

1 Seth W. Wiener (SBN 203747)  
seth@sethwienerlaw.com  
2 LAW OFFICES OF SETH WIENER  
9107 Wilshire Blvd., Suite 450  
3 Beverly Hills, CA 90210  
Telephone: (925) 487-5607

4 Jeffrey Francis Craft (SBN 147186)  
5 jcraft@devlinlawfirm.com  
DEVLIN LAW FIRM LLC  
6 1731 Fox Springs Circle,  
Newbury Park, CA 91320

7 Timothy Devlin (*pro hac vice* to be filed)  
8 tdevlin@devlinlawfirm.com  
Robert Kiddie (*pro hac vice* to be filed)  
9 rkiddie@devlinlawfirm.com  
DEVLIN LAW FIRM LLC  
10 1526 Gilpin Avenue  
Wilmington, DE 19806  
11 Telephone: (302) 449-9010  
Facsimile: (302) 353-4251

12 Attorneys for Express Mobile, Inc.

13  
14  
15 UNITED STATES DISTRICT COURT  
16 CENTRAL DISTRICT OF CALIFORNIA  
17 WESTERN DIVISION

18 EXPRESS MOBILE, INC.,

19 Plaintiff,

20 vs.

21 POSSIBLE WORLDWIDE, LLC

22 Defendant.  
23  
24

) Case No.: 2:19-cv-5110

) **COMPLAINT FOR PATENT  
INFRINGEMENT**

) DEMAND FOR JURY TRIAL

1 Plaintiff Express Mobile, Inc. (“Express Mobile” or “Plaintiff”), for its  
2 Complaint against Defendant Possible Worldwide, LLC (“Possible” or “Defendant”)  
3 alleges the following:

4 **NATURE OF THE ACTION**

5 1. This is an action for patent infringement arising under the Patent Laws of  
6 the United States, 35 U.S.C. § 1 *et seq.*

7 **THE PARTIES**

8 2. Plaintiff is a corporation organized under the laws of the State of  
9 Delaware with a place of business at 3415 Custer Rd. Suite 104, Plano, TX 75023.

10 3. Upon information and belief, Possible is a limited liability company  
11 organized and existing under the laws of California, with a place of business at 12180  
12 Millennium Drive, Suite 420, Playa Vista, CA 90094 and can be served through its  
13 registered agent, Corporate Creations Network Inc., 4640 Admiralty Way, 5<sup>th</sup> Floor,  
14 Marina del Rey, CA 90292.

15 4. Upon information and belief, Possible sells and offers to sell products  
16 and services throughout the United States, including in this judicial district, and  
17 introduces products and services into the stream of commerce and that incorporate  
18 infringing technology knowing that they would be sold in this judicial district and  
19 elsewhere in the United States.

20 **JURISDICTION AND VENUE**

21 5. This is an action for patent infringement arising under the Patent Laws of  
22 the United States, Title 35 of the United States Code.

23 6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and  
24 1338(a).

25 7. Venue is proper in this judicial district under 28 U.S.C. §1400(b). On  
26 information and belief, Defendant incorporated in California, has committed acts of  
27 infringement in this District, and has a regular and established place of business within  
28 this District.

1           8.     On information and belief, Defendant is subject to this Court’s general  
2 and specific personal jurisdiction because Defendant has sufficient minimum contacts  
3 within the State of California and this District, pursuant to due process and/or the  
4 California Long Arm Statute because Defendant purposefully availed itself of the  
5 privileges of conducting business in the State of California and in this District,  
6 because Defendant regularly conducts and solicits business within the State of  
7 California and within this District, and because Plaintiff’s causes of action arise  
8 directly from each of Defendant’s business contacts and other activities in the State of  
9 California and this District.

10                   **COUNT I – INFRINGEMENT OF U.S. Patent No. 6,546,397**

11           9.     The allegations set forth in the foregoing paragraphs 1 through 8 are  
12 incorporated into this First Claim for Relief.

13           10.    On April 8, 2003, U.S. Patent No. 6,546,397 (“the ’397 patent”), entitled  
14 “*Browser Based Web Site Generation Tool and Run Time Engine*,” was duly and  
15 legally issued by the United States Patent and Trademark Office. A true and correct  
16 copy of the ’397 patent is attached as Exhibit A.

17           11.    The inventions of the ’397 patent resolve technical problems related to  
18 website creation and generation. For example, the inventions enable the creation of  
19 websites through browser-based visual editing tools such as selectable settings panels  
20 which describe website elements, with one or more settings corresponding to  
21 commands, which features are exclusively implemented utilizing computer  
22 technology including a virtual machine.

23           12.    The claims of the ’397 patent do not merely recite the performance of  
24 some business practice known from the pre-Internet world along with the requirement  
25 to perform it on the Internet. Instead, the claims of the ’397 patent recite one or more  
26 inventive concepts that are rooted in computerized website creation technology, and  
27 overcome problems specifically arising in the realm of computerized website creation  
28 technologies.

1           13. The claims of the '397 patent recite an invention that is not merely the  
2 routine or conventional use of website creation systems and methods. Instead, the  
3 invention describes a browser-based website creation system and method in which the  
4 user-selected settings representing website elements are stored in a database, and in  
5 which said stored information is retrieved to generate said website.

6           14. The technology claimed in the '397 patent does not preempt all ways of  
7 using website or web page authoring tools nor preempt the use of all website or web  
8 page authoring tools, nor preempt any other well-known or prior art technology.

9           15. Accordingly, each claim of the '397 patent recites a combination of  
10 elements sufficient to ensure that the claim in practice amounts to significantly more  
11 than a patent on an ineligible concept.

12           16. In C.A. 2:17-00128, a case filed in the Eastern District of Texas, the  
13 defendant in that action, KTree Computer Solutions brought a Motion for Judgment  
14 on the Pleadings asserting that the '397 patent, along with U.S. Patent No. 7,594,168  
15 (asserted in Count II below) were invalid as claiming abstract subject matter under 35  
16 U.S.C. § 101. (C.A. 2:17-00128 Dkt. 9.) Subsequent briefing included Plaintiff's  
17 Response and related Declarations and Exhibits (C.A. 2:17-00128 Dkt. 17, 22-24),  
18 KTree's Reply (C.A. 2:17-00128 Dkt. 25), and Plaintiff's Sur-Reply and related  
19 Declarations and Exhibits (C.A. 2:17-00128 Dkt. 26-27). Each of those filings is  
20 incorporated by reference into this Complaint.

21           17. After a consideration of the respective pleadings, Magistrate Judge Payne  
22 recommended denial of KTree's motion, without prejudice, holding that "the claims  
23 appear to address a problem particular to the internet: dynamically generating  
24 websites and displaying web pages based on stored user-selected settings" and further  
25 stating "the asserted claims do not bear all of the hallmarks of claims that have been  
26 invalidated on the pleadings by other courts in the past. For example, the claims are  
27 not merely do-it-on-a-computer claims." (C.A. 2:17-00128 Dkt. 29 attached hereto as  
28 Exhibit B.) Judge Payne's report and recommendation is incorporated by reference

1 into this Complaint. No objection was filed to the Magistrate Judge’s report and  
2 recommendation and the decision therefore became final.

3 18. In C.A. Nos. 3:18-cv-04679 and 3:18-04688, both of which were filed in  
4 the Northern District of California, the respective defendant in each of those actions  
5 brought a Motion to Dismiss asserting that the ’397 patent, along with U.S. Patent No.  
6 7,594,168 (asserted in Count II below) were invalid as claiming abstract subject  
7 matter under 35 U.S.C. § 101. The § 101 briefing in each of those cases is  
8 incorporated by reference into this Complaint.

9 19. After consideration of the respective pleadings and oral argument, Judge  
10 Richard Seeborg issued orders denying each respective motion to dismiss drawing a  
11 comparison between the asserted Express Mobile patents with those patents asserted  
12 in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). (C.A. 3:18 -04679  
13 Dkt. 45, attached hereto as Exhibit C, and C.A. 3:18-04688 Dkt. 40, attached hereto as  
14 Exhibit D.)

15 20. Plaintiff is the assignee and owner of the right, title and interest in and to  
16 the ’397 patent, including the right to assert all causes of action arising under said  
17 patents and the right to any remedies for infringement of them.

18 21. Upon information and belief, Defendant has and continues to directly  
19 infringe at least claims 1-6, 8-11, 14-15, 17, 20, 24-25, 35, and 37 of the ’397 patent  
20 by using a browser-based website and/or web page authoring tool in which the user-  
21 selected settings representing website elements are stored in a database, and in which  
22 said stored information is retrieved to generate said website (the “Accused  
23 Instrumentalities”). The Accused Instrumentalities include but are not limited to the  
24 website building tools used and/or provided by Defendant, such as, for example  
25 Drupal, Joomla, and/or Shopify. *See, e.g.*, <https://www.possible.com/about>.

26 22. On information and belief, Defendant is a for-profit organization with  
27 revenues of approximately \$600 million U.S.D. per year. Moreover, Defendant, its  
28 employees and/or agents utilize the Accused Instrumentalities in the building and/or

1 hosting of websites for Defendant's customers, leading to direct or indirect revenues  
2 and profit. As one example of indirect profit, entities such as Defendant will  
3 frequently offer website building and/or hosting services at reduced pricing as an  
4 inducement to attract customers, who then purchase additional products or services.  
5 On information and belief, without the availability of infringing tools such as the  
6 Accused Instrumentalities, Defendant would be at a disadvantage in the marketplace  
7 and would generate less revenue overall.

8 23. In particular, claim 1 of the '397 patent generally recites a method  
9 enabling production of websites on and for computers with browsers and virtual  
10 machines, by presenting, through a browser, a selectable settings menu describing  
11 elements, such setting(s) corresponding to commands to the virtual machine;  
12 generating a display in accordance with selected settings; storing information  
13 regarding selected settings in a database; generating a website at least in part by  
14 retrieving said information; and building web page(s) to generate said website and a  
15 run time file, where the run time file uses the stored information to generate virtual  
16 machine commands for the display of at least a portion of web page(s).

17 24. The Accused Instrumentalities infringe claim 1 of the '397 patent through  
18 a combination of features which collectively practice each limitation of claim 1. By  
19 way of example, modern internet browsers such as Microsoft Internet Explorer,  
20 Mozilla's Firefox, Apple Safari, Google Chrome, and Opera include virtual machines  
21 within the meaning of the '397 patent. (*See, e.g.*,  
22 <http://developer.telerik.com/featured/a-guide-to-javascript-engines-for-idiots/>;  
23 <http://dictionary.reference.com/browse/virtual+machine?s=t>). The Accused  
24 Instrumentalities support the use of the latest versions of Internet Explorer 11 or later,  
25 Microsoft Edge, latest-1, Firefox latest, latest-1, Chrome latest, latest-1, Safari latest,  
26 latest-1 (Mac OS), Safari Mobile for iPad 2, iPad Mini, iPad with Retina Display (iOS  
27 7 or later), for desktop site, Safari Mobile for iPhone 4 or later; iOS 7 or later, for  
28 mobile site, Chrome for mobile latest-1 (Android 4 or later) for mobile site, where

1 *latest-1* means one major version earlier than the latest released version. (See, e.g.,  
2 <https://www.drupal.org/docs/8/system-requirements/browser->;  
3 [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support).) All of these browsers rely on  
4 browser engines comprising virtual machines to interpret and execute JavaScript and  
5 HTML to render web pages on a computer.

6 25. By way of further example, the Accused Instrumentalities enable users to  
7 produce websites through browsers on users' computers via interaction with an  
8 Internet server. For example, in order to add a new page to a user's website, the user  
9 logs in and then a server of the Accused Instrumentalities initiates presentation to the  
10 user through a browser of a website-builder tool. From the interface—sometimes  
11 referred to as a dashboard—of the Accused Instrumentalities, the user can navigate  
12 and add elements and element properties commensurate with a new page. A display is  
13 generated in accordance with one or more user selected settings substantially  
14 contemporaneously with the selection thereof. This is performed, for example, using  
15 a visual editing tool through a browser. The WYSIWYG interface for selecting center  
16 alignment of an image can also be accessed, and then the user can select various  
17 options such as a font and paragraph styles. After the user selects options such as  
18 image/text alignment or font and paragraph styles through the WYSIWYG editor, the  
19 display immediately updates to reflect the selected option. Furthermore, when images  
20 are uploaded by a user, those images are displayed in approximately 0-2 seconds  
21 depending on file size and bandwidth.

22 26. Data is stored in a database, including information corresponding to user  
23 selected settings such as, for example, the selections of text color. Other user  
24 selections are also stored including, for example, the layout, image filenames,  
25 thumbnails, and paragraph margin settings for defining the alignment of an image  
26 location. The Accused Instrumentalities build one or more web pages to generate a  
27 website from at least a portion of a database and at least one run time file, where at  
28

1 least one run time file utilizes information stored in said database to generate virtual  
2 machine commands for the display of at least a portion of said one or more web pages.

3 27. At run time, at least some of these files use information stored in the  
4 database to generate the HTML for the final rendered HTML page. This HTML  
5 represents virtual machine commands for display of the page because it is read and  
6 used by the applicable browser's engine, including a virtual machine, in order to  
7 render the page. On information and belief, the Accused Instrumentalities further rely  
8 on the browser engine's component JavaScript engine to either display a portion of the  
9 page directly, or generate HTML to be executed for display by the main layout engine.

10 28. Additionally, the "PHP code," including the PHP template files, can be  
11 viewed in the file directory for the Accused Instrumentalities, and this directory  
12 includes various other runtime files (including other PHP files, JavaScript files,  
13 PHTML, and/or XML). It follows that a user will view the finalized website  
14 developed with said tools in a browser outside of the website authoring environment  
15 to verify the website conforms to the intended design. *See, e.g.*,  
16 <https://techterms.com/definition/runtime>.

17 29. The presence of the above referenced elements are demonstrated, by way  
18 of example, by reference to publicly available information. Regarding Drupal, *see*,  
19 *e.g.*, <https://www.drupal.org/home>; <https://www.drupal.org/docs/8/system-requirements/browser-requirements>; <https://www.drupal.org/project/ckeditor>;  
20 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
21 [https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-  
22 images/10/03/2016/9821](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821); Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
23 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
24 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
25 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
26 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
27 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
28



1 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>.  
2 Regarding Joomla, *see, e.g.*, [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support);  
3 [https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-](https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-requirement)  
4 [requirement; https://showcase.joomla.org/](https://showcase.joomla.org/);  
5 [https://docs.joomla.org/Editor\\_form\\_field\\_type](https://docs.joomla.org/Editor_form_field_type); [https://developer.joomla.org/coding-](https://developer.joomla.org/coding-standards/html.html)  
6 [standards/html.html](https://developer.joomla.org/coding-standards/html.html); <https://developer.joomla.org/coding-standards/css.html>;  
7 <https://developer.joomla.org/coding-standards/javascript.html>;  
8 [https://docs.joomla.org/Generating\\_JSON\\_output](https://docs.joomla.org/Generating_JSON_output); [https://api.joomla.org/cms-](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html)  
9 [3/classes/Joomla.CMS.Input.Json.html](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html);  
10 [https://docs.joomla.org/How\\_do\\_you\\_assign\\_a\\_module\\_to\\_specific\\_pages%3F](https://docs.joomla.org/How_do_you_assign_a_module_to_specific_pages%3F);  
11 [https://docs.joomla.org/Where\\_are\\_the\\_web\\_pages%3F](https://docs.joomla.org/Where_are_the_web_pages%3F).

