No. 2024-2279

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

DKR CONSULTING, LLC, *Plaintiff-Appellant*

v.

SHOPIFY, INC., *Defendant-Appellee,*

On Appeal from the United States District Court for the Central District of California, No. 2:23-cv-06904-HDV-JC
Hernan Diego Vera, District Judge

PLAINTIFF-APPELLANT'S OPENING BRIEF

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U.S. Patent No. 10,846,785

1. A method for embedding a buy button for an electronic commerce store, comprising:

receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;

generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and

embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.

2. The method of claim 1, wherein the embeddable buy button is configured to be embedded into different web sites.

3. The method of claim 1, wherein the electronic commerce store includes a checkout screen that allows a purchase of the item using a transaction processing service operated by the buy button provider.

7. A system for embedding buy buttons for an electronic commerce store, comprising:

a first server operated by a buy button provider;

a database communicatively coupled to the first server, the database configured to store an inventory list of items capable of being offered for sale on the electronic commerce store;

an embeddable buy button builder executed by the first server, wherein the embeddable buy button builder is configured to receive a selection of an item from the inventory list and a representation of the item, the embeddable buy button builder further configured to generate the embeddable buy button, wherein the embeddable buy button is configured to be embedded into a web site by the buy button provider, wherein the embeddable buy button includes a hyperlink; and

a second server configured to execute the web site, wherein the buy button provider controls operation of the embeddable buy button on the web site, and wherein the buy button provider controls operation of the electronic commerce store on the web site upon selection of the hyperlink.

U.S. Patent No. 11,157,995:

1. A system for generating an electronic commerce store, comprising:

an application server, the application server controlling a transaction processing service;

a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product;

a widget builder resource executing on the application server, the widget builder resource configured to:

receive the image and metadata from the storage resource; and

generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and

wherein the application server is configured to embed the product listing into a web site and into a social media network, and

wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet

communication with the web site, the application server provides a checkout screen to the client device, wherein the transaction processing service processes a payment transaction for a purchase of the product initiated from the checkout screen using the client device.

U.S. Patent No. 11,455,678:

1. A system for distributing multimedia content over a network, comprising:

a server configured to control a transaction processing service; and

a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,

wherein the server is configured to:

receive the item from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;

distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on the marketplace rule;

receive an indication that the clickable buy button has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

U.S. Patent No. 11,488,237:

1. A system for generating an electronic commerce store, comprising:

an application server configured to control a transaction processing service; and

a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product,

the application server configured to:

receive the information from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button;

distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application;

receive an indication that the clickable link has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CERTIFICATE OF INTEREST

Case Number 24-2279

Short Case Caption DKR Consulting, LLC v. Shopify, Inc.

Filing Party/Entity DKR Consulting, LLC

Instructions:

1. Complete each section of the form and select none or N/A if appropriate.
2. Please enter only one item per box; attach additional pages as needed, and check the box to indicate such pages are attached.
3. In answering Sections 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance.
4. Please do not duplicate entries within Section 5.
5. Counsel must file an amended Certificate of Interest within seven days after any information on this form changes. Fed. Cir. R. 47.4(c).

I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: 09/12/2024

Signature: /s/ Ronald M. Daignault

Name: Ronald M. Daignault

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	**2. Real Party in Interest.** Fed. Cir. R. 47.4(a)(2).	**3. Parent Corporations and Stockholders.** Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities. ☑ None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities. ☑ None/Not Applicable
DKR Consulting, LLC	None	None

☐ Additional pages attached

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

☐ None/Not Applicable ☐ Additional pages attached

Perkowski Legal, PC Peter E. Perkowski		

5. Related Cases. Other than the originating case(s) for this case, are there related or prior cases that meet the criteria under Fed. Cir. R. 47.5(a)?

☐ Yes (file separate notice; see below) ☑ No ☐ N/A (amicus/movant)

If yes, concurrently file a separate Notice of Related Case Information that complies with Fed. Cir. R. 47.5(b). **Please do not duplicate information.** This separate Notice must only be filed with the first Certificate of Interest or, subsequently, if information changes during the pendency of the appeal. Fed. Cir. R. 47.5(b).

6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

☑ None/Not Applicable ☐ Additional pages attached

None		

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GLOSSARY

DKR	Plaintiff-Appellant DKR Consulting, LLC, a North Carolina limited liability company and current assignee of the patents-in-suit
Shopify	Defendant-Appellee Shopify, Inc., a Canadian corporation based in Ottawa, ON
District Court	United States District Court Central District of California
’785 patent	U.S. Patent No. 10,846,785
’995 patent	U.S. Patent No. 11,157,995
’678 patent	U.S. Patent No. 11,455,678
’237 patent	U.S. Patent No. 11,488,237
Appx____	Page ____ in Appendix
Appx____(xx:yy-zz)	Page ____ in Appendix where “xx” represents a column number of a patent, “yy” represents the initial line of cited text, and “zz” represents the ending line of cited text

NOTE: All emphasis in the brief has been added unless otherwise indicated.

STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5(a), DKR's counsel states that there is no other appeal in or from the same civil action or proceeding in the United States District Court Central District of California that was previously before this or any other appellate court.

Pursuant to Federal Circuit Rule 47.5(b), DKR's counsel states that there are no other cases known to be pending in this or any other court or agency that will directly affect or be directly affected by this Court's decision in the pending appeal.

JURISDICTION

DKR brings this appeal from the United States District Court Central District of California in accordance with 28 U.S.C. § 1295(a)(1). *See* Fed. R. App. P. 4(a)(4)(B)(i). The District Court had jurisdiction under 28 U.S.C. § § 1331 and 1338.

DKR appeals from the final judgment entered in the case below, based upon the District Court's erroneous grant of the Motion to Dismiss First Amended Complaint ("Order"). Appx0001-Appx0014, Appx0015.

The Order is final because final judgment was entered on August 1, 2024. Appx0015. DKR timely filed Notice of Appeal within thirty (30) days of entry of final judgment in accordance with 28 U.S.C. § 2107, Fed. R. App. P 4(a), and Fed. Cir. R. 4. Appx0019.

STATEMENT OF ISSUES

1. Whether the District Court erred in granting Defendant-Appellee's Motion to Dismiss the case under Federal Rule of Civil Procedure 12(b)(6)?

2. Whether the District Court erred in granting Defendant-Appellees' Motion to Dismiss in finding the Asserted Claims invalid pursuant to § 101?

3. Whether the District Court erred in failing to construe facts, including those well-pleaded in the First Amended Complaint, in the light most favorable to DKR?

4. Whether the District Court erred in holding the asserted claims to be directed to an abstract idea?

5. Whether the District Court erred in finding insufficient inventive concept when the claims solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner?

STATEMENT OF THE CASE

This appeal involves DKR's U.S. Patent Nos. 10,846,785 (the "'785 patent), 11,157,995 (the "'995 patent), 11,455,678 (the "'678 patent"), and 11,488,237 (the "'237 patent").

On August 22, 2023, DKR initiated a lawsuit against Defendant-Appellee Shopify, asserting that Shopify's e-commerce products and services employing and providing a system for distributing multimedia content over a network infringed at least claim 1 of the '785 patent, '995 patent, '678 patent, and '237 patent. Appx0139-0175. On December 12, 2023, Shopify filed a Motion to Dismiss under Federal Rule of Civil Procedure 12(b)(6) for lack of personal jurisdiction and failure to state a claim, contending that the claims of the Patents-in-Suit are patent ineligible under 35 U.S.C. § 101. Appx0176-0179, Appx0180-0211. On February 9, 2024, the District Court granted DKR leave to file a First Amended Complaint. Appx0212-0213.

On February 14, 2024, DKR filed its First Amended Complaint. Appx0214-0254. On March 6, 2024, Shopify filed a Motion to Dismiss First Amended Complaint, seeking dismissal on patent eligibility alone. Appx0255-0258, Appx0259-0290. On May 9, 2024, the District Court heard arguments on Shopify's motion. Appx0333-0394. On August 1, 2024, the District Court granted Shopify's motion, concluding that the inventions claimed in the Patents-in-Suit were invalid

under 35 U.S.C. § 101. Appx0001-0014. As a result of this ruling, the District Court entered final judgment in Defendant-Appellee's favor. Appx0015. DKR appeals the District Court's grant of the Motion to Dismiss First Amended Complaint, and the final judgment against it.

STATEMENT OF FACTS

I. Preliminary statement.

DKR's principal, Mr. David K. Robb ("Mr. Robb"), was formerly the Chief Executive Officer and founder of DIY Media, Inc. ("DIY Media"), which previously owned the Patents-in-Suit. Appx0215 (¶ 3).

Founded in 2007, DIY Media was a Seattle-based startup with a proprietary platform for selling digital music on social media platforms.[1] But as digital-music commerce shifted from one-time purchases (e.g., iTunes) to subscription models (e.g., Spotify), Mr. Robb and DIY Media shifted focus to creating a platform to address technological issues hindering online sales in social commerce. *Id*. In a 2014 GreekWire interview, Mr. Robb succinctly described the existing technological problems he found in social commerce at that time:

> If online retailers want to reach their target audiences, they need to grab their attention where they're already spending time – in their

[1] Taylor Soper, *Startup Spotlight: Shoppost lets retailers sell products in social media newsfeeds*, GreekWire (July 3, 2014), https://www.geekwire.com/2014/shoppost/

> social media feeds. We tried to sell things through social media ourselves and realized that there wasn't a good solution; most of the existing tools involve tables or links that are hidden away in pages. We don't think social commerce should be redirects or one app for this platform and another for a different platform. We contemplated something that would be easy-to-use, scalable and still keep shoppers on social media.

Id.

Mr. Robb's solution was the "Shoppost" platform. Appx0215 (¶4). Shoppost enabled retailers to design and integrate interactive posts (i.e., web widgets) in social media newsfeeds and websites to sell products.[2] Shoppost enabled retailers using the platform to create all-in-one shopping experiences. In the same GreekWire interview, Mr. Robb highlighted Shoppost as an innovative solution to the technological barriers in social commerce:

> Shoppost is able to really bring social commerce to the level of what it's meant to be – shopping IN social media, not being lead away from it or having to go through multiple clicks just to get more info.

Id.

Shoppost became an industry-leading social commerce platform. The interactive stores were portable between all major social media platforms, including Facebook, Twitter, Instagram, Snapchat, and WordPress. *Id*. DIY Media

[2] Taylor Soper, *Startup Spotlight: Shoppost lets retailers sell products in social media newsfeeds*, GreekWire (July 3, 2014), https://www.geekwire.com/2014/shoppost/

developed partnerships and integrations with major retailers, including Shopify. Appx0220 (¶ 25).

In the early 2010s, DIY Media and Shopify held continuous discussions regarding strategic methods for integrating DIY's Shoppost technology with Shopify's platform. Appx0220 (¶¶21-23). Simultaneously, DIY Media filed patent applications, which are now the Patents-in-Suit. Appx0220 (¶24). Shopify and DIY Media entered into a partnership in March 2014 as Shopify's first integration partner with an e-commerce platform ecosystem. Appx0220 (¶25). In fact, beginning on July 9, 2014, Shopify promoted the Shoppost application and placed the Shoppost application on the homepage of its app store. Appx0220 (¶26). But just days later—on July 19, 2014—Shopify removed the Shoppost application. Appx0220 (¶26).

Less than two years later, in early 2016, Shopify created a feature that exactly mirrored the technical solution and functionality of Shoppost. Appx0220 (¶27). Shortly thereafter, DIY Media went out of business. Mr. Robb transferred DIY Media's patents (including the Patents-in-Suit) to DKR Consulting, LLC, now Plaintiff-Appellant. Appx0215 (¶3).

II. The state of the prior art at the time of the claimed inventions.

The early 2010s represented the American boom of social media. The advent of Facebook, YouTube, Twitter, Tumblr, Snapchat, Pinterest, LinkedIn, etc.

marked a new digital era for merchants and customers. Computer-science innovators were scrambling to create systems and methods to harness the power of social media and e-commerce. On the one hand, online transaction processing services were taking root—companies like PayPal, Google Checkout, Authorize.net, among others. On the other hand, online shopping was junky. Consumers were re-routed—often multiple times—to get from a single advertisement on a website or social media platform to a checkout page (often on the processing services' website) to complete a transaction.

The technological challenge was to provide an optimal method for a customer to purchase a product on a web site or social media platform without the customer being rerouted from the host website to a different website. Mr. Robb's solution was the web widget.

The DKR patent inventors created a dual-purpose system "for the distribution of multimedia content and the consummation of transactions between content owners, content distributors, and consumers." Appx0039 (1:17-21). The inventors identified web widgets as the way to achieve their goals, but at the time of the invention, web-widget technology was incapable of carrying out the needed functions. The specification notes,

> The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal content into dynamic web applications . . . they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market

> tickers, daily weather reports and flight arrival information . . . [but] current web widgets are not used as self-contained electronic commerce platforms.

Appx0039 (1:65-2:10).

The DKR inventors, therefore, had to conceive technological solutions to web widgets to implement their invention. To that end, the patent specification acknowledges the "significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with [] customers from web widgets." Appx0039 (2:9-18).

Thus, the claimed inventions are directed to a web widget with various enhanced capabilities and implementations for various uses. Appx0039 (2:50-51) (updating content inventories using the widgets); Appx0039 (2:58-61) (distributing musical song or musical album using the widgets); Appx0040 (3:1-2) (transaction processing using the widgets); Appx0040 (3:4-5) (viral distribution of content using the widgets).

More specifically, DKR's inventions improved: (i) the way an enhanced widget is built ("Widget Builder"); (ii) the way this widget is then embedded into a website or social media site ("Embedding Element"), and (iii) the way this widget is used to make online purchases ("Store Display Element"). Appx0295.

The ’785 patent, ’237 patent, and ’995 patent are continuations of the ’678 patent. They have virtually identical specifications, but different claims.

III. The inventions of the Patents-In-Suit.

A. The Widget Builder.

The Patents-in-Suit describe a novel multi-purpose and dynamic Widget Builder. Appx0026 (Fig. 3), Appx0042 (7:65 – 8:25). This Widget Builder is a multicomponent product that “is used to create an inventory of ‘web widgets’ 316, buy buttons 310, buy links 312 and preview clips 314.” Appx0042 (7:66-8:2). In other words, the novel Widget Builder is capable of creating a web widget with an array of multi-modal functionalities capable of previewing, purchasing, linking, and/or distributing content across social media and within web sites.

“The merchandising widget 308 is used when a content owner seeks to create a fully custom content compilation which may include promoted merchandise or physical goods . . . as well as other content from the content owner’s catalogue.” Appx0042 (8:34-40). “The merchandising widget 308 is used to promote the merchandise or physical goods that a content owner may choose to promote alone or in association with one or more multimedia content files in an embodiment.” Appx0042 (8:31-34). For example, “[a] merchandising widget is used to promote physical goods such as t-shifts, cups, carrying case, etc. that may be associated with the theme set by a content owner for a song, a release of songs,

or the content owner's catalogue." Appx0044 (12:34-38).

As another example, "buy buttons 310 are generated by content owners using the widget builder resource component 300 . . . ." Appx0042 (8:40-44). A content owner may use the widget builder to connect a preview clip, created in the widget builder resource, with the product. "The preview clips 314 created in the widget builder resource component 300 are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices 130, 132, 134 to enable those consumers to preview multimedia content . . . or to further distribute to third parties in the social networks of these consumers or in other online communities." Appx0042 (8:56-67).

The Widget Builder operates in connection with a multipurpose content management component, providing widget builders with the "metadata editor," Image Content Uploader," "Audio Content Uploader," "the compilation builder," and the "content downloader." Appx0043 (9:4-47). The metadata editor "enables content owners to edit the metadata associated with multimedia content files," such as with a "Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID)." Appx0043 (9:12-18), Appx0044 (11:44-46). The Image Content Uploader "uploads, store[s], and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets," which may include, for example, GIF, JPEG, and

TIF files. Appx0043 (9:18-25). The Audio Content Uploader is "used for uploading audio files," which may include WAV and MP3 files. Appx0043 (9:24-28).

The two central components of the Widget Builder are the "compilation builder" and "content downloader." "The compilation builder is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system 202." Appx0043 (9:28-31). In other words, widget builders are able to pull different multi-modal compilations from inventory to build a custom web widget. "[E]ach content compilation created using the compilation builder 410 is associated with a web widget that will be distributed using the web distribution service 216 to customers on the Internet, mobile communications networks, or other computer communications." Appx0043 (9:31-36). The "content downloader is used for controlling the downloading of the custom content compilations created by content owners which are packaged with and promoted through web widgets." Appx0043 (9:36-40). Accordingly, the Widget Builder, with the compilation builder and content downloader, adds the novel technical capability of offering instantaneous access to purchased content via a web widget.

The content management component has several services, including a content distribution feed "that enables content owners to request and receive

distribution feeds from content distributors." Appx0043 (9:5-8). "The content provided by content distributors to content owners through such feeds is used to automatically update and supplement the content inventories of content owners in the content management system 202." Appx0043 (9:9-12).

The Widget Builder's technical capabilities are explicitly recited in several claims across the Patents-in-Suit. Claim 1 of the '995 patent provides:

> a widget builder resource executing on the application server, the widget builder resource configured to:
>
> receive the image and metadata from the storage resource; and
>
> generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and
>
> wherein the application server is configured to embed the product listing into a web site and into a social media network . . .

Appx0077 (18:49-59).

Claim 1 of the '678 patent notes that the "widget builder resource [is] configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button." Appx0107 (18:53-55). A marketplace rule assigned by a content owner "can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, UK and France, but not in Italy, Germany, etc.), gross

pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials." Appx0104 (11:46-52).

And claim 1 of the '237 patent claims recites "a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button." Appx0137 (18:50-54).

Accordingly, the Patents-in-Suit claim a novel Widget Builder, comprised of the metadata editor, Image Content Uploader, Audio Content Uploader, the compilation builder, and the content downloader to create web widgets, buy buttons, buy links, and preview clips with a fully custom content compilation that enables instantaneous download and access to multimedia products, subject to automatic updates and automatic execution of video and audio clips, with an array of multi-modal functionalities capable of previewing, purchasing, linking, and widely distributing content, which can be subjected to predetermined marketplace rules.

The Widget Builder is a novel technical enhancement to web widgets not found in the prior art.

B. The Embedding Element.

DKR also created a novel way to deploy and distribute their claimed web

widget. As of the priority date of the patents, widgets needed to be tailored and configured to operate within the HTML structure of a given website to function properly. Appx0042 (8:46-56). In other words, a widget creator would need to configure a widget to operate within the HTML structure of a specific website (such as Facebook) but then re-configure that widget to be compatible and perform tasks within another website's HTML structure (such as CNN).

Thus, any changes to the web widget or to web widget content had to be individually customized and made in succession to ensure that all changes were compatible with the hosting websites. For instance, if a widget creator wanted to update a product catalog in a given widget, or change marketplace rules (e.g., date of sale, geographic limitation), the creator would be required to re-code the individual widget inventory and apply that directly to the widget or set of widgets operating in a single HTML structure.

