

3. Upon information and belief, Defendant Performance Direct, Inc., is a corporation organized and existing under the laws of the State of North Carolina and having an office and a place of business at 144 Old Lystra Road, Chapel Hill, North Carolina 27517.

II.
JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the Patent and Trademark Act, 35 U.S.C. § 1 *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338.

5. This Court has personal jurisdiction over Defendants. Upon information and belief, Defendants are subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this forum, including (a) at least a portion of the infringements alleged herein; and (b) regularly doing or soliciting business and/or deriving revenue from goods and/or services provided to individuals in Texas and in this judicial district.

6. Venue is proper in this District under 28 U.S.C. 1400(b) because acts of infringement are occurring in this District and because Defendants have a regular and established place of business in this District. For example, on information and belief, Defendants have a place of business located at 6101 Avenue K, Suite 110, Spring Creek Plaza, Plano, Texas 75074.

III.
THE OPTIMIZE PATENT

7. On December 11, 2001, United States Patent No. 6,330,592 ("the '592 Patent"), entitled "Method, Memory, Product, and Code for Displaying Pre-Customized Content Associated with Visitor Data" was duly and legally issued by the United States Patent and

Trademark Office (the “USPTO”) to Michael K. Makuch and Neil Webber. Optimize is the owner of the entire right, title and interest in and to the ’592 Patent.

8. The ’592 Patent is directed to systems and methods for delivering “pre-customized” web content to computer users “without requiring dynamic page generation for each individual visitor.” Exhibit A at col. 2:15–20.

9. Providing “pre-customized” web content to a plurality of client computers connected via a network in the manner claimed in the ’592 Patent solved technical problems of techniques and systems known in the art. For example, the ’592 Patent describes systems and methods for providing “a highly efficient and scalable mechanism for assembling personalized pages based on information contained in the visitor profile, without requiring a full dynamically-generated customized page computation for each visitor.” *Id.* at col. 3:31–35.

10. Prior to the invention of the ’592 Patent, web site providers who wanted to provide personalized web pages to web site visitors had to obtrusively determine a visitor’s interest(s) (*e.g.*, through a questionnaire) and then dynamically generate a web page containing content relevant to such interest(s). *Id.* at col. 1:60–63.

11. Dynamic generation of such personalized web pages produced slow response times and did not scale well. *Id.* at col. 2:1–8. Disadvantages of dynamic generation include: “web site visitors frequently prefer to not fill out questionnaires when visiting a web site, making it difficult for a site to gather the necessary visitor preference data.” Also, “dynamic generation of every page on a server computer does not scale well for a large number of requests. In other words, existing methods provide a relatively slow response when a large number of requests are made for personalized pages. This slow response time is attributable to the fact that in existing

systems a computer program must be executed to completely generate each dynamic page on every single request.” *Id.* at col. 1:61–2:8.

12. The ’592 Patent describes how the inventors overcame the disadvantages of prior art systems and describes methods and systems for providing “pre-customized” web content (*i.e.*, predetermined content that appears to be personalized for a specific visitor) from cache memory instead of having to dynamically generate web content for a specific visitor. *Id.* at col. 2:15–20.

13. The ’592 Patent describes a web page that “has been customized to reflect the fact that this visitor, preferably based on prior visits, has demonstrated interest in” a particular subject matter. *Id.* at col. 5:5–11. “This type of personalization can be achieved in the prior art only by forcing the user to explicitly answer survey questions and creating individualized pages.” *Id.* at col. 5:16–18.

14. The ’592 Patent describes “personalization” that “can be done according to the accumulated data in the visitor’s file, gathered implicitly by observing which Web Content Items, and therefore which categories have been of interest to the visitor in the past.” The ’592 Patent describes “personalization” “based on predetermined Web Content Items that are developed and then cached into memory.” *Id.* at col. 5:55–60.