12 30. Claim 2 of the '397 patent generally recites an apparatus for producing  
13 websites on and for computers having a browser and a virtual machine, said apparatus  
14 comprising an interface to present a settings menu which describes elements, said  
15 panel presented through a browser, where the selectable setting(s) corresponds to  
16 commands to the virtual machine; a browser to generate a display in accordance with  
17 selected setting(s); a database for storing information regarding selected settings; and  
18 a build tool having run time file(s) for generating web page(s) and using stored  
19 information to generate commands to the virtual machine for generating at least a  
20 portion of web page(s).

21 31. The Accused Instrumentalities infringe claim 2 of the '397 patent through  
22 a combination of features which collectively practice each limitation of claim 2. By  
23 way of example, modern internet browsers such as Microsoft Internet Explorer,  
24 Mozilla's Firefox, Apple Safari, Google Chrome, and Opera include virtual machines  
25 within the meaning of the '397 patent. (*See, e.g.*,  
26 <http://developer.telerik.com/featured/a-guide-to-javascript-engines-for-idiots/>;  
27 <http://dictionary.reference.com/browse/virtual+machine?s=t>). The Accused  
28 Instrumentalities support the use of the latest versions of Internet Explorer 11 or later,

1 Microsoft Edge, latest-1, Firefox latest, latest-1, Chrome latest, latest-1, Safari latest,  
2 latest-1 (Mac OS), Safari Mobile for iPad 2, iPad Mini, iPad with Retina Display (iOS  
3 7 or later), for desktop site, Safari Mobile for iPhone 4 or later; iOS 7 or later, for  
4 mobile site, Chrome for mobile latest-1 (Android 4 or later) for mobile site, where  
5 *latest-1* means one major version earlier than the latest released version. (See, e.g.,  
6 <https://www.drupal.org/docs/8/system-requirements/browser-requirements>;  
7 [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support).) All of these browsers rely on  
8 browser engines comprising virtual machines to interpret and execute JavaScript and  
9 HTML to render web pages on a computer.

10 32. By way of further example, the Accused Instrumentalities enable users to  
11 produce websites through browsers on users' computers via interaction with an  
12 Internet server. For example, in order to add a new page to a user's website, the user  
13 logs in and then a server of the Accused Instrumentalities initiates presentation to the  
14 user through a browser of a website-builder tool. From the interface—sometimes  
15 referred to as a dashboard—of the Accused Instrumentalities, the user can navigate  
16 and add elements and element properties commensurate with a new page. A display is  
17 generated in accordance with one or more user selected settings substantially  
18 contemporaneously with the selection thereof. This is performed, for example, using  
19 a visual editing tool through a browser. The WYSIWYG interface for selecting center  
20 alignment of an image can also be accessed, and then the user can select various  
21 options such as a font and paragraph styles. After the user selects options such as  
22 image/text alignment or font and paragraph styles through the WYSIWYG editor, the  
23 display immediately updates to reflect the selected option. Furthermore, when images  
24 are uploaded by a user, those images are displayed in approximately 0-2 seconds  
25 depending on file size and bandwidth.

26 33. Data is stored in a database, including information corresponding to user  
27 selected settings such as, for example, the selections of text color. Other user  
28 selections are also stored including, for example, the layout, image filenames,

1 thumbnails, and paragraph margin settings for defining the alignment of an image  
2 location. The Accused Instrumentalities build one or more web pages to generate a  
3 website from at least a portion of a database and at least one run time file, where at  
4 least one run time file utilizes information stored in said database to generate virtual  
5 machine commands for the display of at least a portion of said one or more web pages.

6 34. At run time, at least some of these files use information stored in the  
7 database to generate the HTML for the final rendered HTML page. This HTML  
8 represents virtual machine commands for display of the page because it is read and  
9 used by the applicable browser's engine, including a virtual machine, in order to  
10 render the page. On information and belief, the Accused Instrumentalities further rely  
11 on the browser engine's component JavaScript engine to either display a portion of the  
12 page directly, or generate HTML to be executed for display by the main layout engine.

13 35. Additionally, the "PHP code," including the PHP template files, can be  
14 viewed in the file directory for the Accused Instrumentalities, and this directory  
15 includes various other runtime files (including other PHP files, JavaScript files,  
16 PHTML, and XML). *See, e.g.*, <https://techterms.com/definition/runtime>.

17 36. It follows that a user will view the finalized website developed with said  
18 tools in a browser outside of the website authoring environment to verify the website  
19 conforms to the intended design.

20 37. The presence of the above referenced elements are demonstrated, by way  
21 of example, by reference to publicly available information. Regarding Drupal, *see*,  
22 *e.g.*, <https://www.drupal.org/home>; <https://www.drupal.org/docs/8/system-requirements/browser-requirements>; <https://www.drupal.org/project/ckeditor>;  
23 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
24 <https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821>; Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
25 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
26 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
27  
28

1 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
2 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
3 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
4 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>.  
5 Regarding Joomla, *see, e.g.*, [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support);  
6 [https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-](https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-requirement)  
7 [requirement; https://showcase.joomla.org/](https://showcase.joomla.org/);  
8 [https://docs.joomla.org/Editor\\_form\\_field\\_type](https://docs.joomla.org/Editor_form_field_type); [https://developer.joomla.org/coding-](https://developer.joomla.org/coding-standards/html.html)  
9 [standards/html.html; https://developer.joomla.org/coding-standards/css.html](https://developer.joomla.org/coding-standards/css.html);  
10 <https://developer.joomla.org/coding-standards/javascript.html>;  
11 [https://docs.joomla.org/Generating\\_JSON\\_output](https://docs.joomla.org/Generating_JSON_output); [https://api.joomla.org/cms-](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html)  
12 [3/classes/Joomla.CMS.Input.Json.html](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html);  
13 [https://docs.joomla.org/How\\_do\\_you\\_assign\\_a\\_module\\_to\\_specific\\_pages%3F](https://docs.joomla.org/How_do_you_assign_a_module_to_specific_pages%3F);  
14 [https://docs.joomla.org/Where\\_are\\_the\\_web\\_pages%3F](https://docs.joomla.org/Where_are_the_web_pages%3F).

15 38. Claim 3 of the '397 patent recites the apparatus of claim 2, wherein the  
16 database is a multi-dimensional array structured database.

17 39. The Accused Instrumentalities infringe claim 3 of the '397 patent  
18 through, by way of example, patent through a combination of features which  
19 collectively practice each limitation of claim 3.

20 40. By way of example, the JSON strings that are used to generate, in part,  
21 field capabilities originate from the database and therefore reflect the database  
22 structure and contents showing, on information and belief, the implementation of a  
23 multidimensional array structured database. By way of further evidence, the JSON  
24 strings show that there are dimensions for various parameters. *See, e.g.*,  
25 <https://www.drupal.org/files/issues/Field.png>;  
26 <https://api.drupal.org/api/drupal/core%21modules%21field%21field.module/group/field/8.3.x>;  
27 <https://code.tutsplus.com/>.

28

1           41. Claim 4 of the '397 patent recites the apparatus of claim 3, wherein the  
2 representative information is Boolean data, numeric data, string data or multi-  
3 dimensional arrays of various multimedia objects.

4           42. The Accused Instrumentalities infringe claim 4 of the '397 patent through  
5 a combination of features that practice the limitations of Claim 4. *See, e.g.*,  
6 [https://www.drupal.org/docs/8/api/entity-api/defining-and-using-content-entity-field-](https://www.drupal.org/docs/8/api/entity-api/defining-and-using-content-entity-field-definitions)  
7 [definitions.](https://www.drupal.org/docs/8/api/entity-api/defining-and-using-content-entity-field-definitions)

8           43. Claim 5 of the '397 patent recites the apparatus of claim 4, wherein said  
9 elements include multimedia objects selected from the group consisting of a color, a  
10 font, an image, an audio clip, a video clip, a text area and a URL.

11           44. The Accused Instrumentalities infringe claim 5 of the '397 patent through  
12 a combination of features that practice the limitations of Claim 5.

13           45. By way of example, the Accused Instrumentalities include various  
14 multimedia objects selected from a group contained within a WYSIWYG Editor.  
15 Examples include color, font, an image, a video, a text area and a URL as they appear  
16 in the WYSIWYG Editor. The multimedia objects created in the WYSIWYG editor  
17 are stored in the database and appear as HTML scripted text in the database. Text and  
18 vector objects can be selected and colored by selecting them or “click and dragging”  
19 over them in the WYSIWYG editor. A color may also be selected from the color  
20 dropdowns on the control bar of the Editor. This color is saved to the database; as part  
21 of the HTML of the description record. Moreover, text objects may be assigned a font  
22 by making such a selection or “click and dragging” over them in the WYSIWYG  
23 editor. A font can then be selected from the font dropdown on the control bar of the  
24 Editor. This font selection is thereafter saved to the database as part of the HTML of  
25 the description record. Selecting the Image button in the WYSIWYG editor opens a  
26 tabbed panel where the user designates source, title, format, size, etc. The image file  
27 is uploaded to the server and the file’s location and style are saved and posted to the  
28 database as part of the HTML of the description record. Furthermore, videos are

1 created by clicking on the Media module, which opens a tabbed panel where the user  
2 designates URL, format, size, etc. The video's URL and style elements are saved to  
3 the database as part of the HTML of the description record. A text area may also be  
4 selected for creation by clicking in the frame of the WYSIWYG Editor and typing.  
5 The text and its style are saved to the database as part of the HTML of the description  
6 record. After entering text into the WYSIWYG editor's text area, a URL assigned by  
7 clicking and dragging over the text object you wish to link, and then selecting the  
8 "chain" link button from the control bar; which opens a tabbed panel where the user  
9 can designate the URL, target, etc. The text and its style are saved to the database as  
10 part of the HTML of the description record.

11 46. The presence of the above referenced elements are demonstrated, by way  
12 of example, by reference to publicly available information. *See, e.g.*,  
13 <https://www.drupal.org/project/ckeditor>;  
14 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
15 [https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821)  
16 [images/10/03/2016/9821](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821); Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
17 [https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821)  
18 [images/10/03/2016/9821](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821);  
19 <https://www.drupal.org/docs/8/core/modules/media/overview>;  
20 [https://www.drupal.org/project/media\\_entity](https://www.drupal.org/project/media_entity).

21 47. Claim 6 of the '397 patent recites the apparatus of claim 2, wherein said  
22 elements are selected from the group consisting of a button, an image, a paragraph, a  
23 frame, a table, a form and a vector object.

24 48. The Accused Instrumentalities infringe claim 6 of the '397 patent through  
25 a combination of features that practice the limitations of Claim 6.

26 49. By way of example, the Accused Instrumentalities include various user  
27 selectable menus where various elements can be placed on a web page. Those various  
28 user selectable menus are used to place elements selected from the group consisting of

1 a button, an image, a paragraph, a frame, a table, a form and a vector object. The cells  
2 of a table and maps would reside in a frame, and that, dividers, maps and the lines in  
3 tables would be, at least in part, vector objects.

4 50. The presence of the above referenced elements are demonstrated, by way  
5 of example, by reference to publicly available information. *See, e.g.*,  
6 <https://www.drupal.org/project/ckeditor>;  
7 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
8 [https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821)  
9 [images/10/03/2016/9821](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821); Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
10 [https://www.drupal.org/docs/8/core/modules/custom\\_block/overview](https://www.drupal.org/docs/8/core/modules/custom_block/overview);  
11 <https://www.drupal.org/docs/8/core/modules/contact/overview>.

12 51. Claim 9 recites the apparatus of claim 2, wherein said elements include a  
13 button or an images, wherein said selectable settings include the selection of an  
14 element style, and wherein said build tool includes means for storing information  
15 representative of selected style in a database.

16 52. The Accused Instrumentalities infringe claim 9 of the '397 patent through  
17 a combination of features which collectively practice each limitation of claim 9. *See,*  
18 *e.g.*, <https://www.drupal.org/project/ckeditor>;  
19 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
20 [https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821)  
21 [images/10/03/2016/9821](https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821);  
22 <https://www.drupal.org/docs/8/core/modules/image/working-with-images>;  
23 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
24 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
25 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
26 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
27 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
28 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>.

1           53. Claim 10 recites the apparatus of claim 9, wherein said elements are  
2 described by multiple object states.

3           54. The Accused Instrumentalities infringe claim 10 of the '397 patent  
4 through a combination of features which collectively practice each limitation of claim  
5 10. For example, buttons can have multiple object states. *See, e.g.*,  
6 <https://www.drupal.org/docs/8/core/themes/seven-theme>.

7           55. Claim 11 recites the apparatus of claim 9, wherein said elements are  
8 described by a transformation or a timelines of said selected styles.

9           56. The Accused Instrumentalities infringe claim 11 of the '397 patent  
10 through a combination of features which collectively practice each limitation of claim  
11 11. By way of example, the Accused Instrumentalities support CSS architecture. *See,*  
12 *e.g.*, <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>;  
13 *see also, e.g.*, <http://demos.dojotoolkit.org/demos/css3/demo.html>.

14           57. Claim 14 recites the apparatus of claim 2, wherein said elements include  
15 buttons or images, wherein said description of elements is a transition or a timeline  
16 which is selected according to input from a mouse, and wherein said build tool  
17 includes means for storing information representative of said selected description of  
18 elements in said database.

19           58. The Accused Instrumentalities infringe claim 14 of the '397 patent  
20 through a combination of features which collectively practice each limitation of claim  
21 14.

22           59. By way of example, the Accused Instrumentalities include various CSS  
23 libraries that are used extensively for adding transformations and timelines to selected  
24 elements. *See, e.g.*, [https://www.drupal.org/docs/develop/standards/css/css-](https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8)  
25 [architecture-for-drupal-8](http://demos.dojotoolkit.org/demos/css3/demo.html); <http://demos.dojotoolkit.org/demos/css3/demo.html>.

26           60. Claim 15 recites the apparatus of claim 14, wherein at least one of said  
27 description of elements is a timeline or an animation.  
28



1           61. The Accused Instrumentalities infringe claim 15 of the '397 patent  
2 through a combination of features which collectively practice each limitation of claim  
3 15.

4           62. By way of example, the Accused Instrumentalities enable descriptions of  
5 elements describing CSS animations. *See, e.g.*,  
6 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>;  
7 <http://demos.dojotoolkit.org/demos/css3/demo.html>.