DKR, however, changed this paradigm. The inventors recognized that the compatibility problem is eliminated if widgets are created and executed on their own server (i.e., the widget server) distinct and separate from the server hosting the website (i.e., the website server). Claim 1 of the '785 patent recites this specific configuration:

> A method for embedding a buy button for an electronic commerce store comprising:
>
> receiving, by an embeddable buy button builder

> executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;
>
> generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and
>
> embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,
>
> wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.

Appx0047 (18:44-55).

This technical and structural solution conferred several advantages. The patent notes that by having a widget operate on its own server, "a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties, or elect to purchase the multimedia content packaged with the web widget" from within the website itself. Appx0041 (5:40-43). In other words, this novel approach provided a key enhancement in the form of universal compatibility—i.e., platform independence for web widgets. After

DKR's invention, widgets are no longer dependent on the HTML structure of a given website because the web widget operates on its own HTTP platform and is merely displayed on a separate server.

Additionally, this configuration change allows widget creators to quickly and efficiently apply universal changes to widgets and distribute them in a viral manner. The patents note, "[t]he buy links are [independent] Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise." Appx0042 (8:50-56).

At the time of invention, DKR was aware that "[c]urrent methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner." Appx0039 (1:58-60).

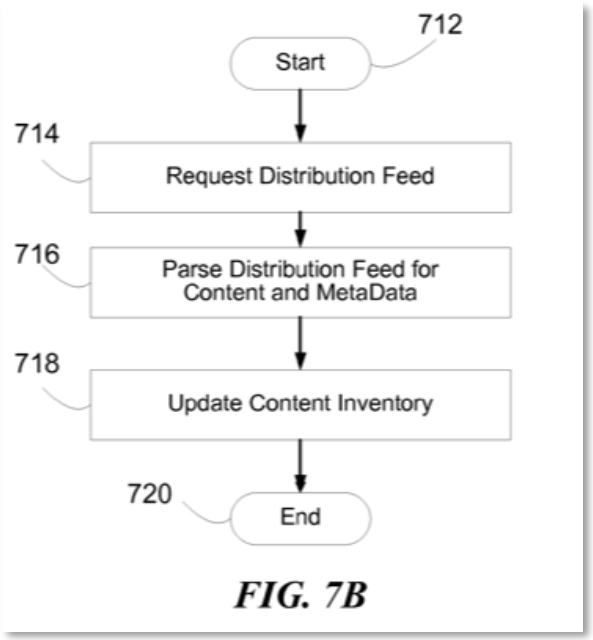


FIG. 7B

Appx0030 (Fig. 7B).

Figure 7B represents a novel simplification that an independent HTML structure operation offered—"requesting and updating content inventories using distribution feeds." Appx0044 (11:53-55). "In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships." Appx0044 (11:57-61). "[O]nce a distribution feed is received it is parsed for content and metadata, as shown at step 716, and the content inventory or inventories maintained by content owners are updated, as shown at step 718. Upon receipt and updating of one or more content inventories, the process ends." Appx0044 (11:67-12:5). Nothing more is required of the widget creator to update the content inventory of a web widget. In other words, the widgets, and their related content inventories, are

universally and easily adaptable.

Accordingly, DKR's claimed invention comprises a novel and technically enhanced web widget that "can be distributed over the Internet or other network . . . to a website where interested parties can activate or further distribute it to third parties on a network." Appx0044 (12:39-43). And once the distributed web widget is "activated from a link, buy button or preview clip, it can be further distributed in a 'viral' fashion to other online communities, websites, forums, etc." Appx0042 (7:23-26).

C. The Store Display Element.

Another novel technical enhancement of the Patents-in-Suit is the ability for a customer to complete an e-commerce transaction within the web widget without being rerouted away from the host website. Appx0039 (1:58-65). The '785 patent notes, "a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner." Appx0039 (1:58-65). At the time the DKR patent applications were filed, a customer making a purchase was navigated away from the host website to a separate e-commerce platform (i.e., website) to complete a transaction. In other words, merchants displayed clickable advertisement widgets within host websites, but once clicked, consumers would be re-routed to another website or window to complete the purchase.

The DKR Patents solved this issue by enabling a consumer to use the widget to complete the transaction on the host website without being re-routed. Even more, the ability to complete the purchase without being re-routed away enables the consumer to instantaneously download and access the multimedia content while remaining in the host website. The '785 patent notes, "[a] web widget is portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation." Appx0039 (1:62-65). For example, a consumer could purchase a song in a web widget, and begin listening to that song, all while remaining on the host website.

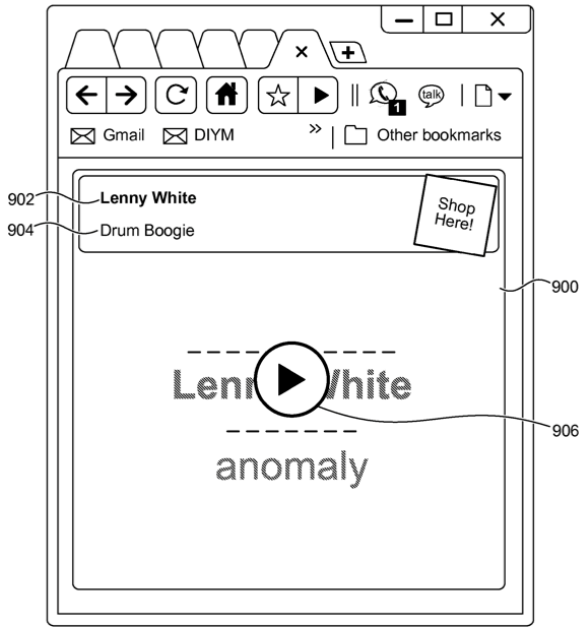


FIG. 9

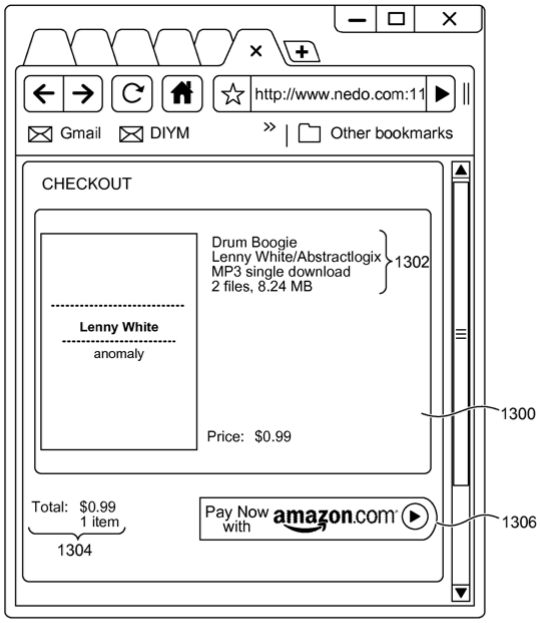


FIG. 13

Appx0032 (Fig. 9), Appx0036 (Fig. 13).

Figure 9 is an illustration of a web widget in one embodiment, wherein the

"widget is received over a network such as the Internet and viewed in a consumer's web browser executing on mobile, laptop or desktop client devices 130, 132, 134 such as Internet Explorer, Firefox, Google Chrome, Safari, Opera or other popular web browsers." Appx0045 (14:31-36).

Figure 13 "is an illustration of the screen shown in a web widget after clicking on the buy button. In this embodiment of a web widget 1300, after a consumer selects the buy button 1206 to purchase the MP3 format file, a checkout screen appears within the web widget 1300." Appx0047 (17:50-54). Upon clicking "Pay Now," the "consumer would enter the credit card, debit card or bank account information to complete the purchase of the multimedia content file that is stored and available for download." Appx0047 (17:67-18:2). The embodiments in the Patents-in-Suit "illustrate how a portable web widget enables commerce through an embedded electronic commerce store." Appx0047 (18:16-19).

The patents further detail how, "once a purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device 130, 132, 134, as shown at step 820, and the process then ends, as shown at step 822." Appx0045 (14:4-8). More specifically, "[u]pon receipt of a content download request from a web widget, the content downloader 412 initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the

cloud-based storage resource 124 or other storage in the multimedia content distribution system 200, and it also controls the process of downloading the retrieved content compilations to a client device 130, 132, 134." Appx0043 (9:39-47).

Thus, the Store Display Element enables embedded e-commerce where consumers can conduct a completed transaction without being re-routed to another platform along with the ability to instantaneously download, access, and use the product.

Claims 1, 2, and 3 of the '785 patent recite an embodiment of this claimed feature:

> 1. . . . . wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.
>
> 2. The method of claim 1, wherein the embeddable buy button is configured to be embedded into different web sites.
>
> 3. The method of claim 1, wherein the electronic commerce stores includes a checkout screen that allows a purchase of the item using a transaction processing service operated by the buy button provider.

Appx0047 (18:56-61), Appx0047 (18:62-63), Appx0047 (18:64-67).

The Store Display Element solved the "significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more

effectively use viral distribution of multimedia content . . . to engage in purchase transactions and other form of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." Appx0039 (2:9-18).

IV. The District Court's order granting Shopify's motion to dismiss.

Erroneously over-generalizing and oversimplifying the claimed inventions, the District Court adopted Shopify's argument that the claims of the Patents-in-Suit were directed to no more than the abstract idea of combining an order form with a product advertisement. Appx0011. The District Court ruled that although the claims "improve the effectiveness of web widgets to distribute content widely and enable merchants to utilize social media to engage customers, the idea of enhancing web widgets does not constitute an advance in computer functionality." Appx0011.

For *Alice* step one, the District Court concluded that the claims were directed to an abstract idea because they use only conventional computer technology as a tool to facilitate e-commerce. Appx0011. The District Court focused on the claims' use of an "application server, storage resource, and widget builder resource" to conclude the claims merely invoke the general process of servers and other devices communicating information to one another. Appx0011-Appx0012. The District

Court focused on the claimed inventions using these generic systems to make "e-commerce more efficient," but determined that "they do not improve the underlying [web widget] technology itself," rendering the claims abstract Appx0012.

The District Court looked to this Court's decision in *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1225 (Fed. Cir. 2014) for *Alice* step one. Appx0012. The District Court noted that the claims in *DDR* were "not unlike the claimed technology here, which seeks to create a means for a website visitor to complete an e-commerce transaction in one webpage." Appx0012. But the District Court found a distinction with respect to the DKR claim language—the claims were recited too broadly to be specific and meaningful applications of their underlying ideas, such that the DKR claims "seek to perform the age-old business practice[] on the Internet," i.e., combining a product advertisement with an order form in one place. Appx0012-Appx0013.

For *Alice* step 2, the District Court acknowledged that an abstract idea implemented on generic computer components can be patent eligible so long as it provides a specific technical solution beyond simply using generic computer concepts in a conventional way. Appx0013. The District Court determined the Patents-in-Suit did not recite an inventive concept because "the Asserted Patents utilize generic computer components (such as servers) in a conventional way."

Appx0014. The District Court focused only on the second server operation, noting that "simply us[ing] a second server to embed a buy button" is not "unconventional." Appx0014.

Accordingly, the District Court determined that the claims did not "add 'something more' to allow the Asserted Patents to survive step two." Appx0014.

V. The motion to dismiss hearing.

The District Court heard oral argument on Shopify's motion to dismiss for lack of patent eligibility. Appx0333-Appx0394.

During the hearing, Judge Vera questioned Shopify's level of over-generalization with regard to its "magazine order form" argument: "So, is that really your point, that just because it's like a tear-off order form that there's no way to patent the concept of an efficient way to get a customer to an order form?" Appx0339.

Shopify argued that the Patents-in-Suit were merely directed to e-commerce, generally, ignoring the specific technical enhancements claimed. Appx0339 ("But the patents here, your Honor, specifically say that you can implement all of this just by using Amazon or PayPal."), Appx0345 ("We have patents that are telling us expressly, You can use preexisting Amazon technology to perform the idea we're talking about here. All you need to do is hyperlink in a link to Amazon or to PayPal, and if you do that on your product advertisement, that will be performing

our invention.").

The District Court, however, continued to question Shopify's over-generalization of the Patents-in-Suit: "That helps, but I'm still struggling with what—what level of generality or what—how much detail is needed to—for something to be inventive?" Appx0382-Appx0383.

Judge Vera questioned why DKR's technical enhancements to web widgets were not enough for patent eligibility: "And your point is that even if that—that does improve functionality, that that's not enough?"). Appx0381. Judge Vera asked why the District Court, who is not an expert, is charged with undoing patents that examiners granted: "What's—what's going on that requires the Court, which is not an expert, to then undo it when patent examiners get provided all this and say, yes, it qualifies?" Appx0342-Appx0343. Shopify summarily represented that "hundreds of patents have been invalidated since Alice by the courts that were issued by the U.S. Patent Office" and that "[t]he Patent Office is in the business of issuing patents, and, unfortunately, these get issued." Appx0343.

Judge Vera further questioned whether it was most efficient and proper for district courts to decide patent eligibility at the pleading stage, specifically noting that he accepted as true Shopify's representation that virtually every court that evaluates e-commerce patents is disqualifying the patents at the pleading stage. Appx0370 ("Well, one thing I'm surprised at from Mr. Lantier's presentation—and

I'll give him a chance to expound on this—in a few minutes—but is that courts seem to go through all of this on a preliminary pleading motion and decide all of this without experts reports and—and more. But if I take what he's saying as true—and I'm sure it is, although we'll check it as well, but virtually every court that looks at e-commerce patents is disqualifying these at the pleading stage?").

Shopify further argued that DKR analogized its patents to that of *DDR Holdings* just because it is a Federal Circuit decision where e-commerce centric patents were held patent-eligible and valid. Appx0347 ("they try to analogize these patents to the patents in DDR Holdings. Every patent owner in e-commerce cases where the patents are challenged on the basis of subject matter eligibility says, our claims are just like the claims in DDR Holdings, because that's the one e-commerce case where the Federal Circuit found that the—the claims were eligible."). Shopify told Judge Vera that the Federal Circuit has never found any other e-commerce claims to be analogous to the *DDR* claims. Appx0347 ("And in the nine in a half years since the Federal Circuit issued the decision in DDR Holdings, to my knowledge, it's never found any other e-commerce claims to be analogous to those claims.").

SUMMARY OF THE ARGUMENT

The District Court's ruling that the Patents-in-Suit are invalid under 35 U.S.C. § 101 is erroneous and should be reversed. The claims of the Patents-in-Suit

are not directed to an abstract idea, and the District Court erred in holding that they are. The claims are directed to technological enhancements to pre-existing online web widget technology and technical improvements to the configuration of e-commerce platforms and networks. Even if arguably directed to any alleged abstract idea, at a minimum, the claims comprise inventive concepts providing the "something more" to make them patent eligible.

The District Court's order does not meet the high burden of overcoming the presumption of validity, and proving by clear and convincing evidence, at the pleading stage, with no claim construction and no record evidence, that every element of every claim of the Patents-in-Suit, as a whole, or as an ordered combination, are abstract ideas under 35 U.S.C. § 101. Likewise, the order does not meet the equally high burden of proving that the claimed subject matter was routine, well-known, or conventional to one of ordinary skill in the art as of the priority date—over a decade ago—particularly when allegations in the First Amended Complaint to the contrary must be accepted as true.

Given the failure to meet these necessary burdens, the District Court's ruling is erroneous and should be reversed.

ARGUMENT

I. Legal principles.

A. Federal Rule of Civil Procedure 12(b)(6).

When ruling on a motion to dismiss under Rule 12(b)(6), the Court must accept "all factual allegations in the complaint as true and construe them in light most favorable to the non-moving party." *Fleming v. Pickard*, 581 F.3d 922, 925 (9th Cir. 2009). The Court must also accept as true all reasonable inferences to be drawn from the material allegations in the complaint. *Pareto v. F.D.I.C.*, 139 F.3d 696, 699 (9th Cir. 1998).

Patent-eligibility under 35 U.S.C. § 101 is a question of law reviewed de novo. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). But patent eligibility, as a question of law, is based on underlying factual findings, including "whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Importantly, "[a]ny fact, such as this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence." *Id*.

In other words, a district court may commit reversible error in concluding there are no underlying factual questions to the § 101 inquiry, including when the "parties dispute whether [] improvement[s] to computer functionality are captured

in the claims." *Id*. at 1369; 1370 ("At this stage of the case, however, there is at least a genuine issue of material fact in light of the specification regarding whether claims [are written] in an inventive manner that improves these aspects of the disclosed [] system.").

B. Patents are presumed valid under 35 U.S.C. § 282.

Patents granted by the U.S. Patent and Trademark Office are presumptively valid. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 100 (2011) (citing 35 U.S.C. § 282). Challengers must overcome "'the basic proposition that a government agency such as the [PTO] was presumed to do its job.'" *Id*. (quoting *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350 (CA Fed. 1984). Accordingly, "[u]nder the Federal Circuit's reading of § 282, a defendant seeking to overcome this presumption must persuade the factfinder of its invalidity defense by clear and convincing evidence." *Microsoft*, 564 U.S. at 100.

C. Eligibility analysis under *Alice's* two-step inquiry.

"[A]ny new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may be eligible for a patent. 35 U.S.C. § 101. The Supreme Court, however, has identified three exceptions: "laws of nature, physical phenomena, and abstract ideas," *Diamond v. Chakrabarty*, 447 U.S. 303, 308-309 (1980), because "patent protection does not extend to claims that monopolize the 'building blocks of human ingenuity'" or

otherwise protect "the basic tools of scientific and technological work." *Berkheimer*, 881 F.3d 1360 at 1366 (quoting *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 529 U.S. 576, 589 (2013).

Courts have been warned to "tread carefully in construing this exclusionary principle lest it swallow all of patent law." *Alice*, 573 U.S. at 217 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012). This caution stems from the logic that, "[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws or nature, natural phenomena, or abstract ideas." *Id*.

The two-step test established by *Mayo Collaborative Servs.*, 566 U.S. at 66 and *Alice*, 573 U.S. at 208 governs the patent-eligibility analysis.

1. Step One.

"At *Alice* step one, [the Court] determine[s] whether the claims are directed to patent ineligible subject matter." *Contour IP Holding LLC v. GoPro, Inc.*, 2024 U.S. App. LEXIS 22825, at *11 (Fed. Cir. 2024). The Court examines "'the focus of the claimed advance over the prior art.'" *Id*. (citing *Affinity Labs of Tex., LLC v. DIRECTTV, LLC*, 838 F.3d 1252, 1257 (Fed. Cir. 2016). The Federal Circuit analyzes the "'basic character'" of the claimed subject matter. *Id*. (citing *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1361 (Fed. Cir. 2023)).

But in considering step one, this Court has cautioned district courts not to "describ[e] the claims at such a high level of abstraction and untethered from the language of the claims," such that the description is "divorced from the claim language itself," because doing so "all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1337; *Contour IP Holding LLC*, 2024 U.S. App. LEXIS 22825, at *11.

