent, col. 21:53-54.

135. The '091 patent is directed at solving a problem unique to the internet – the tracking of internet user access to content aggregated from several hosts and enabling the display of previously accessed content to a user. To accomplish this objective, the '091 patent provided technological solutions including the use of a surf code reference that enabled the tracking of a user as content from different hosts is accessed. The patent specification explains that a surf code reference "is used for automatically storing a reference for each information supplied to each client and it forms the surf user-list. Once the user requests his/her surf user-list, the server will use each surf code reference and create the surf user-list and sent it to the user. A surf user-list will only include information that was previously viewed by the user." '091 patent, col. 21:54-62.

136. Claim 7 of the '091 patent recites means-plus-function claim limitations governed by 35 U.S.C. § 112(f). The corresponding structure(s) in the '091 patent specification includes algorithms that improve the functioning of a computer by being more efficient "the web server 3554 will first save the requested webpage or the product page's code in the session variable user\_tracking\_code 3560 and second it will fetch the webpage or the products page 3726 and send it 3728 to the web browser 3552." *See, e.g.*, '091 patent cols. 11:4-12:32, 22:1-58, figs. 34-39.

137. The ‘091 patent discloses computer algorithms in the specification. In addition to the structures and algorithms disclosed throughout the specification, these algorithms correspond to the means-plus-function claim limitation in the ‘091 patent. Means-plus-function claims such as Claim 7 in the ‘091 patent are inherently not abstract ideas. Stanford Law Professor Mark Lemley described his analysis: “If the patent is interpreted as a means-plus-function claim, it will be limited to the particular software implementation the patentee actually built or described. Such a narrow, specific claim should not be an unpatentable ‘abstract idea.’”<sup>62</sup>



‘091 patent, Col. 22:1-58, Figs. 34-35, 37-39.

138. The ‘091 patent addresses a problem faced by web site operators who had a need to track access to internet content that came from multiple web servers. Further, there was a need to allow users to access content that they had viewed even if the content had come from multiple web servers. The ‘091 patent teaches innovative new technologies that are technological solutions to these problems. The solutions include: (1) a virtual server computer hosting a plurality of content hosts, (2) enabling users to access a virtual server providing a view

<sup>62</sup> Eugene Quinn, *The Ramifications of Alice: A Conversation with Mark Lemley*, IPWATCHDOG BLOG, September 4, 2014, <http://www.ipwatchdog.com/2014/09/04/the-ramifications-of-alice-a-conversation-with-mark-lemley/id=51023/> (emphasis added).

of content supplied from multiple web servers,<sup>63</sup> (3) assigning a surf code reference to each of the pieces of web content that are accessed by a user,<sup>64</sup> and (4) storing a user list comprising the surf code reference such that a user can subsequently access a list of the web content they had accessed.

139. The '091 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 various web 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.” ‘091 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 a web site to display content from various web servers without risking the loss of visitor traffic.

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<sup>63</sup> Like claims that have been found to constitute patent eligible subject matter, the inventions of the '091 patent are directed towards generating a composite web page that combined certain aspects of a host website with information from a third-party merchant. *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.”).

<sup>64</sup> The '091 patent is directed at generating specific data structures. The generation of specific data structures has been found to confer patent eligibility by various courts. *See e.g., 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.”).

140. The '091 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 technology and are directed to overcoming a problem specifically arising in the realm of computer networks. The need to track a user accessing content retrieved from various hosts presented a new challenge. Hewlett Packard Development Company, L.P., in a patent application filed in 2000 (that is cited on the face of the '091 patent), described the challenges presented by tracking user access to content from multiple hosts.

Computer users are increasingly accessing the internet, for entertainment, informational, and work purposes using a variety of computing devices. Accessing and using the internet is often referred to as “surfing the net/web.” . . . Bookmarks are essentially short cuts that allow a user to quickly access favorite websites. . . . A bookmark, then, is essentially stored navigation data that allows a user to efficiently return to a favorite website.<sup>65</sup>

141. At the time of the inventions claimed in the '091 patent, processing, transmitting, and aggregating electronic data from various hosts and tracking users access to specific pieces of content presented new and unique issues over the state of the art. As explained in the '091 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.” '091 patent, col. 1:43-45.

142. Although the methods taught in the '091 patent have been adopted by leading businesses today, at the time of invention, the technologies taught in the '091 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.” '091 patent, col. 1:55-57.

143. Further, the '091 patent claims improve upon the functioning of a computer system by using a surf code reference to allow the granular identification of content accessed by

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<sup>65</sup> See also U.S. Patent App. 09/752,058 at ¶ 6.

a user. The inventions disclosed in the '091 patent improve the functioning of a computer system by improving the security of the system and reducing the amount of data stored (and computer resource utilized). U.S. Patent No. 6,189,024, which was issued in 2001, is cited on the face of the '091 patent and subsequently assigned to Facebook, described drawbacks in the state of the art at the time. These drawbacks in existing systems prevented a user from accessing an accurate list of web content visited where accessing occurred across multiple web sessions.

This "history" function generally lasts throughout the time that a user instantiates the browser program until the point where the browser is terminated. This time period is what traditionally defines a "session." The session history function on browsers record the current navigation path of the user, i.e. it is a single-threaded path. . . . [A] drawback to this approach is apparent when a user navigates through a path on a typical browser, visiting page A 201 first. Page B 202 is then visited, followed by page C 203. The user backtracks up this path to page B 205 and deviates to page D 207. ***Once the user goes off the path, information about the previous path that was deviated from is lost.***<sup>66</sup>

144. U.S. Patent App. 09/752,058, which was assigned to Hewlett Packard (and is cited on the face of the '091 patent), describes drawbacks of existing systems that enabled the tracking of users to web content as including the creation of duplicate data, impairing the amount of computer memory space available on a computer system, and creating security issues from exposing a user's navigation data.

A user's navigation data can, however, create some difficulties. In particular, a user's navigation data can be difficult to manage. . . . Because users often access the internet using different computers, a user's navigation data may become dispersed across the various computers operated by the user thus making access to this data difficult if not impossible. ***This can result in a data integrity issue where one user's navigation data overwrites or obscures navigation data for other users. There may also be a security issue when users leave navigation data on a computer they may casually use.*** Additionally, the storage of ***navigation data locally occupies storage space in the user's computer memory drive thereby limiting the storage available for other uses.***<sup>67</sup>

145. One or more claims of the '091 patent teach the gathering of data from hosts to create a surf code reference. The creation of a label such as a "surf code" has been found to

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<sup>66</sup> U.S. Patent No. 6,189,024, col. 1:18-33 (emphasis added).

<sup>67</sup> U.S. Patent App. No. 09/752,058 at ¶ 9 (emphasis added).

confer patent edibility by various courts.<sup>68</sup> The '091 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 web content located on hosts and assigning the retrieved web content a surf code reference that is used to track user access to the web content.

146. The '091 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 content on a host, assigning the content a surf code reference and using the surf code reference to track user access and generate a list of content accessed by a user. These methods are technologies unique to the internet age.

147. The inventive concepts claimed in the '091 patent are technological, not “entrepreneurial.” For example, retrieving content from a host server is a specific, concrete solution to the technological problem of tracking user access to content retrieved from multiple hosts.

148. The '091 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, one or more claims of the '091 patent require assigning a surf code reference to each of the different contents viewed by a user, storing a user list based on the surf-code reference for each of the different contents, and enabling a user to access a user list identifying the previously viewed contents.

A method of using a code to track user access to content, the method comprising the steps of:

providing a virtual server computer, the virtual server computer hosting a plurality of content hosts, the plurality of content hosts comprising a first content host, a second content host and a third content host;

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<sup>68</sup> 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.”).

enabling each content host in the plurality of content hosts to be accessible by a user at a unique Uniform Resource Locator address;

wherein the plurality of content hosts comprise a plurality of contents;

enabling user interaction with the plurality of content hosts through the first content host without the user having to navigate to the unique Uniform Resource Locator address of any other content host in the plurality of content hosts;

displaying to the user accessing the first host content from at least two different content hosts;

assigning a surf code reference to each content displayed to the user, the surf code reference comprising information that identifies each such content displayed;

supplying from the virtual server computer a user list to the user, the user list comprising an identification of each such content viewed by the user; and

presenting any such content viewed by the user to the user requesting such content from the user list.

149. The '091 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 host.

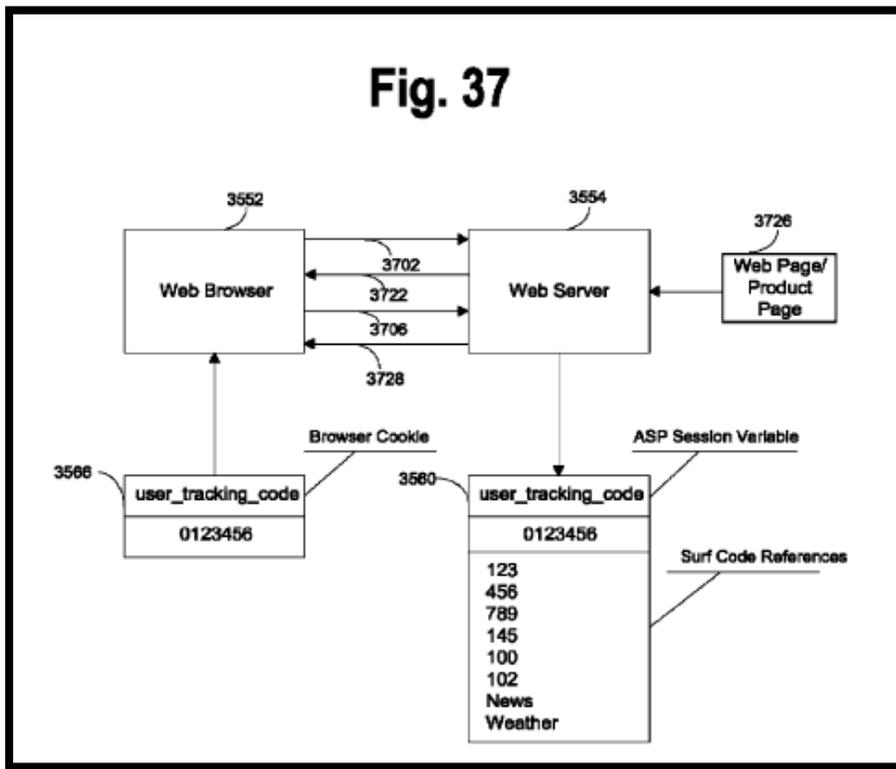
150. The '091 patent does not preempt the field of web content management systems, or prevent use of alternative web content management systems that enable the viewing of previously accessed web content. For example, the '091 patent includes inventive elements—embodied in specific claim limitations—that 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 twenty-one patents cited in the prosecution history include numerous systems that are not preempted by the claims of the '091 patent.

151. The '091 patent does not claim, or attempt to preempt, the performance of an abstract business practice on the internet or using a conventional computer. Further, the claimed subject matter of the '091 patent is not a pre-existing but undiscovered algorithm.

152. The one or more claims of the '091 patent require the use of a computer system through specific claim limitations, including (1) a virtual server computer, (2) a unique resource locator address, (3) three content costs, (4) assigning a surf code reference, (5) supplying the virtual server computer a user list, and (6) storing on the virtual server computer storage medium the surf-code reference.

153. The methods claimed in the '091 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 '091 patent specification describes limitations in the existing systems at the time the inventions disclosed in the '091 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." '091 patent, col. 1:54-59.

154. One or more claims of the '091 patent require a specific configuration of electronic devices, a network configuration, and the web servers to retrieve hosted web content and assign the content a surf code reference that is used to generate a list of accessed content. These are meaningful limitations that tie the claimed methods and systems to specific machines. For example, the below diagram from the '091 patent illustrates a specific configuration of hardware disclosed in the patent.