15. This approach contrasts with prior art personalization based on a “one-time dynamically generated customized web page, which would be too resource intensive and therefore slow.” *Id.*

16. The ’592 Patent does not preempt the field or preclude the use of other web site customization systems. As noted in the ’592 Patent, a “server computer can use a technique known as ‘dynamically-generated customized pages’ to create a web page in response to a request for information from a client computer. A dynamically-generated customized page

results in a set of information in a particular format.” *Id.* at col. 1:34–47. Other web site customization systems and methods may include gathering user input to survey questions to use in dynamically generating a customized page for such visitor.

17. The ’592 Patent claims are not directed to a method of organizing human activity or to a fundamental economic practice long prevalent in our system of commerce. The ’592 Patent claims are directed toward systems and methods that solve a technical problem—how to generate customized web pages for thousands of users without unduly burdening the web servers—with a technical solution: delivering web pages that appear to be customized to a visitor through the use of “web content items” which have “a predetermined association that can be used to enable the appearance of customization/personalization for visitors” and delivering such web content items from cache.

18. The ’592 Patent does not take a well-known or established business method or process and apply it to a general-purpose computer. Instead, the specific system and processes described in the ’592 Patent have no direct corollary to a well-known business process. The ’592 Patent solves a technical problem that arises in the context of providing internet services. As the internet developed and providers attempted to make web sites more personalized, technical problems arose with how best to provide those personalized web sites without unduly burdening the provider’s computer systems. The ’592 Patent’s solution improved computer performance at least by “conserv[ing] computing resources and retain[ing] a higher access speed on a server.” *Id.* at col. 6:13–21.

19. By determining web content to be delivered over a computer network in advance and by delivering the predetermined web content from cache, the ’592 Patent provides a technical solution to a technical problem that is intrinsically tied to computer networks (*i.e.*, the

problems associated with dynamically generating personalized web content for computer users of the Internet).

20. The '592 Patent successfully went through a reexamination proceeding at the United States Patent and Trademark Office (USPTO), with the reexamination certificate issuing on December 18, 2012. A true and correct copy of the '592 Patent, including the reexamination certificate, is attached hereto as Exhibit A.

21. Post-reexamination, this Court conducted a *Markman* claim construction hearing and issued a claim construction Order construing the claims of the reexamined '592 Patent. *Optimize Technology Solutions v. Staples, Inc., et al.*, Case No. 2:11-cv-419-JRG, Memorandum Opinion and Order (Doc. 269) (the "Staples Order").¹ In the Staples Order, this Court determined that the '592 Patent involves using "pre-customized" web content "to create an *appearance* of customization for [a] particular visitor even though the same content may be served to many visitors" of a website via a computer network, such as the Internet. *Id.* at 20 (emphasis in original). This is accomplished through the use of "web content items" which have "a predetermined association that can be used to enable the appearance of customization/personalization for visitors." *Id.* at 21–22. The Court further determined that, by delivering the pre-customized web content items from "cache," the '592 Patent avoided dynamically generating them. *Id.* at 31–32.

22. As described by the inventors:

The present invention gives the visitor the impression of a customized page visitor [*sic*] when in actuality it presents pre-customized pages and/or page components that have been cached. The system thereby **conserves computing resources and retains a higher access speed on a server** as opposed to those systems that dynamically generate customized pages for each visitor.

¹ A true and correct copy of the Staples Order is attached hereto as Exhibit B.

Exhibit A at col. 6:14–20 (emphasis added); see also, *Id.* at col. 5:55–60 (“The ‘personalization’ will not be a one-time dynamically generated customized web page, which would be too resource intensive and therefore slow, but will be based on predetermined Web Content Items that are developed and then cached into memory.”).

23. The ’592 Patent describes improvements of computer server technology (*e.g.*, web servers). As an example, rather than providing a customized page to a visitor to a web site, which requires both ascertaining the interest(s) of the visitor and then dynamically generating web content to meet such interest(s), the ’592 Patent describes use of pre-determined associations to provide “pre-customized” web content—web content that only appears to be customized to the visitor—and provides such web content from cache. The pre-determined associations, which are determined in advance of the visitor requesting a given web page, allows the display of web content that appears to be personalized to such visitor. Moreover, by delivering this “pre-customized” web content from cache, without having to dynamically generate such content, computer servers can deliver the pre-customized content more efficiently and more rapidly, improving the performance and effectiveness of a web site.