"To determine the focus of the claimed advance at *Alice* step one, [the Court] look[s] to whether the claims are directed to 'a specific means or method that improves the relevant technology' rather than simply being directed to 'a result or effect that itself is the abstract idea.'" *Id*. (citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016)). In other words, only "[w]hen a claim 'abstractly cover[s] results' without regard to a specific process or machinery for achieving those results, it creates preemption concerns because it 'would prohibit all other persons from making the same thing by any means whatsoever.'" *Id*. (citing *McRO,* 837 F.3d at 1314).

In cases involving software, *Alice* step one often "turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies [as] an abstract idea for which computers are invoked merely as a tool." *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1306-1307 (Fed. Cir. 2020)(citing *Customedia Techs., LLC v. Dish Network Corp.*,

951 F.3d 1359, 1364 (Fed. Cir. 2020)). The Federal Circuit has "routinely held software claims patent eligible under Alice step one when they are directed to improvements to the functionality of a computer or network platform itself." *Id*. at 1307 (collecting cases).

Likewise, where a claimed invention "achieve[s] an improved technological result in conventional industry practice," it is not abstract. *McRO*, 837 F.3d at 1316.

If the claims are found not directed to an abstract idea, the claims pass muster under § 101 and the inquiry ends. *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016).

2. Step Two.

According to the Federal Circuit's decision in *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1290 (Fed. Cir. 2016), the relevant analysis for *Alice* step 2 centers on unconventionality of the claimed functionalities or features of a claim. The Federal Circuit in *Amdocs* observed that "we have found eligibility when somewhat facially-similar claims . . . recite a sufficient inventive concept under step two—particularly when the claims solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner." *Id*. at 1300.

This step requires courts to "consider the elements of each claim both

individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application." *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014). Indeed, "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *Bascom Global Internet Servs., Inc. v. AT&T Mobility, LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

A claim that is "narrowly drawn not to preempt any and all generic enhancement of data in a similar system, and [that] does not merely combine the components in a generic manner, but instead purposefully arranges the components in a distributed architecture to achieve a technological solution to a technological problem specific to computer networks," is patent eligible. *Amdocs (Isr.) Ltd.*, 841 F.3d at 1301; *DDR Holdings, LLC*, 773 F.3d at 1259 ("the claimed solution amounts to an inventive concept for resolving this particular Internet-centric problem, rendering the claims patent-eligible.").

Further, though conventionality and obviousness under §103 are *not* the same (conventionality is a narrow and strict concept), conventionality too should not be determined using hindsight. Indeed, in *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966), the Supreme Court recognized the danger of hindsight bias in the context of comparing patents to prior art. This Court highlighted the Supreme Court's concern in *Eurand, Inc. v. Mylan Pharms., Inc.*, 676 F.3d 1063, 1079 (Fed.

Cir. 2012), noting "judicial hunches" are encouraged by hindsight bias. In other words, "'decision-makers unconsciously let knowledge of the invention bias their conclusion concerning whether the invention was obvious.'" *Id*. (citation omitted). Thus, "knowing that the inventor succeeded in making the patented invention, a fact finder might develop a hunch that the claimed invention was obvious, and then construct a selective version of the facts that informs that hunch." *Id*.

This Court should apply the same logic to its analysis of conventionality under 35 U.S.C. § 101. That is, knowledge of the invention as it exists today *should not* qualify as indicia that the inventions claimed must have been conventional as of the date of the patents. As this Court stated, such hindsight biases are "precisely why fact finders must withhold judgment on an obviousness challenge until it considers all relevant evidence." *Id*. Thus, just like obviousness, the Court should determine conventionality only after considering all relevant evidence, including evidence derived from prior art, if any, put forth by the patent challenger.

II. Step One: The District Court erred in holding that the claims were directed to an abstract idea.

The District Court failed to evaluate the technical enhancements claimed by the Patents-in-Suit. *MyMail, Ltd. v. ooVoo, LLC*, 934 F. 3d 1373, 1379 (Fed. Cir. 2019) ("patent eligibility requires a full understanding of the basic character of the claimed subject matter"). The District Court simply adopted Shopify's over-

generalized "combining an order form with a product advertisement" analogy. Appx0011. But at *Alice* step one, "it is not enough . . . to merely trace the invention to some real-world analogy;" instead, the Court "must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Data Engine Technologies LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018) (quoting *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016)).

Here, the District Court recognized that the Patents-in-Suit are directed to "improv[ing] the effectiveness of web widgets to distribute content widely and enable merchants to utilize social media to engage customers," but then it erroneously determined that "**the idea of enhancing web widgets does not constitute an advance in computer functionality**" to pass muster under *Alice* step one. Appx0011. This is wrong.

To be sure, the Federal Circuit looks to "whether the claims are directed to 'a specific means or method that improves the relevant technology.'" *Contour IP Holding LLC*, 2024 U.S. App. LEXIS 22825, at *12 (citing *McRO*, 837 F.3d at 1314). In other words, a claim is not abstract where it "achieve[s] an improved technological result in conventional industry practice." *McRO*, 837 F.3d at 1316.

Accordingly, "enhancing web widgets" with a novel Widget Builder, Embedding Element, and Store Display Element *does* constitute means and methods to improve the relevant technology—web widgets. *Koninklijke KPN N.V.*

v. Gemalto M2M GmbH, 942 F.3d 1143, 1150 (Fed. Cir. 2019) (claims are patent eligible when "they are directed to a non-abstract improvement in an existing technological process); *compare Contour IP LLC*, 2024 U.S. App. LEXIS 22825, at *12 (only "[w]hen a claim 'abstractly cover[s] results' without regarding to a *specific process* or machinery for achieving those results, it creates preemption concerns.") (citation omitted).

The District Court focused only on a sub-part of the last element of each claim wherein the web widgets were configured to facilitate an e-commerce transaction. Appx0047 (18:57-60) ("the electronic commerce store configured to facilitate payment processing related to a purchase of the item."). But there is much more to the claimed inventions than the sub-part of the last element in the claims the District Court relied upon. The DKR Patents do not purport to monopolize e-commerce itself; instead, the claimed invention comprises novel *means* for developing, integrating, and updating web widgets that allow widget creators to "create an inventory of 'web widgets' 316, buy buttons 310, buy links 312 and preview clips 314," which, in these embodiments, are used to conduct an e-commerce transaction. Appx0072 (8:1-2).

As noted above, the DKR Patents claim at least three separate improvements to web widget capabilities: (i) the way an enhanced widget is built (i.e., Widget Builder); (ii) the way the enhanced widget is then embedded into a website or

social media platform (i.e., Embedding Element); and (iii) the way this widget is used to make online purchases (i.e., Store Display Element). These are technical enhancements to web widgets not found in the prior art. *Koninklijke KPN N.V.*, 942 F.3d at 1151 (holding patent eligible claims that "sufficiently capture the inventors' asserted technical contribution to the prior art by reciting how the solution specifically improves the function of prior art").

For example, related to the Embedding Element, claim 1 of the '785 Patent recites, among other things, the concept of having the enhanced widget (referred to as an "embeddable buy button") execute on a separate server from the web site into which the buy button is embedded. Specifically, claim 1 recites,

> generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and
>
> embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

Appx0047 (18:48-56).

Likewise, claim 7 of the '785 Patent recites,

> a first server operated by a buy button provider;
>
> a database communicatively coupled to the first server, . .
>
> an embeddable buy button builder executed by the first server . . . wherein the embeddable buy button is

> configured to be embedded into a web site by the buy button provider . . .; and
>
> a second server configured to execute the web site, wherein the buy button provider controls operation of the embeddable buy button of the web site, and wherein the buy button provider controls operation of the electronic commerce store on the web site upon selection of the hyperlink.

Appx0048 (19:12-31).

This concept of having the enhanced widget executing on a separate server from the website is a patent eligible (and novel) solution. *Contour IP Holding LLC*, 2024 U.S. App. LEXIS 22825, at *12 ("specific means or method that improves the relevant technology") (citation omitted). Designing and deploying the embeddable buy button on its own independent server improves web widget technology because, among other things, it provides for a widget having universal compatibility.

For instance, before the priority date of the DKR Patents, each widget had to be tailored and configured to operate within the HTML structure of a given website. Appx0039 (1:62-65). In other words, a widget creator would need to configure a widget to operate within the HTML structure of the Facebook website but re-configure that widget to be compatible, and perform tasks, within the CNN website HTML structure. Any changes to the web widget or to the content of the web widget had to be made in succession to ensure that all changes were

compatible with various hosting websites.

This issue, however, is solved by having the web widget execute on a separate server from the website. This is a technical solution and ensures that the widget is not dependent on the HTML structure of a given website; the web widget operates on its own HTTP platform and is merely displayed on a separate server—the host website or social media platform. Appx0042 (8:49-56), Appx0044 (12:50-57). Therefore, the Embedding Element allows widget creators to apply changes to widgets universally.

Another method that improves the web widget is the Widget Builder. The DKR patents recite a Widget Builder operating on its own server, with a host of novel tools, to create and embed the widgets. Claim 1 of the ’995 Patent recites,

> a widget builder resource executing on the application server, the widget builder resource configured to:
>
> receive the image and metadata from the storage resource; and
>
> generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and
>
> wherein the application server is configured to embed the product listing into a web site and into a social media network . . .

Appx0077 (18:49-59).

The Widget Builder works in collaboration with the Embedding Element to

solve the need for widget creators to manually adapt, update, or change widgets within and across websites and social media platforms. In other words, the claimed Widget Builder is coupled with the independent server operation, enabling widget creators to pull data from a live inventory to automatically implement and update that data in dynamic web widgets placed across foreign HTML structures. Appx0079, Appx0040 (4:40-47), Appx0043 (9:9-12), Appx0044 (11:67-12:3), Appx0044 (12:9-15).

A main component of the Widget Builder is the "compilation builder." "The compilation builder is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system 202." Appx0044 (11:28-31). In other words, the claimed Widget Builder is able to pull different multi-modal compilations from a live inventory to build a custom web widget. The Widget Builder then enables distribution of the custom compilation, and universal updates across HTML structures. "[E]ach content compilation created using the compilation builder 410 is associated with a web widget that will be distributed using the web distribution service 216 to customers on the Internet, mobile communications networks, or other computer communications." Appx0072 (8:50-56).

Moreover, before the priority date of the DKR Patents, the widget creator had to manually alter each widget by downloading, uploading, and applying data to

each individual web widget. The DKR Patents introduce a novel Widget Builder, coupled with a compilation builder, that solves this problem.

Now, a widget creator can access a theoretically unlimited number of multi-model content inventories and connect those inventories with web widgets already installed in HTML structures across the internet and social media platforms. Appx0042 (8:16-21, 26-39), Appx0044 (11:67-12:3), Appx0047 (18:43-47). This is due, in part, to the Widget Builder operating on a server independent of the host HTML server, and on the same server as the widget itself. Appx0042 (8:49-56), Appx0044 (12:50-57).

Accordingly, the widget creator may use the Widget Builder to continuously update the web widget with new or additional inventories without re-coding an individual widget, which no longer requires widgets being "down for maintenance" or involving the host website.

Any *one* of these improvements to web widgets represents a technological advancement, rather than "a process or system that qualifies [as] an abstract idea for which computer are invoked merely as a tool." *Uniloc USA, Inc.*, 957 F.3d at 1303. Improvements to online web widgets is an invention that *cannot* have a pre-computer analog. *Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 Fed. Appx. 1001, 1004 (Fed. Cir. 2017) (analyzing claims with no "pre-electronic [] analog.").

The District Court failed to meaningfully analyze these technical

enhancements to web widgets. The District Court instead opined that the claims "use conventional computer technology as a tool to facilitate e-commerce," relying on *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) for the proposition that "conventional computer components, such as a database and processors, operating in a conventional manner . . . do not confer patent eligibility." Appx0011. But the District Court ignored that the DKR Patents claim *nonconventional* configurations and operations of computer components to achieve these nonconventional results.

The District Court's erroneous interpretation of *Alice* step one is demonstrated by its cited caselaw. The District Court relies principally on *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020). In *Customedia Techs*, this Court determined that "improving a user's experience while using a computer application is not, *without more*, sufficient to render the claims directed to an improvement in computer functionality." *Id*. But in *Customedia Techs*, the claims recited a "'data delivery system for providing automatic delivery of . . . specifically identified advertising data'" by merely "dedicating a section of the computer's memory to advertising data." *Id*. at 1363. There was no improvement to the means or methods of any single technology. *Id*. at 1093 ("The claims . . . do not solve any technological problem.").

That is a far cry from the claims of the DKR Patents, which claim at least

three specific enhancements to web widget technology itself. *Adasa Inc. v. Avery Dennison Corp.*, 55 F. 4th 900, 908 (Fed. Cir. 2022) ("If the focus of the claim is a specific and concrete technological advance, for example an improvement to a technological process . . ., our inquiry ends and the claim is eligible."); *Koninklijke KPN N.V.*, 942 F.3d at 1151 ("holding claims eligible that "recite a sufficiently specific implementation . . . of an existing tool . . . that improves the functioning of the overall technological process").

Accordingly, the claims of the DKR patents are not directed to the abstract idea of a "magazine order form." The claimed inventions are instead directed to technological improvements to pre-existing web widgets. Thus, the DKR patents are patent-eligible, and the District Court should be reversed.

At the very least, the District Court's inquiry—whether the enhancements claimed by the Patents-in-Suit constitute an advance in computer functionality—is an underlying factual question reserved for the factfinder. *Berkheimer*, 881 F.3d at 1368 (patent eligibility, as a question of law, is based on underlying factual findings, including "whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field.").

Neither Shopify nor the District Court analyzed whether the claims of the DKR Patents—including their *admitted* "technical enhancements"—were well-understood, routine and conventional to a person of ordinary skill. *Id*. ("Whether a

particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art.").

Instead, the District Court disregarded DKR's accompanying expert declaration and stood in the shoes of the factfinder to determine that although the DKR Patents admittedly claim, "technical enhancements," those technical enhancements did not rise to the level of an advance in computer technology. Appx0008.

The District Court was not in a position to make that determination. This was improper and reversible error. *Id*. ("While patent eligibility is a question of law, the District Court erred in concluding there are no underlying factual questions to the § 101 inquiry."). For this reason alone, the District Court committed reversible error.

III. Step Two: The District Court erred in holding that the claims did not contain an inventive concept.

The District Court failed to properly analyze the DKR Patents under *Alice* step two, determining that the claims "utilize generic computer components (such as servers) in a conventional way, which is insufficient to elevate the invention to 'significantly more' than the underlying abstract idea." Appx0014.

In so holding, the District Court offered only a generalized statement regarding the Embedding Element, concluding that it did "not agree that merely adding additional devices to increase efficiency is 'unconventional.'" Appx0014.

This is a severe lack of analysis of the technical enhancements claimed by the DKR Patents.

To arrive at its result, the District Court ignored "the elements of each claim both individually and as an ordered combination." *DDR Holdings, LLC*, 773 F.3d at 1255. As this Court has directed, a claim that "purposefully arranges the components in a distributed architecture to achieve a technological solution to a technological problem specific to computer networks" is patent eligible under *Alice* step two. *Amdocs (Isr.) Ltd.*, 841 F.3d at 1301. This Court has "found eligibility when somewhat facially-similar claims . . . recite a sufficient inventive concept under step two—particularly when the claims solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner." *Id*.

The Federal Circuit's decision in *DDR Holdings*, 773 F.3d at 1257 is dispositive of the issue in DKR's favor. Indeed, the DKR claims are similar to the claims in *DDR Holdings* because they both purport to solve similar technological problem but with differing means and methods. In fact, as Shopify is well aware, the same patent this Court upheld in *DDR*—U.S. Patent No. 7,818,399—was later asserted against Shopify too. *See generally DDR Holdings, LLC v. Shopify Inc.*, Case No. 1:17-cv-00501-CFC (D. Del. 2017). Unsurprisingly, just like in this case, DDR's infringement allegation centered on Shopify's e-commerce platform

offering a product webpage to complete an e-commerce transaction. *Id*. at Dkt. 1.

This is because, as noted above, in the early 2010s, the American boom of e-commerce and social media found innovators scrambling to create systems and methods to revolutionize social commerce. But online shopping was kludgy. Customers were re-routed—often multiple times—to get from a single link or advertisement on a website to a checkout page to complete a transaction.

The technological challenge was to provide an optimal method for allowing a visitor to engage in an e-commerce transaction on a web site or social media platform without being rerouted from the host website—*i.e.*, "rather than [the website] instantly losing visitors to the third-party's website." *DDR Holdings*, 773 F.3d at 1257.

In a 2014 GreekWire interview,[3] Mr. Robb succinctly described this technological problem:

> If online retailers want to reach their target audiences, they need to grab their attention where they're already spending time – in their social media feeds. We tried to sell things through social media ourselves and realized that there wasn't a good solution; most of the existing tools involve tables or links that are hidden away in pages. We don't think social commerce should be redirects or one app for this platform and another for a different platform. We contemplated

[3] Taylor Soper, *Startup Spotlight: Shoppost lets retailers sell products in social media newsfeeds*, GreekWire (July 3, 2014), https://www.geekwire.com/2014/shoppost/

> something that would be easy-to-use, scalable and still keep shoppers on social media.

Id.

The inventors in *DDR* and DKR claimed their respective technical solutions.[4]

DDR's solution was a composite web page that "[o]n activation of a hyperlink on a host website—such as an advertisement for a third-party merchant—instead of taking the visitor to the merchant's website, the system generates and directs the visitor to a composite web page that displays product information from the third-party merchant, but retains the host website's 'look and feel.'" *DDR Holdings*, 773 F.3d at 1249-50. Thus, "the host website can display a third-party merchant's products, but retain its visitor traffic by displaying this product information from within a generated web page that 'gives the viewer of the page the impression that she is viewing pages served by the host' website." *Id* at 1250.

DKR's solution, on the other hand, was to revolutionize pre-existing web widget technology, which was limited to "discrete applications of limited functionality" at the time, to enable an e-commerce transaction within the host

[4] Indeed, the patent this Court deemed eligible in *DDR*—U.S. Patent No. 7,818,399—was granted in late 2010, while DKR's U.S. Patent Application No. 12/852,090—parent patent of the Patents-in-Suit—was filed earlier that same year.

website. Appx0039 (1:65-2:10). In other words, DKR invented the Embedding Element, the Widget Builder, and the Store Display Element to transform an otherwise discrete application into a solution to the problem of retaining website visitors.

Mr. Robb's solution amounted to the "Shoppost" platform—the culmination of the Patents-in-Suit. Appx0215 (¶4). Shoppost enabled retailers to design and integrate interactive posts (i.e., web widgets) in social media newsfeeds and websites to sell products without re-routing the customer to another website.[5] In the same GreekWire interview, Mr. Robb highlighted Shoppost (*i.e.*, the Patents-in-Suit) as an innovative solution to the technological problem:

> Shoppost is able to really bring social commerce to the level of what it's meant to be – shopping IN social media, not being lead away from it or having to go through multiple clicks just to get more info.