'091 patent, Fig. 37.

155. The '091 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.

156. One or more of the '091 patent claims require a three content costs and the use of a Uniform Resource Locator Address, which 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.

**INTERNET ADVERTISING PATENTS**

157. 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.

158. Microsoft patents have identified the unique challenges that the internet presented to content authors seeking to monetize their content.

Unfortunately, an author that is an excellent producer of content does not always have the best access to channels for distributing the content. Likewise, distributors of content do not always have access to the best content to distribute. However, authors are often concerned about how to provide content to a distributor (e.g., an aggregation site) in a manner that will allow the author to receive appropriate credit for the content and even to profit from the content through monetary rewards. Once an author's content is displayed on a site that is not under the control of the author, the author also loses control of the advertisements and other revenue streams associated with the content. An author may not trust a distributor to provide the author with a fair share of any revenue derived from the attention and readership that the author's content garners for the distributor. An author may also not want his content shown on a particular site regardless of monetization (e.g., Disney content or political videos on an explicit adult site). ***Thus, monetizing content on the web is an ongoing concern, particularly for content authors.***

U.S. Patent No. 9,208,246, Col. 1: 31-49 (emphasis added) (this patent assigned to Microsoft claims priority to a March 26, 2010 application).

159. 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.<sup>69</sup>

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.<sup>70</sup>

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***

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<sup>69</sup> U.S. Patent No. 5,948,061, col. 1:29-59 (assigned Google, Inc. and issued September 7, 1999) (emphasis added).

<sup>70</sup> 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).

*data comes an unprecedented opportunity to explore it for business purposes as well as a responsibility and need to respect the privacy of users.*<sup>71</sup>

160. 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.

161. 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. *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.<sup>72</sup>

162. 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. . ."

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<sup>71</sup> U.S. Patent No. 8,589,292, col. 1:6-13 (citing the '384 patent as relevant prior art) (emphasis added).

<sup>72</sup> *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.").

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

163. 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.

164. 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.

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

166. 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 portals*, 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**

167. 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 E. The '139 patent relates to specific methods for web site development based on advertising revenue sharing.

168. 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.

169. 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.

170. 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.

171. 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.<sup>73</sup>

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

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<sup>73</sup> 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).

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.<sup>74</sup>

172. 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.

173. 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.

174. 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 commissions. "We were, like, 'Wow, that was easy,'" said Andy Teare, the store's general manager.<sup>75</sup>

175. 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

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<sup>74</sup> U.S. Patent No. 9,196,000 (emphasis added) (assigned to Xerox Corporation and referencing UnoWeb's U.S. Patent No. 7,580,858).

<sup>75</sup> Mark Cohen, *Surviving the Dark Side of Affiliate Marketing*, NY TIMES (December 4, 2013).

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.

176. 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.<sup>76</sup>

177. 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.<sup>77</sup>

178. 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;

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<sup>76</sup> 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.”).

<sup>77</sup> 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 that is more unique to the internet is called click-fraud. Click-fraud results when a person takes steps to imitate legitimate views.”).

- 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.

179. 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.

180. 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 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.

181. 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.

182. 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.

183. 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.,<sup>78</sup> Microsoft,<sup>79</sup> and Cox Communications<sup>80</sup> as being a problem unique to and arising from the internet.

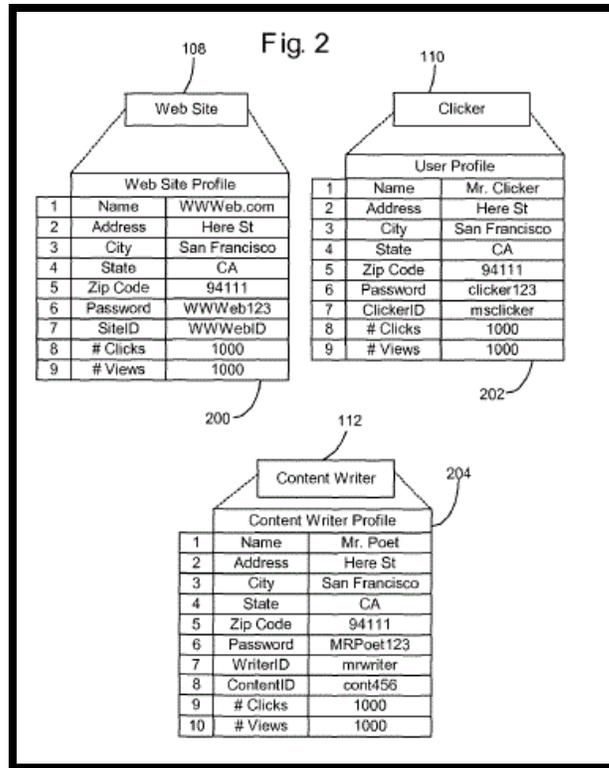
184. The systems and methods claimed in the '139 patent were not a longstanding or fundamental economic practice at the time of patented inventions. Nor were they fundamental principles in ubiquitous use on the internet or computers in general. One or more claims of the '139 patent require a specific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

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<sup>78</sup> 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.’”).

<sup>79</sup> 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.”).

<sup>80</sup> 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.”).



'139 patent, Fig. 2.

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

185. 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 F. The ‘384 patent relates to specific methods for web site development based on advertising revenue sharing.

186. 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.

187. 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).

188. 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.

189. 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.

190. 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.

191. 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.

192. 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.

193. 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.<sup>81</sup>

194. 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;

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<sup>81</sup> 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.”).

- 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.

195. 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.

196. 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.

197. 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.

198. 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.

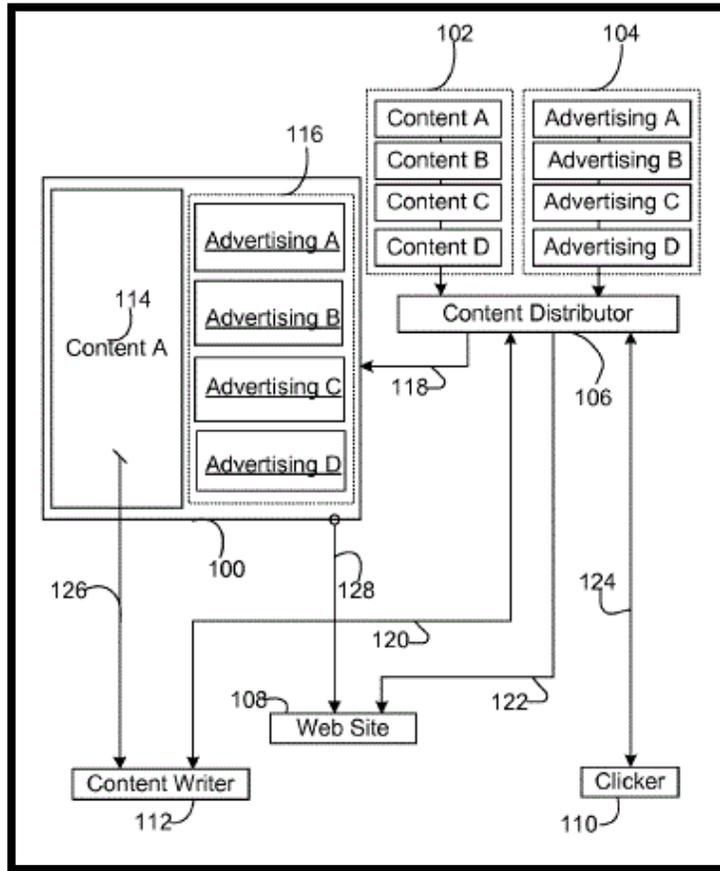
199. The '384 patent claims methods that “could not conceivably be performed in the human mind or pencil and paper.”

200. 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.

201. 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.

202. 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.

203. 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**

204. 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 G. 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.

205. 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.

206. 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.<sup>82</sup>

207. 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."<sup>83</sup>

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

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<sup>82</sup> 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.").

<sup>83</sup> Min Chen, Varghese S. Jacob, Suresh Radhakrishnan, and Young U. Ryu, *The Effect of Fraud Investigation Cost on Pay-Per-Click Advertising*, 11<sup>TH</sup> ECONOMICS OF INFORMATION SECURITY CONFERENCE PROCEEDINGS (2012), available at [http://www.econinfosec.org/archive/weis2012/papers/Chen\\_WEIS2012.pdf](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.”*<sup>84</sup>

**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.<sup>85</sup>

**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.<sup>86</sup>

**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.*<sup>87</sup>

**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.

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<sup>84</sup> 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.).

<sup>85</sup> *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.).

<sup>86</sup> 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).

<sup>87</sup> 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.).

We have several teams that are 100% dedicated to the effort, and we will continue 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.<sup>88</sup>

209. 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.

210. 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.

211. 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.

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<sup>88</sup> 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).

212. 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.

213. 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 value information over time since the consumption of particular information may vary and is often unpredictable.*<sup>89</sup>

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.<sup>90</sup>

214. 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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<sup>89</sup> U.S. Patent App. No. 12/816,868 (emphasis added) (assigned to Microsoft Corporation and published September 15, 2011).

<sup>90</sup> U.S. Patent No. 9,196,000 (emphasis added) (assigned to Xerox Corporation and referencing the '858 patent).

215. 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.<sup>91</sup>

*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.”<sup>92</sup>

216. 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.

217. 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

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<sup>91</sup> U.S. Patent App. No. 2011/0255171 at ¶ 7 (emphasis added) (assigned to Microsoft Corporation and referencing the '858 patent as relevant prior art).

<sup>92</sup> 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.).

advertisement — and that action counts as a paid-for impression even though no human being will see it.<sup>93</sup>

218. 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.<sup>94</sup>

219. 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.

220. 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.<sup>95</sup>

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<sup>93</sup> 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-variety-s-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.”).

<sup>94</sup> 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).

<sup>95</sup> *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,

221. 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.

222. 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.

223. 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.

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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.”).

224. 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.

225. 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,<sup>96</sup>

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<sup>96</sup> 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,<sup>97</sup> and reducing the number of malware bots placed on machines for the purpose of generating clicks.<sup>98</sup>

226. 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.”<sup>99</sup>

227. 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 companies such as Yahoo!, Inc.,<sup>100</sup> Microsoft,<sup>101</sup> and Cox Communications<sup>102</sup> as unique to and arising from the fundamental structure of the internet.

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<sup>97</sup> 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).

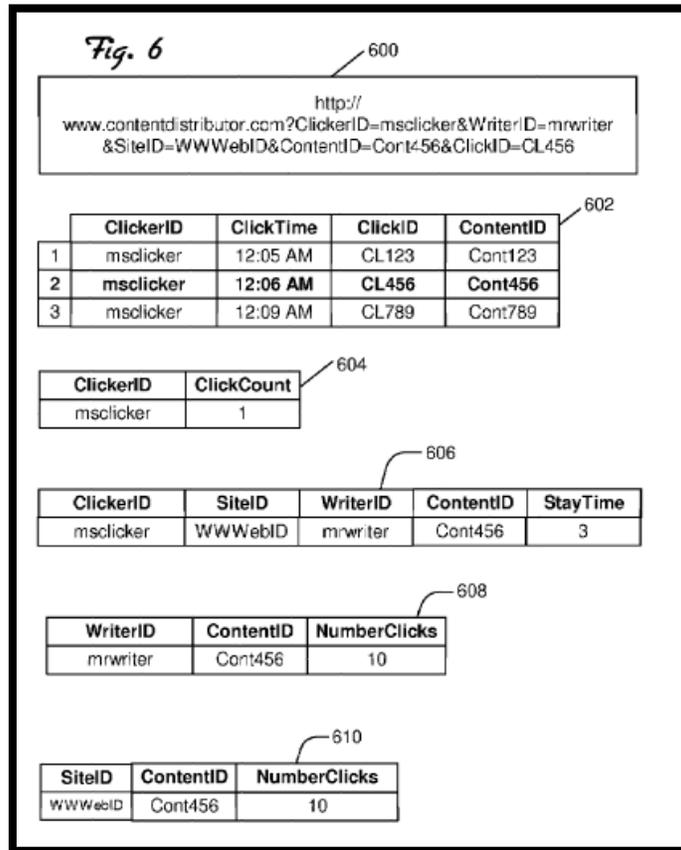
<sup>98</sup> Haitao Xu, Daiping Liu, and Aaron Koehl *et al.*, *Click Fraud Detection on the Advertiser Side*, in PROCEEDINGS OF THE 19TH EUROPEAN SYMPOSIUM ON RESEARCH IN COMPUTER SECURITY at 419 (2014) (“As online advertising has evolved into a multi-billion dollar business, click fraud has become 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.”).