24. The technical problem addressed by the inventors of the ’592 Patent specifically arises in the realm of computer networks (*e.g.* the Internet), namely the problem conventional systems had when attempting to efficiently provide customized or personalized pages to visitors to a web site. The claimed technical solution that addresses this problem presents web content over a network that is both “cached” (*i.e.*, not dynamically generated) and “pre-customized” in order to give the *appearance* of customization for visitors to the web site. This solution improves the way that computer systems operate, conserving computing resources and increasing the speed at which web content is delivered via a web site.

25. As demonstrated by its frequent citation by the United States Patent Office in other later-issued patents involving computer-network technologies, the '592 Patent represents a fundamental technical improvement involving computer networks. Specifically, the '592 Patent has been cited during the prosecution of over eighty subsequently issued patents owned by companies including Amazon, Netflix, Yahoo! Inc., CBS Interactive, Inc., and Sony Corporation.²

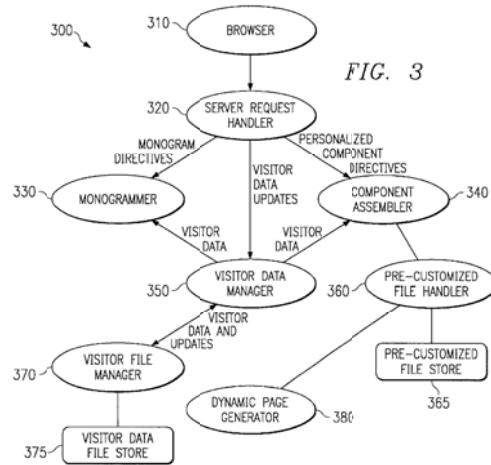
26. Claim 16 of the '592 Patent recites means-plus-function claim limitations governed by 35 U.S.C. § 112(f). *See*, Exhibit A, Ex Parte Reexamination Certificate at col. 2:51–3:9. The corresponding structure(s) in the '592 Patent specification include(s) algorithms that improve the functioning of a computer by improving efficiency: the “system thereby conserves computing resources and retains a higher access speed on a server as opposed to those systems that dynamically generate customized pages for each visitor.” Exhibit A at col. 6:14–20.³

27. The '592 Patent discloses computer algorithms and structures in the specification. These algorithms and structures correspond to the means-plus-function claim limitations of Claim 16 of the '592 Patent. In the Staples Order, the Court found corresponding structure for the means-plus-function claim limitations of Claim 16. *See*, Exhibit B at 74–102.

28. Figure 3 of the '592 Patent, reproduced below for convenience, and its associated text describe “a relationship diagram” for an embodiment of the invention. *See*, Exhibit A at col. 4:4–5, 6:43–7:27.

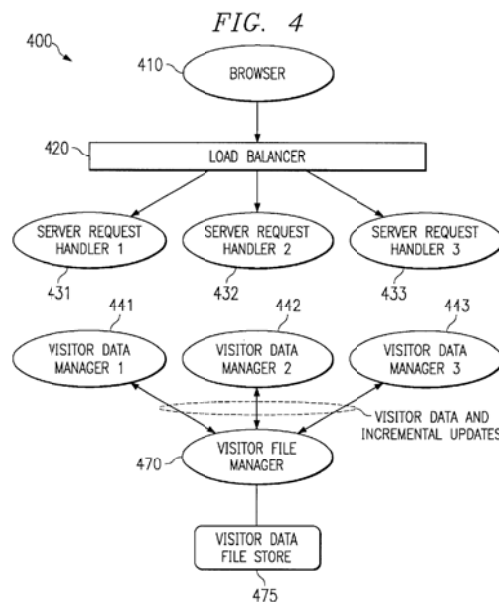
² *See, e.g.*, US Patent Nos. 8,963,847 (assigned to Netflix, Inc.), 8,620,767 (assigned to Amazon.com, Inc.), 8,595,226 (assigned to Yahoo! Inc.), 8,214,264 (assigned to CBS Interactive, Inc.), and 6,422,870 (assigned to Sony Corporation).