Id.

Indeed, DKR's invention went a step further than *DDR*. The DKR claims revealed that there was no longer a need to create an entirely separate "hybrid web page" with the "look and feel" of the host web page that was designed to "give the impression," *i.e.*, "fool" the visitor into thinking they remained in, or connected to,

[5] Taylor Soper, *Startup Spotlight: Shoppost lets retailers sell products in social media newsfeeds*, GreekWire (July 3, 2014), https://www.geekwire.com/2014/shoppost/

the host webpage. Now, with DKR's technical enhancements to web widgets, visitors could *truly* conduct an e-commerce transaction within the host web page without being rerouted.

The District Court agreed that the claims in *DDR* and DKR equally provided a "means for a website visitor to complete an e-commerce transaction in one webpage." Appx0012. But then the District Court determined that the claims of the DKR Patents were distinct from those in *DDR* because they were "'recited too broadly and generically to be considered sufficiently specific and meaningful applications of their underlying abstract idea[].'" Appx0012 (quoting *DDR Holdings*, 773 F.3d at 1256). The District Court was further "unpersuaded by DKR's argument that the claims disclose a manner of utilizing conventional components in a non-conventional, non-generic arrangement." Appx0014. This is wrong.

As demonstrated below, the various elements recited in the DKR claims use many of the same generic computer components as in *DDR*, but similarly arrange those components in a non-generic way to achieve technological advances such that they pass muster under *Alice* step two. Holding otherwise would completely undermine this Court's analysis in *DDR*.

DDR - Patent No. 7,818,399	DKR Patents

(1) A method of an outsource provider serving web pages offering commercial opportunities, the method comprising:	A method for embedding a buy button for an electronic commerce store, comprising: Appx0047 (18:41-43).
(a) automatically at a server of the outsource provider, in response to activation, by a web widget browser of a computer user, of a link displayed by one of a plurality of first web pages, recognizing as the source page the one of the first web pages on which the link has been activated; (ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and	generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and Appx0047 (18:49-51). receive an indication that the clickable buy button has been selected by a remote computing device; Appx0107 (18:60-61).
(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one another;	embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider, Appx0047 (18:52-55). a second server configured to execute the web site, wherein the buy button provider controls operation of the embeddable buy button on the web site, and wherein the buy button provider controls operation of the electronic commerce store on the web site upon selection of the hyperlink. Appx0048 (19:26-31).

(b) automatically retrieving from a storage coupled to the server pre-stored data associated with the source page; and then	receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale of the electronic commerce store; Appx0047 (18:43-47).
(c) automatically with the server computer-generating and transmitting to the web browser a second web page that includes: information associated with the commerce object associated with the link that has been activated, and	a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product, Appx0137 (18:43-47). execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (1) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button Appx0137 (18:50-54).

Indeed, the DKR claims (right) provide *more* detailed instructions on *how* to implement technical enhancements to web widgets using generic components than *DDR's* claims similarly describing how to implement the hybrid web page.

Simply put, like in *DDR*, "the claims at issue here specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of

a hyperlink." *DDR Holdings*, 773 F.3d at 1258. This Court has determined that these types of claimed solutions amount to an inventive concept for "resolving the particular Internet-centric problem, rendering the claims patent-eligible." *Id*.

More specifically, like in *DDR*, the Store Display Element solves the problem of being instantly transported away from a host website after clicking a hyperlink. The Store Display Element solves the technology-based problem of incorporating an e-commerce platform within a web widget—a technology that was *not* otherwise available in the prior art. Using web widgets to enable "one-stop shop" e-commerce that allows a consumer to conduct a complete transaction quickly and without being re-routed to another platform (*i.e.*, website) is certainly an improvement to the capabilities of web widget technology.

Claims 1, 2, and 3 of the '785 patent provide an example of this claimed feature:

> 1.
> ....
> wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.
>
> 2. The method of claim 1, wherein the embeddable buy button is configured to be embedded into different web sites.
>
> 3. The method of claim 1, wherein the electronic

> commerce stores includes a checkout screen that allows a purchase of the item using a transaction processing service operated by the buy button provider.

Appx0047 (18:41-61), Appx0047 (18:62-63), Appx0047 (18:64-67).

The Store Display Element solved the "significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content . . . to engage in purchase transactions and other form of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." Appx0039 (2:9-18).

The Embedding Element in the '785 patent specifies how interactions with the internet are manipulated to reach a desired result—creating widgets on a first server independent of the host on a second server. Before the priority date of the DKR Patents, each widget had to be tailored and configured to operate within the HTML structure of a given website. The unconventional (and novel) use of separate servers for placement of a web widget enables widgets to be placed within host websites regardless of HTML structure, and otherwise enables widget creators (using the Widget Builder) to universally implement and update such widgets. Appx0039 (1:58-65).

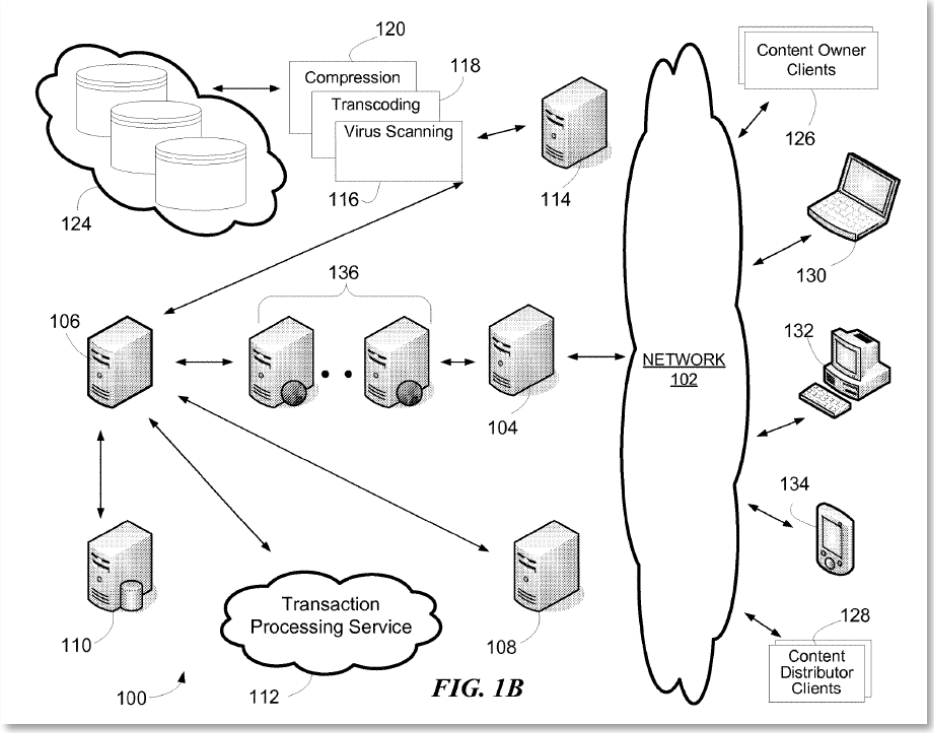
Claim 1 of the '785 patent recites this specific configuration:

> A method for embedding a buy button for an electronic commerce store comprising:
>
> receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;
>
> generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and
>
> embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

Appx0047 (18:41-61).

This technical and structural solution conferred several advantages. The patents note that by having a widget operate on its own server, "a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties, or elect to purchase the multimedia content packaged with the web widget" from within the website itself. Appx0041 (5:40-43). In other words, this novel approach provided a key enhancement in the form of universal compatibility—*i.e.*, platform independence for web widgets. After DKR's invention, widgets are no longer dependent on the HTML structure of a given website because the web widget operates on its own HTTP platform and is

merely displayed on a separate server. Appx0047 (18:41-61).



Appx0024 (Figure 1B).

Figure 1B above is an example embodiment of the operating environment for the multimedia content distribution system using several distinct servers. Figure 1B demonstrates which components operate on separate servers to enable these multiple novel solutions to create, implement, and update web widgets across HTML platforms. "In this operating environment, one or more web servers have been added as independent computing resources for use in receiving and responding to content related requests from various client devices 130, 132, 134." Appx0041 (5:57-60). "The web servers executed on the application server 106 are used to respond to requests received from web widgets, button, links or preview

clips executed or selected in browsers running on the consumer client devices 130, 132, 134." Appx0040 (4:35-39). A claim that is "narrowly drawn not to preempt any and all generic enhancement of data in a similar system, and [that] does not merely combine the components in a generic manner, but instead purposefully arranges the components in a distributed architecture to achieve a technological solution to a technological problem specific to computer networks," is patent eligible. *Amdocs (Isr.) Ltd.*, 841 F.3d at 1301.

Additionally, this configuration change allows widget creators to quickly and efficiently apply universal changes to widgets and distribute them in a viral manner. The patents note, "[t]he buy links are [independent] Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise." Appx0042 (8:50-56).

The Widget Builder is another unconventional technological improvement over the prior art. The Widget Builder incorporates the Embedding Element and Store Display Element to communicatively couple "a web widget so that the selection or clicking on a button, link, or preview clip causes the activation of a web widget." Appx0041 (6:29-31). The DKR patents recite a Widget Builder

operating on its own server (*i.e.*, the widget server) and independent of the host server to create and embed the widgets. A Widget Builder resource component 300 was designed to host inventories (full catalog widget 302, single release widget 304, single song widget 306, and merchandising widget 308), operated on an independent server coupled with the widget, to create buy buttons 310, buy links 312, and preview clips 314. Appx0026 (Fig. 3). The Widget Builder works in collaboration with the embedding element to solve the need for widget creators to manually adapt, update, or change widgets within and across websites.

At the time of invention, DKR was aware that "[c]urrent methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner." Appx0021 (1:58-60).

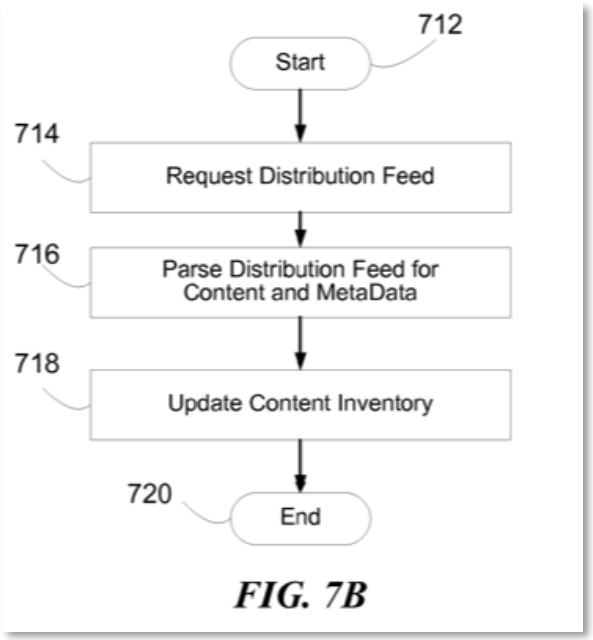


FIG. 7B

Appx0030 (Fig. 7B).

Figure 7B represents a novel simplification offered by the Widget Builder and independent HTML structure operation—"requesting and updating content inventories using distribution feeds." Appx0044 (11:53-55). "In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships." Appx0044 (11:58-61). "[O]nce a distribution feed is received it is parsed for content and metadata, and shown at step 716, and the content inventory or inventories maintained by content owners are updated, as shown at step 718. Upon receipt and updating of one or more content inventories, the process ends." Appx0044 (11:67-12:5).

Nothing more is required of the widget creator to update the content

inventory of a web widget. In other words, the widgets are universally and easily adaptable.

"[B]uy buttons 310 are generated by content owners using the Widget Builder resource component 300…" Appx0042 (8:40-44). A content owner may use the Widget Builder to connect a preview clip, created in the Widget Builder resource, with the product. "The preview clips 314 created in the Widget Builder resource component 300 are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices 130, 132, 134 to enable those consumers to preview multimedia content . . . or to further distribute to third parties in the social networks of these consumers or in other online communities." Appx0042 (8:56-67).

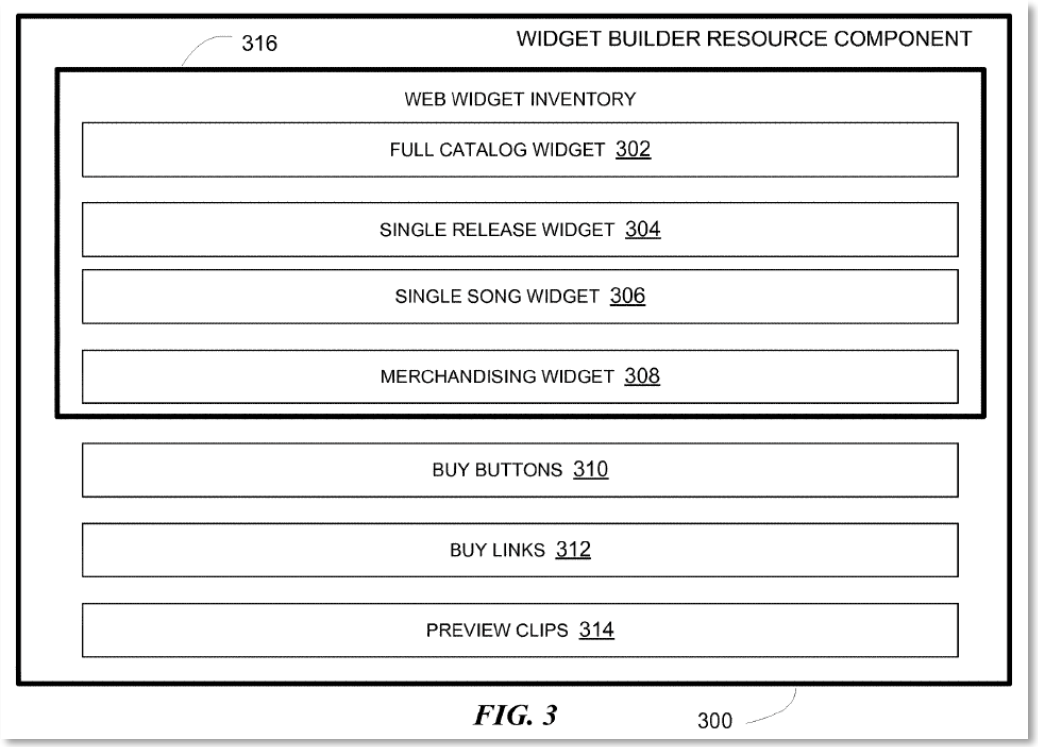


FIG. 3

Appx0026 (Fig. 3).

The Widget Builder operates in connection with a multipurpose content management component, providing widget builders with the "metadata editor," Image Content Uploader," "Audio Content Uploader," "the compilation builder," and the "content downloader." Appx0043 (9:4-47). These technical features are not found in the prior art. And the District Court did not even make this analysis; the court failed to compare these technical enhancements to prior art and what could be considered conventional.

The metadata editor "enables content owners to edit the metadata associated with multimedia content files," such as with a "Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID)." Appx0043 (9:12-18), Appx0044 (11:44-46). The Image Content Uploader "uploads, store[s], and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets," which may include, for example, GIF, JPEG, and TIF files Appx0043 (9:18-25). The Audio Content Uploader is "used for uploading audio files," which may include WAV and MP3 files. Appx0043 (9:24-28).

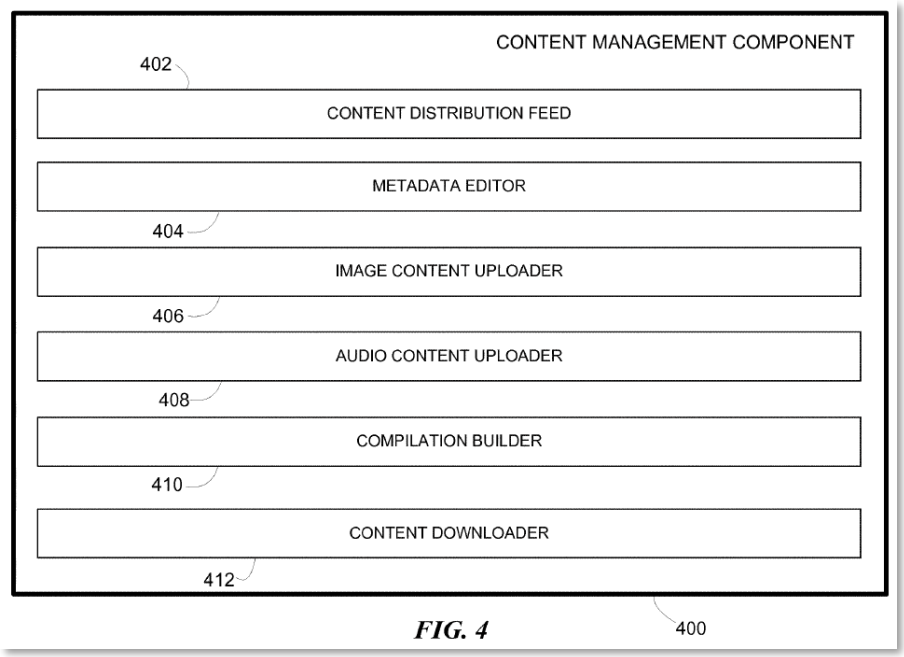


FIG. 4

Appx0027 (Fig. 4).

Accordingly, the Embedding Element, Widget Builder, and Store Display Element are each examples of the technical inventive concepts claimed by the DKR patents. Neither Shopify nor the District Court provide any analysis explaining how these technical improvements do *not* qualify as an inventive concept required under *Alice* step two. That was reversible error.

As mentioned above, the District Court recognized the technology-based improvements of the claimed inventions. But after buying into Shopify's rhetoric and counsel's statements that courts routinely invalidate patents under §101 on motions to dismiss, and that the Patent Office regularly issues bogus patents, the District Court simply adopted Shopify's "magazine order form" analogy and determined the patents contained *not a single* inventive concept. Not so.

This Court, however, has already dispelled over-generalized analogies for technological improvements like these. In *DDR*, the defendant argued that *DDR's* patents claimed no more than the abstract idea of a "store within a store." *DDR Holdings*, 773 F.3d at 1256.

But this Court explained that while the "store within a store" concept may have been well-known by the relevant timeframe, "that practice did not have to account for the ephemeral nature of an Internet 'location' or the near-instantaneous transport between these locations made possible by standing Internet communication protocols, which introduces a problem that does not arise in the 'brick and mortar' context." *Id*. ("There is, however, no possibility that by walking up to this kiosk, the customer will be suddenly and completely transported outside the warehouse store and relocated to a separate physical venue associated with the third party—the analog of what ordinarily occurs in 'cyberspace' after the simple click of a hyperlink.").

The same is true here. Though well-known by the relevant time frame, the "magazine advertisement order form" did not have to account for, among other things, the ephemeral nature of an internet location and the instantaneous transport between locations made possible by standing Internet protocols. *Id*.