<sup>99</sup> 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).

<sup>100</sup> *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.’”).

<sup>101</sup> *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.”).

228. 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.



‘858 patent, Fig. 6.

<sup>102</sup> 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.”).

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

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

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

231. Microsoft makes, sells, offers to sell, imports, and/or uses the Yammer website (*e.g.*, <http://www.yammer.com>) and Yammer mobile applications (*e.g.*, Yammer for iOS native application; Yammer for Android native application; Yammer for Windows Mobile native application) (collectively, the “Microsoft ‘345 Product”).

232. On information and belief, the Microsoft ‘345 Product includes web content management software.

233. On information and belief, the Microsoft ‘345 Product is available to businesses and individuals throughout the United States.

234. On information and belief, the Microsoft ‘345 Product is provided to businesses and individuals located in the Eastern District of Texas.

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

236. On information and belief, Brian Lyttle in a 2014 presentation on Yammer at the SharePoint 2014 Conference described the ability of Yammer to retrieve third party content. “The key thing around the story is the URL is specified in the object element. This URL is key to specify with the object element. If you specify a different URL you will create a different open graph item for that object . . . Message meta data, it is possible to also attach Open Graph properties to Yammer messages.”

Open Graph objects can be attached to messages



**Brian Lyttle**  
to Code Camp

Messages can have open graph metadata attached as long as you specify it correctly.



[www.brianlyttle.com](http://www.brianlyttle.com)  
An overview how to start debugging problems with zones.

Like · Reply · Share · More · May 11 at 1:07pm from Yammer OG Messaging Demo

```
public MessageResponse Post(string message,
                             List<KeyValuePair<string, string>> openGraphProperties)
{
    var postData = new List<KeyValuePair<string, string>>
    {
        new KeyValuePair<string, string>("body", message)
    };
    postData.AddRange(openGraphProperties);

    var jsonObj = _client.Post<JsonObject>("messages.json", postData);
    var result = new MessageResponse(jsonObj);

    return result;
}
```

Brian Lyttle, *Overview of Yammer app development - SPC 332, MSDN Channel 9 at 44:19-45:20* (March 2014).

237. On information and belief, the Microsoft ‘345 Product hosts on Microsoft computers said third-party-supplied content. Microsoft reads third-party-supplied content and makes third-party supplied content available to users.

238. On information and belief, the Microsoft ‘345 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 Microsoft include third-party-supplied content.

239. On information and belief, Microsoft gathers third-party-supplied content from servers. For example, when the Microsoft ‘345 Product is requested to load a user feed or recently accessed content, the Microsoft website/web app virtual web server computer retrieves third-party supplied content (e.g., third-party supplied image content; third-party supplied video content; third-party supplied document content; third-party supplied textual (e.g., notes) content; etc.) comprising first objects describing a product or service (e.g., image, video, document, and/or textual content).

240. On information and belief, the below screen capture shows that elements in a user’s news feed are retrieved using the “GET” method.

Name	Method	Status	Protocol	Domain	Remote Address	Type	Initiator	Time	Connection Id	Server
files?from=nav	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	document	Other	2.19 s	1274314	Microsoft-Il...
yam-application-a6cb1fa4e8525cf104171...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:48	33 ms	1274031	nginx
yam-yamkit-ng-a98a21fce1b0e7869642a1...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:50	47 ms	1274032	nginx
yam-feeds-74395ddcbf04626f317ba3880...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:52	37 ms	1274034	nginx
yam-common-ui-ccc19f9875e804b0e0db33...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:53	43 ms	1274036	nginx
yam-workfeed-app-7ac48c2332785e21e...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:54	40 ms	1274035	nginx
yam-pages-3042263a2baed18fcbabbab70b...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:56	43 ms	1274033	nginx
yam-requirejs-complete-7475cc20e0c509...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:58	70 ms	1274031	nginx
yam-vendor-637d131736ed3e9037c5cd13...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:192	84 ms	1274034	nginx
yam-requirejs-redirector-b01dd1da774ab...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:193	89 ms	1274035	nginx
yam-en-us-dict-22dea2d51e675378c9119...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:194	90 ms	1274036	nginx
yam-bootstrap-f8b47b637d2384fa8c5166...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:195	93 ms	1274033	nginx

*Yammer Recently Accessed Content Feed - Network Developer Tools, YAMMER WEBPAGE (last visited April 2016) (log of elements loaded on a Yammer user's recently accessed files feed that is logged by a browser in network developer tools).*

241. On information and belief, the Microsoft '345 Product hosts, on the server computer, third-party-supplied content, said hosting comprises reading third-party supplied content and making said third-party supplied content available for access by the user. For example, Microsoft hosts on the Microsoft webpage/web app virtual web server computer the third-party-supplied content (e.g., third-party supplied document content; third-party supplied image content; third-party supplied video content; third-party supplied textual (e.g., notes, etc.) content; etc.), the hosting comprising reading the third-party supplied content and making the third-party supplied content available for access by the user.

242. On information and belief, Microsoft transmits 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.

243. On information and belief, Chris Johnson in a presentation at the Microsoft Sharepoint 2014 conference in describing the data model for Yammer described that objects are parsed and contain a unique ID associated with each object. "And so here you can see one that I grabbed earlier on [referring to a message object]. If your familiar with JSON there is information here on who made the update and so forth and what sort of update . . . you can also see the URL for the particular update. . . all these messages as we go through the example we'll see they have a unique ID tied to them so you can grab that and interact with that particular instance of the message."

## Message payload

```
{
  "id": 361548022,
  "sender_id": 1499582735,
  "replied_to_id": null,
  "created_at": "2014/01/30 01:14:17 +0000",
  "network_id": 863840,
  "message_type": "update",
  "sender_type": "user",
  "url": "https://www.yammer.com/api/v1/messages/361548022",
  "web_url": "https://www.yammer.com/yammerisawesome.onmicrosoft.com/messages/361548022",
  "body": {
    "parsed": "Great sales numbers! This is great!",
    "plain": "Great sales numbers! This is great!",
    "rich": "Great sales numbers! This is great!"
  },
  "thread_id": 361548022,
  "client_type": "Web",
  "client_url": "https://www.yammer.com/",
  "system_message": false,
  "direct_message": false,
  ...
}
```

Chris Johnson, *Developing socially connected apps with Yammer*, SHAREPOINT AND OPENGRAPH, MSDN Channel 9 at 12:45-13:43 (March 2014).

244. On information and belief, the Microsoft '345 Product selects a guiding means from third-party-supplied content for use in identifying related second content. For example, the Yammer webpage/web app virtual web server computer selects guiding means (e.g., Open Graph metadata/API-compatible metadata/tag information/code) from the third-party-supplied content for use in identifying related second content.

245. On information and belief, the Microsoft '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 Microsoft website/web app virtual web server computer uses the guiding means (e.g., Open Graph metadata/ API-compatible metadata/tag information/code) for an object within the first objects of the third-party-supplied content (e.g., third-party supplied content; third-party supplied image content; third-party supplied video content; third-party supplied textual content; etc.) to identify the related second content, wherein the related second content comprises an object that is related to an object within the first objects of the third-party-supplied content.

246. On information and belief, the Microsoft ‘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 Microsoft website/web app virtual web server computer uses the guiding means (e.g., Open Graph metadata/ API-compatible metadata/tag information/code) for an object within the first objects of the third-party-supplied content (e.g., third-party supplied content; third-party supplied image content; third-party supplied video content; third-party supplied textual content; etc.) to identify the related second content, wherein the related second content comprises an object that is related to an object within the first objects of the third-party-supplied content.

247. On information and belief, Microsoft documentation states that “when you send an OG object to Yammer, the object checks to see if it can scrape OG metadata from the page at the OG objects URL. Yammer uses an internal service to visit the page and, if the page is public, retrieve any OG metadata present on the page. If the internal service finds OG metadata that Yammer didn’t receive from the activity related to the object, then Yammer saves the new metadata.”<sup>103</sup>

248. On information and belief, the Microsoft ‘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 Microsoft website/web app includes the second content in the web page to form a second web page, the including being performed by the Microsoft website/web app virtual web server computer.

249. On information and belief, the Microsoft ‘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 Microsoft website/web app virtual web server computer sends the second web page to the to the client computer for display on the client computer with the web page previously transmitted.

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<sup>103</sup> *OG Metadata – Yammer Documentation*, YAMMER DEVELOPER CENTER (last visited April 2016), available at: <https://developer.yammer.com/docs/embeddly>.

250. On information and belief, Microsoft 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, Microsoft '345 Product, which includes infringing web content management technologies.

251. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the Microsoft '345 Product, Microsoft 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).

252. On information and belief, Microsoft also indirectly infringes the '345 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of September 23, 2010.

253. On information and belief, Microsoft has had knowledge of the '345 patent since at least September 23, 2010. Microsoft cited the '345 patent in the following U.S. Patent App. which was published on September 23, 2010: U.S. Patent App. No. 12/406,903. Alternatively, Microsoft has had knowledge of the '345 patent since at least the service of this Complaint or shortly thereafter, and on information and belief, Microsoft knew of the '345 patent and knew of its infringement, including by way of this lawsuit.

254. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '345 patent. Microsoft 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, Microsoft provides the Microsoft '345 Product that has the capability of operating in a manner that infringe one or more of the claims of the '345 patent, including at least claims 1-8, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '345 Product to utilize the product

in a manner that directly infringe one or more claims of the '345 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '345 Product in a manner that directly infringes one or more claims of the '345 patent, including at least claims 1-8, Microsoft specifically intended to induce infringement of the '345 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '345 Product, *e.g.*, through Microsoft tutorials, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '345 patent. Accordingly, Microsoft 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.

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

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

257. Unless a permanent injunction is issued enjoining Microsoft 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.

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

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

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

260. Microsoft makes, distributes, sells, licenses, offers to sell, imports, and/or uses the Microsoft Azure platform which includes Azure Search, Azure DocumentDB, Azure SQL Database, Azure StorSimple, Azure Content Delivery Network (CDN), and Azure Data Catalog (collectively, the “Microsoft ‘386 Product”).

261. On information and belief, the Microsoft ‘386 Product includes web content management software.

262. On information and belief, the Microsoft ‘386 Product is available to businesses and individuals throughout the United States.

263. On information and belief, the Microsoft ‘386 Product is provided to businesses and individuals located in the Eastern District of Texas.

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

265. On information and belief, Microsoft documentation states, “An indexer in Azure Search is a crawler that extracts searchable data and metadata from an external data source and populates an index based on field-to-field mappings between the index and your data source. This approach is sometimes referred to as a 'pull model' because the service pulls data in without you having to write any code that pushes data to an index.”<sup>104</sup>

266. On information and belief, the Microsoft ‘386 Product indexes third-party-supplied content. For example, Microsoft Azure indexes a plurality of objects using searchable data and metadata from the external data source.