³ *See* Eugene Quinn, *The Ramifications of Alice: A Conversation with Mark Lemley*, IPWATCHDOG BLOG, Sept. 4, 2014, <http://www.ipwatchdog.com/2014/09/04/the-ramifications-of-alice-a-conversation-with-mark-lemley/id=51023/>. (“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.’”) (last visited Dec. 21, 2017).



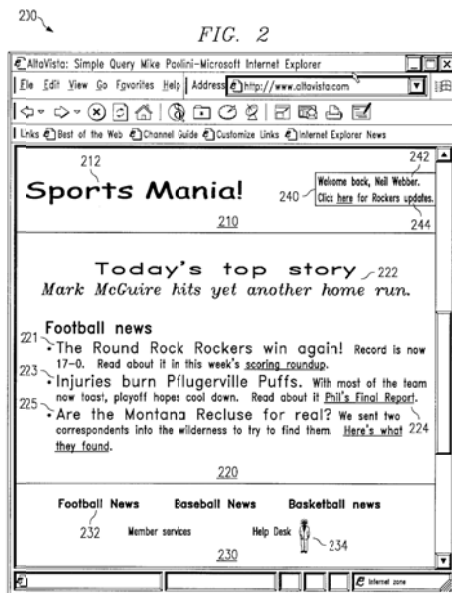
29. The text associated with Figure 3 includes a description of structures and algorithms “when a browser 310 operating on a client computer (as in 110 in FIG. 1) makes a request to the web site server (as in 130 in FIG.1)” through “updated visitor file data [being] delivered back to the visitor data manager 350 and stored in the visitor data file store 375 by the visitor file manager 370.” *Id.* at col. 6:43–7:27.

30. Figure 4 of the '592 Patent, reproduced below for convenience, and its associated text describe an embodiment of the invention “configured for use with multiple server computers.” *Id.* at col. 4:7–8, 7:28–65.



31. The text associated with Figure 4 includes a description of structures and algorithms “to achieve higher performance by sharing the load across multiple server machines.” *Id.* at col. 7:28–65; *see also*, Claim 8. This description includes a “load balancer, such as Cisco Local Director, a DNS round robin, or equivalent technology” that exists “between the web site visitor’s browser 410 and a set of server request handlers 431, 432, 433.” *Id.* at col. 7:28–65. The description also includes interaction between each “server request handler” and “their own visitor data manager 441, 442, 443,” and a “visitor file manager 470 as a separate mechanism” that “serves as the collection point for all updated data generated by the individual visitor data managers.” *Id.*

32. Figure 2 of the ’592 Patent, reproduced below for convenience, and its associated text describe an “example page” delivered by a “web server.” *Id.* at 4:3, 4:40–6:42.



33. The text associated with Figure 2 includes a description of structures and algorithms to solve “the problem of explicit questions and the performance problem.” *Id.* at col. 5:26–27. The structures and algorithms solve this problem by creating a page that is not “a one-time dynamically generated customized web page, which would be too resource intensive and

therefore slow, but will be based on predetermined Web Content Items that are developed and then cached into memory.” *Id.* at col. 4:40–6:42.

34. The structures and functions described in the ’592 Patent recite structure supporting “means for labeling content of a web site.” For example, the ’592 Patent recites “the developer can then assign at least one category and/or a keyword to each of the Web Content Items. These categories and key words are used to determine visitor interest when they access Web Content Items on a Web Site.” *Id.* at col. 5:40–44; *see also*, Exhibit B at 75 and 84–86.

35. The structures and functions described in the ’592 Patent recite structure supporting “means for registering the labeled accessed content in a personalized data file.” For example, the ’592 Patent recites that “when a visitor accesses a URL and the associated Web Content Items,” the program “registers the representative categories belonging to the web page.” Exhibit A at col. 5:61–67; *see also*, Exhibit B at 75 and 86–88.