In Shopify's analogy, there is no possibility that—by filling out an order form attached to a magazine advertisement—the customer will be "suddenly and

completed transported" into a separate physical venue associated with the third party merchant. And also, unlike the "brick and mortar" (*i.e.*, physical reality) magazine order form, the DKR Patents enable the consumer to conduct a *completed* e-commerce transaction with the ability to instantaneously access and download the multimedia content—further demonstrating that this technology cannot have a "pre-computer analogue." In other words, a magazine advertisement order form did not allow the consumer to instantaneously receive the product.

That is a solution only available due to the "near-instantaneous" nature of the inventors' improved web widget and internet capability and novel configurations. The District Court failed to consider or explain away this Court's "store within a store" analysis as it applied to Shopify's over-generalized "magazine order form" analogy. *Id*. ("It is this challenge of retaining control over the attention of the customer in the context of the Internet that the [DKR Patent's] claims address.").

The District Court fell into Shopify's trap—the proposition that preserving DKR's patents would provide DKR the keys to the kingdom of all e-commerce on the internet, *i.e.*, any and all "buy buttons." Appx0272. But that is not the case. The DKR Patents "do not attempt to preempt every application of the idea of" increasing sales by placing a buy button next to a product advertisement, "or any other variant suggested by" the District Court or Shopify. *DDR Holdings*, 773 F.3d

at 1259. Instead, the "claims include 'additional features' that ensure the claims are 'more than a drafting effort to monopolize" e-commerce or web widgets themselves. *Id*.

The District Court's failure to evaluate and consider the technical improvements of DKR's claimed inventions prevented the court from understanding the "'something more' to allow the Asserted Patents to survive step two." Appx0014. This Court has determined that facially-similar claims that solve a facially-similar technological problem are patent eligible:

> To be sure, the DDR claims do not recite an invention as technologically complex as an improved, particularized method of digital data compression. But nor do they recite a commonplace business method aimed at processing business information, applying a known business practice to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functional and conventional network operations, such as the claims in *Alice, Ultramercial, buySAFE, Accenture,* and *Bancorp*. The claimed system, although used by business, is patent-eligible under § 101.

DDR Holdings, 773 F.3d at 1259.

At the very least, the District Court's determination—that "the claims were recited too broadly to be specific and meaningful applications of their underlying ideas"—is an underlying factual question reserved for the factfinder. Appx0012.

A District Court commits reversible error in concluding there are no underlying factual questions to the § 101 inquiry when the "parties dispute whether [] improvement[s] to computer functionality are captured in the claims."

Berkheimer, 881 F.3d at 1369; 1370 ("At this stage of the case, however, there is at least a genuine issue of material fact in light of the specification regarding whether claims [are written] in an inventive manner that improves these aspects of the disclosed [] system.").

Neither Shopify nor the District Court analyzed the technological improvements to recited web widgets as described in the claims or the specification. To the extent the District Court, or this Court, question whether the DKR claims meaningfully capture the improvements to web widget technology as described in the patent specification, that is an inquiry reserved for the factfinder and should not be resolved on a motion to dismiss.

In sum, the claims of the DKR patents contain several distinct inventive concepts that pass muster under *Alice* step two. Thus, the DKR patents are patent-eligible. The District Court should be reversed.

IV. The District Court failed to consider DKR's expert declaration.

The District Court committed reversible error when excluding DKR's expert declaration by Dr. Arthur Keller, which accompanied DKR's amended complaint.

The District Court noted that "if a district court considers evidence outside the pleadings, it must normally convert the 12(b)(6) motion into a Rule 56 motion for summary judgement." Appx0008 (quoting *United States v. Ritchie*, 342 F.3d 903, 907 (9th Cir. 2003)). The district reasoned that DKR did not provide a compelling

reason for the court to do so here. *Id*.

But during the District Court's hearing, Judge Vera asked why the District Court, who is not an expert, is charged with undoing patents that examiners granted: "What's—what's going on that requires the Court, which is not an expert, to then undo it when patent examiners get provided all this and say, yes, it qualifies?" Appx0342-Appx0343. Judge Vera further questioned whether it was most efficient and proper for the District Court to decide patent eligibility at the pleading stage without experts. Appx0370 ("Well, one thing I'm surprised at . . . is that courts seem to go through all of this on a preliminary pleading motion and decide all of this without experts reports and—and more.").

Accordingly, as the District Court acknowledged that the question of patent eligibility would be better addressed with the assistance of experts. Dr. Keller's declaration was probative on the issue subject-matter eligibility and the factual issues that underlie a Section 101 analysis. The District Court abused its discretion by rejecting Dr. Keller's declaration.

Though the "Ninth Circuit ha[s] held that 'affidavits and declarations . . . are not allowed as a pleading exhibit unless they form the basis of the complaint," *In re Mannkind Sec. Actions*, 835 F. Supp. 2d 797, 820-21 (C.D. Cal. Dec. 16, 2011), the Central District of California has held that "there exists 'no inflexible rule' governing the sort of 'written instruments' that may be attached to a pleading." *Id*.

To be sure, Dr. Keller's declaration *does* form a basis for the allegations in DKR's complaint as it provides supporting evidence that the DKR patents are indeed directed to patent-eligible subject matter, which is a *requirement* to bring suit for patent infringement. In other words, especially in the context of a § 101 motion to dismiss at the pleading stage, Dr. Keller's declaration is critical evidence supporting patent eligibility, which forms the basis of the complaint. To hold that a § 101 expert declaration cannot qualify as forming a basis of a patent infringement complaint, but simultaneously grant a motion to dismiss for lack of patent eligibility, is self-contradictory. Accordingly, Dr. Keller's declaration satisfies the Ninth Circuit's pleading exhibit requirement and the District Court should have considered it.

Otherwise, district courts . . . [have] denied motions to strike [expert reports] where the expert reports were not essential to the Court's decision and were used 'merely to buttress' the plaintiff's contentions." *In re Herbalife, Ltd. Sec. Litig.*, 2015 U.S. Dist. LEXIS 186970, at *2 (C.D. Cal. Jul. 28, 2015); *see also Cole v. Hunter*, 2014 U.S. Dist. LEXIS 8796, at *4 (N.D. Tex. Jan. 24, 2014).

Thus, the District Court had the option to include the Dr. Keller declaration as a written instrument integral to the complaint or convert Shopify's motion to dismiss into a Rule 56 motion. The District Court ignored that Dr. Keller's declaration was properly attached to and incorporated within the First Amended

Complaint, served as a basis of the complaint, and served to buttress DKR's allegations that the claims of the DKR patents are patent eligible. *Ritchie*, 342 F.3d at 907 ("A court may, however, consider certain materials—documents attached to the complaint, documents incorporated by reference in the complaint, or matters of judicial notice—without converting the motion to dismiss into a motion for summary judgment."). But the District Court improperly refused to do so.

Accordingly, the District Court committed reversible error by excluding Dr. Keller's expert declaration.

CONCLUSION

For the reasons set forth above, Plaintiff-Appellant DKR Consulting, LLC respectfully requests this Court to vacate and reverse the District Court's order granting Shopify's Motion to Dismiss as the DKR patents are patent-eligible under 35 U.S.C. § 101.

Dated: October 29, 2024

Respectfully submitted,

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ADDENDUM

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

DKR Consulting, LLC,

Plaintiff,

v.

Shopify, Inc.,

Defendant.

Case No. 2:23-cv-06904-HDV-JCx

ORDER GRANTING DEFENDANT'S MOTION TO DISMISS [DKT. NO. 37]

I. INTRODUCTION

Plaintiff DKR Consulting, LLC ("DKR") brings this action against Defendant Shopify, Inc. ("Shopify"), asserting patent infringement under 35 U.S.C. § 271. DKR asserts Shopify infringed the following four patents related to web widget technology for electronic commerce ("e-commerce"): U.S. Patent Nos. 10,846,785 (the "'785 Patent"); 11,157,995 (the "'995 Patent"); 11,455,678 (the "'678 Patent"); and 11,488,237 (the "'237 Patent") (collectively, the "Asserted Patents").[1] First Amended Complaint ("FAC") ¶ 1, 69, 79, 87, 97 [Dkt. No. 36].

Before the Court is Shopify's Motion to Dismiss the FAC ("Motion") brought under Federal Rule of Civil Procedure 12(b)(6). [Dkt. No. 37].[2] Shopify contends the Asserted Patents claim only an abstract idea and are therefore patent-ineligible under *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014). The Court agrees, and grants Shopify's motion.

II. BACKGROUND

Defendant Shopify is a Canadian company that makes and sells e-commerce software products and services, including its own application programming interfaces (APIs). FAC ¶ 7. DIY Media, Inc., a nonparty in this action, previously owned the Asserted Patents, and discussed business collaborations with Shopify from 2011 to 2015. *Id.* ¶¶ 3, 21. Around this time, Shopify allegedly obtained DIY Media's confidential technical information, including the technology behind the Asserted Patents. *Id.* ¶ 20.

Plaintiff DKR now owns the four Asserted Patents. *Id.* ¶¶ 2, 26, 28–30, 41–43, 47–49, 53–55. These Patents each seek to solve existing problems with, and improve upon, web widget[3]

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[1] The United States Patent and Trademark Office issued these four patents from 2020 to 2022. FAC ¶¶ 28, 41, 47, 53.

[2] The Motion is fully briefed. *See* DKR's Opposition ("Opp.") [Dkt. No. 40]; Shopify's Reply [Dkt. No. 41]. The Court heard oral argument on May 9, 2024 and took the Motion under submission. [Dkt. No. 44].

[3] The Asserted Patents define a "web widget" as, "portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation." '785 Patent at col. 1:62–65. Examples of web widgets are "discrete applications . . . that allow users to turn personal content into dynamic web applications which can be shared on virtually any website." *Id.* at col. 1:66–67 to 2:1–2.

technology, in part to "exploit social media marketing trends to engage in purchase transactions . . . over the rapidly growing number of mobile networks and associated mobile devices." *Id.* ¶ 36 (quoting '678 Patent at col. 1:7–17); *see id.* ¶¶ 37, 46, 52, 56. The Asserted Patents are each described below.

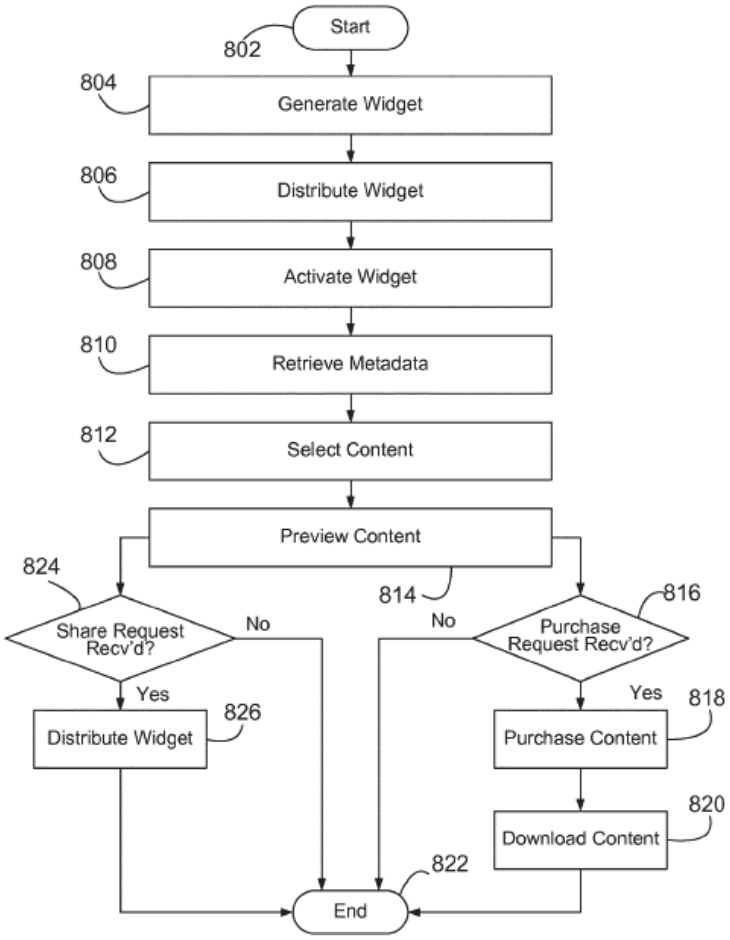
A. The '678 Patent

Patent '678 is titled, "System and Method for Distributable E-Commerce Product Listings" and was issued on September 27, 2022. FAC, Ex. 3 at 1. This alleged innovation is meant to handle technological problems associated with the processing of commercial transactions via an "enhanced widget." *Id.* ¶ 40.

Claim 1 of the '678 Patent recites:

> A system for distributing multimedia content over a network, comprising:
> a server configured to control a transaction processing service; and
> a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,
> wherein the server is configured to:
> receive the item from the storage resource;
> execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;
> distribute the product listing to a web site or a distributed application, where in the product listing is configured to be displayed on the web site or the distributed application based on the marketplace rule;
> receive an indication that the clickable buy button has been selected by a remote computing device; and
> provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

'678 Patent at col. 18:42–67. The flow chart below illustrates "a method for distributing multimedia content using a web widget in an embodiment." *Id.* at col. 2:53–54.



B. The '785 Patent

Patent '785 is titled, "System and Method for Generating and Distributing Embeddable Buy Buttons" and was issued on November 24, 2020. FAC, Ex. 1 at 1. Patent '785 is specifically concerned with embedding a "buy" button that allows a commercial transaction to be completed in an e-commerce store. *Id.* ¶ 45. Claim 1 of this patent recites "the concept of having the enhanced widget (referred to as an 'embeddable buy button') execute on a separate server from the web site into which the buy button is embedded." Opp. at 13.

Claim 1 of the '785 patent recites:

> A method for embedding a buy button for an electronic commerce store, comprising:
>
> receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an inventory and a

representation of the item, wherein the item is to be listed for sale on the first electronic commerce store;

generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and

embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.

'785 Patent at col. 18:42–61.

C. The '995 Patent

Patent '995 is titled, "System and Method for Generating and Distributing Embeddable Electronic Commerce Stores" and was issued on October 26, 2021. FAC, Ex. 2 at 1. Patent '995 is concerned with "generating an embeddable electronic commerce store" that is "embeddable into various sales channels, such as web pages and social media networks." *Id.* ¶ 51; Ex. 2 at 1.

Claim 1 of the '995 Patent recites:

A system for generating an electronic commerce store, comprising:

an application server, the application server controlling a transaction processing service;

a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product;

a widget builder resource configured to:

receive the image and metadata from the storage resource; and

generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and

wherein the application server is configured to embed the product listing into a web site and into a social media network, and

wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet communication with the web site, the application server provides a checkout screen to the client device, wherein the transaction processing service processes a payment transaction for a purchase of the product initiated from the checkout screen using the client device.

'995 Patent at col.18: 42–67.

D. The '237 Patent

Patent '237 is titled, "System and Method for Facilitating Social Shopping" and was issued on November 1, 2022. FAC, Ex. 4 at 1. Patent '237 discloses "a portable web widget for distribution of e-commerce content." *Id.* ¶ 56.

Claim 1 of the '237 Patent recites:

> A system for generating an electronic commerce store, comprising:
> an application server configured to control a transaction processing service; and
> a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product,
> the application server configured to:
> receive the information from the storage resource;
> execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button;
> distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application;
> receive an indication that the clickable link has been selected by a remote computing device; and
> provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

'237 Patent at col. 18:39–65.

III. LEGAL STANDARD

A. Rule 12(b)(6)

Under Rule 12(b)(6), a party may move to dismiss a complaint for failure to state a claim upon which relief may be granted. "To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw

the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678. Only where a plaintiff fails to "nudge[] [his or her] claims . . . across the line from conceivable to plausible[,]" is the complaint properly dismissed. *Id*. at 680.

While the plausibility requirement is not a probability assessment, it demands more than "a sheer possibility that a defendant has acted unlawfully." *Id*. at 678. The determination of whether a complaint satisfies the plausibility standard is a "context-specific task that requires the reviewing court to draw on its judicial experience and common sense." *Id*. at 679.

B. 35 U.S.C. § 101

In a patent infringement action, a party accused of infringement may move for dismissal under 35 U.S.C. § 101 on the ground that the claimed invention is ineligible for protection under the Patent Act and the patent is therefore invalid. On this type of motion, the moving party bears the burden of establishing that the claims are patent-ineligible under Section 101. *Mod. Telecom Sys. LLC v. Earthlink, Inc.*, No. 14-cv-0347-DOC, 2015 WL 1239992, at *7 (C.D. Cal. Mar. 17, 2015). In performing this analysis, a court construes the patent claims in a manner most favorable to the plaintiff. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014).

IV. DISCUSSION

Shopify moves for dismissal on the ground that the Asserted Patents are invalid under 35 U.S.C. § 101. Section 101 of the Patent Act provides that a patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The U.S. Supreme Court has "long held that [Section 101] contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 573 U.S. at 216.

In *Alice*, the Supreme Court articulated a two-step framework[4] for determining whether a patent claims eligible subject matter. First, courts ask "whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* at 217 (citation omitted). If so, courts then "consider

[4] This framework was initially set out in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012).

the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application." *Id.* In its Motion, Shopify contends that the Asserted Patents are invalid because the claims fall within the "abstract ideas" exception to Section 101.

A. Evidentiary Objection

The Court begins its analysis by addressing Shopify's objection to DKR's declaration by Arthur Keller, Ph.D, submitted with the FAC. *See* Declaration of Arthur Keller, Ph.D., FAC, Exhibit 5 [Dkt. No. 36-5]. DKR retained Dr. Keller as an expert witness on patent eligibility. *Id.* ¶¶ 1–2. Shopify asks the Court to disregard the declaration because it is not a "written instrument" and therefore is not properly incorporated into the complaint. Motion at 22.

Shopify is correct. When ruling on a motion to dismiss, courts can only consider the pleadings and any documents that are incorporated by reference therein or that are properly the subject of judicial notice. *Gerritsen v. Warner Bros. Ent. Inc.*, 112 F. Supp. 3d 1011, 1020 (C.D. Cal. 2015); *see also* Fed. R. Civ. P. 10 (permitting a copy of a written instrument as an exhibit to a pleading). Declarations are not permitted as pleading exhibits unless they form the basis of the complaint, which is the not the case here. *See United States v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003).[5] Consequently, the Court disregards the declaration submitted with the FAC.

B. Representative Claims

When reviewing a Section 101 challenge, a district court need not address each claim of an asserted patent. Instead, it may find that particular claims are representative because all of the claims are "substantially similar and linked to the same abstract idea." *Content Extraction*, 776 F.3d at 1348 (citation omitted). Where claims "contain only minor differences in terminology but require performance of the same basic process, [] they should rise or fall together." *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1368 n.7 (Fed. Cir. 2017) (citation omitted).

[5] "When ruling on a Rule 12(b)(6) motion to dismiss, if a district court considers evidence outside the pleadings, it must normally convert the 12(b)(6) motion into a Rule 56 motion for summary judgment, and it must give the nonmoving party an opportunity to respond." *United States v. Ritchie*, 342 F.3d 903, 907 (9th Cir. 2003). DKR has not provided a compelling reason for the Court to do so here. The Court declines to convert the motion to a motion for summary judgment.