267. On information and belief, Microsoft documentation states that Microsoft Azure DocumentDB performs “Automatic indexing of documents, JSON documents are represented as trees. Structural information and instance values are normalized into a JSON-Path.”

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<sup>104</sup> Heidi Steen, *Indexers in Azure Search*, MICROSOFT AZURE DOCUMENTATION (April 14, 2016), available at: <https://azure.microsoft.com/en-us/documentation/articles/search-indexer-overview/>

# Indexing

```

"location":
[
  { "country": "Germany", "city": "Berlin" },
  { "country": "France", "city": "Paris" }
],
"headquarters": "Belgium",
"exports":
[
  { "city": "Moscow" },
  { "city": "Athens" }
]
    
```

```

"location":
[
  { "country": "Germany", "city": "Berlin" },
  { "country": "France", "city": "Paris" }
],
"headquarters": "Belgium",
"exports":
[
  { "city": "Moscow" },
  { "city": "Athens" }
]
    
```

## How it works

Automatic indexing of documents  
JSON documents are represented as trees  
Structural information and instance values are normalized into a **JSON-Path**

## Example

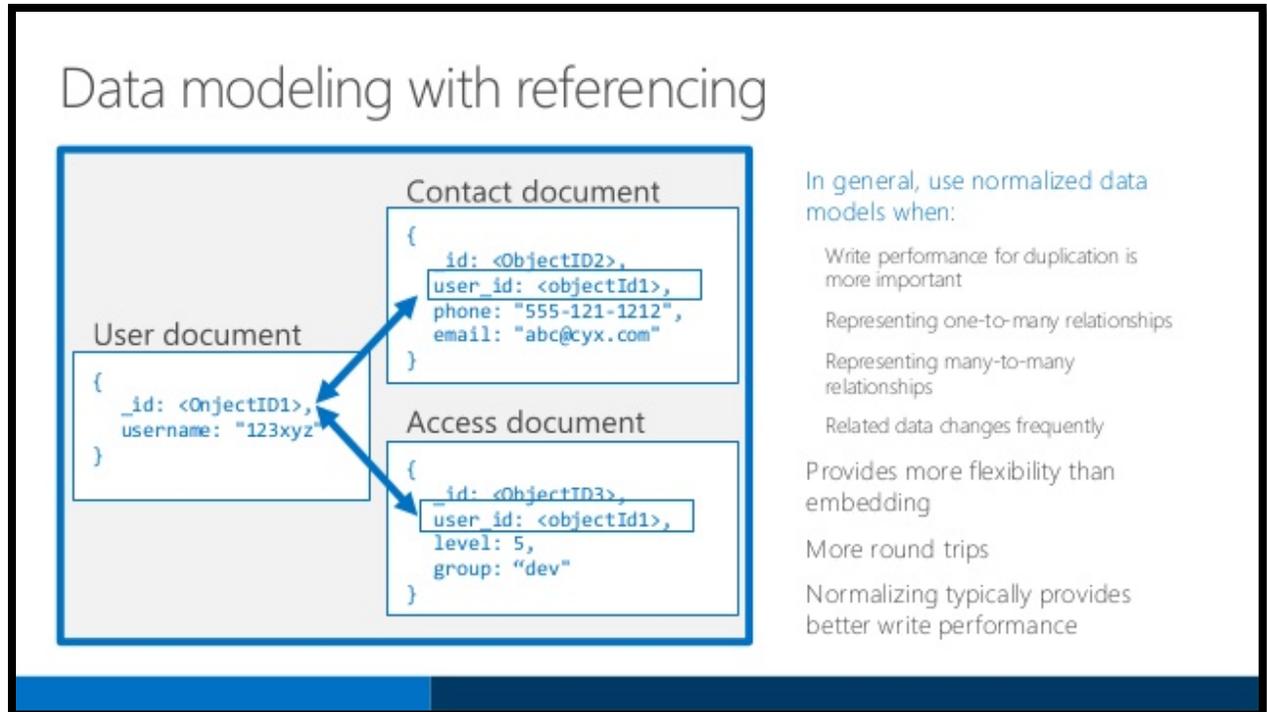
{"headquarters": "Belgium"} → /"headquarters"/"Belgium"

{"exports": [{"city": "Moscow"}, {"city": "Athens"}]} → /"exports"/0/"city"/"Moscow" and /"exports"/1/"city"/"Athens".

Benjamin Guinebertière, MICROSOFT AZURE: DOCUMENT DB AND OTHER NOSQL DATABASES at 17 (2015).

268. On information and belief, the Microsoft ‘386 Product indexes content using keywords.

269. On information and belief, the Microsoft ‘386 Product indexes content and stores index information. The below excerpt from Microsoft documentation shows how DocumentDB creates data modeling where related objects are identified through “one-to-many relationships” and “many-to-many relationships.”



Sato Naoki, MICROSOFT AZURE DOCUMENTDB at 22 (2015)

270. On information and belief, objects are indexed by Microsoft using an indexer. Microsoft documentation has stated that numerous different kinds of data can be indexed once an indexer is used to identify the target index and data source. “An indexer describes how the data flows from your data source into a target search index. You should plan on creating one indexer for every target index and data source combination. While you can have multiple indexers writing into the same index, an indexer can only write into a single index.”<sup>105</sup>

271. On information and belief, the Microsoft ‘386 Product forms a database table containing objects in the plurality of objects, wherein forming is performed by the server computer. For example, the Microsoft 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.

<sup>105</sup> Andrew Hoh, *Connecting DocumentDB with Azure Search using indexers*, MICROSOFT AZURE DOCUMENTATION (March 9, 2016), available at: <https://azure.microsoft.com/en-us/documentation/articles/documentdb-search-indexer/#RunIndexer>

272. On information and belief, the Microsoft ‘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 Microsoft website/web app virtual web server computer 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.

273. On information and belief, Microsoft enables the “moreLikeThis” query parameter in the Search Documents API. This functionality enables a first content that is identified and displayed to have a second content identified that is relevant to the first content.

Microsoft Documentation states:

*The moreLikeThis parameter finds documents that are similar to the document specified by the document key.* When a search request is made with moreLikeThis, a list of search terms is generated based on the frequency and rarity of terms in the source document. Those terms are then used to make the request. By default, the contents of all searchable fields are considered unless searchFields is used to restrict which fields are searched.<sup>106</sup>

274. . On information and belief, the Microsoft ‘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 Microsoft website/web app virtual web server computer identifies a second content by finding a relationship between the second content and the object selected.

275. On information and belief, the Microsoft ‘386 Product hosts on the Microsoft servers third-party-supplied content.

276. On information and belief, the Microsoft ‘386 Product reads third-party-supplied content and makes third-party-supplied content available to users.

277. On information and belief, the Microsoft ‘386 Product sends second content for receipt and display on the client computer, wherein sending is performed by the server computer.

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<sup>106</sup> Bruce Johnston, *Azure Search Service REST API: Version 2015-02-28-Preview*, MICROSOFT AZURE DOCUMENTATION (March 8, 2016), available at: <https://azure.microsoft.com/en-us/documentation/articles/search-api-2015-02-28-preview/> (emphasis added).

For example, the inclusion of the “moreLikeThis” parameter will return for display on the client computer the related content.

278. On information and belief, the Microsoft ‘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 Microsoft include third-party-supplied content.

279. On information and belief, Microsoft 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 Microsoft ‘386 Product, which includes infringing web content management technologies.

280. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the Microsoft ‘386 Product, Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the ‘386 patent, including at least claims 1-6 and 8-9, pursuant to 35 U.S.C. § 271(a).

281. On information and belief, Microsoft 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.

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

283. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft ‘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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the ‘386 patent. Microsoft 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, Microsoft provides the Microsoft '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 1-6 and 8-9, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '386 Product to utilize the product in a manner that directly infringe one or more claims of the '386 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '386 Product in a manner that directly infringes one or more claims of the '386 patent, including at least claims 1 and 1-6 and 8-9, Microsoft specifically intended to induce infringement of the '386 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '386 Product, *e.g.*, through Microsoft user guides, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '386 patent. Accordingly, Microsoft 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.

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

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

286. Unless a permanent injunction is issued enjoining Microsoft 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.

**COUNT III**  
**INFRINGEMENT OF U.S. PATENT NO. 7,730,083**

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

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

289. Microsoft makes, sells, offers to sell, imports, and/or uses the Yammer website (*e.g.*, <http://www.yammer.com>) and Yammer mobile applications (*e.g.*, Yammer for iOS native application; Yammer for Android native application; Yammer for Windows Mobile native application) (collectively, the “Microsoft ‘083 Product”).

290. On information and belief, the Microsoft ‘083 Product includes web content management software.

291. On information and belief, the Microsoft ‘083 Product is available to businesses and individuals throughout the United States.

292. On information and belief, the Microsoft ‘083 Product is provided to businesses and individuals located in the Eastern District of Texas.

293. On information and belief, the Microsoft ‘083 Product provides a computer hosting a plurality of contents provided by a plurality of content hosts, wherein the contents are stored on a computer storage medium, and wherein the computer is configured with all the required software and hardware to support the ability to control all interfacing with the user without redirecting the user to any of the plurality of content hosts, and to request and receive data from the content hosts. For example, Microsoft provides a virtual web server computer to a user accessing the Yammer website and/or web apps (*e.g.*, [www.yammer.com](http://www.yammer.com)). The Yammer virtual web server computer comprises, for example, a plurality of contents (*e.g.*, image contents, video contents, textual contents, contents combining one or more of the foregoing, etc.) from a plurality of content hosts (*e.g.*, [7-067.rt.yammer.com](http://7-067.rt.yammer.com), [c.microsoft.com](http://c.microsoft.com), [UNOWEB COMPLAINT FOR PATENT INFRINGEMENT](http://mug0.assets-</a></p></div><div data-bbox=)

yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com).

Name	Metho...	Sta...	Protocol	Domain	Remote Address	Type	Initiator
3rd_party.png	GET	200	http/1.1	mug0.assets-yammer.com	13.107.6.159:443	png	Other
trans_pixel.aspx?wcs.tz=-7&wcs.cot=0&wc...	GET	200	http/1.1	c.microsoft.com	134.170.185.126:4...	gif	Other
web_ui	POST	200	http/1.1	receiver.yamalytics.yammer.com	40.78.62.210:443	xhr	Other
treated	POST	201	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
handshake	OPTIO...	200	http/1.1	7-067.rt.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
inbox.json?all_unseen=true&filter=PRIVAT...	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
svg-sprite-6474dcd63f0d666e89d4561290...	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	svg+xml	yam-vendor-637d131...js:2...
treated	POST	201	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
treated	POST	201	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
preview?url=http%3A%2F%2Ficheck.bbci.co...	GET	200	http/1.1	thumbnails.yammer.com	134.170.148.30:44...	jpeg	yam-vendor-637d131...js:1...
thumbnail	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	png	yam-vendor-637d131...js:1...
preview?url=http%3A%2F%2Fi2.cdn.turner...	GET	200	http/1.1	thumbnails.yammer.com	134.170.148.30:44...	jpeg	yam-vendor-637d131...js:1...
treated	POST	201	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
treated	POST	201	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
web_ui	POST	200	http/1.1	receiver.yamalytics.yammer.com	40.78.62.210:443	xhr	yam-vendor-637d131...js:2...
complete?prefix=&models=user%3A50&s...	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...
handshake	POST	200	http/1.1	7-067.rt.yammer.com	13.107.6.159:443	xhr	Other
cometd/	OPTIO...	200	http/1.1	7-067.rt.yammer.com	13.107.6.159:443	xhr	yam-vendor-637d131...js:2...