8           63. Claim 17 recites the apparatus of claim 2, wherein one or more of said  
9 elements is a button or an image, wherein said description of elements is a transition,  
10 an animation or a timeline, and wherein said build engine includes means to  
11 synchronize said description of said one or more elements.

12           64. The Accused Instrumentalities infringe claim 17 of the '397 patent  
13 through a combination of features which collectively practice each limitation of claim  
14 17.

15           65. By way of example, the Accused Instrumentalities enable the definition  
16 of certain parent elements and child element in certain classes, which can include the  
17 URL for an image, in the database, and that also can be zoomed. The parent element  
18 can include two transform styles, such as one for the parent and one for its lens.

19           66. Claim 20 recites the apparatus of claim 2, wherein at least one of said  
20 elements is a child button or a child object, wherein said description of said elements  
21 is a timeline, a transition or an animation, and wherein said build engine includes  
22 means for defining said description of said element.

23           67. The Accused Instrumentalities infringe claim 20 of the '397 patent  
24 through a combination of features which collectively practice each limitation of claim  
25 20.

26           68. By way of example, the Accused Instrumentalities enable the description  
27 of elements as timelines or transition. Moreover, the build engine includes the means  
28

1 for defining said description of said element through a choice of menu items through  
2 the design tab of the Product Information Admin Panel.

3 69. Claim 24 recites the apparatus of claim 2, wherein said run time files  
4 include one compressed website specific, customized run time engine program file  
5 and one compressed website specific, customized run time engine library file.

6 70. The Accused Instrumentalities infringe claim 24 of the '397 patent  
7 through a combination of features which collectively practice each limitation of claim  
8 24.

9 71. By way of example, the Accused Instrumentalities include two  
10 customized runtime files, an HTML file and a second unique CSS file. *See, e.g.*,  
11 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
12 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
13 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
14 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
15 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
16 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>.

17 72. Claim 25 recites the apparatus of claim 24, wherein said run time files  
18 include a dynamic web page scaling mechanism, whereby each of said one or more  
19 generated web pages is scaled for viewing on said display.

20 73. The Accused Instrumentalities infringe claim 25 of the '397 patent  
21 through a combination of features which collectively practice each limitation of claim  
22 25.

23 74. By way of example, the Accused Instrumentalities enable rescaling of a  
24 web page to the size of the particular screen that is being used. *See, e.g.*,  
25 <https://www.drupal.org/docs/8/mobile/responsive-web-design>;  
26 <https://www.drupal.org/docs/8/mobile/web-based-mobile-apps>.

27  
28

1           75. Claim 35 of the '397 patent generally recites the apparatus of claim 2,  
2 wherein the build tool includes dynamic resizing means operable to redefine a size of  
3 a web page upon being display.

4           76. The Accused Instrumentalities infringe claim 35 of the '397 patent  
5 through a combination of features which collectively practice each limitation of claim  
6 35.

7           77. By way of example, the Accused Instrumentalities enable dynamic  
8 resizing upon display to a different device and screen. For example, the Accused  
9 Instrumentalities include "Responsive Web Design." Responsive Web Design refers  
10 to web design that changes formatting and lay-out to respond to different devices,  
11 screen sizes and browser capabilities. The Accused Instrumentalities therefore enable  
12 the creation of web pages that may be viewed with resizing means operable to  
13 redefine a size of a web page upon being displayed. *See, e.g.*,

14 [http://www.w3schools.com/html/html\\_responsive.asp](http://www.w3schools.com/html/html_responsive.asp);

15 <https://www.drupal.org/docs/8/mobile/responsive-web-design>;

16 <https://www.drupal.org/docs/8/mobile/web-based-mobile-apps>.

17           78. Claim 37 of the '397 patent generally recites [a]n apparatus for producing  
18 websites with web page(s) on and for a computer with a browser and a virtual  
19 machine, the apparatus comprising: an interface for building a website through control  
20 of website elements, being operable through the browser on to: present a selectable  
21 settings menu, accept settings, and generate the display in accordance with an  
22 assembly of settings contemporaneously with the acceptance thereof, at least one  
23 setting being operable to generate said display through commands to said virtual  
24 machine; an internal database associated with the interface for storing information  
25 representative of one or more of assembly of settings for controlling elements of the  
26 website; and a build tool to construct web page(s) of the website having: an external  
27 database containing data corresponding to the information stored in the internal  
28 database, and one or more run time files, where said run time files use information

1 stored in the external database to generate virtual machine commands for the display  
2 of at least a portion of one or more web pages.

3 79. The Accused Instrumentalities infringe claim 37 of the '397 patent  
4 through a combination of features which collectively practice each limitation of claim  
5 37. By way of example, modern internet browsers such as Microsoft Internet  
6 Explorer, Mozilla's Firefox, Apple Safari, Google Chrome, and Opera include virtual  
7 machines within the meaning of the '397 patent. (*See, e.g.*,  
8 <http://developer.telerik.com/featured/a-guide-to-javascript-engines-for-idiots/>;  
9 <http://dictionary.reference.com/browse/virtual+machine?s=t>). The Accused  
10 Instrumentalities support the use of the latest versions of Internet Explorer 11 or later,  
11 Microsoft Edge, latest-1, Firefox latest, latest-1, Chrome latest, latest-1, Safari latest,  
12 latest-1 (Mac OS), Safari Mobile for iPad 2, iPad Mini, iPad with Retina Display (iOS  
13 7 or later), for desktop site, Safari Mobile for iPhone 4 or later; iOS 7 or later, for  
14 mobile site, Chrome for mobile latest-1 (Android 4 or later) for mobile site, where  
15 *latest-1* means one major version earlier than the latest released version. (*See*  
16 <https://www.drupal.org/docs/8/system-requirements/browser-requirements>;  
17 [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support).)

18 80. By way of example, the Accused Instrumentalities include various  
19 multimedia objects selected from a group contained within a WYSIWYG Editor.  
20 Examples include color, font, an image, a video, a text area and a URL as they appear  
21 in the WYSIWYG Editor. The multimedia objects created in the WYSIWYG editor  
22 are stored in the database and appear as HTML scripted text in the database. Text and  
23 vector objects can be selected and colored by selecting them or "clicking and  
24 dragging" over them in the WYSIWYG editor. A color may also be selected from the  
25 color dropdowns on the control bar of the Editor. This color is saved to the database;  
26 as part of the HTML of the description record. Moreover, text objects may be assigned  
27 a font by making such a selection or "click and dragging" over them in the  
28 WYSIWYG editor. A font can then be selected from the font dropdown on the

1 control bar of the Editor. This font selection is thereafter saved to the database as part  
2 of the HTML of the description record. Selecting the Image button in the WYSIWYG  
3 editor opens a tabbed panel where the user designates source, title, format, size, etc.  
4 The image file is uploaded to the server and the file's location and style are saved and  
5 posted to the database as part of the HTML of the description record. Furthermore,  
6 videos are created by clicking on the Media module, which opens a tabbed panel  
7 where the user designates URL, format, size, etc. The video's URL and style  
8 elements are saved to the database as part of the HTML of the description record. A  
9 text area may also be selected for creation by clicking in the frame of the WYSIWYG  
10 Editor and typing. The text and its style are saved to the database as part of the  
11 HTML of the description record. After entering text into the WYSIWYG editor's text  
12 area, a URL assigned by clicking and dragging over the text object you wish to link,  
13 and then selecting the "chain" link button from the control bar; which opens a tabbed  
14 panel where the user can designate the URL, target, etc. The text and its style are  
15 saved to the database as part of the HTML of the description record.

16 81. Furthermore, the Accused Instrumentalities enable data from the client-  
17 side form referenced to be stored in a server-side database.

18 82. The presence of the above referenced elements are demonstrated, by way  
19 of example, by reference to publicly available information. *See, e.g.*,  
20 <https://www.drupal.org/home>; <https://www.drupal.org/docs/8/system-requirements/browser-requirements>; <https://www.drupal.org/project/ckeditor>;  
21 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
22 <https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821>; Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
23 [https://www.drupal.org/project/save\\_draft](https://www.drupal.org/project/save_draft);  
24 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
25 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
26 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
27  
28

1 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
2 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
3 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>;  
4 Regarding Joomla, *see, e.g.*, [https://docs.joomla.org/Joomla\\_Browser\\_Support](https://docs.joomla.org/Joomla_Browser_Support);  
5 [https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-](https://www.joomlart.com/documentation/other/joomla-3-and-joomla-2-5-system-requirement)  
6 [requirement](https://showcase.joomla.org/); <https://showcase.joomla.org/>;  
7 [https://docs.joomla.org/Editor\\_form\\_field\\_type](https://docs.joomla.org/Editor_form_field_type); [https://developer.joomla.org/coding-](https://developer.joomla.org/coding-standards/html.html)  
8 [standards/html.html](https://developer.joomla.org/coding-standards/html.html); <https://developer.joomla.org/coding-standards/css.html>;  
9 <https://developer.joomla.org/coding-standards/javascript.html>;  
10 [https://docs.joomla.org/Generating\\_JSON\\_output](https://docs.joomla.org/Generating_JSON_output); [https://api.joomla.org/cms-](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html)  
11 [3/classes/Joomla.CMS.Input.Json.html](https://api.joomla.org/cms-3/classes/Joomla.CMS.Input.Json.html);  
12 [https://docs.joomla.org/How\\_do\\_you\\_assign\\_a\\_module\\_to\\_specific\\_pages%3F](https://docs.joomla.org/How_do_you_assign_a_module_to_specific_pages%3F);  
13 [https://docs.joomla.org/Where\\_are\\_the\\_web\\_pages%3F](https://docs.joomla.org/Where_are_the_web_pages%3F).

14 83. Upon information and belief, these Accused Instrumentalities are used,  
15 marketed, provided to, and or used by or for each of Defendant’s partners, clients,  
16 customers, and/or end users across the country and in this District.

17 84. Defendant was made aware of the ’397 patent and its infringement  
18 thereof at least as early as the filing of this Complaint.

19 85. Since the date of the filing of this Complaint, Defendant’s infringement  
20 of the ’397 patent has been willful.

21 86. Plaintiff has not sold any product nor offered a service within the scope  
22 of any claim of the ’397 patent. In addition, prior to August 12, 2015, no license to  
23 the ’397 patent had been granted.

24 87. Plaintiff has been harmed by Defendant’s infringing activities.

25 **COUNT II – INFRINGEMENT OF U.S. PATENT NO. 7,594,168**

26 88. The allegations set forth in the foregoing paragraphs 1 through 87 are  
27 incorporated into this Second Claim for Relief.

28

1           89. On September 22, 2009, U.S. Patent No. 7,594,168 entitled *Browser*  
2 *Based Web Site Generation Tool and Run Time Engine* was duly and legally issued by  
3 the United States Patent and Trademark Office. A true and correct copy of the '168  
4 patent is attached as Exhibit E.

5           90. The inventions of the '168 patent resolve technical problems related to  
6 website creation and generation. For example, the inventions enable the creation of  
7 websites through browser-based build tools and a user interface, which features are  
8 exclusively implemented utilizing computer technology.

9           91. The claims of the '168 patent do not merely recite the performance of  
10 some business practice known from the pre-Internet world along with the requirement  
11 to perform it on the Internet. Instead, the claims of the '168 patent recite one or more  
12 inventive concepts that are rooted in computerized website creation technology, and  
13 overcome problems specifically arising in the realm of computerized website creation  
14 technologies.

15           92. The claims of the '168 patent recite an invention that is not merely the  
16 routine or conventional use of website creation systems and methods. Instead, the  
17 invention describes a browser-based website creation system including a server  
18 comprising a build engine configured to create and apply styles to, for example, a  
19 website with web pages comprised of objects.

20           93. The technology claimed in the '168 patent does not preempt all ways of  
21 using website or web page authoring tools nor preempt the use of all website or web  
22 page authoring tools, nor preempt any other well-known or prior art technology.

23           94. Accordingly, each claim of the '168 patent recites a combination of  
24 elements sufficient to ensure that the claim in practice amounts to significantly more  
25 than a patent on an ineligible concept.

26           95. As noted above and incorporated into this Second Claim for Relief,  
27 defendants in other cases in which the '397 and '168 patents were asserted, asserted  
28

1 that the '397 and '168 patents were invalid under 35 U.S.C. § 101. Those motions  
2 and related Orders are discussed above.

3 96. Plaintiff is the assignee and owner of the right, title and interest in and to  
4 the '168 patent, including the right to assert all causes of action arising under said  
5 patents and the right to any remedies for infringement of them.

6 97. Upon information and belief, Defendant has and continues to directly  
7 infringe at least claims 1-6 of the '168 patent by using a browser-based website and/or  
8 web page authoring tool in which the user-selected settings representing website  
9 elements are stored in a database, and retrieval of said information to generate said  
10 website (the "Accused Instrumentalities"). The Accused Instrumentalities include but  
11 are not limited website building tools used and/or provided by Defendant, such as, for  
12 example Drupal, Joomla, and/or Shopify. *See, e.g.*, <https://www.possible.com/about>.

13 98. In particular, claim 1 of the '168 patent generally recites a system for  
14 assembling a website comprising a server with a build engine, the website comprising  
15 web pages with objects (one button or one image object), the server accepting user  
16 input to associate a style with objects, wherein a button or image object is associated  
17 with a style that includes values defining transformations and time lines; wherein each  
18 web page is defined entirely by the objects and the style associated with the object,  
19 produce a database with a multidimensional array comprising the objects that  
20 comprise the website including data defining the object style, number, and an  
21 indication of the web page that each object is part of, and provide the database to a  
22 server accessible to web browser; wherein the database is produced such that a web  
23 browser with access to a runtime engine is configured to generate the website from the  
24 objects and style data extracted from the provided database.

25 99. The Accused Instrumentalities infringe claim 1 of the '168 patent through  
26 a combination of features which collectively practice each limitation of claim 1. (*See,*  
27 *e.g.*, [https://developer.mozilla.org/en-US/docs/Web/API/Document\\_Object\\_Model](https://developer.mozilla.org/en-US/docs/Web/API/Document_Object_Model),  
28 [http://www.w3schools.com/js/js\\_htmlDOM.asp](http://www.w3schools.com/js/js_htmlDOM.asp).)



1           100. Further, by way of example, the JSON strings that are used by the  
2 Accused Instrumentalities to generate, in part, element formatting originate from the  
3 database and therefore reflect the database structure and contents showing, on  
4 information and belief, the implementation of a multidimensional array structured  
5 database comprising the objects that comprise the web site. By way of further  
6 evidence, the JSON strings show that there are dimensions for the pages, for arrays of  
7 columns, for arrays of sections, and for arrays of modules generated using the  
8 Accused Instrumentalities. *See, e.g.*,  
9 <https://api.drupal.org/api/drupal/core%21modules%21field%21field.module/group/field/8.3.x>  
10

11           101. Further, the Accused Instrumentalities enable the storing in the database  
12 of data defining each object such as object styles, an object number, and an indication  
13 of the which page each object is a part of. For example, a user can select a theme  
14 style for a body title on a specific page. The CSS database file is thereafter saved to  
15 the server, reflecting the selected font, size, and the object and page to which it  
16 applies.