Moreover, "[c]ourts may treat a claim as representative . . . if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim . . . ." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018) (citation omitted).

Shopify contends that Claim 1 of each of the four Asserted Patents is representative of all asserted claims. Motion at 4. DKR disagrees, arguing that Claim 1 of each of the Asserted Patents are not representative because the terms used are open to more than one construction. Opp. at 10. It suggests that claim construction is required before a Section 101 analysis is proper. *Id.*

But the Federal Circuit requires more. "A patentee must do more than invoke a generic need for claim construction or discovery to avoid grant of a motion to dismiss under § 101. Instead, the patentee must propose a specific claim construction or identify specific facts that need development . . . ." *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1360–61 (Fed. Cir. 2023). DKR merely argues that certain claims "may require construction," Opp. at 10, but does not propose a claim construction nor identify specific facts needing development. Such basis, alone, is insufficient for the Court to bypass a Section 101 analysis.

The Court's review confirms that Claim 1 of each of the Asserted Patents contain "only minor differences in terminology but require performance of the same basic process." *Smart Sys. Innovations*, 873 F.3d at 1368 n.7. For example, Claim 1 of the '785 Patent recites a "method for embedding a buy button for an electronic commerce store . . . " and all subsequent claims of the '785 Patent elaborate on the method and system of using two servers to generate and distribute a "buy button" that may be embedded in an e-commerce website. Similarly, the claims that follow Claim 1 of the '995 Patent—which discloses a "system for generating an electronic commerce store"—detail the use of a content management system to generate an e-commerce store embeddable in social media websites. Further, Claim 1 of the '678 Patent recites a "system for distributing multimedia content over a network" to provide a checkout screen to process a payment. The remaining claims of that patent elaborate on the system with minor terminology differences, such as detailing that "the remote computing device is a smartphone." '678 Patent at col. 19:3–4, 47–48; col. 20:36–37. The same can be said of Claim 1 of the '237 Patent, which recites a particular configuration and process

to generate an e-commerce store, and which represents the same basic process as the claims that follow it.

In sum, all the claims in these patents describe inventions that are substantially similar and linked to the same idea. The Court therefore finds that Claim 1 of each of the Asserted Patents is representative of the other claims within those patents.

C. Step One of the *Alice* Analysis

The Court next analyzes the two-step *Alice* test for the representative claims. Shopify argues that all claims of the Asserted Patents are ineligible for patent protection because they are directed to the abstract idea of combining a product advertisement with an order form. Motion at 11–14. According to Shopify, the claims simply use conventional computer technology to implement this abstract idea. *Id.* DKR contends the claims of the Asserted Patents are instead directed to enhancements in web widget technology and functionality. Opp. at 12–17.

To determine whether a claim is directed to an abstract idea, courts examine what the subject patent aims to advance. *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303 (Fed. Cir. 2018) (citation omitted). For software innovation claims, such as those presented here, courts consider whether the claims focus on a "process that qualifies as an abstract idea for which computers are invoked merely as a tool," in contrast to claims that focus on a "specific asserted improvement in computer capabilities." *Id.* (citation omitted); *see id.* at 1305 (finding the asserted claims were directed to a non-abstract improvement in computer functionality because they "employ[ed] a new kind of file that enable[d] a computer security system to do things it could not do before"); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (explaining that courts may evaluate whether the claims are "directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery"); *Adasa Inc. v. Avery Dennison Corp.*, 55 F.4th 900, 908 (Fed. Cir. 2022) ("If the focus of the claim is a specific and concrete technological advance, for example an improvement to a technological process or in the underlying operation of a machine, our inquiry ends and the claim is eligible."), *cert. denied*, 143 S. Ct. 2561 (2023). A claim is directed to an abstract idea if it "consist[s] only of generalized steps to be performed on a computer using conventional computer activity." *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838

F.3d 1253, 1260 (Fed. Cir. 2016) (citation omitted). Moreover, a claim must "ha[ve] the specificity required to transform [the] claim from one claiming only a result to one claiming a way of achieving it." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018); *see also Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1343 (Fed. Cir. 2018) (explaining that patent ineligible claims "failed to recite a practical way of applying an underlying idea [and] instead were drafted in such a result-oriented way that they amounted to encompassing the 'principle in the abstract' no matter how implemented").

The Court concludes that the claims at issue here are directed to an abstract idea—specifically, that of combining an order form with a product advertisement, through the use of conventional computer technology. While the Asserted Patents aver that they improve the effectiveness of web widgets to distribute content widely and enable merchants to utilize social media to engage customers,[6] the idea of enhancing web widgets does not constitute an advance in computer functionality. *See Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020) ("[I]mproving a user's experience while using a computer application is not, without more, sufficient to render the claims directed to an improvement in computer functionality.").

To the contrary, the claims at issue here use conventional computer technology as a tool to facilitate e-commerce. Claim 1 of the '785 Patent is a method for generating an embeddable buy button through the use of a second server. This analogous use of conventional computer components has been rejected as patent ineligible. *See Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) ("[T]he transmission of information derived from that entered data to a computer user, all through the use of conventional computer components, such as a database and processors, operating in a conventional manner. . . do not confer patent eligibility." (citations omitted)). Claim 1 of the '995 Patent, '678 Patent, and '237 Patent are systems that utilize an

[6] Specifically, the Asserted Patents state: "[T]here is a significant and growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." '785 Patent at col. 2:11–17; '995 Patent at col. 2:11–17; '678 Patent at col. 2:11–17; '237 Patent at col. 2:11–17.

application server, storage resource, and widget builder resource, all interacting to generate or distribute a checkout screen to facilitate online shopping on an e-commerce website or social media network. This type of system merely invokes the generic process of servers and other devices communicating information to one another. *See Alice*, 573 U.S. at 225 (finding that the use of a computer to "obtain data, adjust account balances, and issue automated instruction" did "no more than require a generic computer to perform generic computer functions."). These claims focus on making e-commerce more efficient with the use of conventional computer technology, but they do not improve the underlying technology itself.

DKR argues the claims at issue here are more akin to those found patent eligible in *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Opp. at 18–21. The patent at issue in *DDR* claimed technology that, after a website visitor clicks on an advertisement, directs the visitor to a hybrid web page that looked and felt like the initial host website, wherein the hybrid web page combined the initial host's website with a third-party merchant's website. This is not unlike the claimed technology here, which seeks to create a means for a website visitor to complete an e-commerce transaction in one webpage.

In this case, however, there is an important distinction. Although the claimed technology in *DDR* may be similar to the technology at issue here, the claims themselves are not. In *DDR*, the Federal Circuit considered other cases that found software-related patents ineligible. *DDR*, 773 F.3d at 1256. It identified a common thread among those cases finding ineligibility: "Under Supreme Court precedent, th[ose] claims were recited too broadly and generically to be considered sufficiently specific and meaningful applications of their underlying abstract ideas." *Id.* The Court continued, "Although many of the claims recited various computer hardware elements, these claims in substance were directed to nothing more than the performance of an abstract business practice on the Internet or using a conventional computer. Such claims are not patent-eligible." *Id.* The Federal Circuit went on to find that the claims in *DDR* were distinguishable because "they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in

computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.* at 1257.

Here, the Court finds that the claims in the Asserted Patents are analogous to the kinds of claims rejected in *DDR*—viz., ones that seek to perform age-old business practices on the Internet. Indeed, the Asserted Patents recite a means of combining a product advertisement with an order form in one place, which is a "business practice known from the pre-Internet world." *DDR*, 773 F.3d at 1257.

D. Step Two of the *Alice* Analysis

In the second step of the *Alice* test, courts look for an "inventive concept," that is, "an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 573 U.S. at 217. This step is satisfied when the claim limitations "involve more than performance of well-underst[ood], routine, [and] conventional activities previously known to the industry," which is a question of fact. *Content Extraction*, 776 F.3d at 1347–48 (citation omitted); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018).

To survive step two, claims to "an abstract idea implemented on generic computer components" must "provid[e] a specific technical solution beyond simply using generic computer concepts in a conventional way." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016) (discussing cases where the court found that the claims preempted the use of an abstract idea and did not pass step two); *see also Alice*, 573 U.S. at 223–24 ("Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of additional featur[e] that provides any practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself." (citations omitted)). The Federal Circuit has repeatedly ruled that "invocations of computers and networks that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018) (collecting cases) (citations omitted). Moreover, "the use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014).

Applying this standard, the Court finds that the Asserted Patents do not recite an inventive concept. As explained in Section IV.C, *supra*, the concept of combining an order form with a product advertisement is abstract. The Court is unpersuaded by DKR's argument that the claims disclose a manner of utilizing conventional components in a non-conventional, non-generic arrangement. The Asserted Patents utilize generic computer components (such as servers) in a conventional way, which is insufficient to elevate the invention to "significantly more" than the underlying abstract idea. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1056 (Fed. Cir. 2017) ("The use and arrangement of conventional and generic computer components recited in the claims—such as a database, user terminal, and server—do not transform the claim, as a whole, into 'significantly more' than a claim to the abstract idea itself." (citations omitted)); *In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 615 (Fed. Cir. 2016) (holding that "vague, functional descriptions of server components" were insufficient to render the invention patent-eligible). Claim 1 of the '785 Patent simply uses a second server to embed a buy button. The Court does not agree that merely adding additional devices to increase efficiency is "unconventional." And Claim 1 of the '995 Patent, '678 Patent, and '237 Patent all recite configuring a conventional server to communicate conventionally with a conventional storage resource. Moreover, any other hardware or software described in the claims—such as smartphones or a transaction processing service, *see, e.g.,* '679 Patent at col. 18–20—are also used conventionally. The claims here do not add "something more" to allow the Asserted Patents to survive step two.

In short, the Asserted Patents do not claim patent-eligible subject matter under Section 101 and the *Alice* test.

V. CONCLUSION

For the forgoing reasons, Defendant's Motion to Dismiss is granted. The Court dismisses the FAC with prejudice.

Dated: August 1, 2024

Hernán D. Vera
United States District Judge

JS-6

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

DKR Consulting, LLC,

Plaintiff,

v.

Shopify, Inc.,

Defendant.

Case No. 2:23-cv-06904-HDV-JCx

JUDGMENT

Pursuant to this Court's Order Granting Defendant's Motion to Dismiss, it is ordered that judgment is entered on all claims in favor of Defendant Shopify, Inc. Plaintiff shall take nothing from this action against Defendant. This action is **dismissed with prejudice** in its entirety.

Dated: August 1, 2024

Hernán D. Vera
United States District Judge

ACCO,(JCx),APPEAL,CLOSED,DISCOVERY,MANADR

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA (Western Division - Los Angeles)
CIVIL DOCKET FOR CASE #: 2:23-cv-06904-HDV-JC

DKR Consulting, LLC v. Shopify, Inc.
Assigned to: Judge Hernan D. Vera
Referred to: Magistrate Judge Jacqueline Chooljian
Case in other court: Federal Circuit, 24-02279
Cause: 35:145 Patent Infringement

Date Filed: 08/22/2023
Date Terminated: 08/01/2024
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

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Date Filed	#	Docket Text
08/22/2023	1	COMPLAINT Receipt No: ACACDC-35902059 - Fee: $402, filed by Plaintiff DKR Consulting, LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4) (Attorney Peter E. Perkowski added to party DKR Consulting, LLC(pty:pla)) (Perkowski, Peter) (Entered: 08/22/2023)
08/22/2023	2	CIVIL COVER SHEET filed by Plaintiff DKR Consulting, LLC. (Perkowski, Peter) (Entered: 08/22/2023)
08/22/2023	3	CERTIFICATION AND NOTICE of Interested Parties filed by Plaintiff DKR Consulting, LLC, identifying DKR Consulting, Inc. and Shopify, Inc.. (Perkowski, Peter) (Entered: 08/22/2023)
08/22/2023	4	REPORT ON THE FILING OF AN ACTION Regarding a Patent or a Trademark (Initial Notification) filed by DKR Consulting, LLC. (Perkowski, Peter) (Entered: 08/22/2023)
08/22/2023	5	Request for Clerk to Issue Summons on Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff DKR Consulting, LLC. (Perkowski, Peter) (Entered: 08/22/2023)
08/23/2023	6	NOTICE OF ASSIGNMENT to District Judge Hernan D. Vera and Magistrate Judge Jacqueline Chooljian. (et) (Entered: 08/23/2023)
08/23/2023	7	NOTICE TO PARTIES OF COURT-DIRECTED ADR PROGRAM filed. (et) (Entered: 08/23/2023)
08/23/2023	8	Notice to Counsel Re Consent to Proceed Before a United States Magistrate Judge. (et) (Entered: 08/23/2023)
08/23/2023	9	21 DAY Summons Issued re Complaint (Attorney Civil Case Opening) 1 as to Defendant Shopify, Inc. (et) (Entered: 08/23/2023)
08/23/2023	10	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney Ronald M. Daignault on behalf of Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at cacd_attyadm@cacd.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (et) (Entered: 08/23/2023)
08/23/2023	11	NOTICE OF PRO HAC VICE APPLICATION DUE for Non-Resident Attorney Chandran B. Iyer on behalf of Plaintiff. A document recently filed in this case lists you as an out-of-state attorney of record. However, the Court has not been able to locate any record that you are admitted to the Bar of this Court, and you have not filed an application to appear Pro Hac Vice in this case. Accordingly, within 5 business days of the date of this notice, you must either (1) have your local counsel file an application to appear Pro Hac Vice (Form G-64) and pay the applicable fee, or (2) complete the next section of this form and return it to the court at cacd_attyadm@cacd.uscourts.gov. You have been removed as counsel of record from the docket in this case, and you will not be added back to the docket until your Pro Hac Vice status has been resolved. (et) (Entered: 08/23/2023)
08/28/2023	12	APPLICATION of Non-Resident Attorney Ronald M. Daignault to Appear Pro Hac Vice on behalf of Plaintiff DKR Consulting, LLC (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-35941287) filed by Plaintiff DKR Consulting, LLC. (Attachments: # 1 Proposed Order) (Perkowski, Peter) (Entered: 08/28/2023)
08/28/2023	13	APPLICATION of Non-Resident Attorney Ramachandran B. Iyer to Appear Pro Hac Vice on behalf of Plaintiff DKR Consulting, LLC (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-35941393) filed by Plaintiff DKR Consulting, LLC. (Attachments: # 1 Proposed Order) (Perkowski, Peter) (Entered: 08/28/2023)
08/30/2023	14	CIVIL STANDING ORDER by Judge Hernan D. Vera. PLEASE READ THIS ORDER CAREFULLY. IT GOVERNS THE CASE AND DIFFERS IN SOME RESPECTS FROM THE LOCAL RULES. (lom) (Entered: 08/30/2023)
09/01/2023	15	ORDER by Judge Hernan D. Vera Granting 12 Non-Resident Attorney Ronald M Dignault APPLICATION to Appear Pro Hac Vice on behalf of Plaintiff DKR Consulting LLC, designating Peter Edward Perkowski as local counsel. (bm) (Entered: 09/01/2023)
09/01/2023	16	ORDER by Judge Hernan D. Vera Granting 13 Non-Resident Attorney Chandran B Iyer APPLICATION to Appear Pro Hac Vice on behalf of Plaintiff DKR Consulting LLC, designating Peter Edward Perkowski as local counsel. (bm) (Entered: 09/01/2023)
09/06/2023	17	REQUEST for foreign service on Shopify, Inc. filed by Plaintiff DKR Consulting, LLC (Perkowski, Peter) (Entered: 09/06/2023)
12/22/2023	18	NOTICE of Appearance filed by attorney Liv Herriot on behalf of Defendant Shopify, Inc. (Attorney Liv Herriot added to party Shopify, Inc.(pty:dft))(Herriot, Liv) (Entered: 12/22/2023)
12/22/2023	19	NOTICE of Appearance filed by attorney Henry Michael Nikogosyan on behalf of Defendant Shopify, Inc. (Attorney Henry Michael Nikogosyan added to party Shopify, Inc.(pty:dft))(Nikogosyan, Henry) (Entered: 12/22/2023)