*Yammer Feed – Inspection Using Network Developer Tools, YAMMER WEBPAGE (last visited April 2016) (log of elements loaded on a Yammer user’s feed that is logged by a browser in network developer tools).*

294. On information and belief, the Microsoft ‘083 Product includes a virtual server computer (e.g., the Microsoft virtual web server computer provided to a user accessing the Microsoft websites and/or web apps) that hosts a plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.). The plurality of content hosts comprises at least a first content host, a second content host, and a third content host.

295. On information and belief, Microsoft enables each content host in the plurality of content hosts to be accessible by a user at a unique Uniform Resource Locator address. For example, Microsoft enables each content host in the plurality of content hosts to be accessible by

a user of the Microsoft webpage and/or web app at a unique URL within the following domains/subdomains:

- 7-067.rt.yammer.com
- c.microsoft.com
- mug0.assets-yammer.com
- plaris.yammer.com
- receiver.yamalytics.yammer.com
- s0.assets-yammer.com
- thumbnails.yammer.com

296. On information and belief, the Microsoft '083 Product includes functionality where a plurality of content hosts comprise a plurality of contents. For example, the plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.) comprise a plurality of contents (e.g., photo contents, video contents, textual contents, chat contents, contents combining one or more of the foregoing, etc.). Moreover, when a Microsoft user in the Eastern District of Texas visits the Microsoft website (e.g., via the webpage <https://www.yammer.com>), a Microsoft web server requests a plurality of dynamic contents from a plurality of hosts to display and control user interaction with the Yammer user's feed.

297. On information and belief, the Microsoft '083 Product stores on the computer storage medium an identification of the user to enable the user to log in to the computer. For example, Microsoft stores on a computer storage medium accessible to the Microsoft website/web app virtual server computer (e.g., non-volatile server-accessible flash and/or solid state memory) an identification of a registered Microsoft user (e.g., an identifier of the registered Microsoft user) to enable the user to log into the Microsoft website/web app virtual server computer.

298. On information and belief, Microsoft permits a logged-in user to access the computer through the requesting client to view at least two different contents in the plurality of contents.

299. On information and belief, Microsoft permits a user at a client to access a virtual server providing the virtual network, wherein such access enables the user to view multiple contents supplied by a different host in the virtual network, wherein the virtual server sends a request and receives data from the different hosts, and wherein the virtual server has all the required software and hardware to support the ability to virtually present the multiple contents. For example, the Microsoft website/web app virtual web server enables a user to interact with the plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.) without the user having to navigate to the unique URL address of any other content host in the plurality of content hosts. Moreover, in order to display and control user interaction with the Yammer webpage/UI, the Microsoft web server requests at least a second dynamic content hosted by a second host. For example, web browser source and developer tools reveal (among many others) content and associated hosts.

300. Microsoft assigns a surf code reference to each of the contents viewed, the surf code reference comprising information that identifies the contents viewed. For example, the Microsoft website/web app assigns an “Object ID” surf code reference to each content displayed to the user (e.g., the Yammer user “JohnDoe”), the surf code reference comprising information that identifies each such content displayed.

301. Microsoft receives a request from a logged-in user to create a user list of different contents viewed by the logged-in user.

302. Microsoft receives a request from a user to create a user list of different contents viewed by the user. Moreover, Microsoft configures the Yammer server to control interfacing with the Microsoft user accessing the first dynamic content (e.g., the external display content) and the second dynamic content (e.g., the dynamic content) through the second host (e.g., the \*.yammer.com host).

303. Microsoft stores the user list on the computer, the user list comprising the surf-code reference for each of the different contents viewed by the logged-in user.

304. Microsoft stores the user list comprising the surf code reference automatically within the virtual network for each content supplied to the user.

305. Microsoft permits the logged-in user to access the user list to identify the content viewed by the logged-in user. For example, through at least the Microsoft website/web app's "Recently Accessed" functionality, Microsoft supplies, from the Yammer website/web app virtual web server computer, a user list to the user (e.g., the Yammer user "JohnDoe"), the user list comprising an identification of each such content viewed by the user.

306. Microsoft permits the user at the client to request the user-list from the virtual network. Moreover, Yammer configures the Yammer server to maintain the Microsoft user's interaction with the first dynamic content (e.g., external display content) at the second host (e.g., the \*.yammer.com host).

307. Microsoft presents the content viewed by the logged-in user to the user requesting such content from the user list. For example, the Yammer website/web app displays to the user accessing the first host (e.g., www.yammer.com) content from at least two different content hosts (e.g., content from at least 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.).

308. Microsoft supplies from the virtual network the user-list to the user at the client. For example, through at least the Yammer website/web app's "Recently Accessed" functionality, Yammer presents to the user (e.g., the Yammer user "Doe") any such content viewed by the user requesting such content from the user list.

309. Microsoft supplies a content to the user drawn from the user list.

310. On information and belief, Microsoft has directly infringed and continues to directly infringe the '083 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 Microsoft '083 Product, which includes infringing web content management technologies.

311. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the Microsoft '083 Product, Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '083 patent, including at least claims 1-6, 8 and 10, pursuant to 35 U.S.C. § 271(a).

312. On information and belief, Microsoft also indirectly infringes the '083 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

313. On information and belief, Microsoft has had knowledge of the '083 patent since at least service of this Complaint or shortly thereafter, and on information and belief, Microsoft knew of the '083 patent and knew of its infringement, including by way of this lawsuit.

314. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '083 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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '083 patent. Microsoft performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '083 patent and with the knowledge, that the induced acts would constitute infringement. For example, Microsoft provides the Microsoft '083 Product that has the capability of operating in a manner that infringes one or more of the claims of the '083 patent, including at least claims 1-6, 8 and 10, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '083 Product to utilize the product in a manner that directly infringe one or more claims of the '083 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '083 Product in a manner that directly infringes one or more claims of the '083 patent, including at least claims 1-6, 8 and 10, Microsoft specifically intended to induce infringement of the '083 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '083 Product, *e.g.*, through Microsoft user guides, product support, marketing

materials, and training materials to actively induce the users of the accused products to infringe the '083 patent. Accordingly, Microsoft 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 '083 patent, knowing that such use constitutes infringement of the '083 patent.

315. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '083 patent.

316. As a result of Microsoft's infringement of the '083 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Microsoft's infringement, but in no event less than a reasonable royalty for the use made of the invention by Microsoft together with interest and costs as fixed by the Court, and Microsoft will continue to suffer damages in the future unless Microsoft's infringing activities are enjoined by this Court.

317. Unless a permanent injunction is issued enjoining Microsoft and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '083 patent, UnoWeb will be greatly and irreparably harmed.

**COUNT IV**  
**INFRINGEMENT OF U.S. PATENT NO. 8,037,091**

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

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

320. Microsoft makes, sells, offers to sell, imports, and/or uses the Yammer website (*e.g.*, <http://www.yammer.com>) and Yammer mobile applications (*e.g.*, Yammer for iOS native application; Yammer for Android native application; Yammer for Windows Mobile native application) (collectively, the "Microsoft '091 Product").

321. On information and belief, the Microsoft '091 Product includes web content management software.

322. On information and belief, the Microsoft ‘091 Product is available to businesses and individuals throughout the United States.

323. On information and belief, the Microsoft ‘091 Product is provided to businesses and individuals located in the Eastern District of Texas.

324. On information and belief, the Microsoft ‘091 Product provides a virtual server computer, the virtual server computer hosting a plurality of content hosts, the plurality of content hosts comprising a first content host, a second content hosts and a third content host. For example, Microsoft provides a virtual web server computer to a user accessing the Microsoft websites and/or web apps (e.g., www.yammer.com). The Microsoft virtual web server computer comprises, for example, a plurality of contents (e.g., image contents, video contents, textual contents, ticker contents, chat contents, ad contents, contents combining one or more of the foregoing, etc.) from a plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, parlis.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.).

Name	Metho...	Sta...	Protocol	Domain	Remote Address	Type	Initiator	Time	Connection Id	Server
files?from=nav	GET	200	http/1.1	www.yammer.com	13.107.6.159:443	document	Other	2.19 s	1274314	Microsoft-Il...
yam-application-a6cb1fa4e8525c104171...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:48	33 ms	1274031	nginx
yam-yamkit-ng-a98a21fce1b0e7869642a1...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:50	47 ms	1274032	nginx
yam-feeds-74395ddcbbf04626f317ba3880...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:52	37 ms	1274034	nginx
yam-common-ui-ccc19f9875e804b0edbd33...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:53	43 ms	1274036	nginx
yam-workfeed-app-7ac48c2cb327855e21e...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:54	40 ms	1274035	nginx
yam-pages-3042263a2baed18fcbabbab70b...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:56	43 ms	1274033	nginx
yam-requirejs-complete-7475cc20edc5d9...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	stylesheet	files?from=nav:58	70 ms	1274031	nginx
yam-vendor-637d131736ed3e9037c5cd13...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:192	84 ms	1274034	nginx
yam-requirejs-redirector-b01dd1da77a4ab...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:193	89 ms	1274035	nginx
yam-en-us-dict-22dea2d51e675378c9119...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:194	90 ms	1274036	nginx
yam-bootstrap-f8b47b637d2384fa8c5166...	GET	304	http/1.1	s0.assets-yammer.com	13.107.6.159:443	script	files?from=nav:195	93 ms	1274033	nginx

*Yammer Recently Accessed Content Feed - Network Developer Tools, YAMMER WEBPAGE* (last visited April 2016) (log of elements loaded on a Yammer user’s recently accessed files feed that is logged by a browser in network developer tools).

325. On information and belief, the Microsoft ‘091 Product includes a virtual server computer (e.g., the Microsoft virtual web server computer provided to a user accessing the Yammer websites and/or web apps) hosting a plurality of content hosts (e.g., 7-

067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.). The plurality of content hosts comprises at least a first content host, a second content host, and a third content host.



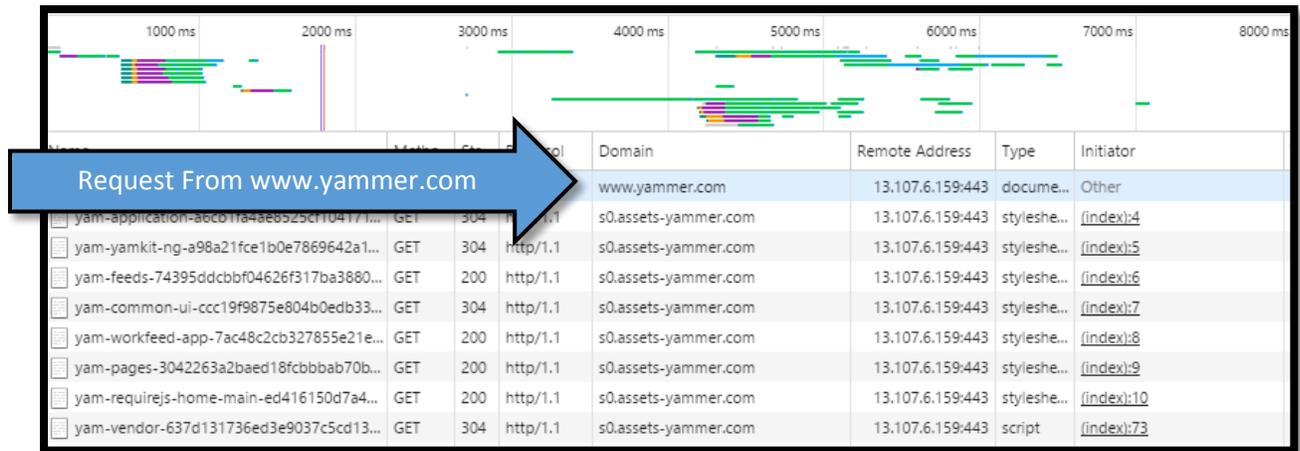
*Yammer File Request– Network Request, YAMMER WEBSITE* (last visited April 2016) (showing that the objects are retrieved from a server located at “rt.yammer.com”).