17           102. By way of example, for the completed web site, the Accused  
18 Instrumentalities include runtime files, such as, for example HTML CSS files. *See,*  
19 *e.g.*, <https://www.drupal.org/home>; <https://www.drupal.org/docs/8/system-requirements/browser-requirements>; <https://www.drupal.org/project/ckeditor>;  
20 <https://www.drupal.org/docs/8/core/modules/ckeditor/overview>;  
21 <https://dev.acquia.com/blog/tutorial-drupal-8-wysiwyg-inline-and-responsive-images/10/03/2016/9821>; Angela Byron, *Ultimate Guide to Drupal 8* at 4 (2016);  
22 <https://www.drupal.org/docs/7/understanding-drupal/technology-stack>;  
23 <https://www.drupal.org/docs/8/system-requirements/web-server>;  
24 <https://www.drupal.org/docs/8/core/modules/rest/overview>;  
25 <https://www.drupal.org/docs/8/core/modules/serialization/overview>;  
26 <https://www.drupal.org/docs/8/understanding-drupal-8/overview>;  
27  
28

1 <https://www.drupal.org/docs/develop/standards/css/css-architecture-for-drupal-8>;  
2 <https://www.drupal.org/docs/8/core/modules/media/overview>;  
3 [https://www.drupal.org/project/media\\_entity](https://www.drupal.org/project/media_entity);  
4 <https://www.drupal.org/docs/8/core/modules/image/working-with-images>;  
5 <http://demos.dojotoolkit.org/demos/css3/demo.html>;  
6 <https://www.drupal.org/files/issues/Field.png>;  
7 <https://api.drupal.org/api/drupal/core%21modules%21field%21field.module/group/field/8.3.x>; [https://www.drupal.org/project/save\\_draft](https://www.drupal.org/project/save_draft).

9 103. Claim 2 of the '168 patent generally recites the system of claim 1,  
10 wherein one of said plurality of objects is a child, and wherein the build engine is  
11 configured to accept user input to associate a style with child button and child image  
12 objects.

13 104. The Accused Instrumentalities infringe claim 2 of the '168 patent  
14 through a combination of features which collectively practice each limitation of claim  
15 2.

16 105. By way of example from Express Mobile's investigatory use of the  
17 Accused Instrumentalities, users of the Accused Instrumentalities are able to access  
18 child element images by clicking on a parent element which unlock additional images  
19 related to a product being viewed.

20 106. Claim 3 of the '168 patent generally recites the system of claim 2,  
21 wherein at least one of said styles includes values defining timelines for child button  
22 and child image objects.

23 107. The Accused Instrumentalities infringe claim 3 of the '168 patent  
24 through a combination of features which collectively practice each limitation of claim  
25 3.

26 108. By way of example, the Accused Instrumentalities incorporate various  
27 CSS libraries, and CSS-animations and CSS-transitions are used extensively for  
28

1 adding transformations and timelines to selected elements. On information and belief,  
2 this includes timelines for child buttons and child image objects.

3 109. Claim 4 of the '168 patent generally recites the system of claim 1,  
4 wherein at least one of said styles includes settings for multiple object states.

5 110. The Accused Instrumentalities infringe claim 4 of the '168 patent through  
6 a combination of features which collectively practice each limitation of claim 4.

7 111. By way of example, the Accused Instrumentalities enable the ability to  
8 define a hover state, so that an element, including a button, has defined styles. *See,*  
9 *e.g.*, <https://www.drupal.org/docs/8/core/themes/seven-theme>.

10 112. Claim 5 of the '168 patent generally recites the system of claim 1,  
11 further including file size reduction means for reducing total size of files generated by  
12 said build engine to a size between 12k and 50k.

13 113. On information and belief, the Accused Instrumentalities infringe claim 5  
14 of the '168 patent through a combination of features which collectively practice each  
15 limitation of claim 5.

16 114. Claim 6 of the '168 patent generally recites the system of claim 1, where  
17 said data is stored as one or more of a Boolean an integer, a string, a floating point  
18 variables, or a URL.

19 115. The Accused Instrumentalities infringe claim 6 of the '168 patent through  
20 a combination of features which collectively practice each limitation of claim 6. A  
21 review of the API documentation behind websites created using the Accused  
22 Instrumentalities reveals data that is stored as one or more of a Boolean, an integer, or  
23 a string. *See, e.g.*, [https://www.drupal.org/docs/8/api/entity-api/defining-and-using-](https://www.drupal.org/docs/8/api/entity-api/defining-and-using-content-entity-field-definitions)  
24 [content-entity-field-definitions](https://www.drupal.org/docs/8/api/entity-api/defining-and-using-content-entity-field-definitions).

25 116. Upon information and belief, these Accused Instrumentalities are used,  
26 marketed, provided to, and or used by or for each of Defendant's partners, clients,  
27 customers, and/or end users across the country and in this District.

28

1 117. Defendant was made aware of the '168 patent and its infringement  
2 thereof at least as early as the filing of this Complaint.

3 118. Since the date of the filing of this Complaint, Defendant's infringement  
4 of the '168 patent has been willful.

5 119. Plaintiff has not sold any product nor offered a service within the scope  
6 of any claim of the '168 patent. In addition, prior to August 12, 2015, no license to  
7 the '168 patent had been granted.

8 120. Plaintiff has been harmed by Defendant's infringing activities.

9 **COUNT III – INFRINGEMENT OF U.S. PATENT NO. 9,471,287**

10 121. The allegations set forth in the foregoing paragraphs 1 through 120 are  
11 incorporated into this Third Claim for Relief.

12 122. On October 18, 2016, U.S. Patent No. 9,471,287 ("the '287 patent"),  
13 entitled "*Systems and Methods for Integrating Widgets on Mobile Devices*," was duly  
14 and legally issued by the United States Patent and Trademark Office. A true and  
15 correct copy of the '287 patent is attached as Exhibit F.

16 123. The inventions of the '287 patent resolve technical problems related to  
17 generating content on a display of a device, such as the display of a mobile device.  
18 For example, the inventions of the '287 patent feature a registry and an authoring tool  
19 or Player configured to define a User Interface ("UI") object for display on the device,  
20 where the UI object corresponds to a web component. Each UI object is either: 1)  
21 selected by a user or 2) automatically selected by the system as a preferred UI object  
22 corresponding to a symbolic name of the web component and used to produce an  
23 Application, where the Application is a device-independent code; and a Player, where  
24 the Player is a device-dependent code. The Application and Player enable 1) the  
25 device to provide one or more input values and corresponding input symbolic name to  
26 the web service and 2) the web service to utilize the input symbolic name and the user  
27 provided one or more input values to generate one or more output values having an  
28 associated output symbolic name, while 3) the Player receives the output symbolic

1 name and corresponding one or more output values and provide instructions for the  
2 display of the device to present an output value in the defined UI object. These  
3 features are exclusively implemented utilizing computer technology.

4 124. The claims of the '287 patent do not merely recite the performance of  
5 some business practice known from the pre-Internet world along with the requirement  
6 to perform it on the Internet. Instead, the claims of the '287 patent recite one or more  
7 inventive concepts that are rooted in the computerized generation of content on a  
8 display of a device, such as a mobile device, and overcome problems specifically  
9 arising in the realm of computerized display content generation technologies.

10 125. The claims of the '287 patent recite inventions that are not merely the  
11 routine or conventional use of systems and methods for the computerized generation  
12 of content on a display of a device. Instead, the inventions feature systems for use  
13 with devices and methods of using the systems with authoring tools or Players specific  
14 to each device and Applications that are device independent.

15 126. The technology claimed in the '287 patent does not preempt all ways for  
16 the computerized generation of content on a display of a device, such as a mobile  
17 device, nor preempt the use of all authoring tools or Players for the computerized  
18 generation of content on a display of a device, such as a mobile devices, nor preempt  
19 any other well-known or prior art technology.

20 127. Accordingly, each claim of the '287 patent recites a combination of  
21 elements sufficient to ensure that the claim in practice amounts to significantly more  
22 than a patent on an ineligible concept.

23 128. Plaintiff is the assignee and owner of the right, title and interest in and to  
24 the '287 patent, including the right to assert all causes of action arising under the  
25 patents and the right to any remedies for infringement of them.

26 129. Upon information and belief, Plaintiffs has and continues to directly  
27 infringe at least claims 1 and 15 of the '287 patent by a system and method which  
28 includes a registry and an authoring tool or Player configured to define a User

1 Interface (“UI”) object for display on the device, where the UI object corresponds to a  
2 web component. Each UI object is either: 1) selected by a user or 2) automatically  
3 selected by the system as a preferred UI object corresponding to a symbolic name of  
4 the web component and used to produce an Application, where the Application is a  
5 device-independent code and a Player, where the Player is a device-dependent code.  
6 The Application and Player enable 1) the device to provide one or more input values  
7 and corresponding input symbolic name to the web service and 2) the web service to  
8 utilize the input symbolic name and the user provided one or more input values to  
9 generate one or more output values having an associated output symbolic name, while  
10 3) the Player receives the output symbolic name and corresponding one or more  
11 output values and provides instructions for the display of the device to present an  
12 output value in the defined UI object (the “Accused Instrumentalities”). The Accused  
13 Instrumentalities include the Shopify Theme Editor, based on the Ruby on Rails  
14 platform, that enables the functionality described above. *See, e.g.,*  
15 <https://www.possible.com/about>; [https://medium.com/@chris.chimen/build-shopify-  
16 app-with-ruby-on-rails-for-beginer-part-1-40471da7d607](https://medium.com/@chris.chimen/build-shopify-app-with-ruby-on-rails-for-beginer-part-1-40471da7d607).

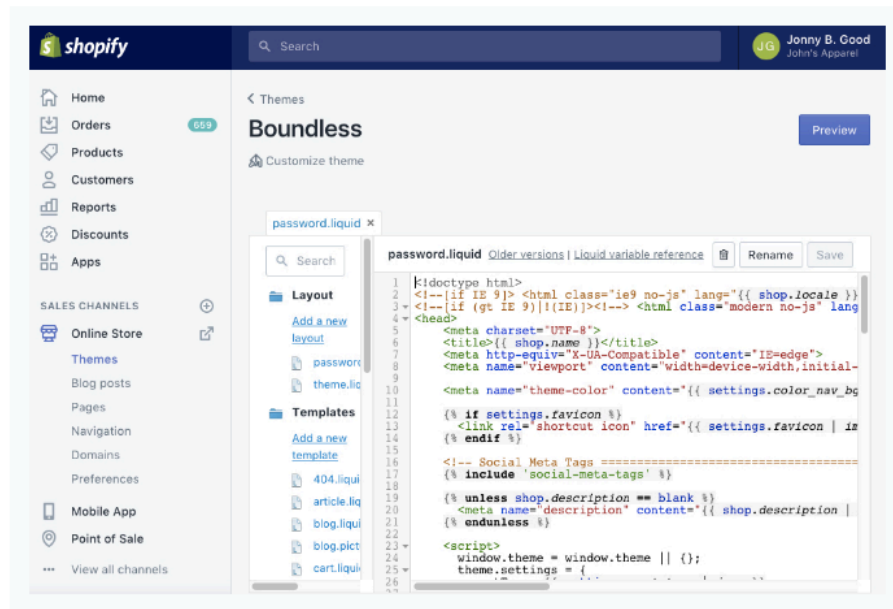
17 130. In particular, claim 1 of the ’287 patent recites 1 a system for generating  
18 code to provide content on a display of a device, the system comprising: computer  
19 memory storing a registry of: a) symbolic names required for evoking one or more  
20 web components each related to a set of inputs and outputs of a web service  
21 obtainable over a network, where the symbolic names are character strings that do not  
22 contain either a persistent address or pointer to an output value accessible to the web  
23 service, where each symbolic name has an associated data format class type  
24 corresponding to a subclass of User Interface (UI) objects that support the data format  
25 type of the symbolic name, and has a preferred UI object, and b) an address of the web  
26 service; an authoring tool configured to: define a (UI) object for presentation on the  
27 display, where the defined UI object corresponds to a web component included in the  
28 registry selected from a group consisting of an input of the web service and an output

1 of the web service, where each defined UI object is either: 1) selected by a user of the  
2 authoring tool; or 2) automatically selected by the system as the preferred UI object  
3 corresponding to the symbolic name of the web component selected by the user of the  
4 authoring tool, access the computer memory to select the symbolic name  
5 corresponding to the web component of the defined UI object, associate the selected  
6 symbolic name with the defined UI object, where the selected symbolic name is only  
7 available to UI objects that support the defined data format associated with that  
8 symbolic name, and produce an Application including the selected symbolic name of  
9 the defined UI object, where the Application is a device-independent code; and a  
10 Player, where the Player is a device-dependent code, wherein, when the Application  
11 and Player are provided to the device and executed on the device, and when the user  
12 of the device provides one or more input values associated with an input symbolic  
13 name to an input of the defined UI object, 1) the device provides the user provided  
14 one or more input values and corresponding input symbolic name to the web service,  
15 2) the web service utilizes the input symbolic name and the user provided one or more  
16 input values for generating one or more output values having an associated output  
17 symbolic name, 3) the Player receives the output symbolic name and corresponding  
18 one or more output values and provides instructions for the display of the device to  
19 present an output value in the defined UI object.

20 131. The Accused Instrumentalities infringe claim 1 of the '287 patent through  
21 a combination of features which collectively practice each limitation of claim 1. By  
22 way of example, as shown in the screen shot below, the Accused Instrumentalities  
23 feature a system for generating code, including HTML, CSS, and JSON code, to  
24 provide content on a display of a device.

25  
26  
27  
28

## Edit HTML/CSS page



The **Edit HTML/CSS** page can be accessed through the **Themes** page of your Shopify Admin. It allows you to see all of your theme templates and assets, and directly make changes to them.

(<https://help.shopify.com/themes/development/getting-started/choosing-an-editor>).

132. The Accused Instrumentalities feature a computer memory provided by the Shopify servers and their MySQL database. By way of example, the Accused Instrumentalities' Ruby on Rails platform utilizes JSON strings extensively as part of its API, which necessarily require servers and databases. (See, <https://developer.RubyonRails.org/rest-api/>.)

133. The computer memory stores a registry of a) symbolic names required for evoking one or more web components each related to a set of inputs and outputs of a web service obtainable over a network, where the symbolic names are character strings that do not contain either a persistent address or pointer to an output value accessible to the web service. In particular, the Accused Instrumentalities' MySQL database contains symbolic names required for evoking one or more web components each related to a set of inputs and outputs of a web service obtainable over a network



1 by the formatting of the symbolic names in conjunction with the Shopify Theme  
2 Editor, widget, and plugin authoring tools.