12/22/2023	20	NOTICE OF MOTION AND MOTION to Dismiss filed by Defendant Shopify, Inc.. Motion set for hearing on 2/22/2024 at 10:00 AM before Judge Hernan D. Vera. (Attachments: # 1 Memorandum in Support, # 2 Declaration of Erin McIntomny in Support, # 3 Proposed Order) (Nikogosyan, Henry) (Entered: 12/22/2023)
12/27/2023	21	NOTICE TO FILER OF DEFICIENCIES in Electronically Filed Document RE: NOTICE OF MOTION AND MOTION to Dismiss 20 . The following error(s) was/were found: Local Rule 7-1.1 no notice of interested parties. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (lom) (Entered: 12/27/2023)
01/03/2024	22	TEXT ONLY ENTRY (IN CHAMBERS) ORDER CONTINUING MOTION HEARING by Judge Hernan D. Vera. The Court, on its own motion, continues the MOTION TO DISMISS 20 from 02/22/2024 to 2/29/2024 at 10:00 AM. Counsel shall take notice of the new date and time. IT IS SO ORDERED. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (cr) TEXT ONLY ENTRY (Entered: 01/03/2024)
01/03/2024	23	NOTICE of Interested Parties filed by Defendant Shopify, Inc., (Nikogosyan, Henry) (Entered: 01/03/2024)
01/04/2024	24	APPLICATION of Non-Resident Attorney Gregory H. Lantier to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669311) filed by Defendant Shopify, Inc.. (Nikogosyan, Henry) (Entered: 01/04/2024)
01/04/2024	25	APPLICATION of Non-Resident Attorney Haixia Lin to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669337) filed by Defendant Shopify, Inc.. (Nikogosyan, Henry) (Entered: 01/04/2024)
01/05/2024	26	NOTICE of Deficiency in Electronically Filed Pro Hac Vice Application RE: APPLICATION of Non-Resident Attorney Haixia Lin to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669337) 25 , APPLICATION of Non-Resident Attorney Gregory H. Lantier to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669311) 24 . The following error(s) was/were found: Local Rule 83-2.1.3.3(b) Proposed order not attached. Other error(s) with document(s): See Notice of Lodging. See L.R. 5-1 and specifically L.R. 5-4.4.1. (lt) (Entered: 01/05/2024)
01/08/2024	27	NOTICE OF LODGING filed re APPLICATION of Non-Resident Attorney Gregory H. Lantier to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669311) 24 (Attachments: # 1 Proposed Order)(Nikogosyan, Henry) (Entered: 01/08/2024)
01/08/2024	28	NOTICE OF LODGING filed re APPLICATION of Non-Resident Attorney Haixia Lin to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc. (Pro Hac Vice Fee - $500 Fee Paid, Receipt No. ACACDC-36669337) 25 (Attachments: # 1 Proposed Order)(Nikogosyan, Henry) (Entered: 01/08/2024)
01/08/2024	29	ORDER ON APPLICATION OF NON-RESIDENT ATTORNEY TO APPEAR IN A SPECIFIC CASE PRO HAC VICE 24 by Judge Hernan D. Vera. APPLICATION to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc., designating Henry Michael Nikogosyan as local counsel. Granting 24 Non-Resident Attorney Gregory H. Lantier (rolm) (Entered: 01/08/2024)
01/08/2024	30	ORDER ON APPLICATION OF NON-RESIDENT ATTORNEY TO APPEAR IN SPECIFIC CASE PRO HAC VICE 25 by Judge Hernan D. Vera. APPLICATION to Appear Pro Hac Vice on behalf of Defendant Shopify, Inc., designating Henry Michael Nikogosyan as local counsel. Granting 25 Non-Resident Attorney Haixia Lin (rolm) (Entered: 01/08/2024)
02/08/2024	31	NOTICE OF MOTION AND MOTION to AMEND Complaint (Attorney Civil Case Opening), 1 filed by Plaintiff DKR Consulting, LLC. Motion set for hearing on 3/7/2024 at 10:00 AM before Judge Hernan D. Vera. (Attachments: # 1 Memorandum of Points and Authorities, # 2 Proposed Order) (Perkowski, Peter) (Entered: 02/08/2024)
02/08/2024	32	NOTICE OF LODGING filed re NOTICE OF MOTION AND MOTION to AMEND Complaint (Attorney Civil Case Opening), 1 31 (Attachments: # 1 Exhibit A - Proposed First Amended Complaint with new Exhibit 5, # 2 Exhibit B - redline of Proposed First Amended Complaint)(Perkowski, Peter) (Entered: 02/08/2024)
02/09/2024	33	NOTICE TO FILER OF DEFICIENCIES in Electronic Filed Document RE: NOTICE OF MOTION AND MOTION to AMEND Complaint 31 . The following error(s) was/were found: Hearing information is missing, incorrect, or untimely. Other error(s) with document(s): Hearing is untimely. See court's website for Judge's current motion dates. In response to this notice, the Court may: (1) order an amended or correct document to be filed; (2) order the document stricken; or (3) take other action as the Court deems appropriate. You need not take any action in response to this notice unless and until the Court directs you to do so. (lom) (Entered: 02/09/2024)
02/09/2024	34	TEXT ONLY ENTRY (IN CHAMBERS) ORDER by Judge Hernan D. Vera: The Court reset Plaintiff's Motion for Leave to File First Amended Complaint 31 to 04/04/24 at 10:00 a.m. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (wm) TEXT ONLY ENTRY (Entered: 02/09/2024)
02/09/2024	35	MINUTES IN CHAMBERS - ORDER GRANTING LEAVE TO FILE FIRST AMENDED COMPLAINT [DKT. NO. 31] by Judge Hernan D. Vera. Plaintiff DKR is ordered to file its First Amended Complaint ("FAC") no later than February 15, 2024. Defendant's Motion to Dismiss [Dkt. No. 20] is moot. Defendant shall file a responsive pleading no later than twenty-one (21) days after the FAC is filed. The Court will reserve the hearing date of April 11, 2024, in the event a motion to dismiss the FAC is filed. (lom) (Entered: 02/09/2024)
02/14/2024	36	FIRST AMENDED COMPLAINT against Defendant Shopify, Inc. amending Complaint (Attorney Civil Case Opening), 1 , filed by Plaintiff DKR Consulting, LLC (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5) (Perkowski, Peter) (Entered: 02/14/2024)
03/06/2024	37	NOTICE OF MOTION AND MOTION to Dismiss First Amended Complaint filed by Defendant Shopify, Inc.. Motion set for hearing on 4/11/2024 at 10:00 AM before Judge Hernan D. Vera. (Attachments: # 1 Memorandum of Law in Support, # 2

		Declaration of Gregory Lantier in Support, # 3 Exhibit A, # 4 Exhibit B, # 5 Exhibit C, # 6 Proposed Order) (Nikogosyan, Henry) (Entered: 03/06/2024)
03/13/2024	38	STIPULATION for Extension of Time to File Opposition to and Reply ISO Defendant's motion to dismiss, and to reset hearing on the motion as to NOTICE OF MOTION AND MOTION to Dismiss First Amended Complaint 37 filed by Plaintiff DKR Consulting, LLC. (Attachments: # 1 Proposed Order)(Perkowski, Peter) (Entered: 03/13/2024)
03/14/2024	39	ORDER MODIFYING SCHEDULE ON DEFENDANT'S MOTION TO DISMISS by Judge Hernan D. Vera, re Stipulation for Extension of Time to File Response/Reply, 38 : The court, having considered the parties' Stipulation to Modify Schedule and Briefing and Hearing on Defendant's Motion to Dismiss (ECF 37), and finding good cause, hereby GRANTS the Stipulation and ORDERS the following schedule on the motion. Plaintiff's opposition to motion to dismiss: April 4; Defendant's reply in support of the motion: April 25; Hearing: May 9 at 10 am. (bm) (Entered: 03/14/2024)
04/04/2024	40	MEMORANDUM in Opposition to NOTICE OF MOTION AND MOTION to Dismiss First Amended Complaint 37 filed by Plaintiff DKR Consulting, LLC. (Attachments: # 1 Declaration of Peter Perkowski, # 2 Exhibit 1, # 3 Exhibit 2, # 4 Exhibit 3, # 5 Proposed Order)(Perkowski, Peter) (Entered: 04/04/2024)
04/25/2024	41	REPLY in Support of NOTICE OF MOTION AND MOTION to Dismiss First Amended Complaint 37 filed by Defendant Shopify, Inc.. (Lantier, Gregory) (Entered: 04/25/2024)
04/26/2024	42	REQUEST for Hearing (Oral Argument), re NOTICE OF MOTION AND MOTION to Dismiss First Amended Complaint 37 , filed by Defendant Shopify, Inc.. Request set for hearing on 5/9/2024 at 10:00 AM before Judge Hernan D. Vera. (Attachments: # 1 Proposed Order) (Lantier, Gregory) (Entered: 04/26/2024)
04/29/2024	43	TEXT ONLY ENTRY (IN CHAMBERS) ORDER by Judge Hernan D. Vera: Defendant's request for oral argument 42 re motion to dismiss the First Amended Complaint is granted. Absent unusual circumstances, the Court sets every substantive motion for oral argument.THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (wm) TEXT ONLY ENTRY (Entered: 04/29/2024)
05/09/2024	44	MINUTES OF DEFENDANT SHOPIFY, INC.'S RULE 12(B)(6) MOTION TO DISMISS AMENDED COMPLAINT 37 held before Judge Hernan D. Vera: Having heard oral argument on the motion, the Court takes the motion under submission. Time in court: 1:29 min(s). Attorney for Plaintiff(s): Peter Perkowski / Ramachandran Iyer. Attorney for Defendant(s): Gregory Lantier / Henry Nilogosyan / Liv Herriot. Court Reporter: CourtSmart. CRD: Wendy Hernandez. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (wm) (Entered: 05/09/2024)
05/10/2024	45	TRANSCRIPT ORDER as to Plaintiff DKR Consulting, LLC for Court Smart (CS). Court will contact Cathy Pampinella at cpampinella@daignaultiyer.com with further instructions regarding this order. Transcript preparation will not begin until payment has been satisfied with the transcription company. (Perkowski, Peter) (Entered: 05/10/2024)
05/10/2024	46	TRANSCRIPT ORDER as to Defendant Shopify, Inc. for Court Smart (CS). Court will contact Henry Nikogosyan at Henry.Nikogosyan@wilmerhale.com with further instructions regarding this order. Transcript preparation will not begin until payment has been satisfied with the transcription company. (Lantier, Gregory) (Entered: 05/10/2024)
05/14/2024	47	TRANSCRIPT for proceedings held on 5/9/2024. Court Reporter/Electronic Court Recorder: ECHO REPORTING, INC., phone number (858) 453-7590. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Electronic Court Recorder before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Notice of Intent to Redact due within 7 days of this date. Redaction Request due 6/4/2024. Redacted Transcript Deadline set for 6/14/2024. Release of Transcript Restriction set for 8/12/2024. (aa) (Entered: 05/14/2024)
05/14/2024	48	NOTICE OF FILING TRANSCRIPT filed for proceedings 5/9/2024 re Transcript 47 THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (aa) TEXT ONLY ENTRY (Entered: 05/14/2024)
08/01/2024	49	ORDER GRANTING DEFENDANT'S MOTION TO DISMISS [DKT. NO. 37] by Judge Hernan D. Vera. For the forgoing reasons, Defendant's Motion to Dismiss is granted. The Court dismisses the FAC with prejudice. (lom) (Entered: 08/01/2024)
08/01/2024	50	JUDGMENT by Judge Hernan D. Vera. Pursuant to this Court's Order Granting Defendant's Motion to Dismiss 49 , it is ordered that judgment is entered on all claims in favor of Defendant Shopify, Inc. Plaintiff shall take nothing from this action against Defendant. This action is dismissed with prejudice in its entirety. (MD JS-6, Case Terminated). (lom) (Entered: 08/01/2024)
08/01/2024	51	REPORT ON THE DETERMINATION OF AN ACTION Regarding a Patent or Trademark. (Closing) (Attachments: # 1 Judgment) (lom) (Entered: 08/01/2024)
08/26/2024	52	NOTICE OF APPEAL to the Federal Circuit Court of Appeals filed by Plaintiff DKR Consulting, LLC. Appeal of Judgment, 50 , Order on Motion to Dismiss 49 . (Appeal Fee - $605 Fee Paid, Receipt No. ACACDC-38095498.) (Perkowski, Peter) (Entered: 08/26/2024)
08/27/2024		TRANSMISSION of the Notice of Appeal, Docket Sheet, Judgment and or order e-mailed to the US Court of Appeals for the Federal Circuit re: Notice of Appeal to Federal Circuit Court of Appeals 52 (mat) (Entered: 08/27/2024)
08/30/2024	53	NOTIFICATION from Federal Circuit Court of Appeals of case number assigned and briefing schedule. Appeal Docket No. 2024-2279 assigned to Notice of Appeal to Federal Circuit Court of Appeals 52] as to Appellant DKR Consulting, LLC. (mat) (Entered: 09/04/2024)

PACER Service Center
Transaction Receipt
10/23/2024 08:31:38

PACER Login:	rmdaignault	**Client Code:**	
Description:	Docket Report	**Search Criteria:**	2:23-cv-06904-HDV-JC End date: 10/23/2024
Billable Pages:	7	**Cost:**	0.70

US010846785B2

(12) **United States Patent**
Robb et al.

(10) **Patent No.: US 10,846,785 B2**
(45) **Date of Patent: Nov. 24, 2020**

(54) **SYSTEM AND METHOD FOR GENERATING AND DISTRIBUTING EMBEDDABLE BUY BUTTONS**

(71) Applicant: **DKR CONSULTING LLC**, Charlotte, NC (US)

(72) Inventors: **David Robb**, Charlotte, NC (US); **Grant Neerings**, Charlotte, NC (US); **Cameron Patterson**, Seattle, WA (US); **Joseph Rodriguez**, Seattle, WA (US); **Quinton Richard Harris**, Seattle, WA (US); **Benjamin Cook**, Seattle, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/863,229**

(22) Filed: **Apr. 30, 2020**

(65) **Prior Publication Data**

US 2020/0265507 A1 Aug. 20, 2020

Related U.S. Application Data

(63) Continuation of application No. 16/512,018, filed on Jul. 15, 2019, which is a continuation of application
(Continued)

(51) **Int. Cl.**
G06Q 30/00 (2012.01)
G06Q 30/06 (2012.01)
(Continued)

(52) **U.S. Cl.**
CPC ***G06Q 30/0641*** (2013.01); ***G06F 3/04817*** (2013.01); ***G06F 3/04842*** (2013.01);
(Continued)

(58) **Field of Classification Search**
USPC 705/26.1–27.2
See application file for complete search history.

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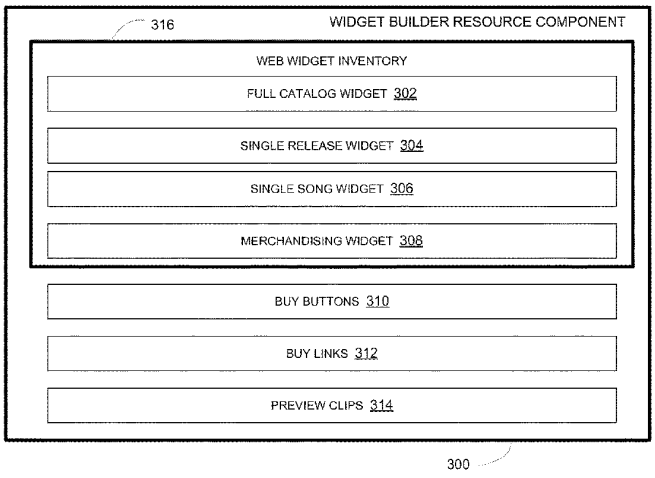
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(Continued)

Primary Examiner — Ethan D Civan

(57) **ABSTRACT**

An embeddable buy button for distribution of multimedia content over a computer communications network, the buy button adapted for viral distribution and execution in a web browser on a client device wherein the buy button includes a content retrieval component communicatively coupled to an application server over the computer communications network, the content retrieval component configured to retrieve one or more multimedia display files and metadata into an embedded electronic commerce store in the buy button after it enters an active operational mode, the buy button also including a content preview component configured to enable a streamed execution of a portion of the multimedia content files associated with each of the multimedia display files from a multimedia content distribution system executing on the application server, and a transaction processing component operative to execute and complete a commercial transaction in the embedded electronic commerce store pertaining to the multimedia content files.

20 Claims, 16 Drawing Sheets



Related U.S. Application Data

No. 15/591,208, filed on May 10, 2017, now Pat. No. 10,395,304, which is a continuation of application No. 13/571,293, filed on Aug. 9, 2012, now Pat. No. 9,679,298, which is a continuation-in-part of application No. 12/852,090, filed on Aug. 6, 2010, now abandoned.

(51) **Int. Cl.**

G06F 3/0484	(2013.01)
G06Q 30/02	(2012.01)
G06F 3/0481	(2013.01)
G06Q 50/00	(2012.01)

(52) **U.S. Cl.**

CPC ***G06Q 30/02*** (2013.01); ***G06Q 30/0643*** (2013.01); ***G06Q 50/01*** (2013.01)

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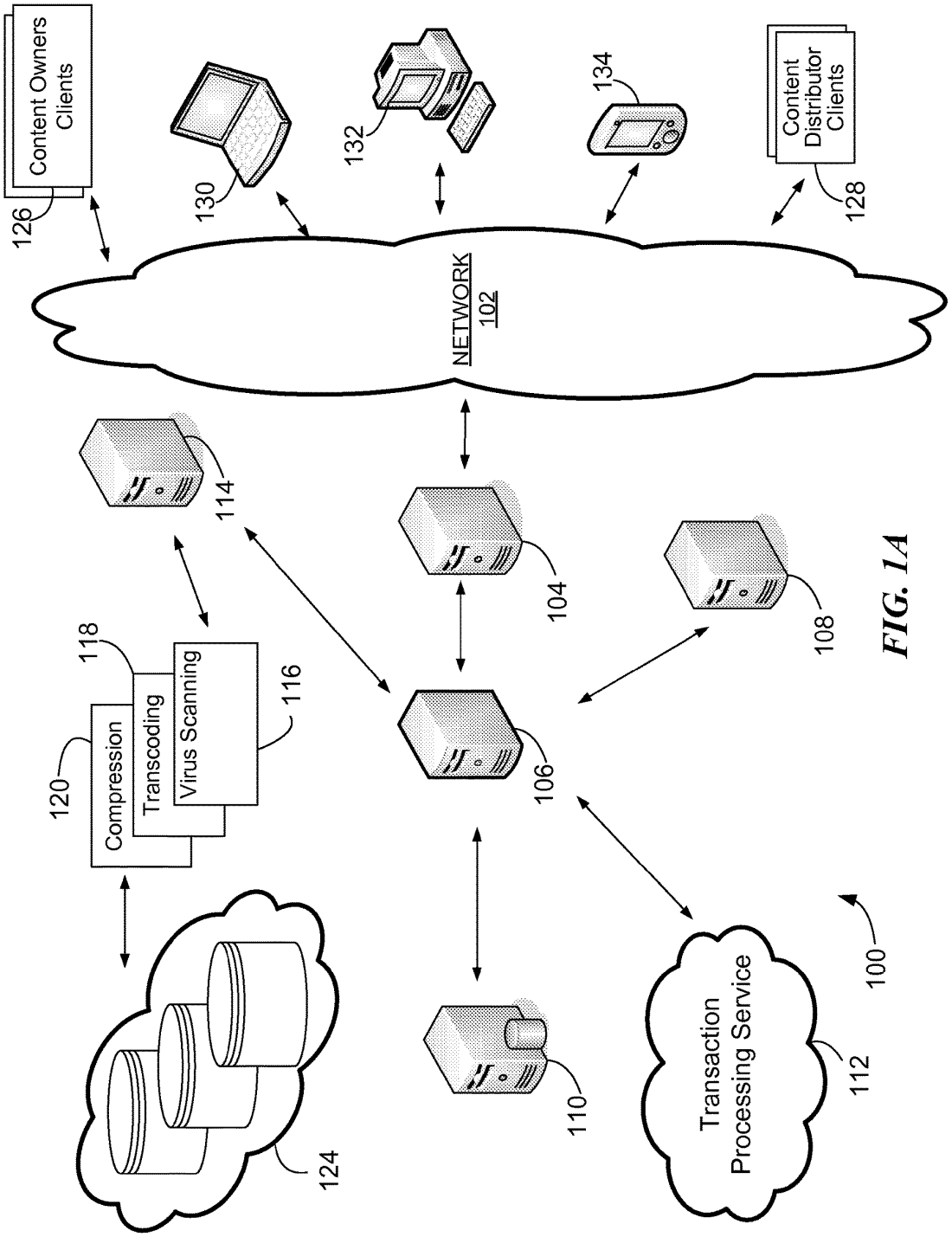

Content Owners Clients
126
130
132
134
Content Distributor Clients
128
NETWORK
102
114
104
108
118
116
120
Compression
Transcoding
Virus Scanning
106
124
110
Transaction Processing Service
112
100