36. The structures and functions described in the ’592 Patent recite structure supporting “means for storing the data file for at least one visitor.” For example, the ’592 Patent recites the “updated visitor file data is delivered back to the visitor data manager 350 and stored in the visitor data file store 375 by the visitor file manager.” Exhibit A at col. 7:21–27; *see also*, Exhibit B at 76 and 89.

37. The structures and functions described in the ’592 Patent recite structure supporting “means for generating a set of pre-customized displays.” For example, the ’592 Patent recites: “a home page for a large web site might include a personalization directive describing the inclusion of an article related to a visitor’s favorite NFL team. The personalization directive function examines the visitor profile, determines the favorite team, and includes the appropriate page with information about that team. In this way, each visitor to the web site might

receive a different introductory web page, customized for their preferences. Even though every visitor receives a page that appears to be customized for them, since, in fact, there are only 30 or so NFL teams; the caching mechanism of the invention ensures that the dynamic page generation only occurs at most 30 or so times.” Exhibit A at col. 3:6–18; *see also*, Exhibit B at 77 and 92–95.

38. The structures and functions described in the ’592 Patent recite structure supporting “means for caching the set of pre-customized displays on the server.” For example, the ’592 Patent recites: “The component assembler uses the pre-customized file handler 360, to retrieve the Web Content Items, formatted as pre-customized pages, that are appropriate for this visitor. Pre-customized pages can be cached in a pre-customized file store 365, or can be dynamically generated on demand by the dynamic page generator 380.” *Id.* at col. 7:6–11; *see also*, Exhibit B at 77 and 95–97.

39. The structures and functions described in the ’592 Patent recite structure supporting “means for analyzing a personalized data file of the second visitor and, based on visitor preferences of said second visitor, said second visitor with a same pre-customized display displayed to a previous visitor.” For example, the ’592 Patent recites: “If a visitor file exists for the current visitor, the program accesses such visitor file to determine the visitor’s interests as determined by the keywords associated with prior Web Content Items served, and, in one embodiment, there may be a weighing factor or other algorithmic determination for the additional Web Content Items viewed by the visitor during the most recent usage. The program then selects a pre-customized page or pre-customized page components which should reflect this interest. These selections can be assembled by a component assembler 340, and may be further

subject to personal modification by a monogrammer 330 to make changes such as inserting the visitor's name onto the page." Exhibit A at col. 6:60–7:5; *see also*, Exhibit B at 78 and 97–101.

40. The structures and functions described in the '592 Patent recite structure supporting "means for displaying said same pre-customized display from cache onto a web page accessed by said second visitor without regenerating said same cached pre-customized display for said second visitor." For example, the '592 Patent recites "The component assembler uses the pre-customized file handler 360, to retrieve the Web Content Items, formatted as pre-customized pages, that are appropriate for this visitor. Pre-customized pages can be cached in a pre-customized file store 365, or can be dynamically generated on demand by the dynamic page generator 380." Exhibit A at col. 4:3; *see also*, Exhibit B at 76 and 89–92.