3 134. Furthermore, each symbolic name has an associated data format class  
4 type corresponding to a subclass of defined UI objects *i.e.*, element/UI components,  
5 that supports the data format type of the symbolic name, and has a preferred UI object  
6 as evidenced by the JSON formatting of the name in conjunction with the Shopify  
7 Theme Editor and widget authoring tools. JSON names are strings that only represent  
8 the symbolic names that are bound both to a web service input and/or output and to a  
9 UI object. All JSON names in the name/value pairs are character strings. The Shopify  
10 Theme Editor includes elements for defining the layout for placement of the defined  
11 UI objects. Widgets, plug-ins and other elements correspond to the de3fined UI  
12 objects and are the product of the JSON formatting.

13 135. The computer memory also stores b) an address of the web service.  
14 Because the Shopify Theme Editor contains web services, it contains the  
15 corresponding addresses for the web services.

16 136. The Accused Instrumentalities feature an authoring tool in the form of  
17 the Shopify Theme Editor, widget, and plug-in authoring tools.

18 137. The authoring tool is configured to define a UI object for presentation on  
19 the display, where the defined UI object corresponds to a web component included in  
20 the registry selected from a group consisting of an input of the web service and an  
21 output of the web service. The Shopify Theme Editor's drag and drop component  
22 capabilities define the presence of a (UI) object for presentation on a display, where  
23 the defined UI object corresponds to a web component included in the registry  
24 (Shopify Server and mySQLdatabase) selected from a group consisting of an input of  
25 the web service and an output of the web service.

26 138. Each defined UI object automatically selected by the system as the  
27 preferred UI object corresponding to the symbollic name of the web component  
28 selected by the user of the authoring tool. The Accused Instrumentalities' UI objects

1 are automatically selected by the system as the preferred UI object corresponding to  
2 the symbolic name of the web component selected by the user of the authoring tool,  
3 i.e., a UI object selected by a user is automatically selected.

4 139. The Accused Instrumentalities' authoring tool is configured to access the  
5 computer memory to select the symbolic name corresponding to the web component  
6 of the defined UI object by a JSON formatted element.

7 140. The Accused Instrumentalities' authoring tool is also configured to  
8 associate the selected symbolic name with the defined UI object, i.e., the JSON  
9 formatted element, where the selected symbolic name is only available to UI objects  
10 that support the defined data format associated with the element associated with that  
11 symbolic name, i.e., JSON string. JSON names are strings that only represent the  
12 symbolic names that are bound both to a web service input and/or output and to a UI  
13 object. All JSON names in the name/value pairs are character strings. When the  
14 Shopify Theme Editor makes a UI element request a JSON request is sent to the  
15 Server and a JSON data response is provided to the Interface.

16 141. The Ruby on Rails authoring tool is configured to produce an  
17 Application including the selected symbolic name of the defined UI object, where the  
18 Application is a device-independent with its API and "hybrid" capabilities.

19 142. The Accused Instrumentalities authoring tool is further configured to  
20 produce a Player, where the Player is a device-dependent code. The Shopify Theme  
21 Editor contains a Player in the form of a run time player. The Accused  
22 Instrumentality produces a device dependent file, which is wrapped inside the runtime  
23 file, i.e., a file, including a run time engine, that is downloaded or created when a  
24 browser is pointed to a web page or website,. In order for a site to display on different  
25 devices through a browser or through responsive capabilities, there is device  
26 dependent code. *See, e.g., X Commerce, Inc. v Express Mobile, Inc., Case No 17-cv-*  
27 *02605-RS, NDCA, DKT 79-8;*

28

1 143. The Accused Instrumentalities feature a system where the Application  
2 and Player are provided to the device and executed on the device and when the user of  
3 the device provides one or more input values associated with an input symbolic name  
4 to an input of the defined UI object. Because the Accused Instrumentalities  
5 incorporate a system that includes Ruby on Rails, when a user of the device provides  
6 one or more input values associated with an input symbolic name, using JSON  
7 formatting characteristics, to an input of the defined UI object, the device provides the  
8 user provided one or more input values and corresponding input symbolic name, using  
9 JSON formatting characteristics, to the web service.

10 144. The Accused Instrumentalities feature a system where the device  
11 provides the user provided one or more input values and corresponding input  
12 symbolic name to the web service. Because the Accused Instrumentalities incorporate  
13 a system that includes the Ruby on Rails platform, the web service utilizes the input  
14 symbolic name and the user provided one or more input values for generating one or  
15 more output values having an associated output symbolic name. The defined UI  
16 object output value corresponds to the output symbolic name based on its JSON  
17 formatting characteristics.

18 145. The Accused Instrumentalities feature a system where the web service  
19 utilizes the input symbolic name and the user provided one or more input values for  
20 generating one or more output values having an associated output symbolic name.  
21 Because of the JSON formatting, the output values having an associated output  
22 symbolic name.

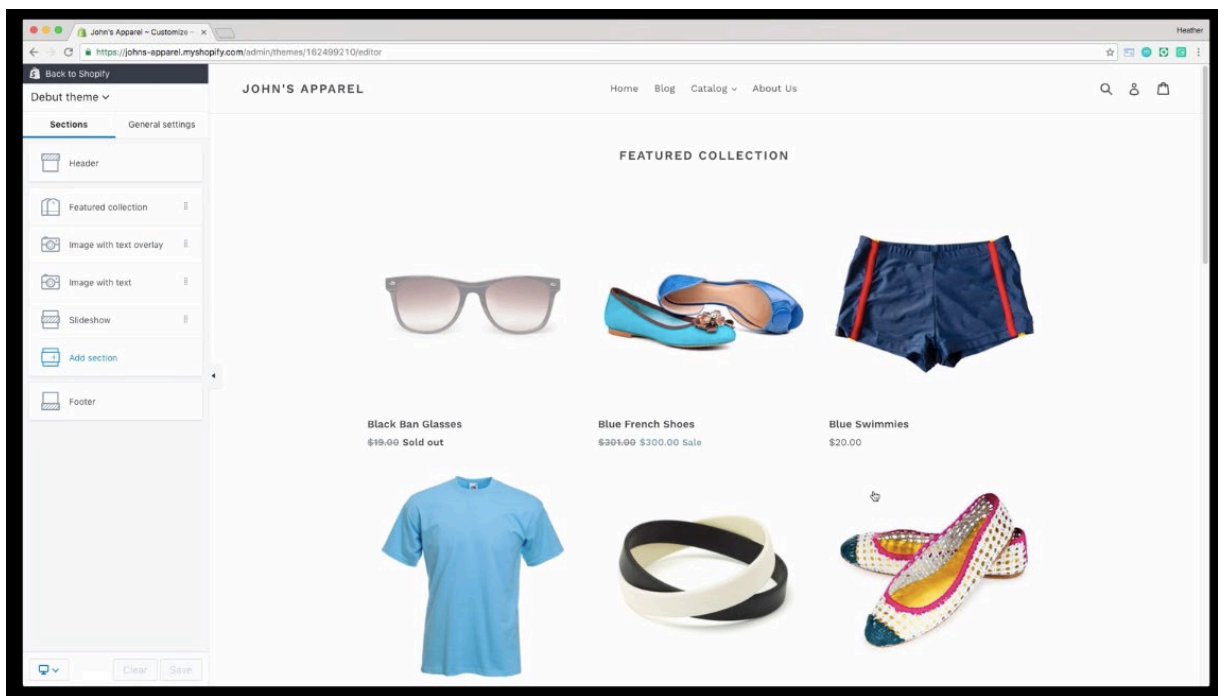
23 146. The Accused Instrumentalities feature a system where the Player receives  
24 the output symbolic name and corresponding one or more output values and provides  
25 instructions for the display of the device to present an output value in the defined UI  
26 object. The runtime player within Ruby on Rails receives the output name, output  
27 value, and provides instructions for a display as shown by the fact that the defined UI  
28 object are ultimately rendered

1           147. The presence of the above referenced features is demonstrated, by way of  
2 example, by reference to publicly available information, including  
3 <https://www.shopify.com/>; <https://www.shopify.com/website/hosting>;  
4 <https://help.shopify.com/manual/using-themes/change-the-layout>;  
5 <https://help.shopify.com/manual/using-themes/change-the-layout/using-theme-presets>  
6 [https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors)  
7 [errors](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors); <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
8 <https://www.slideshare.net/jduff/how-shopify-scales-rails-20443485>;  
9 <http://techstacks.io/shopify>; [https://help.shopify.com/manual/intro-to-shopify/pricing-](https://help.shopify.com/manual/intro-to-shopify/pricing-plans/plan-features)  
10 [plans/plan-features](https://help.shopify.com/manual/intro-to-shopify/pricing-plans/plan-features); <https://help.shopify.com/api/reference>;  
11 <https://help.shopify.com/api/storefront-api> [https://help.shopify.com/api/sdks/shopify-](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly)  
12 [apps/modifying-online-store/use-javascript-responsibly](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly);  
13 <https://help.shopify.com/api/reference/product>;  
14 <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
15 <http://techstacks.io/shopify>; <https://help.shopify.com/api/reference>;  
16 <https://help.shopify.com/manual/apps>; <https://api.rubyonrails.org/>  
17 [https://guides.rubyonrails.org/rails\\_application\\_templates.html](https://guides.rubyonrails.org/rails_application_templates.html);  
18 <https://teamtreehouse.com/community/ruby-on-rails-with-html-templates-2>;  
19 <https://guides.railsgirls.com/design>; <https://guides.rubyonrails.org/plugins.html>;  
20 <https://www.rubydoc.info/gems/dashing-rails>;  
21 <https://github.com/Shopify/dashing/wiki/Additional-Widgets>;  
22 <https://help.shopify.com/themes/customization/communication/add-contact-form>; and  
23 <https://help.shopify.com/manual/using-themes/change-the-layout/add-video>.

24           148. Claim 15 of the '287 patent recites a method of displaying content on a  
25 display of a device having a Player, where the Player is a device-dependent code, the  
26 method comprising: defining a user interface (UI) object for presentation on the  
27 display, where the UI object corresponds to a web component included in a registry of  
28

1 one or more web components selected from a group consisting of an input of a web  
 2 service and an output of the web service, where each web component includes a  
 3 plurality of symbolic names of inputs and outputs associated with each web service,  
 4 and where the registry includes: a) symbolic names required for evoking one or more  
 5 web components each related to a set of inputs and outputs of the web service  
 6 obtainable over a network, where the symbolic names are character strings that do not  
 7 contain either a persistent address or pointer to an output value accessible to the web  
 8 service, and b) an address of the web service, and where each defined UI object is  
 9 either: 1) selected by a user of an authoring tool; 2) automatically selected by a system  
 10 as a preferred UI object corresponding to a symbolic name of the web component  
 11 selected by the user of the authoring tool.

12 149. The Accused Instrumentalities infringe claim 15 of the '287 patent  
 13 through a combination of features which collectively practice each limitation of claim  
 14 15. By way of example, the method is for displaying content on a display of a device  
 15 as shown in the screen shot below.

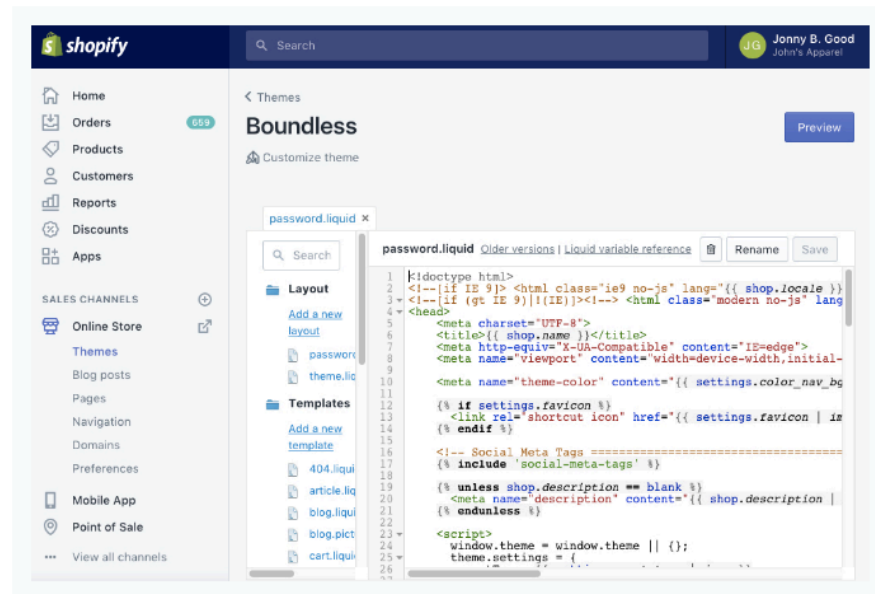


(<https://help.shopify.com/manual/using-themes/change-the-layout>).

1           150. The Accused Instrumentalities feature a Player, where the Player is a  
 2 device-dependent code. For example, Shopify, for Mobile Apps, produces a device  
 3 dependent file, which is wrapped inside a runtime file. The HTML, CSS, Java, and  
 4 JSON coding capabilities are s in the screen shot below.

### 5           6           7           8           9           10           11           12           13           14           15           16           17           18           19           20           21           22           23           24           25           26           27           28

#### Edit HTML/CSS page



The Edit HTML/CSS page can be accessed through the Themes page of your Shopify Admin. It allows you to see all of your theme templates and assets, and directly make changes to them.

(<https://help.shopify.com/themes/development/getting-started/choosing-an-editor>).

151. The Accused Instrumentalities include defining a user interface (UI) object for presentation on the display, where the defined UI object corresponds to a web component included in the registry of one or more web components, and where the web component is selected from a group consisting of an input of a web service and an output of the web service. The Shopify Theme Editor defines a UI object for presentation on display, where the UI object corresponds to a web component included in the non-volatile computer memory selected from a group consisting of an input of a web service and an output of the web service by JSON data formatting. JSON names are strings that only represent the symbolic names that are bound both to

1 a web service input and/or output and to a UI object. All JSON names in the  
2 name/value pairs are character strings. When the Ruby on Rails interface makes a UI  
3 element request a JSON request is sent to the Server and a JSON data response is  
4 provided to the Interface.