326. On information and belief, the Microsoft ‘091 Product enables each content host in the plurality of content hosts to be accessible by a user at a unique Uniform Resource Locator address. For example, Yammer enables each content host in the plurality of content hosts to be accessible by a user of the Yammer webpage and/or web app at a unique URL within the following domains/subdomains:

- 7-067.rt.yammer.com
- c.microsoft.com
- mug0.assets-yammer.com
- plaris.yammer.com
- receiver.yamalytics.yammer.com
- s0.assets-yammer.com
- thumbnails.yammer.com

327. On information and belief, the Microsoft ‘091 Product includes a plurality of content hosts that comprise a plurality of contents. For example, the plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.) comprise a plurality of contents (e.g., photo contents, video contents, textual contents, ticker contents, chat contents, ad contents, contents combining one or more of the foregoing, etc.).

328. On information and belief, the Microsoft ‘091 Product enables user interaction with the plurality of content hosts through the first content host without the user having to navigate to the unique Uniform Resource Locator address of any other content host in the plurality of content hosts. For example, the Yammer website/web app virtual web server enables a user to interact with the plurality of content hosts (e.g., 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.) through the first content host (e.g., www.yammer.com) without the user having to navigate to the unique URL address of any other content host in the plurality of content hosts.



*Yammer File Request - Network Developer Tools, YAMMER WEBPAGE (last visited April 2016) (showing that when a file is requested Yammer.com initiates the request to the x.yammer.com hosts).*

329. On information and belief, the Microsoft ‘091 Product displays to the user accessing the first host content from at least two different content hosts. For example, the

Yammer website/web app displays to the user accessing the first host (e.g., www.yammer.com) content from at least two different content hosts (e.g., content from at least 7-067.rt.yammer.com, c.microsoft.com, mug0.assets-yammer.com, plaris.yammer.com, receiver.yamalytics.yammer.com, s0.assets-yammer.com, thumbnails.yammer.com, etc.).

330. On information and belief, the Microsoft '091 Product assigns a surf code reference to each content displayed to the user, the surf code reference comprising information that identifies each such content displayed. For example, the Microsoft website/web app assigns a unique ID surf code reference to each content displayed to the user (e.g., the Yammer user), the surf code reference comprising information that identifies each such content displayed.

331. On information and belief, the Microsoft '091 Product supplies from the virtual server computer a user list to the user, the user list comprising an identification of each such content viewed by the user. For example, through at least the yammer website/web app's "Recently Accessed" functionality, Microsoft supplies, from the yammer website/web app virtual web server computer, a user list to the user (e.g., the Yammer user "John\_Doe"), the user list comprising an identification of each such content viewed by the user.

332. On information and belief, the Microsoft '091 Product presents any such content viewed by the user to the user requesting such content from the user list. For example, through at least the Yammer website/web app's "Recently Accessed" functionality, Microsoft presents to the user (e.g., the Yammer user "John\_Doe") any such content viewed by the user requesting such content from the user list.

333. On information and belief, Microsoft has directly infringed and continues to directly infringe the '091 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 Microsoft '091 Product, which includes infringing web content management technologies.

334. By making, using, testing, offering for sale, and/or selling web content management products and services, including but not limited to the Microsoft '091 Product,

Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '091 patent, including at least claims 1-6 and 8-10, pursuant to 35 U.S.C. § 271(a).

335. On information and belief, Microsoft also indirectly infringes the '091 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least as of the date of service of this Complaint.

336. On information and belief, Microsoft has had knowledge of the '091 patent since at least service of this Complaint or shortly thereafter, and on information and belief, Microsoft knew of the '091 patent and knew of its infringement, including by way of this lawsuit.

337. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '091 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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '091 patent. Microsoft performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '091 patent and with the knowledge, that the induced acts would constitute infringement. For example, Microsoft provides the Microsoft '091 Product that has the capability of operating in a manner that infringes one or more of the claims of the '091 patent, including at least claims 1-6 and 8-10, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '091 Product to utilize the product in a manner that directly infringe one or more claims of the '091 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '091 Product in a manner that directly infringes one or more claims of the '091 patent, including at least claims 1-6 and 8-10, Microsoft specifically intended to induce infringement of the '091 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '091 Product, *e.g.*, through Microsoft user guides, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '091 patent. Accordingly, Microsoft 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 '091 patent, knowing that such use constitutes infringement of the '091 patent.

338. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '091 patent.

339. As a result of Microsoft's infringement of the '091 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Microsoft's infringement, but in no event less than a reasonable royalty for the use made of the invention by Microsoft together with interest and costs as fixed by the Court, and Microsoft will continue to suffer damages in the future unless Microsoft's infringing activities are enjoined by this Court.

340. Unless a permanent injunction is issued enjoining Microsoft and its agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '091 patent, UnoWeb will be greatly and irreparably harmed.

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

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

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

343. Microsoft makes, sells, offers to sell, imports, and/or uses the Microsoft Display Ad Platform<sup>107</sup> which includes the Microsoft Store Engagement and Monetization SDK, Microsoft AdControl, Microsoft InterstitialAd Control, Microsoft AdMediatorControl, and Windows Dev Center (collectively, the "Microsoft '139 Product").

344. On information and belief, the Microsoft '139 Product includes internet advertising functionality.

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<sup>107</sup> *Microsoft Guidelines for Advertising*, MSDN NETWORK – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/jj649139.aspx>

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

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

347. On information and belief, the Microsoft '139 Product enables web site development based on advertising revenue sharing. Microsoft states that its Network enables publishers of content to monetize their content. "Dev Center has now integrated the functionality previously available in pubCenter to simplify how to create, manage and track your Microsoft advertising ad impressions and revenue. In addition, Microsoft Advertising and Windows ad mediation have been merged into one single SDK, the Microsoft Universal Ad Client SDK, which works for apps built for Windows Phone 8.x, Windows 8.x and Windows 10."<sup>108</sup>

348. On information and belief, the Microsoft '139 Product displays paid content from an advertiser through a webpage that is available through an Windows 8.x and/or Windows 10 application. For example, Microsoft states that "You need to have an account with Windows Dev Center to publish your app and receive ads. This is true regardless of whether or not you are using ad mediation. Advertising-related app management is also done in Windows Dev Center."<sup>109</sup>

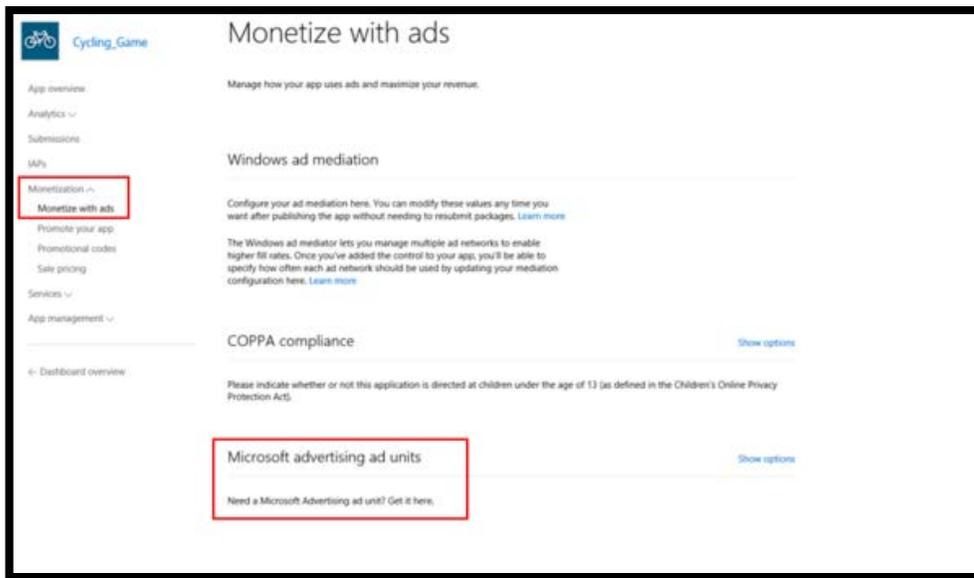
349. On information and belief, the Microsoft '139 Product enables registering a content provider to provide non-paid content. Microsoft documentation states: "Submit your app: After you complete development of your app, you can publish your app in the Windows Store by

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<sup>108</sup> Bernardo Zamora, *New Advertising Features and Walkthrough of Using Ads and Mediation*, WINDOWS BLOG (October 8, 2015), available at: <https://blogs.windows.com/buildingapps/2015/10/08/new-advertising-features-and-walkthrough-of-using-microsoft-ads-and-mediation/>.

<sup>109</sup> McLean Schofield, *Workflows for Creating Apps with Ads*, MSDN – WINDOWS DEV CENTER (April 28, 2016), available at: <https://msdn.microsoft.com/en-us/windows/uwp/monetize/workflows-for-creating-apps-with-ads>

using the Windows Dev Center dashboard. In addition to meeting requirements for all apps in



the Windows Store, apps that display ads must meet several additional requirements.”<sup>110</sup> Bernardo Zamora, *New Advertising Features and Walkthrough of Using Ads and Mediation*, WINDOWS BLOG (October 8, 2015), available at: <https://blogs.windows.com/buildingapps/2015/10/08/new-advertising-features-and-walkthrough-of-using-microsoft-ads-and-mediation/> (“To manually create ad units in Dev Center, select the ‘Monetize à Monetize with ads’, menu and click the ‘Show options’ link under ‘Microsoft advertising ad units.’”).

350. On information and belief, the Microsoft ‘139 Product enables a user to become a registered user. Specifically, the Microsoft ‘139 Product uses the advertising ID feature which is “Used to provide more relevant advertising by understanding which apps are used by the user and how they are used, and to improve quality of service by determining the frequency and effectiveness of ads and to detect fraud and security issues. This ID is per-user, per-device; all of the apps for a single user on a device have the same advertising ID.”<sup>111</sup>

351. On information and belief, Microsoft documentation states that the advertising ID feature that is used to register users accomplishes the following tasks:

<sup>110</sup> *Id.*

<sup>111</sup> *AdvertisingManager.AdvertisingId / advertisingId property*, MSDN – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/windows.system.userprofile.advertisingmanager.advertisingid.aspx>.

- Publishers will have a better understanding of which of their apps a customer installs.
- Advertising partners can serve more relevant and profitable ads to a customer without accessing any Personally Identifiable Information (PII).
- Advertising partners can put limits on how many times it serves an ad to the same customer, known as frequency capping.
- Publishers can track promotions and app incentives to a user to prevent fraud.

*AdvertisingManager.AdvertisingId* | *advertisingId* property, MSDN – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/windows.system.userprofile.advertisingmanager.advertisingid.aspx>.

352. On information and belief, the Microsoft ‘139 Product displays paid content from an advertiser through a webpage of the website on a computer.

353. On information and belief, the Microsoft ‘139 Product registers a content provider to prepare non-paid content for the webpage on a computer. For example, Microsoft receives non-paid app content from a provider (e.g., a Windows 10 App developer). Moreover, an app is received by Microsoft subject to a condition that the provider may receive no compensation for the non-paid content. A mandatory Microsoft App Developer Agreement requires that an app cannot use external payment platforms to charge a user for the right and/or ability to use and/or download the app. *See, e.g.*, <https://msdn.microsoft.com/en-us/library/windows/apps/hh694058.aspx>.