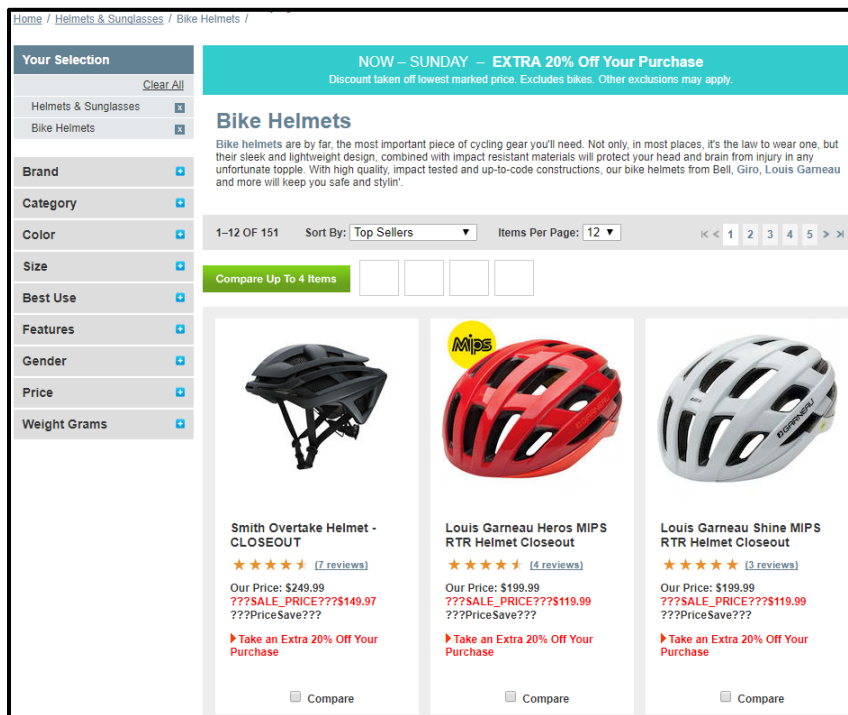
IV.
CLAIM FOR RELIEF

(PATENT INFRINGEMENT OF THE '592 PATENT)
(35 U.S.C. § 271)

41. Optimize incorporates the allegations set forth above in paragraphs 1 through 39.

42. Upon information and belief, without license or authorization and in violation of 35 U.S.C. § 271(a), Defendants have been and are now infringing at least Claims 1, 16 and 25 of the '592 Patent in this district and throughout the United States, literally or under the doctrine of equivalents, by, among other things, making, having made, and/or using (including for testing purposes) methods and/or systems utilized by at least one website owned or operated by or for Defendants (including, but not limited to, <http://www.performancebike.com>) (the "Accused Instrumentalities"). The Accused Instrumentalities provide pre-customized displays, including the product recommendation functionality on such websites, all to the injury of Plaintiff. Defendants are thus liable for infringement of the '592 Patent pursuant to 35 U.S.C. § 271.

43. Regarding Claim 1, the Accused Instrumentalities perform a method that includes labeling content of the Defendants' web site. For example, as seen on the web page below, content has been labeled with the label "Bike Helmets":



See,

http://www.performancebike.com/webapp/wcs/stores/servlet/SubCategory_10052_10551_40002_6_-1_400902_400902

44. Visitors to the Defendants' web site can access content on the web site. When a visitor (*e.g.*, a first visitor) accesses labeled content of the web site, the Accused Instrumentalities register the labeled accessed content in a data file and store the data file for such visitor. For example, when a first visitor (*e.g.*, Robert) accessed content (*e.g.*, "Smith Overtake Helmet – CLOSEOUT") and added the accessed content to his "shopping cart," the Accused Instrumentalities registered the labeled accessed content in Robert's data file and stored such data file. To illustrate, when Robert subsequently views his "SHOPPING CART," the Accused

Instrumentalities display Robert’s previously accessed content as indicated in the screen shot of a portion of the web page provided by the Accused Instrumentalities when Robert viewed his “SHOPPING CART”:

The screenshot shows the Performance Bicycle website's shopping cart. The cart contains one item: Smith Overtake Helmet - CLOSEOUT, priced at \$149.97. Below the cart, there are recommendations for Pearl Izumi Select Gloves, DeFeet Framework Socks, and Kool Covers SPD-SL Cleat Covers. The right sidebar shows delivery options, shipping estimates, and an order summary with a total due of \$119.98.

Product Description	Qty	Unit Price	Total
Smith Overtake Helmet - CLOSEOUT Item #40-3908-MBK-M Color: Matte Black Size: Medium	1	\$249.99 \$149.97	\$149.97

Product	Price
Pearl Izumi Select Gloves	\$24.99
DeFeet Framework Socks	\$6.99 (SALE)
Kool Covers SPD-SL Cleat Covers	\$12.99

Item	Price
Merchandise Subtotal	\$149.97
Your Savings Today	(\$40.98)
Order Subtotal	\$119.98
Shipping & Handling	\$10.99
S&H Discounts	(\$10.99)
Amount Due	\$119.98

45. The Accused Instrumentalities generate, cache and display pre-customized displays for a first visitor. In the example noted in the screen shot above, the Accused Instrumentalities generated, cached and displayed pre-customized displays, including a pre-customized display associated with the content “DeFeet Framework Socks”, such as in connection with Robert placing other content (*e.g.*, “Smith Overtake Helmet – CLOSEOUT”) into his “SHOPPING CART.”