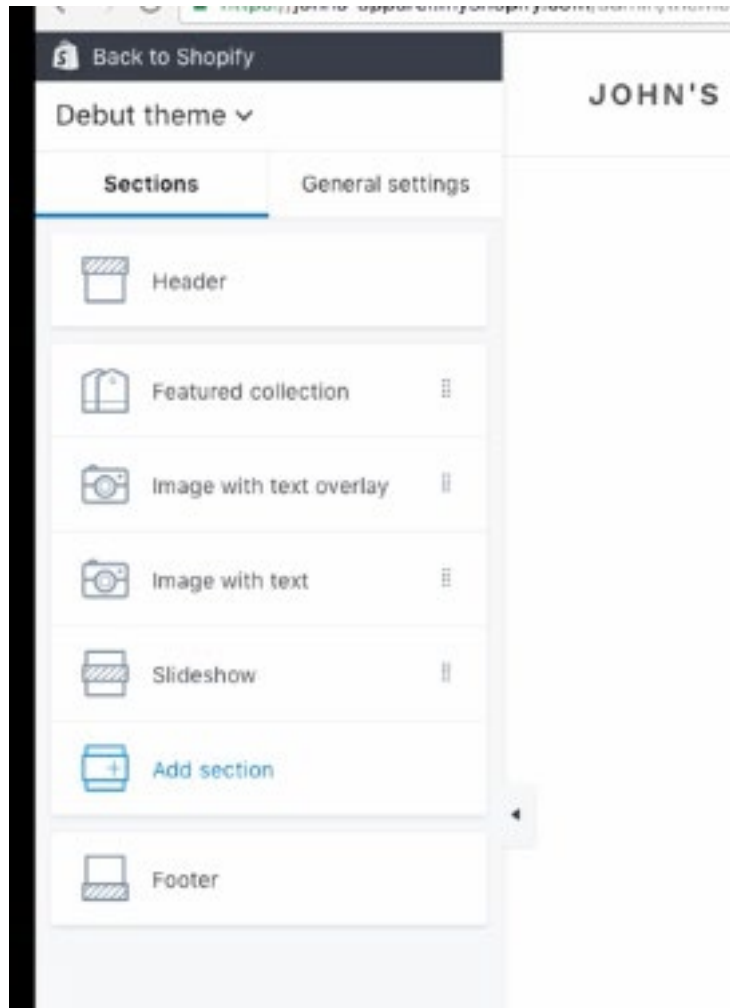
5 152. Each web component includes a plurality of symbolic names of inputs  
6 and outputs associated with each web service. The plurality of symbolic names of  
7 inputs and outputs associated with each web service is a feature of their JSON  
8 formatting characteristics. Each symbolic name has an associated data format class  
9 type corresponding to a subclass of UI objects that supports the data format type of the  
10 symbolic name, and has a preferred UI object as demonstrated by the presence of  
11 JSON formatting in conjunction with the Shopify Theme Editor and widget  
12 capabilities.

13 153. The registry includes: a) symbolic names required for evoking one or  
14 more web components each related to a set of inputs and outputs of a web service  
15 obtainable over a network, where the symbolic names are character strings that do not  
16 contain either a persistent address or pointer to an output value accessible to the web  
17 service. The registry and Ruby on Rails MySQL database contain symbolic names  
18 required for evoking one or more web components each related to a set of inputs and  
19 outputs of a web service obtainable over a network as demonstrated by the formatting  
20 in conjunction with the Shopify Theme Editor, widget, and plugin authoring tools.  
21 JSON names are strings that only represent the symbolic names that are bound both to  
22 a web service input and/or output and to a UI object. All JSON names in the  
23 name/value pairs are character strings. When the Ruby on Rails interface makes a UI  
24 element request a JSON request is sent to the Server and a JSON data response is  
25 provided to the Interface.

26 154. The registry also includes b) an address of the web service. Because the  
27 Shopify Theme Editor contains web services, it contains the corresponding web  
28 addresses.

1           155. Each defined UI object is either: 1) selected by a user of an authoring  
2 tool; or 2) automatically selected by the system as the preferred UI object  
3 corresponding to the symbolic name of the web component selected by the user of the  
4 authoring tool.

5           156. The Accused Instrumentalities include an authoring tool in the form of  
6 the Theme Editor shown the screen shot below



7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23 (https://help.shopify.com/manual/using-themes/change-the-layout).

24           157. The Shopify Theme Editor's UI objects are automatically selected by the  
25 system as the preferred UI object corresponding to the symbolic name of the web  
26 component selected by the user of the authoring tool, i.e., a UI object selected by a  
27 user is automatically selected.



1           158. The Accused Instrumentalities include selecting the symbolic name from  
2 the web component (i.e Shopify Theme EditorWidget or Plug-in) corresponding to the  
3 defined UI object, where the selected symbolic name has an associated data format  
4 class type corresponding to a subclass of UI objects that support the data format type  
5 of the symbolic name and has the preferred UI object. The Shopify Theme Editor  
6 accesses its memory to select the symbolic name corresponding to the web component  
7 of the defined UI object (as evidenced by JSON data formatting), associate the  
8 selected symbolic name with the defined UI object (the JSON element corresponding  
9 to an element), where the selected symbolic name is only available to UI objects that  
10 support the defined data format associated with that symbolic name (the element  
11 associated with at JSON string). Additionally, the preferred UI object is the selected  
12 UI object. JSON names are strings that only represent the symbolic names that are  
13 bound both to a web service input and/or output and to a UI object. All JSON names  
14 in the name/value pairs are character strings. When the Ruby on Rails interface  
15 makes a UI element request a JSON request is sent to the Server and a JSON data  
16 response is provided to the Interface.

17           159. The Accused Instrumentalities include associating the selected symbolic  
18 name with the defined UI object.

19           160. The Accused Instrumentalities include producing an Application  
20 including the selected symbolic name of the defined UI object, where the Application  
21 is a device-independent code. Ruby on Rails produces an Application included in the  
22 symbolic name of the defined UI object. The independent code is a arises from the API  
23 and “hybrid” capabilities.

24           161. The Accused Instrumentalities feature a system where the Application  
25 and Player are provided to the device and executed on the device and when the user of  
26 the device provides one or more input values associated with an input symbolic name  
27 to an input of the defined UI object. Because the Accused Instrumentalities  
28 incorporate a system that includes the Shopify Theme Editor, when a user of the

1 device provides one or more input values associated with an input symbolic name,  
2 using JSON formatting characteristics, to an input of the defined UI object, the device  
3 provides the user provided one or more input values and corresponding input  
4 symbolic name, using JSON formatting characteristics, to the web service.

5 162. The Accused Instrumentalities feature a system where the device  
6 provides the user provided one or more input values and corresponding input  
7 symbolic name to the web service. Because the Accused Instrumentalities incorporate  
8 a system that includes Ruby on Rails, the web service utilizes the input symbolic  
9 name and the user provided one or more input values for generating one or more  
10 output values having an associated output symbolic name. The defined UI object  
11 output value corresponds to the output symbolic name based on its JSON formatting  
12 characteristics.

13 163. The Accused Instrumentalities feature a system where the web service  
14 utilizes the input symbolic name and the user provided one or more input values for  
15 generating one or more output values having an associated output symbolic name.  
16 Because of the JSON formatting, the output values having an associated output  
17 symbolic name.

18 164. The Accused Instrumentalities feature a system where the Player receives  
19 the output symbolic name and corresponding one or more output values and provides  
20 instructions for the display of the device to present an output value in the defined UI  
21 object. The runtime player within Ruby on Rails receives the output name, output  
22 value, and provides instructions for a display as shown by the fact that the defined UI  
23 object are ultimately rendered.

24 The presence of the above referenced features is demonstrated, by way of example, by  
25 reference to publicly available information including: <https://www.shopify.com/>;  
26 <https://www.shopify.com/website/hosting>; [https://help.shopify.com/manual/using-](https://help.shopify.com/manual/using-themes/change-the-layout)  
27 [themes/change-the-layout](https://www.shopify.com/online); <https://www.shopify.com/online>;  
28 <https://help.shopify.com/api/sdks/shopify-apps/apps-on-shopify-mobile>;

1 <https://developers.shopify.com/mobile-buy-sdk>;  
2 <https://help.shopify.com/manual/using-themes/change-the-layout/using-theme-presets>  
3 [https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors)  
4 [errors](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors); <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
5 <https://www.slideshare.net/jduff/how-shopify-scales-rails-20443485>;  
6 <http://techstacks.io/shopify>; [https://help.shopify.com/manual/intro-to-shopify/pricing-](https://help.shopify.com/manual/intro-to-shopify/pricing-plans/plan-features)  
7 [plans/plan-features](https://help.shopify.com/manual/intro-to-shopify/pricing-plans/plan-features); <https://help.shopify.com/api/reference>;  
8 <https://help.shopify.com/api/storefront-api> [https://help.shopify.com/api/sdks/shopify-](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly)  
9 [apps/modifying-online-store/use-javascript-responsibly](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly);  
10 <https://help.shopify.com/api/reference/product>;  
11 <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
12 <http://techstacks.io/shopify>; <https://help.shopify.com/api/reference>;  
13 <https://help.shopify.com/manual/apps>; <https://api.rubyonrails.org/>  
14 165. [https://guides.rubyonrails.org/rails\\_application\\_templates.html](https://guides.rubyonrails.org/rails_application_templates.html);  
15 <https://teamtreehouse.com/community/ruby-on-rails-with-html-templates-2>;  
16 <https://guides.railsgirls.com/design>; <https://guides.rubyonrails.org/plugins.html>;  
17 <https://www.rubydoc.info/gems/dashing-rails>;  
18 <https://github.com/Shopify/dashing/wiki/Additional-Widgets>;  
19 <https://help.shopify.com/themes/customization/communication/add-contact-form>; and  
20 <https://help.shopify.com/manual/using-themes/change-the-layout/add-video>.

21 166. Upon information and belief, these Accused Instrumentalities are used,  
22 marketed, provided to, and or used by or for each of Defendant's partners, clients,  
23 customers, and/or end users across the country and in this District.

24 167. Defendant was made aware of the '287 patent and its infringement  
25 thereof at least as early as the filing of this Complaint.

26 168. Since the date of the filing of this Complaint, Defendant's infringement  
27 of the '287 patent has been willful.  
28

1 169. Within the past six years, Plaintiff has not sold any product nor offered a  
2 service within the scope of any claim of the '287 patent. In addition, prior to August  
3 12, 2015, no license to the '287 patent had been granted.

4 170. Plaintiff has been harmed by Defendant's infringing activities.

5 **COUNT IV – INFRINGEMENT OF U.S. PATENT NO. 9,063,755**

6 171. The allegations set forth in the foregoing paragraphs 1 through 170 are  
7 incorporated into this Third Claim for Relief.

8 172. On June 23, 2015, U.S. Patent No. 9,063,755 ("the '755 patent"), entitled  
9 "Systems and methods for presenting information on mobile devices," was duly and  
10 legally issued by the United States Patent and Trademark Office. A true and correct  
11 copy of the '755 patent is attached as Exhibit H.

12 173. The inventions of the '755 patent resolve technical problems related to a  
13 system a system for generating code to provide content on a display of a device. The  
14 system includes a computer memory and an authoring tool, where the computer  
15 memory stores a registry of: a) symbolic names required for evoking one or more web  
16 components related to a web service and b) an address of the web service. The  
17 authoring tool is configured to: define a (UI) object for presentation on the display,  
18 where the defined UI object corresponds to a web component included in the registry  
19 selected from a group consisting of an input of the web service and an output of the  
20 web service; access the computer memory to select the symbolic name corresponding  
21 to the web component of the defined UI object, associate the selected symbolic name  
22 with the defined UI object; produce an Application including the selected symbolic  
23 name of the defined UI object, where the Application is a device-independent code;  
24 and produce a Player, where the Player is a device-dependent code, such that 1) the  
25 device provides the user provided one or more input values and corresponding input  
26 symbolic name to the web service, 2) the web service utilizes the input symbolic name  
27 and the user provided one or more input values for generating one or more output  
28 values having an associated output symbolic name, and 3) the Player receives the

1 output symbolic name and corresponding one or more output values and provides  
2 instructions. These features are exclusively implemented utilizing computer  
3 technology.

4 174. The claims of the '755 patent do not merely recite the performance of  
5 some business practice known from the pre-Internet world along with the requirement  
6 to perform it on the Internet. Instead, the claims of the '755 patent recite one or more  
7 inventive concepts that are rooted in the computerized generation of content on a  
8 display of a device, such as a mobile device, and overcome problems specifically  
9 arising in the realm of computerized display content generation technologies.

10 175. The claims of the '755 patent recite inventions that are not merely the  
11 routine or conventional use of systems and methods for the computerized generation  
12 of content on a display of a device. Instead, the inventions feature systems for use  
13 with devices and methods of using the systems with authoring tools or Players specific  
14 to each device and Applications that are device independent.

15 176. The technology claimed in the '755 patent does not preempt all ways for  
16 the computerized generation of code for a display of a device, such as a mobile  
17 device, nor preempt the use of all authoring tools or Players for the computerized  
18 generation of content on a display of a device, such as a mobile devices, nor preempt  
19 any other well-known or prior art technology.

20 177. Accordingly, each claim of the '755 patent recites a combination of  
21 elements sufficient to ensure that the claim in practice amounts to significantly more  
22 than a patent on an ineligible concept.

23 178. Plaintiff is the assignee and owner of the right, title and interest in and to  
24 the '755 patent, including the right to assert all causes of action arising under the  
25 patents and the right to any remedies for infringement of them.