354. On information and belief, the Microsoft App Developer agreement states:

MICROSOFT MAKES NO PROMISES OR GUARANTEES REGARDING: (A) THE NUMBER OF ADVERTISEMENTS YOU MAY EXPECT TO BE DISPLAYED ON OR IN YOUR PROPERTIES BY MICROSOFT OR (B) THE AMOUNT OF ANY PAYMENTS YOU MAY RECEIVE IN CONNECTION WITH YOUR USE OF MICROSOFT’S ADVERTISING SERVICES.<sup>112</sup>

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<sup>112</sup> MICROSOFT APP DEVELOPER AGREEMENT (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/hh694058.aspx>.

355. On information and belief, Microsoft sets a time period before which paid content can be redisplayed to a registered user. For example, in determining “Click Measurement Methodology,” Microsoft excludes repetitive and accidental clicks including:

#### General and sophisticated invalid traffic filtration methodology

To identify and filter (exclude) invalid click activity — including, but not limited to, non-human click activity and suspected click fraud — Microsoft employs techniques based on identifiers, activity and patterns found in web log data. However, because user identification and intent cannot always be known or discerned by publishers, advertisers or their respective agents, it is unlikely that all invalid click activity can be identified and excluded from the reported results. Bing Ads engineering will apply updates to the filtration methods below on an as needed basis.

#### Multiple-click-per-impression

Bing Ads uses the “multiple-click-per-impression method” in which a click is discarded when the time between the click and the previous click on an ad impression or search-result content is less than the repeat-click-refractory period specified by Microsoft. This rule is meant to correct for navigational mistakes such as unintentional double-clicking on an impression.

#### User frequency caps

Bing Ads limits the number of click events that can be billed per search user for a given period of time. If a user is found to exceed the limits, all activity from the user within the period of time is considered invalid. The definition of a search user is proprietary and varies by context, and the frequency caps employed are also proprietary and not disclosed.

*Bing Ads Click Measurement: Description of Methodology (DOM)*, Microsoft Bing Ads (last visited April 2016), available at: <http://advertise.bingads.microsoft.com/en-us/dom>.<sup>113</sup>

356. On information and belief, the Microsoft ‘139 Product receives payment from the advertiser for the number of interactions of the user with the paid content. For example, Microsoft receives paid advertising content from a Microsoft advertiser.

<sup>113</sup> See also 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: <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.”).

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

358. On information and belief, the Microsoft '139 Product receives payment from the advertiser for the number of times the paid content is displayed to the registered user. For example, Microsoft calculates a number (e.g., impressions, clicks, and/or conversions) equaling all interactions of the Microsoft app user with the Microsoft In-App Advertising.

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

360. On information and belief, Microsoft 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 Microsoft '139 Product, which includes internet advertising revenue sharing technologies.

361. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the Microsoft '139 Product, Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '139 patent, including at least claims 2, 5-7 and 10, pursuant to 35 U.S.C. § 271(a).

362. On information and belief, Microsoft 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.

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

364. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '139 patent. Microsoft 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, Microsoft provides the Microsoft '139 Product that has the capability of operating in a manner that infringe one or more of the claims of the '139 patent, including at least claims 2, 5-7 and 10, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '139 Product to utilize the products in a manner that directly infringe one or more claims of the '139 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '139 Product in a manner that directly infringes one or more claims of the '139 patent, including at least claims 2, 5-7 and 10, Microsoft specifically intended to induce infringement of the '139 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '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. Accordingly, Microsoft 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.

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

366. As a result of Microsoft's infringement of the '139 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Microsoft's infringement, but in no event less than a reasonable royalty for the use made of the invention by

Microsoft together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless Microsoft's infringing activities are enjoined by this Court.

367. Unless a permanent injunction is issued enjoining Microsoft 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 VI**  
**INFRINGEMENT OF U.S. PATENT NO. 8,140,384**

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

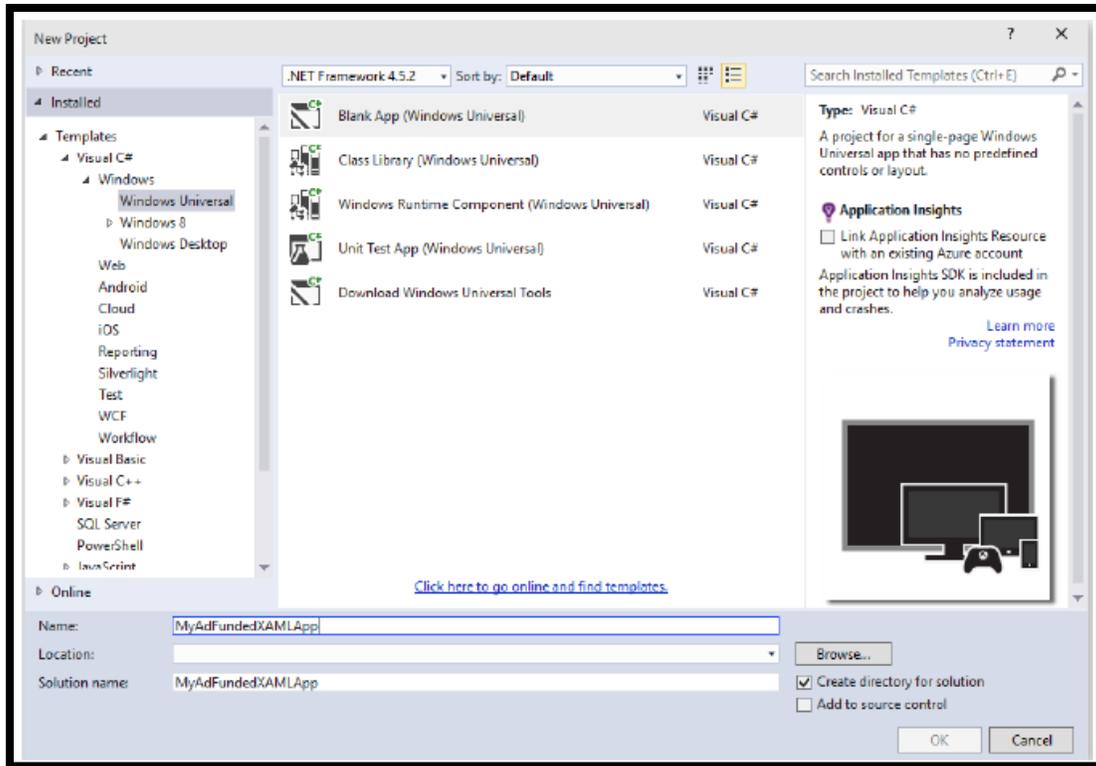
369. Microsoft makes, uses, sells, and/or offers for sale in the United States products and/or services for internet advertising revenue sharing.

370. Microsoft makes, sells, offers to sell, imports, and/or uses the Microsoft Display Ad Platform<sup>114</sup> which includes the Microsoft Store Engagement and Monetization SDK, Microsoft AdControl, Microsoft InterstitialAd Control, Microsoft AdMediatorControl, and Windows Dev Center (collectively, the "Microsoft '384 Product").

371. On information and belief, the Microsoft '384 Product includes internet advertising functionality.

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<sup>114</sup> *Microsoft Guidelines for Advertising*, MSDN NETWORK – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/jj649139.aspx>



Windows 10 Advertising SDK Walkthrough, MSDN – Windows Dev Center (last visited April 2016), available at: <https://msdn.microsoft.com/enus/library/mt125365.aspx>.

372. On information and belief, the Microsoft ‘384 Product is available to businesses and individuals throughout the United States.

373. On information and belief, the Microsoft ‘384 Product is provided to businesses and individuals located in the Eastern District of Texas.

374. On information and belief, the Microsoft ‘384 Product receives paid content from an advertiser. For example, Microsoft receives paid advertising content from a Microsoft Platform advertiser.

375. On information and belief, the Microsoft ‘384 Product sends the content and advertisement to a user accessing the server computer.

376. On information and belief, the Microsoft ‘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. For example, Microsoft receives app content from a provider (e.g., a Microsoft App Developer). Moreover, an app is received by Microsoft subject to a condition

that the provider may receive no compensation for the non-paid content. A mandatory Microsoft App Developer Agreement requires that an app cannot use external payment platforms to charge a user for the right and/or ability to use and/or download the app. *See, e.g.*, <https://msdn.microsoft.com/en-us/library/windows/apps/hh694058.aspx>.

377. On information and belief, the Microsoft App Developer agreement states:

MICROSOFT MAKES NO PROMISES OR GUARANTEES REGARDING: (A) THE NUMBER OF ADVERTISEMENTS YOU MAY EXPECT TO BE DISPLAYED ON OR IN YOUR PROPERTIES BY MICROSOFT OR (B) THE AMOUNT OF ANY PAYMENTS YOU MAY RECEIVE IN CONNECTION WITH YOUR USE OF MICROSOFT'S ADVERTISING SERVICES.<sup>115</sup>

378. On information and belief, the Microsoft '384 Product combines the paid content and the non-paid content on a content page.

379. On information and belief, Microsoft registers a user to interact with the content page. For example, the Microsoft '384 Product uses the advertising ID feature which is "Used to provide more relevant advertising by understanding which apps are used by the user and how they are used, and to improve quality of service by determining the frequency and effectiveness of ads and to detect fraud and security issues. This ID is per-user, per-device; all of the apps for a single user on a device have the same advertising ID."<sup>116</sup>

380. On information and belief, Microsoft documentation states that the Advertising ID is a unique ID used for "determining the frequency and effectiveness of ads and to detect fraud and security issues."

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<sup>115</sup> MICROSOFT APP DEVELOPER AGREEMENT (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/hh694058.aspx>.

<sup>116</sup> *AdvertisingManager.AdvertisingId / advertisingId property*, MSDN – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/windows.system.userprofile.advertisingmanager.advertisingid.aspx>.

**Properties**  
The AdvertisingManager class has these properties.

Property	Access type	Description
AdvertisingId	Read-only	Retrieves a unique ID used to provide more relevant advertising by understanding which apps are used by the user and how they are used, and to improve quality of service by determining the frequency and effectiveness of ads and to detect fraud and security issues. This ID is per-user, per-device; all of the apps for a single user on a device have the same advertising ID. If the advertising ID feature is turned off, no ID is retrieved.

*AdvertisingManager.AdvertisingId* | *advertisingId* property, MSDN – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/windows.system.userprofile.advertisingmanager.advertisingid.aspx>.

381. On information and belief, Microsoft documentation states that the advertising ID feature that is used to register users accomplishes the following tasks:

- Publishers will have a better understanding of which of their apps a customer installs.
- Advertising partners can serve more relevant and profitable ads to a customer without accessing any Personally Identifiable Information (PII).
- Advertising partners can put limits on how many times it serves an ad to the same customer, known as frequency capping.
- Publishers can track promotions and app incentives to a user to prevent fraud.

*AdvertisingManager.AdvertisingId* | *advertisingId* property, MSDN – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/windows.system.userprofile.advertisingmanager.advertisingid.aspx>.

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

383. On information and belief, Microsoft calculates a number equaling all interactions of the user with the paid content. For example, Microsoft calculates a number (e.g., impressions, clicks, and/or conversions) equaling all interactions of the Microsoft app user with the Microsoft content.

384. On information and belief, the Microsoft '384 Product determines if the second click is received after expiration of the time period.

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

386. On information and belief, the Microsoft '384 Product pays the provider based on a fraction of the payment. For example, on information and belief, Microsoft pays the Microsoft content provider based on a fraction of the payment received from the Microsoft advertiser in (as one particular example, Microsoft retains a fraction of the advertiser payment for itself as revenue).

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

388. On information and belief, Microsoft 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 Microsoft '384 Product, which includes infringing internet advertising revenue sharing technologies.

389. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the Microsoft '384 Product, Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '384 patent, including at least claims 7-8, pursuant to 35 U.S.C. § 271(a).

390. On information and belief, Microsoft 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.

391. On information and belief, Microsoft has had knowledge of the '384 patent since at least the service of this Complaint or shortly thereafter, and on information and belief,

Microsoft knew of the '384 patent and knew of its infringement, including by way of this lawsuit.

392. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '384 patent. Microsoft 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, Microsoft provides the Microsoft '384 Product that has the capability of operating in a manner that infringe one or more of the claims of the '384 patent, including at least claims 7-8, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '384 Product to utilize the products in a manner that directly infringe one or more claims of the '384 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '384 Product in a manner that directly infringes one or more claims of the '384 patent, including at least claims 7-8, Microsoft specifically intended to induce infringement of the '384 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '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. Accordingly, Microsoft 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 '384 patent, knowing that such use constitutes infringement of the '384 patent.

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

394. As a result of Microsoft's infringement of the '384 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Microsoft's

infringement, but in no event less than a reasonable royalty for the use made of the invention by Microsoft together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless Microsoft's infringing activities are enjoined by this Court.

395. Unless a permanent injunction is issued enjoining Microsoft 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 VII**  
**INFRINGEMENT OF U.S. PATENT NO. 7,580,858**

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

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

398. Microsoft makes, sells, offers to sell, imports, and/or uses the Microsoft Display Ad Platform<sup>117</sup> which includes the Microsoft Store Engagement and Monetization SDK, Microsoft AdControl, Microsoft InterstitialAd Control, Microsoft AdMediatorControl, and Windows Dev Center (collectively, the "Microsoft '858 Product").

399. On information and belief, the Microsoft '858 Product includes internet advertising functionality.

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

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

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

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<sup>117</sup> *Microsoft Guidelines for Advertising*, MSDN NETWORK – WINDOWS DEV CENTER (last visited April 2016), available at: <https://msdn.microsoft.com/en-us/library/windows/apps/jj649139.aspx>

## Why advertising?

Advertising can help you earn more revenue—without affecting the app experience.

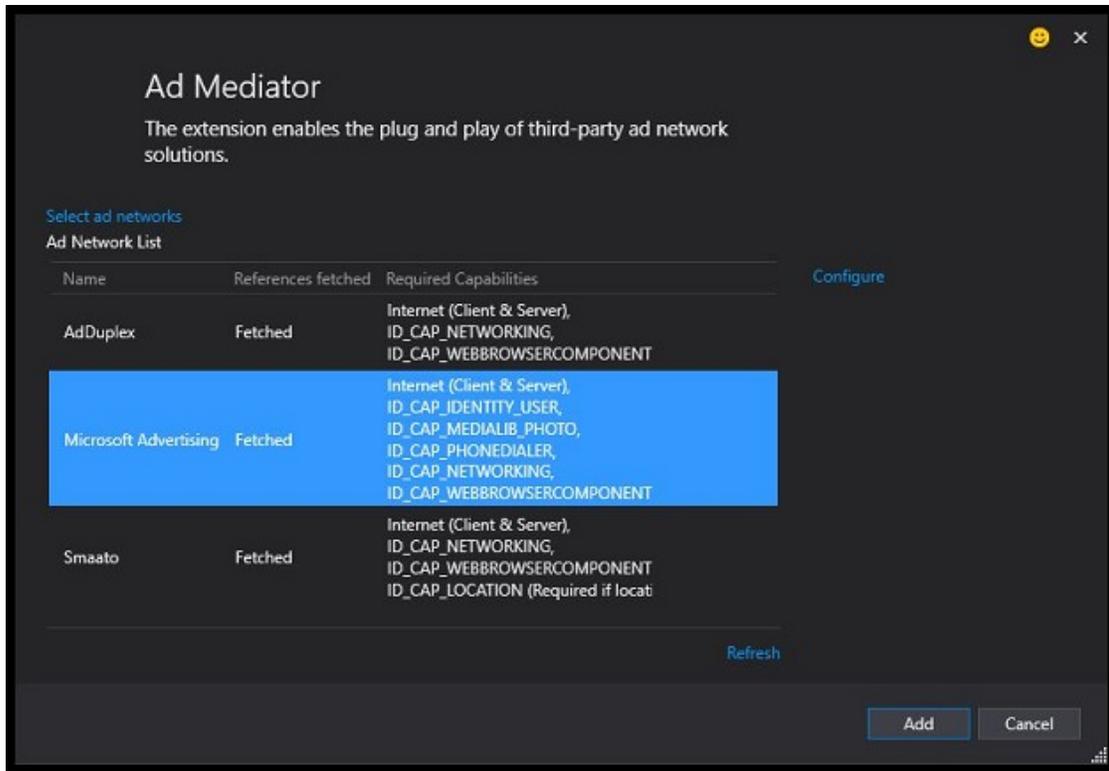
It's true. With the Microsoft Advertising SDK for Windows 8, you determine the advertising experience in your app—allowing you to provide the most integrated user experience possible.

## Advertisers will pay to reach your audience.

When you create an app with the Microsoft Advertising SDK for Windows 8, you join the multi-billion dollar media marketplace. As the app publisher, you have the opportunity to attract unique and valuable audiences that advertisers will pay to reach. By connecting the advertiser to your app audience with relevant and engaging experiences, you create value for advertisers and users, and revenue for yourself.

*Ads in Apps 101- Reaching Audiences & Making Money With Advertising*, MICROSOFT ADVERTISING DOCUMENTATION (2011) (“To drive the largest yield per advertisement, you need to attract as many eyeballs to the advertisement as possible. Ads placed in the upper half of the screen (above the fold) or in the first frame that a user sees, drive more ad impressions. When marketing the value proposition of your app, “tag” your app with the specific category of content it provides, such as gaming, finance, etc., to help advertisers easily identify what type of audience they may reach.”).

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



*McLean Schofield, Add and Use the ad Mediator Control, MSDN – WINDOWS DEV CENTER (April 21, 2016), available at: <https://msdn.microsoft.com/en-us/windows/uwp/monetize/add-and-use-the-ad-mediator-control> (“Each ad network may require certain app capabilities. These are shown by each provider in the Ad Mediator (for Visual Studio 2015) or Services Manager (for Visual Studio 2013) window. Be sure to declare all of the required capabilities in your app's manifest so that the ads are properly displayed.”).*

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

405. On information and belief, the Microsoft ‘858 Product receives payment from the advertiser for the number of interactions of the user with the paid content.

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

407. On information and belief, the Microsoft ‘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.

408. On information and belief, Microsoft sets a time period before which paid content can be redisplayed to a registered user. For example, in determining “Click Measurement Methodology,” Microsoft excludes repetitive and accidental clicks including:

#### General and sophisticated invalid traffic filtration methodology

To identify and filter (exclude) invalid click activity — including, but not limited to, non-human click activity and suspected click fraud — Microsoft employs techniques based on identifiers, activity and patterns found in web log data. However, because user identification and intent cannot always be known or discerned by publishers, advertisers or their respective agents, it is unlikely that all invalid click activity can be identified and excluded from the reported results. Bing Ads engineering will apply updates to the filtration methods below on an as needed basis.

#### Multiple-click-per-impression

Bing Ads uses the “multiple-click-per-impression method” in which a click is discarded when the time between the click and the previous click on an ad impression or search-result content is less than the repeat-click-refractory period specified by Microsoft. This rule is meant to correct for navigational mistakes such as unintentional double-clicking on an impression.

#### User frequency caps

Bing Ads limits the number of click events that can be billed per search user for a given period of time. If a user is found to exceed the limits, all activity from the user within the period of time is considered invalid. The definition of a search user is proprietary and varies by context, and the frequency caps employed are also proprietary and not disclosed.

*Bing Ads Click Measurement: Description of Methodology (DOM)*, Microsoft Bing Ads (last visited April 2016), available at: <http://advertise.bingads.microsoft.com/en-us/dom>.<sup>118</sup>

409. On information and belief, Microsoft 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 Microsoft ‘858 Product, which includes infringing internet advertising revenue sharing technologies.

<sup>118</sup> See also 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: <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.”).

410. By making, using, testing, offering for sale, and/or selling internet advertising revenue sharing products and services, including but not limited to the Microsoft '858 Product, Microsoft has injured UnoWeb and is liable to UnoWeb for directly infringing one or more claims of the '858 patent, including at least claims 3-4, pursuant to 35 U.S.C. § 271(a).

411. On information and belief, Microsoft also indirectly infringes the '858 patent by actively inducing infringement under 35 U.S.C. § 271(b), at least February 19, 2013. Microsoft cited the '858 patent in the following U.S. Patents and published patent applications: U.S. Patent No. 8,380,576 and U.S. Patent App. Nos. 12/816,868 and 12/701,192. Alternatively, Microsoft has had knowledge of the '858 patent since at least the service of this Complaint or shortly thereafter, and on information and belief, Microsoft knew of the '858 patent and knew of its infringement, including by way of this lawsuit.

412. On information and belief, Microsoft intended to induce patent infringement by third-party customers and users of the Microsoft '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. Microsoft specifically intended and was aware that the normal and customary use of the accused products would infringe the '858 patent. Microsoft 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, Microsoft provides the Microsoft '858 Product that has the capability of operating in a manner that infringe one or more of the claims of the '858 patent, including at least claims 3-4, and Microsoft further provides documentation and training materials that cause customers and end users of the Microsoft '858 Product to utilize the products in a manner that directly infringe one or more claims of the '858 patent. By providing instruction and training to customers and end-users on how to use the Microsoft '858 Product in a manner that directly infringes one or more claims of the '858 patent, including at least claims 3-4, Microsoft specifically intended to induce infringement of the '858 patent. On information and belief, Microsoft engaged in such inducement to promote the sales of the Microsoft '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. Accordingly, Microsoft 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.

413. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '858 patent.

414. As a result of Microsoft's infringement of the '858 patent, UnoWeb has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Microsoft's infringement, but in no event less than a reasonable royalty for the use made of the invention by Microsoft together with interest and costs as fixed by the Court, and UnoWeb will continue to suffer damages in the future unless Microsoft's infringing activities are enjoined by this Court.

415. Unless a permanent injunction is issued enjoining Microsoft 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.

#### **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 Microsoft has infringed, either literally and/or under the doctrine of equivalents, the '083, '345, '091, '386, '858, '139, and the '384 patent;
- B. An award of damages resulting from Microsoft's acts of infringement in accordance with 35 U.S.C. § 284;
- C. A permanent injunction enjoining Microsoft and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation with

Microsoft, from infringing the '083, '345, '091, '386, '858, '139, and the '384 patent;

- D. A judgment and order requiring Microsoft 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: May 2, 2016

Respectfully submitted,

/s/ Elizabeth L. DeRieux  
Elizabeth L. DeRieux (TX Bar No. 05770585)  
D. Jeffrey Rambin (TX Bar No. 00791478)  
CAPSHAW DERIEUX, LLP  
114 E. Commerce Ave.  
Gladewater, Texas 75647  
Telephone: 903-845-5770  
E-mail: ederieux@capshawlaw.com  
E-mail: jrambin@capshawlaw.com

OF COUNSEL:

Dorian S. Berger (CA SB No. 264424)  
Daniel P. Hipskind (CA SB No. 266763)  
BERGER & HIPSKIND LLP  
1880 Century Park East, Suite 815  
Los Angeles, CA 90067  
Telephone: 323-886-3430  
Facsimile: 323-978-5508  
E-mail: dsb@bergerhipskind.com  
E-mail: dph@bergerhipskind.com

Matt Olavi (CA SB No. 265945)  
Brian J. Dunne (CA SB No. 275689)  
OLAVI DUNNE LLP  
816 Congress Ave., Ste. 1620  
Austin, Texas 78701  
Telephone: 512-717-4485  
Facsimile: 512-717-4495  
E-mail: molavi@olavidunne.com  
E-mail: bdunne@olavidunne.com

*Attorneys for UnoWeb Virtual, LLC*