46. When a second visitor visits the Defendants’ web site, the Accused Instrumentalities analyze the data file of the second visitor, associate the second visitor with the same at least one pre-customized display previously displayed to a previous visitor (*e.g.*, the first


visitor), and display the same at least one pre-customized display to the second visitor. The analyzing is performed after generating the at least one pre-customized display and the at least one pre-customized display is not regenerated before being displayed to the second visitor. For example, as shown in the following screen shot of a portion of a web page provided by the Accused Instrumentalities, when a second visitor (e.g., Robert) visits the Defendants’ web site and adds “DeFeet Aireator HiTop Sugar Skulls Socks” to his “SHOPPING CART” and then subsequently requests to view his “SHOPPING CART” page, the Accused Instrumentalities analyzed Robert’s data file (e.g., his “shopping cart” file) and then returned a web page to Robert which displayed content (e.g., under “You May Also Like”) to Robert based on his data file, including the content associated with “DeFeet Framework Socks” which was previously displayed to Robert (as shown in the screen shot above) and is displayed to Robert (after retrieval from cache without regeneration).

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ITEMS IN YOUR CART: 1 [\(Remove All\)](#)

Product Description	Qty	Unit Price	Total	
 DeFeet Aireator HiTop Sugar Skulls Socks Item #11-2477-BLK-M Color: <input type="radio"/> Black Size: Medium	1 Update	\$12.99	\$12.99	Edit Save for Later Remove

You May Also Like



DeFeet Framework Socks
★★★★★ (4)
Our Price: ~~\$42.99~~
SALE: \$6.99

DeFeet Aireator 3" Sugafly Socks
★★★★★ (0)
Our Price: \$10.99

DeFeet Aireator Flock Off 5" Socks
★★★★★ (0)
Our Price: \$12.99

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Totally Free Shipping [Select Store](#) [Learn More](#)

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Ground Shipping : \$4.99

ORDER SUMMARY

Promo Code: [Enter Promo Code](#)

Merchandise Subtotal	\$12.99
<input checked="" type="checkbox"/> Your Savings Today	(\$2.60)
Order Subtotal	\$10.39
Shipping & Handling	\$4.99
Amount Due	\$15.38

47. Regarding Claim 16, the Accused Instrumentalities comprise or use one or more structures and algorithms supporting a computer program product for operating a web site on a server computer as described above with respect to Claim 1.

48. Regarding Claim 25, the Accused Instrumentalities comprise or use one or more server computers and contain instructions executable to perform a method as described above with respect to Claim 1.

49. As a consequence of Defendants' infringement of the '592 Patent, Optimize has suffered and will continue to suffer monetary damages in an amount not yet determined. Optimize is entitled to recover from Defendants the damages sustained by Optimize as a result of Defendants' infringement of the '592 Patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

50. Optimize is in compliance with 35 U.S.C. § 287.

V.
PRAYER FOR RELIEF

WHEREFORE, Optimize respectfully requests that this Court enter:

1. A judgment in favor of Optimize that Defendants have infringed the '592 Patent;
2. A judgment and order requiring Defendants to pay Optimize its damages, costs, expenses, and prejudgment and post-judgment interest for Defendants' infringement of the '592 Patent as provided under 35 U.S.C. § 284;
3. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and that Defendants be ordered to pay Optimize's attorney fees and costs; and
4. Any and all other relief the Court deems just and proper under the circumstances.

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was electronically filed in compliance with Local Rule CV-5(a). As such, this document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed. R. Civ. P. 5(d) and Local Rule CV-5(d) and (e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by email and/or U.S. First Class Mail, on this the 18th day of September, 2018.

/s/ Scott Crocker
Scott Crocker