26 179. Upon information and belief, Plaintiffs has and continues to directly  
27 infringe at least claims 1 and 15 of the '755 patent by a system a system for generating  
28 code to provide content on a display of a device. The system includes a computer

1 memory and an authoring tool, The computer memory stores a registry of: a)  
2 symbolic names required for evoking one or more web components each related to a  
3 set of inputs and outputs of a web service obtainable over a network, where the  
4 symbolic names are character strings that do not contain either a persistent address or  
5 pointer to an output value accessible to the web service, where each symbolic name  
6 has an associated data format class type corresponding to a subclass of User Interface  
7 (UI) objects that support the data format type of the symbolic name, and has a  
8 preferred UI object, and b) an address of the web service. The authoring tool is  
9 configured to: define a (UI) object for presentation on the display, where the defined  
10 UI object corresponds to a web component included in the registry selected from a  
11 group consisting of an input of the web service and an output of the web service;  
12 access the computer memory to select the symbolic name corresponding to the web  
13 component of the defined UI object, associate the selected symbolic name with the  
14 defined UI object; produce an Application including the selected symbolic name of  
15 the defined UI object, where the Application is a device-independent code; and  
16 produce a Player, where the Player is a device-dependent code, such that when the  
17 Application and Player are provided to the device and executed on the device, and  
18 when the user of the device provides one or more input values associated with an  
19 input symbolic name to an input of the defined UI object, 1) the device provides the  
20 user provided one or more input values and corresponding input symbolic name to the  
21 web service, 2) the web service utilizes the input symbolic name and the user provided  
22 one or more input values for generating one or more output values having an  
23 associated output symbolic name, 3) the Player receives the output symbolic name and  
24 corresponding one or more output values and provides instructions. (The “Accused  
25 Instrumentalities”). The Accused Instrumentalities include the Shopify Theme Editor,  
26 based on the Ruby on Rails platform, that enables the functionality described  
27 above. *See, e.g.*, <https://www.possible.com/about>;

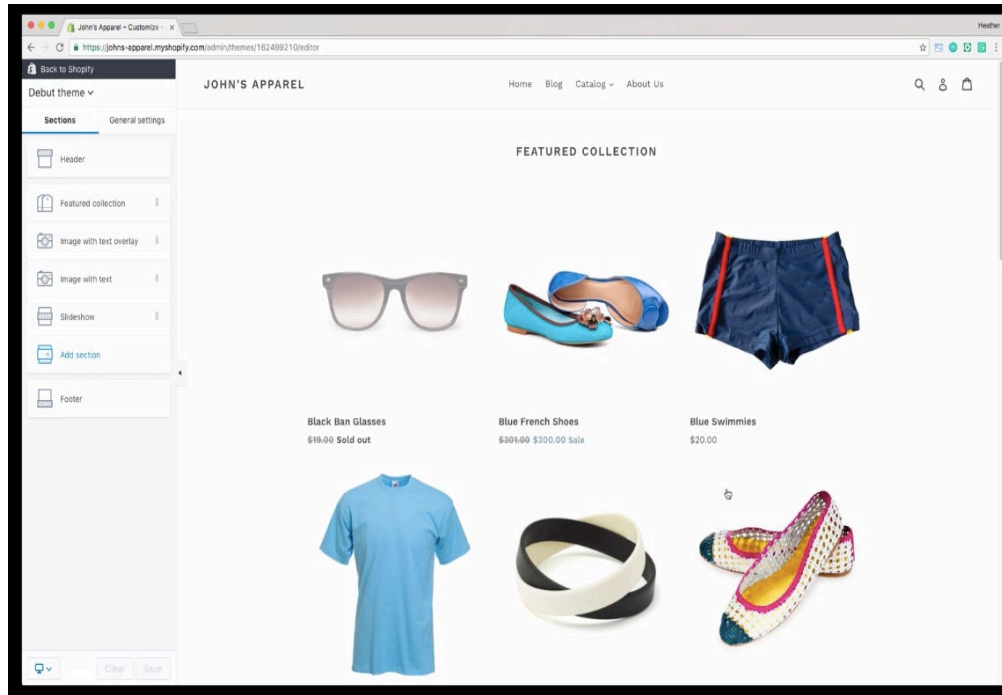
28

1 [https://medium.com/@chris.chimen/build-shopify-app-with-ruby-on-rails-for-beginer-](https://medium.com/@chris.chimen/build-shopify-app-with-ruby-on-rails-for-beginer-part-1-40471da7d607)  
2 [part-1-40471da7d607.](https://medium.com/@chris.chimen/build-shopify-app-with-ruby-on-rails-for-beginer-part-1-40471da7d607)

3 180. In particular, claim 1 of the '755 patent recites 1 a system for generating  
4 code to provide content on a display of a device, said system comprising: computer  
5 memory storing a registry of: a) symbolic names required for evoking one or more  
6 web components each related to a set of inputs and outputs of a web service  
7 obtainable over a network, where the symbolic names are character strings that do not  
8 contain either a persistent address or pointer to an output value accessible to the web  
9 service, and b) the address of the web service; an authoring tool configured to: define  
10 a user interface (UI) object for presentation on the display, where said UI object  
11 corresponds to the web component included in said registry selected from the group  
12 consisting of an input of the web service and an output of the web service, access said  
13 computer memory to select the symbolic name corresponding to the web component  
14 of the defined UI object, associate the selected symbolic name with the defined UI  
15 object, produce an Application including the selected symbolic name of the defined  
16 UI object, where said Application is a device-independent code, and produce a Player,  
17 where said Player is a device-dependent code; such that, when the Application and  
18 Player are provided to the device and executed on the device, and when a user of the  
19 device provides one or more input values associated with an input symbolic name to  
20 an input of defined UI object, 1) the device provides the user provided one or more  
21 input values and corresponding input symbolic name to the web service, 2) the web  
22 service utilizes the input symbolic name and the user provided one or more input  
23 values for generating one or more output values having an associated output symbolic  
24 name, 3) said Player receives the output symbolic name and corresponding one or  
25 more output values and provides instructions for a display of the device to present an  
26 output value in the defined UI object.

27  
28

1 181. The Accused Instrumentalities infringe claim 1 of the '755 patent through  
 2 a combination of features which collectively practice each limitation of claim 1. By  
 3 way of example, as shown in the screen shot below, the Accused Instrumentalities  
 4 feature a method of displaying content of a device.



17 (<https://help.shopify.com/manual/using-themes/change-the-layout>).

18 182. The Accused Instrumentalities feature a registry of one or more web  
 19 components related to inputs and outputs of a web service obtainable over a network.  
 20 The registry is provided by the Shopify servers and their MySQL database. By way  
 21 of example, the Accused Instrumentalities' Ruby on Rails platform utilizes JSON  
 22 strings extensively as part of its API, which necessarily require servers and databases.  
 23 (See, <https://developer.Ruby on Rails.org/rest-api/>.)

24 183. Each web component includes a plurality of symbolic names of inputs  
 25 and outputs associated with each web service.

26 184. Furthermore, the registry required for evoking one or more web  
 27 components each related to a set of inputs and outputs of a web service obtainable  
 28 over a network, where the symbolic names are character strings that do not contain



1 either a persistent address or pointer to an output value accessible to the web service.  
2 In particular, the Accused Instrumentalities' MySQL database contains symbolic  
3 names required for evoking one or more web components each related to a set of  
4 inputs and outputs of a web service obtainable over a network by the formatting of the  
5 symbolic names in conjunction with the Shopify Theme Editor, widget, and plugin  
6 authoring tools.

7 185. The computer memory also stores b) an address of the web service.  
8 Because the Shopify Theme Editor contains web services, it contains the  
9 corresponding addresses for the web services.

10 186. The Accused Instrumentalities feature an authoring tool in the form of  
11 the Shopify Theme Editor, widget, and plug-in authoring tools.

12 187. The authoring tool is configured to define a UI object for presentation on  
13 the display, where the defined UI object corresponds to a web component included in  
14 the registry selected from a group consisting of an input of the web service and an  
15 output of the web service. The Shopify Theme Editor's drag and drop component  
16 capabilities define the presence of a (UI) object for presentation on a display, where  
17 the defined UI object corresponds to a web component included in the registry  
18 (Shopify Server and mySQLdatabase) selected from a group consisting of an input of  
19 the web service and an output of the web service.

20 188. The Accused Instrumentalities' authoring tool is configured to access the  
21 computer memory to select the symbolic name corresponding to the web component  
22 of the defined UI object by a JSON formatted element.

23 189. The Accused Instrumentalities' authoring tool is also configured to  
24 associate the selected symbolic name with the defined UI object, i.e., the JSON  
25 formatted element, where the selected symbolic name is only available to UI objects  
26 that support the defined data format associated with the element associated with that  
27 symbolic name, i.e., JSON string. JSON names are strings that only represent the  
28 symbolic names that are bound both to a web service input and/or output and to a UI

1 object. All JSON names in the name/value pairs are character strings. When the  
2 Shopify Theme Editor makes a UI element request a JSON request is sent to the  
3 Server and a JSON data response is provided to the Interface.

4 190. The Accused Instrumentalities authoring tool is configured to produce an  
5 Application including the selected symbolic name of the defined UI object, where the  
6 Application is a device-independent. The Accused Instrumentalities' Application is  
7 comprised of the mySQLdatabase, including all the user selectable settings, as  
8 augmented by the web component definition The application, because it contains user  
9 selected settings, and is represented by Boolean, numbers and String primitives, is  
10 device independent, and stored in the mySQL database for each application.

11 191. The Accused Instrumentalities authoring tool is further configured to  
12 produce a Player, where the Player is a device-dependent code. The Shopify Theme  
13 Editor contains a Player in the form of a run time player. The Accused  
14 Instrumentality produces a device dependent file, which is wrapped inside the run  
15 time file, i.e., *i.e.*, a file, including a run time engine, that is downloaded or created  
16 when a browser is pointed to a web page or website,. In order for a site to display on  
17 different devices through a browser or through responsive capabilities, there is device  
18 dependent code. *See, e.g., X Commerce, Inc. v Express Mobile, Inc.*, Case No 17-cv-  
19 02605-RS, NDCA, DKT 79-5.

20 192. The Accused Instrumentalities feature a system where the Application  
21 and Player are provided to the device and executed on the device and when the user of  
22 the device provides one or more input values associated with an input symbolic name  
23 to an input of the defined UI object. Because the Accused Instrumentalities  
24 incorporate a system that includes Ruby on Rails, when a user of the device provides  
25 one or more input values associated with an input symbolic name, using JSON  
26 formatting characteristics, to an input of the defined UI object, the device provides the  
27 user provided one or more input values and corresponding input symbolic name, using  
28 JSON formatting characteristics, to the web service.

1           193. The Accused Instrumentalities feature a system where the device  
2 provides the user provided one or more input values and corresponding input  
3 symbolic name to the web service. Because the Accused Instrumentalities incorporate  
4 a system that includes the Ruby on Rails platform, the web service utilizes the input  
5 symbolic name and the user provided one or more input values for generating one or  
6 more output values having an associated output symbolic name. The defined UI  
7 object output value corresponds to the output symbolic name based on its JSON  
8 formatting characteristics.

9           194. The Accused Instrumentalities feature a system where the web service  
10 utilizes the input symbolic name and the user provided one or more input values for  
11 generating one or more output values having an associated output symbolic name.  
12 Because of the JSON formatting, the output values having an associated output  
13 symbolic name.

14           195. The Accused Instrumentalities feature a system where the Player receives  
15 the output symbolic name and corresponding one or more output values and provides  
16 instructions for the display of the device to present an output value in the defined UI  
17 object. The runtime player within Ruby on Rails receives the output name, output  
18 value, and provides instructions for a display as shown by the fact that the defined UI  
19 object are ultimately rendered.

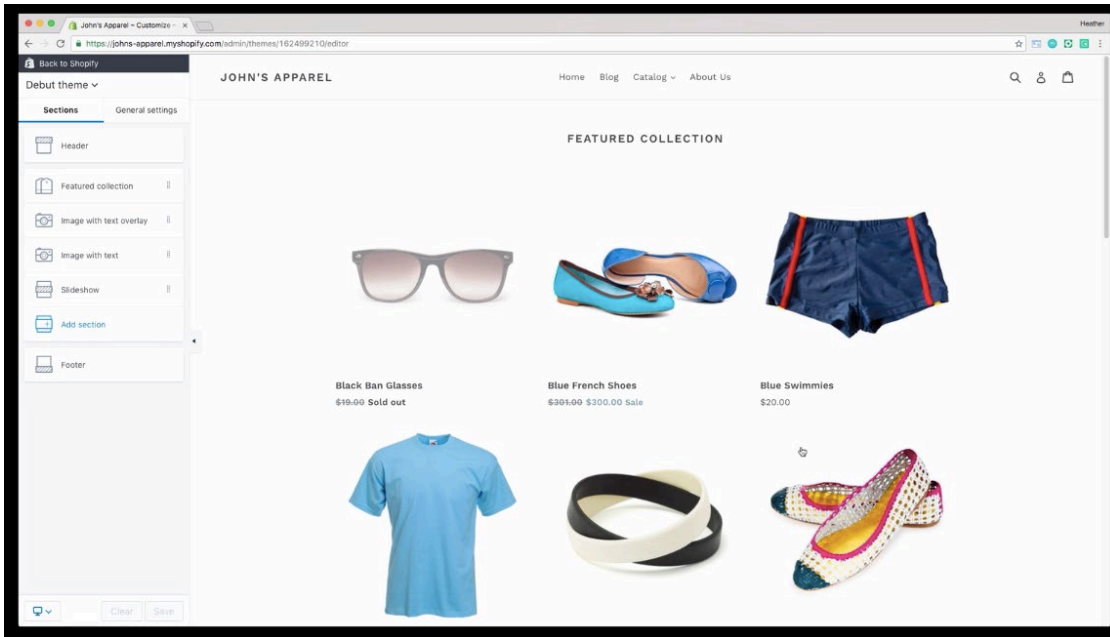
20           196. The presence of the above referenced features is demonstrated, by way of  
21 example, by reference to publicly available information, including  
22 <https://www.shopify.com/>; <https://www.shopify.com/website/hosting>;  
23 <https://help.shopify.com/manual/using-themes/change-the-layout>;  
24 <https://help.shopify.com/manual/using-themes/change-the-layout/using-theme-presets>  
25 [https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors)  
26 [errors](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-errors); <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
27 <https://www.slideshare.net/jduff/how-shopify-scales-rails-20443485>;  
28 <http://techstacks.io/shopify>; <https://help.shopify.com/manual/intro-to-shopify/pricing->

1 plans/plan-features; <https://help.shopify.com/api/reference>;  
2 <https://help.shopify.com/api/storefront-api> [https://help.shopify.com/api/sdks/shopify-](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly)  
3 [apps/modifying-online-store/use-javascript-responsibly](https://help.shopify.com/api/sdks/shopify-apps/modifying-online-store/use-javascript-responsibly);  
4 <https://help.shopify.com/api/reference/product>;  
5 <https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html>;  
6 <http://techstacks.io/shopify>; <https://help.shopify.com/api/reference>;  
7 <https://help.shopify.com/manual/apps>; <https://api.rubyonrails.org/>;  
8 [https://guides.rubyonrails.org/rails\\_application\\_templates.html](https://guides.rubyonrails.org/rails_application_templates.html);  
9 <https://teamtreehouse.com/community/ruby-on-rails-with-html-templates-2>;  
10 <https://guides.railsgirls.com/design>; <https://guides.rubyonrails.org/plugins.html>;  
11 <https://www.rubydoc.info/gems/dashing-rails>;  
12 <https://github.com/Shopify/dashing/wiki/Additional-Widgets>;  
13 <https://help.shopify.com/themes/customization/communication/add-contact-form>; and  
14 <https://help.shopify.com/manual/using-themes/change-the-layout/add-video>.

15 197. The Accused Instrumentalities infringe claim 12 of the '755 patent  
16 through a combination of features which collectively practice each limitation of claim  
17 12. By way of example, the method is for displaying content on a display of a device  
18 as shown in the screen shot below.

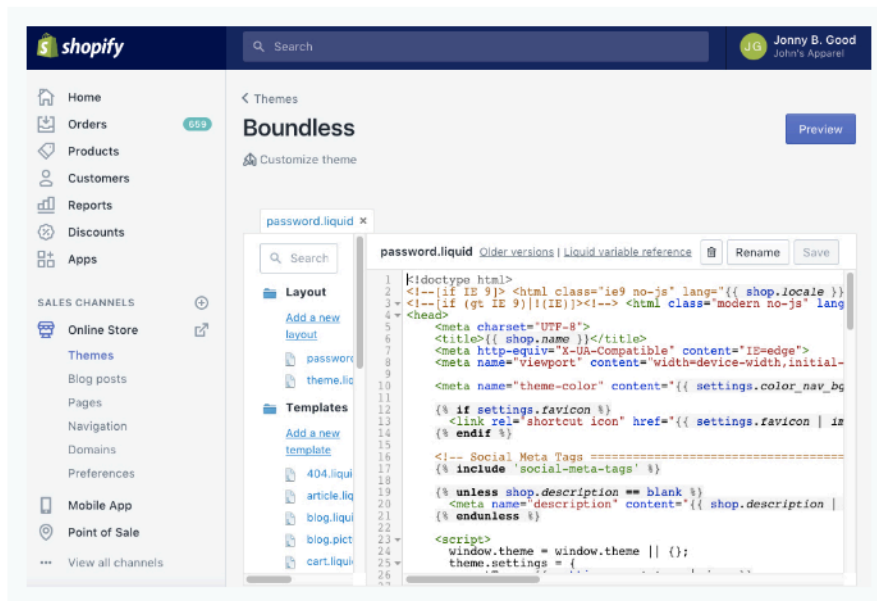
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



<https://help.shopify.com/manual/using-themes/change-the-layout>).

### Edit HTML/CSS page



The **Edit HTML/CSS page** can be accessed through the **Themes** page of your Shopify Admin. It allows you to see all of your theme templates and assets, and directly make changes to them.

(<https://help.shopify.com/themes/development/getting-started/choosing-an-editor>).

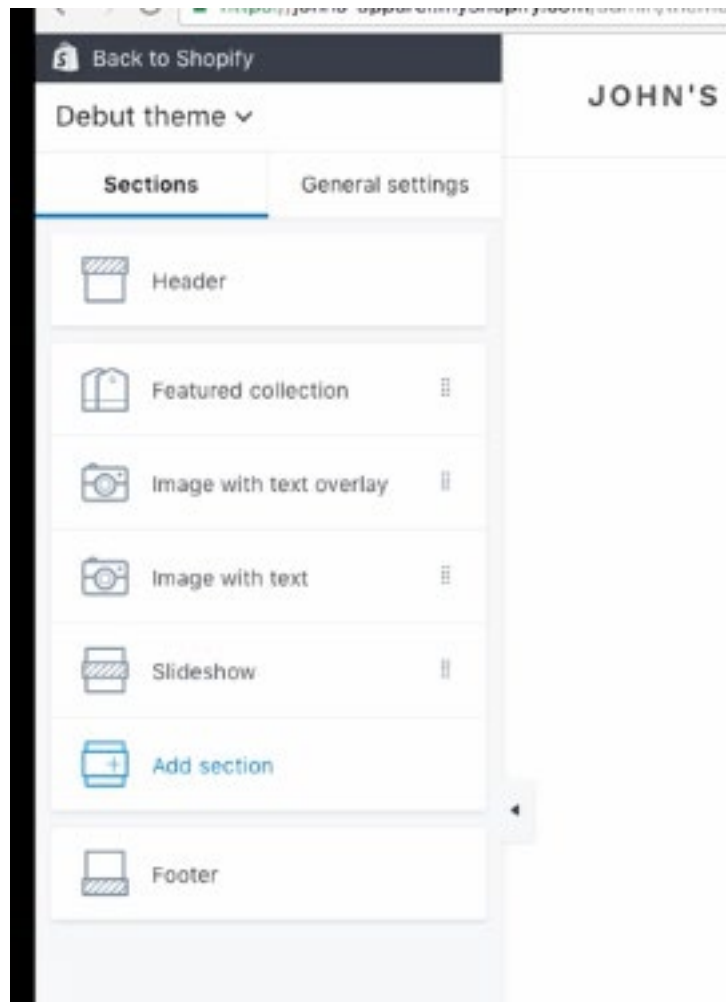
1           198. The Accused Instrumentalities feature a registry of one or more web  
2 components, inputs and outputs of a web service obtainable over a network and an  
3 output of the web service by JSON data formatting. JSON names are strings that only  
4 represent the symbolic names that are bound both to a web service input and/or output  
5 and to a UI object. All JSON names in the name/value pairs are character strings.  
6 When the Ruby on Rails interface makes a UI element request a JSON request is sent  
7 to the Server and a JSON data response is provided to the Interface.

8           199. Each web component includes a plurality of symbolic names of inputs  
9 and outputs associated with each web service. The plurality of symbolic names of  
10 inputs and outputs associated with each web service is a feature of their JSON  
11 formatting characteristics. Each symbolic name has an associated data format class  
12 type corresponding to a subclass of UI objects that supports the data format type of the  
13 symbolic name, and has a preferred UI object as demonstrated by the presence of  
14 JSON formatting in conjunction with the Shopify Theme Editor and widget  
15 capabilities.

16           200. The registry includes: a) symbolic names required for evoking one or  
17 more web components each related to a set of inputs and outputs of a web service  
18 obtainable over a network, where the symbolic names are character strings that do not  
19 contain either a persistent address or pointer to an output value accessible to the web  
20 service. The registry and Ruby on Rails MySQL database contain symbolic names  
21 required for evoking one or more web components each related to a set of inputs and  
22 outputs of a web service obtainable over a network as demonstrated by the formatting  
23 in conjunction with the Shopify Theme Editor, widget, and plugin authoring tools.  
24 JSON names are strings that only represent the symbolic names that are bound both to  
25 a web service input and/or output and to a UI object. All JSON names in the  
26 name/value pairs are character strings. When the Ruby on Rails interface makes a UI  
27 element request a JSON request is sent to the Server and a JSON data response is  
28 provided to the Interface.

1           201. The registry also includes b) an address of the web service. Because the  
2 Shopify Theme Editor contains web services, it contains the corresponding web  
3 addresses.

4           202. Accused Instrumentalities define a user interface (UI) object for  
5 presentation on the display, where said UI object corresponds to a web component  
6 included in said registry selected from the group consisting of an input of the web  
7 service and an output of the web service. The Accused Instrumentalities contain an  
8 authoring tool in the form of the Shopify Theme Editor shown in the screen shot  
9 below.



10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26 (https://help.shopify.com/manual/using-themes/change-the-layout).

27           The Shopify Theme Editor's drag and drop component capabilities define the  
28 presence of a (UI) object for presentation on a display, where the defined UI object

1 corresponds to a web component included in the registry selected from a group  
2 consisting of an input of the web service and an output of the web service.

3 203. The Accused Instrumentalities include selecting the symbolic name from  
4 the web component (i.e Shopify Theme EditorWidget or Plug-in) corresponding to the  
5 defined UI object, where the selected symbolic name has an associated data format  
6 class type corresponding to a subclass of UI objects that support the data format type  
7 of the symbolic name and has the preferred UI object. The Shopify Theme Editor  
8 accesses its memory to select the symbolic name corresponding to the web component  
9 of the defined UI object (as evidenced by JSON data formatting), associate the  
10 selected symbolic name with the defined UI object (the JSON element corresponding  
11 to an element), where the selected symbolic name is only available to UI objects that  
12 support the defined data format associated with that symbolic name (the element  
13 associated with at JSON string). Additionally, the preferred UI object is the selected  
14 UI object. JSON names are strings that only represent the symbolic names that are  
15 bound both to a web service input and/or output and to a UI object. All JSON names  
16 in the name/value pairs are character strings. When the Ruby on Rails interface  
17 makes a UI element request a JSON request is sent to the Server and a JSON data  
18 response is provided to the Interface.

19 204. The Accused Instrumentalities include associating the selected symbolic  
20 name with the defined UI object.

21 205. The Accused Instrumentalities include producing an Application  
22 including the selected symbolic name of the defined UI object, where the Application  
23 is a device-independent code. The Application is comprised of the mySQL database  
24 that includes all the user selectable settings, augmented by the web component  
25 definition. The application, because it contains user selected settings, and is  
26 represented by Boolean, numbers and String primitives, is device independent, and  
27 stored in a database for each application.  
28



1           206. The Accused Instrumentalities also include producing a Player, where the  
2 Player is a device-dependent code. The Shopify Theme Editor contains a Player in the  
3 form of a runtime player.

4           207. The Accused Instrumentalities feature a system where the Application  
5 and Player are provided to the device and executed on the device and when the user of  
6 the device provides one or more input values associated with an input symbolic name  
7 to an input of the defined UI object. Because the Accused Instrumentalities  
8 incorporate a system that includes the Shopify Theme Editor, when a user of the  
9 device provides one or more input values associated with an input symbolic name,  
10 using JSON formatting characteristics, to an input of the defined UI object, the device  
11 provides the user provided one or more input values and corresponding input  
12 symbolic name, using JSON formatting characteristics, to the web service.

13           208. The Accused Instrumentalities feature a system where the device  
14 provides the user provided one or more input values and corresponding input  
15 symbolic name to the web service. Because the Accused Instrumentalities incorporate  
16 a system that includes Ruby on Rails, the web service utilizes the input symbolic  
17 name and the user provided one or more input values for generating one or more  
18 output values having an associated output symbolic name. The defined UI object  
19 output value corresponds to the output symbolic name based on its JSON formatting  
20 characteristics.

21           209. The Accused Instrumentalities feature a system where the web service  
22 utilizes the input symbolic name and the user provided one or more input values for  
23 generating one or more output values having an associated output symbolic name.  
24 Because of the JSON formatting, the output values having an associated output  
25 symbolic name.

26           210. The Accused Instrumentalities feature a system where the Player receives  
27 the output symbolic name and corresponding one or more output values and provides  
28 instructions for the display of the device to present an output value in the defined UI

1 object. The runtime player within Ruby on Rails receives the output name, output  
2 value, and provides instructions for a display as shown by the fact that the defined UI  
3 object are ultimately rendered.

4 211. The presence of the above referenced features is demonstrated, by way of  
5 example, by reference to publicly available information includig.

6 [https://www.shopify.com/;](https://www.shopify.com/)

7 [https://www.shopify.com/website/hosting;](https://www.shopify.com/website/hosting)

8 [https://help.shopify.com/themes/development/getting-started/choosing-an-editor;](https://help.shopify.com/themes/development/getting-started/choosing-an-editor)

9 [https://help.shopify.com/manual/using-themes/change-the-layout;](https://help.shopify.com/manual/using-themes/change-the-layout)

10 [https://www.shopify.com/online;](https://www.shopify.com/online) <https://help.shopify.com/api/sdks/shopify-apps/apps->

11 [on-shopify-mobile;](https://developers.shopify.com/mobile-buy-sdk) [https://developers.shopify.com/mobile-buy-sdk;](https://developers.shopify.com/mobile-buy-sdk)

12 <https://help.shopify.com/manual/using-themes/change-the-layout/using-theme-presets>

13 <https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit->

14 [errors;](https://help.shopify.com/manual/using-themes/troubleshooting/fix-64-kilobyte-limit-) [https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html;](https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html)

15 [https://www.slideshare.net/jduff/how-shopify-scales-rails-20443485;](https://www.slideshare.net/jduff/how-shopify-scales-rails-20443485)

16 [http://techstacks.io/shopify;](http://techstacks.io/shopify) <https://help.shopify.com/manual/intro-to-shopify/pricing->

17 [plans/plan-features;](https://help.shopify.com/manual/intro-to-shopify/pricing-) [https://help.shopify.com/api/reference;](https://help.shopify.com/api/reference)

18 <https://help.shopify.com/api/storefront-api> <https://help.shopify.com/api/sdks/shopify->

19 [apps/modifying-online-store/use-javascript-responsibly;](https://help.shopify.com/api/sdks/shopify-)

20 [https://help.shopify.com/api/reference/product;](https://help.shopify.com/api/reference/product)

21 [https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html;](https://dev.mysql.com/doc/refman/5.7/en/what-is-mysql.html)

22 [http://techstacks.io/shopify;](http://techstacks.io/shopify) [https://help.shopify.com/api/reference;](https://help.shopify.com/api/reference)

23 [https://help.shopify.com/manual/apps;](https://help.shopify.com/manual/apps) [https://api.rubyonrails.org/;](https://api.rubyonrails.org/)

24 [https://guides.rubyonrails.org/rails\\_application\\_templates.html;](https://guides.rubyonrails.org/rails_application_templates.html)

25 [https://teamtreehouse.com/community/ruby-on-rails-with-html-templates-2;](https://teamtreehouse.com/community/ruby-on-rails-with-html-templates-2)

26 [https://guides.railsgirls.com/design;](https://guides.railsgirls.com/design) [https://guides.rubyonrails.org/plugins.html;](https://guides.rubyonrails.org/plugins.html)

27 [https://www.rubydoc.info/gems/dashing-rails;](https://www.rubydoc.info/gems/dashing-rails)

28 [https://github.com/Shopify/dashing/wiki/Additional-Widgets;](https://github.com/Shopify/dashing/wiki/Additional-Widgets)

1 <https://help.shopify.com/themes/customization/communication/add-contact-form>; and  
2 <https://help.shopify.com/manual/using-themes/change-the-layout/add-video>.

3 213. Upon information and belief, these Accused Instrumentalities are used,  
4 marketed, provided to, and or used by or for each of Defendant's partners, clients,  
5 customers, and/or end users across the country and in this District.

6 214. Defendant was made aware of the '755 patent and its infringement  
7 thereof at least as early as the filing of this Complaint.

8 215. Since the date of the filing of this Complaint, Defendant's infringement  
9 of the '755 patent has been willful.

10 216. Within the past six years, Plaintiff has not sold any product nor offered a  
11 service within the scope of any claim of the '755 patent. In addition, prior to August  
12 12, 2015, no license to the '755 patent had been granted.

13 217. Plaintiff has been harmed by Defendant's infringing activities.

14 **JURY DEMAND**

15 Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands  
16 a trial by jury on all issues triable as such.

17 **PRAYER FOR RELIEF**

18 WHEREFORE, Plaintiff demands judgment for itself and against Defendant as  
19 follows:

20 A. An adjudication that Defendant has infringed the '397, '168, '287, and  
21 '755 patents;

22 B. An award of damages to be paid by Defendant adequate to compensate  
23 Plaintiff for Defendant's past infringement of the '397, '168, '287, and '755 patents,  
24 and any continuing or future infringement through the date such judgment is entered,  
25 including interest, costs, expenses and an accounting of all infringing acts including,  
26 but not limited to, those acts not presented at trial;

27 C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an  
28 award of Plaintiff's reasonable attorneys' fees; and

1 D. An award to Plaintiff of such further relief at law or in equity as the  
2 Court deems just and proper.

3 Dated: June 12, 2019

4 By: /s/ Jeffrey Francis Craft  
5 Jeffrey Francis Craft (SBN 147186)  
6 jcraft@devlinlawfirm.com  
7 DEVLIN LAW FIRM LLC  
8 1731 Fox Springs Circle,  
9 Newbury Park, CA 91320

10 *Attorneys for Plaintiff Express Mobile, Inc.*