FIG. 1A

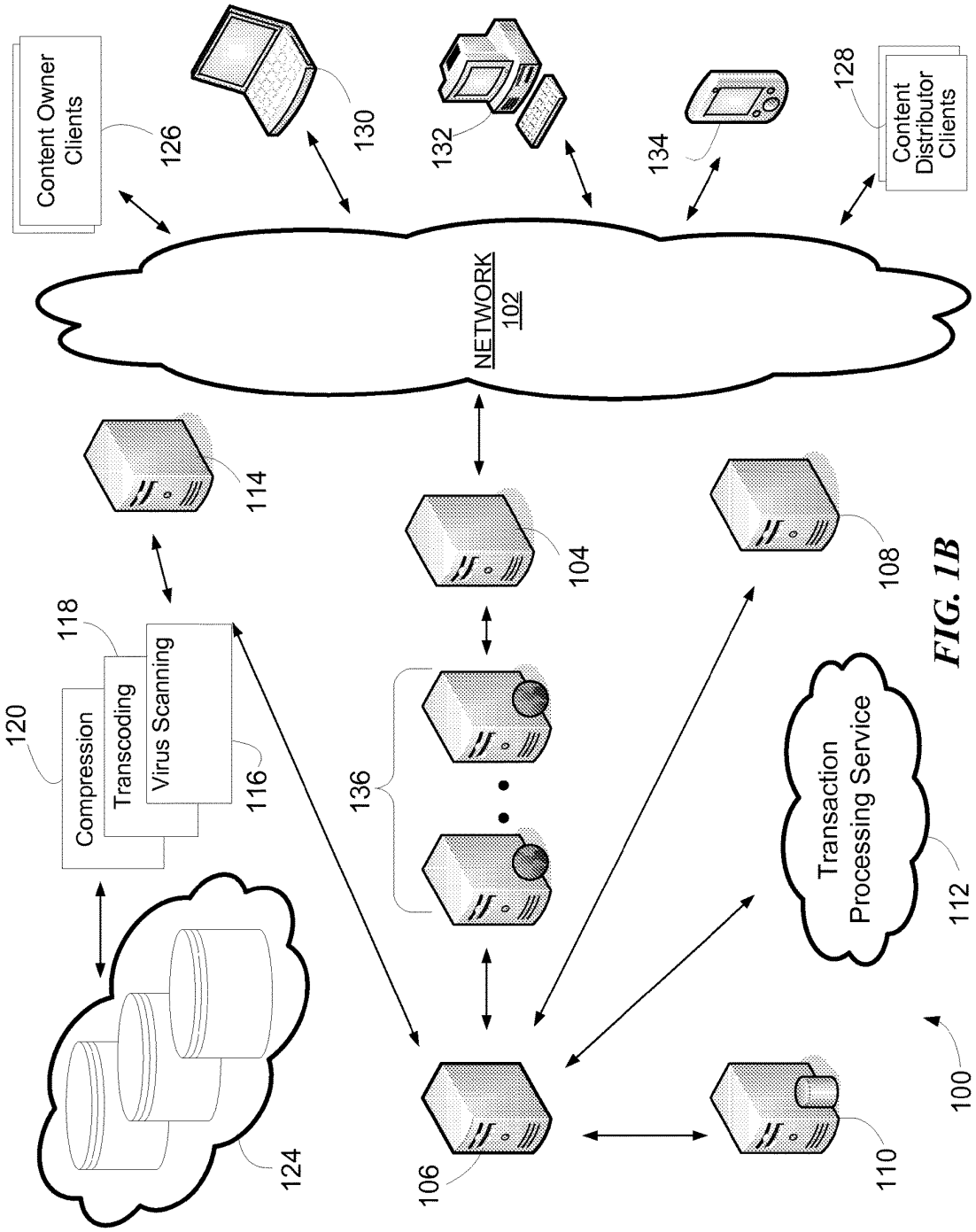

Content Owner Clients
126
130
132
134
128
Content Distributor Clients
NETWORK
102
114
104
108
118
120
Compression
Transcoding
Virus Scanning
116
136
Transaction Processing Service
112
124
106
110
100

FIG. 1B

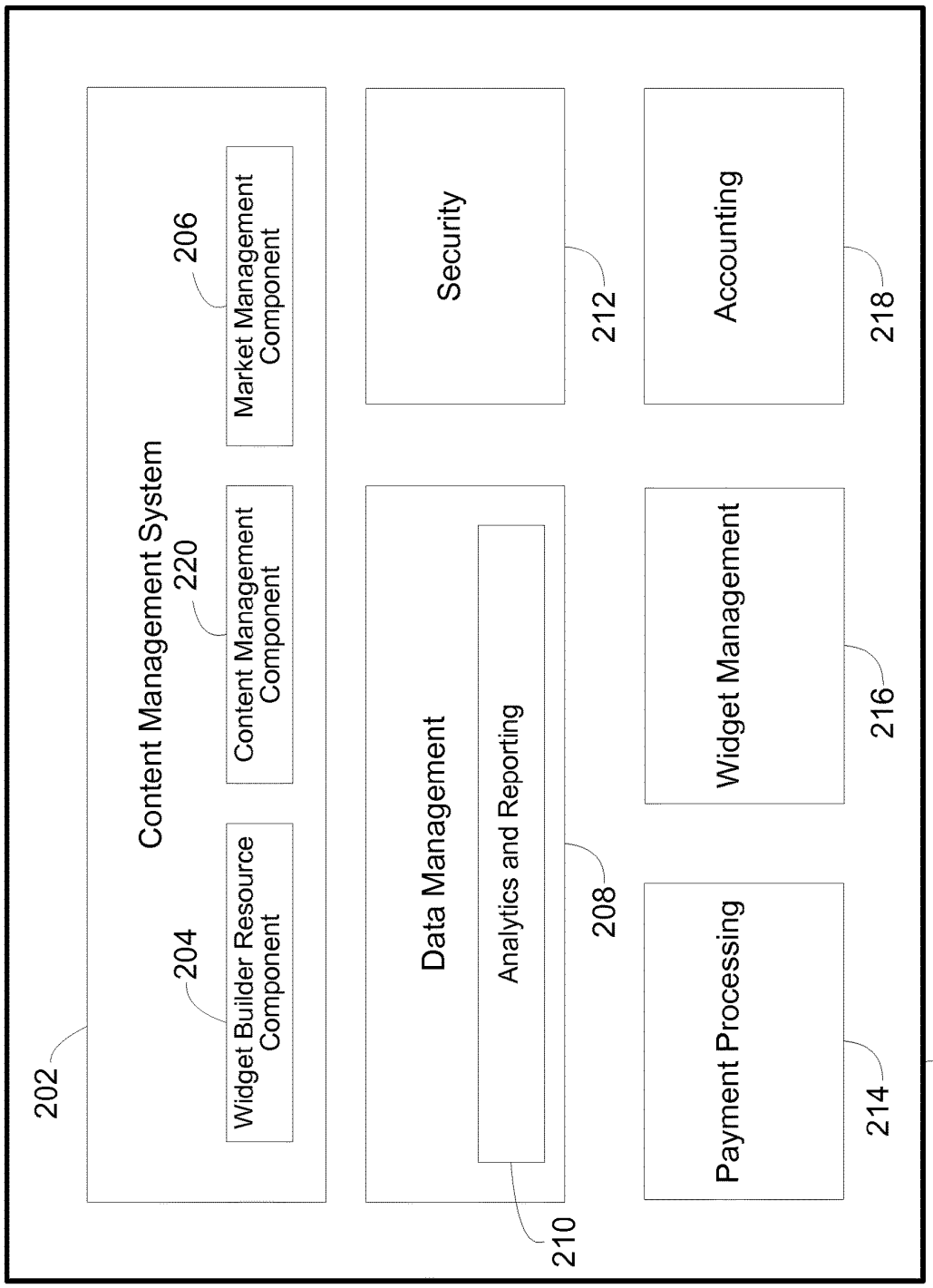

Content Management System
202
Widget Builder Resource Component
204
Content Management Component
220
Market Management Component
206
Data Management
Analytics and Reporting
208
210
Security
212
Widget Management
216
Payment Processing
214
Accounting
218
200

FIG. 2

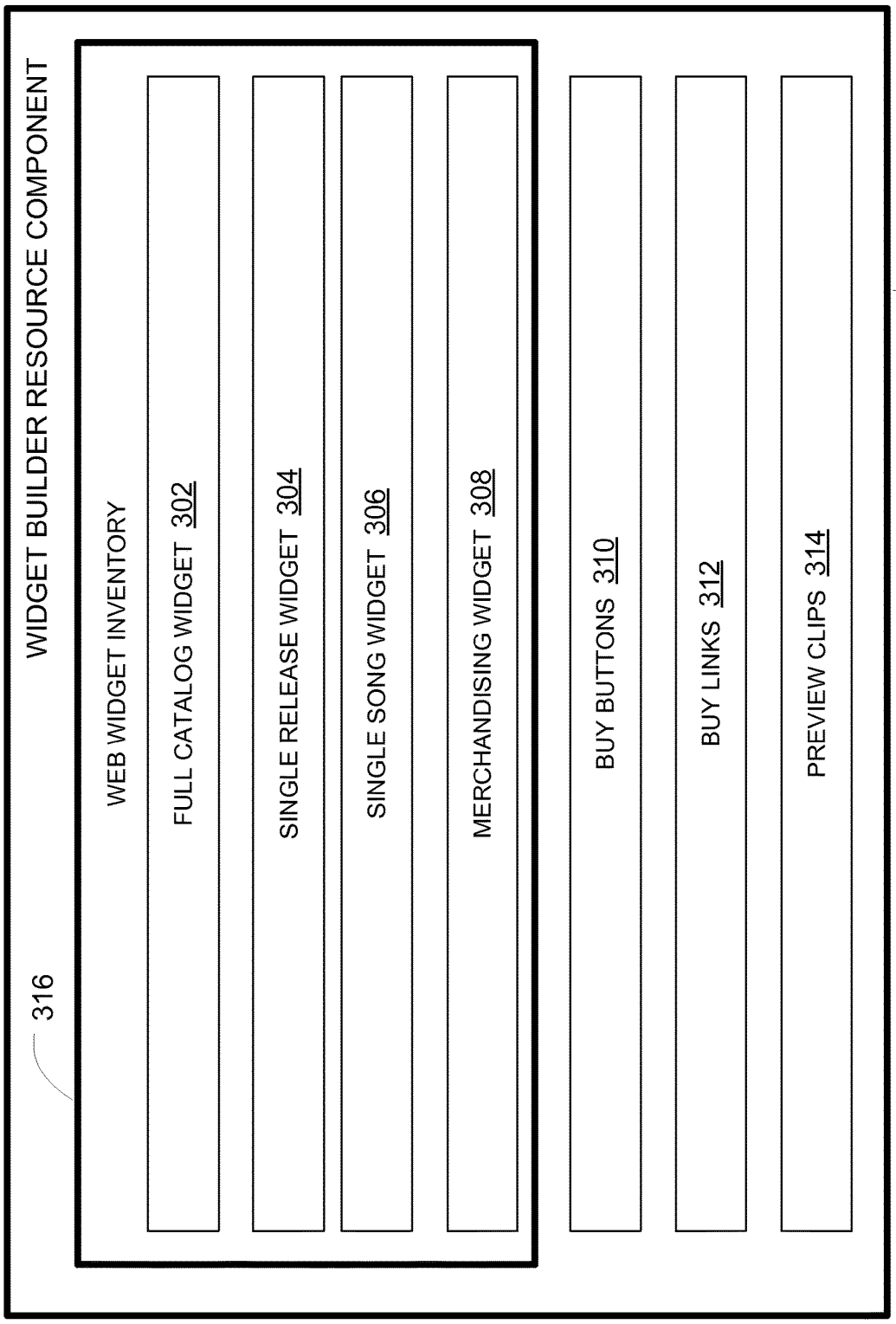

WIDGET BUILDER RESOURCE COMPONENT
316
WEB WIDGET INVENTORY
FULL CATALOG WIDGET 302
SINGLE RELEASE WIDGET 304
SINGLE SONG WIDGET 306
MERCHANDISING WIDGET 308
BUY BUTTONS 310
BUY LINKS 312
PREVIEW CLIPS 314
300

FIG. 3

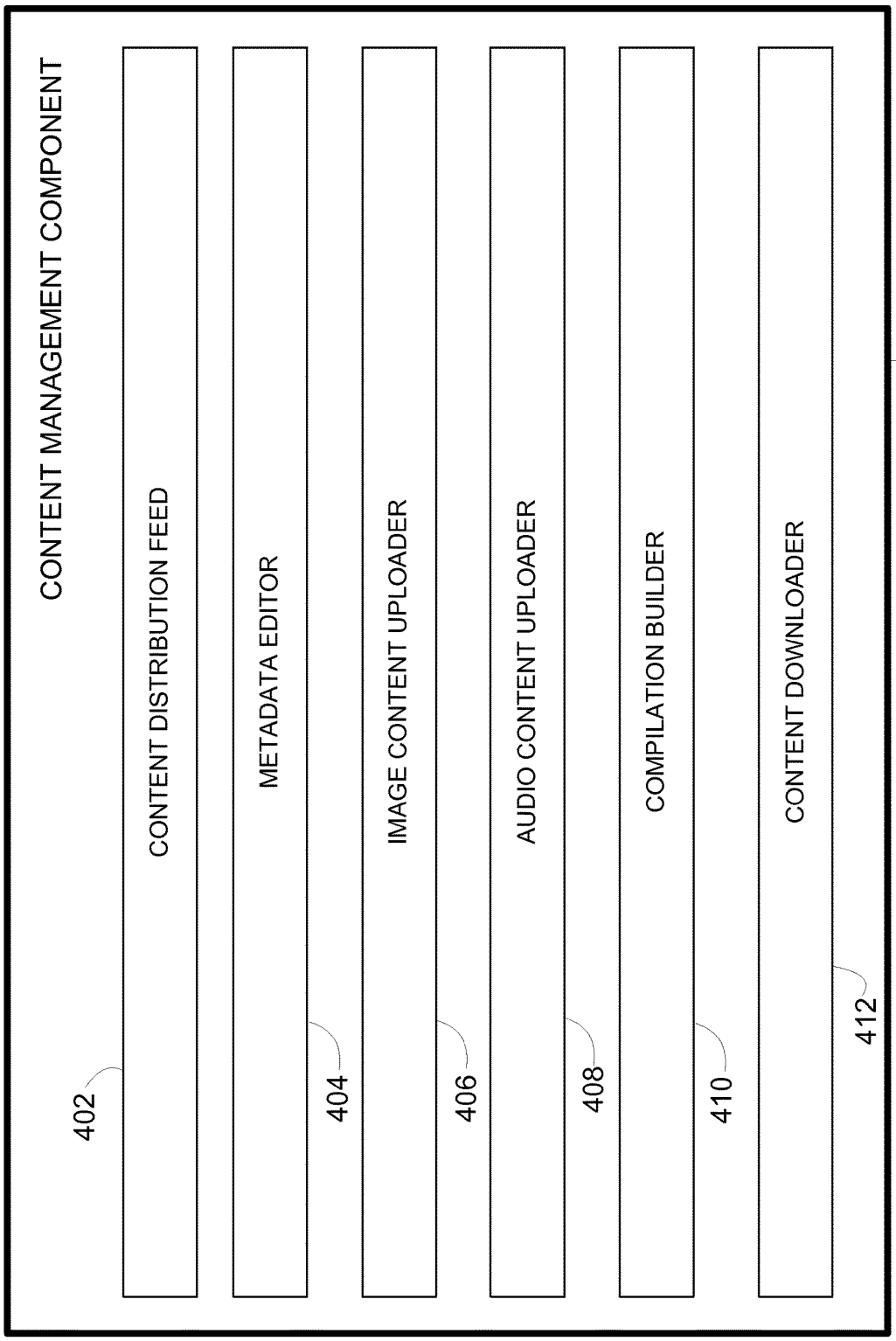

CONTENT MANAGEMENT COMPONENT
CONTENT DISTRIBUTION FEED
METADATA EDITOR
IMAGE CONTENT UPLOADER
AUDIO CONTENT UPLOADER
COMPILATION BUILDER
CONTENT DOWNLOADER
400
402
404
406
408
410
412

FIG. 4

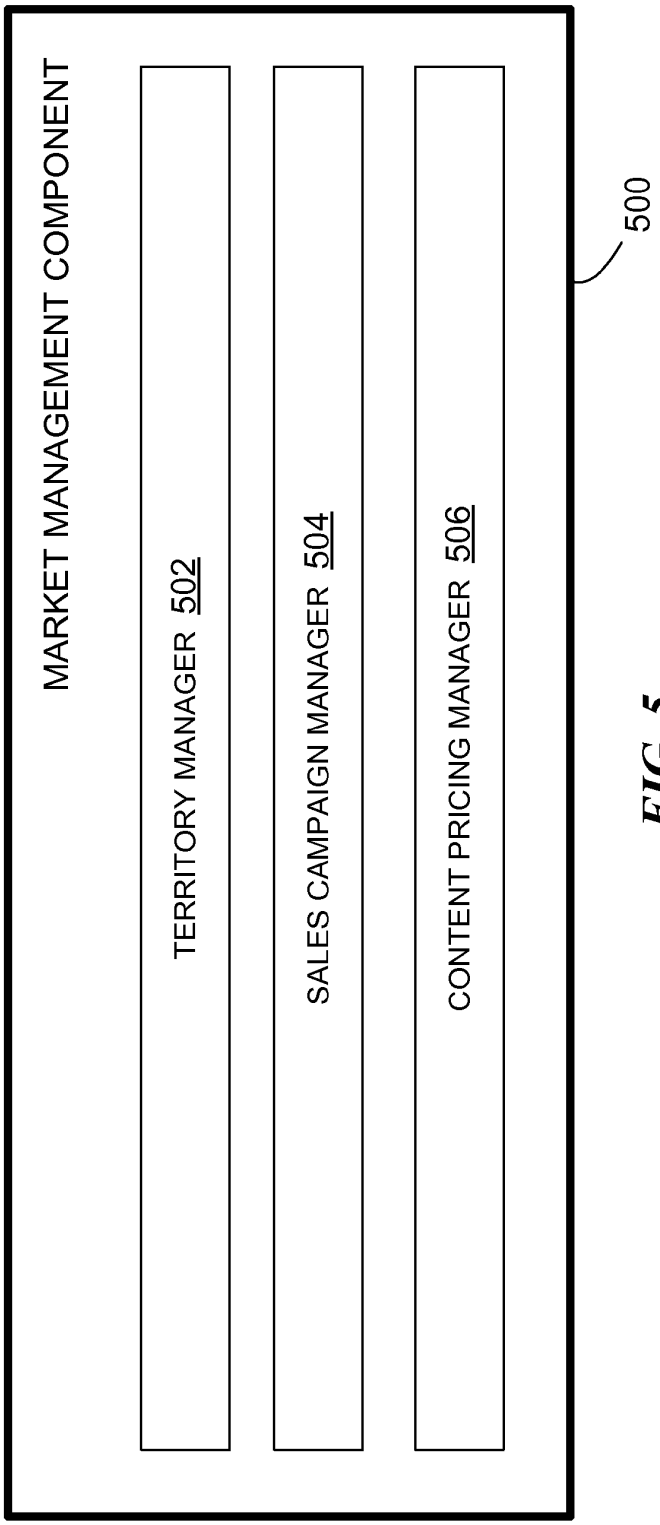

MARKET MANAGEMENT COMPONENT
TERRITORY MANAGER 502
SALES CAMPAIGN MANAGER 504
CONTENT PRICING MANAGER 506
500

FIG. 5

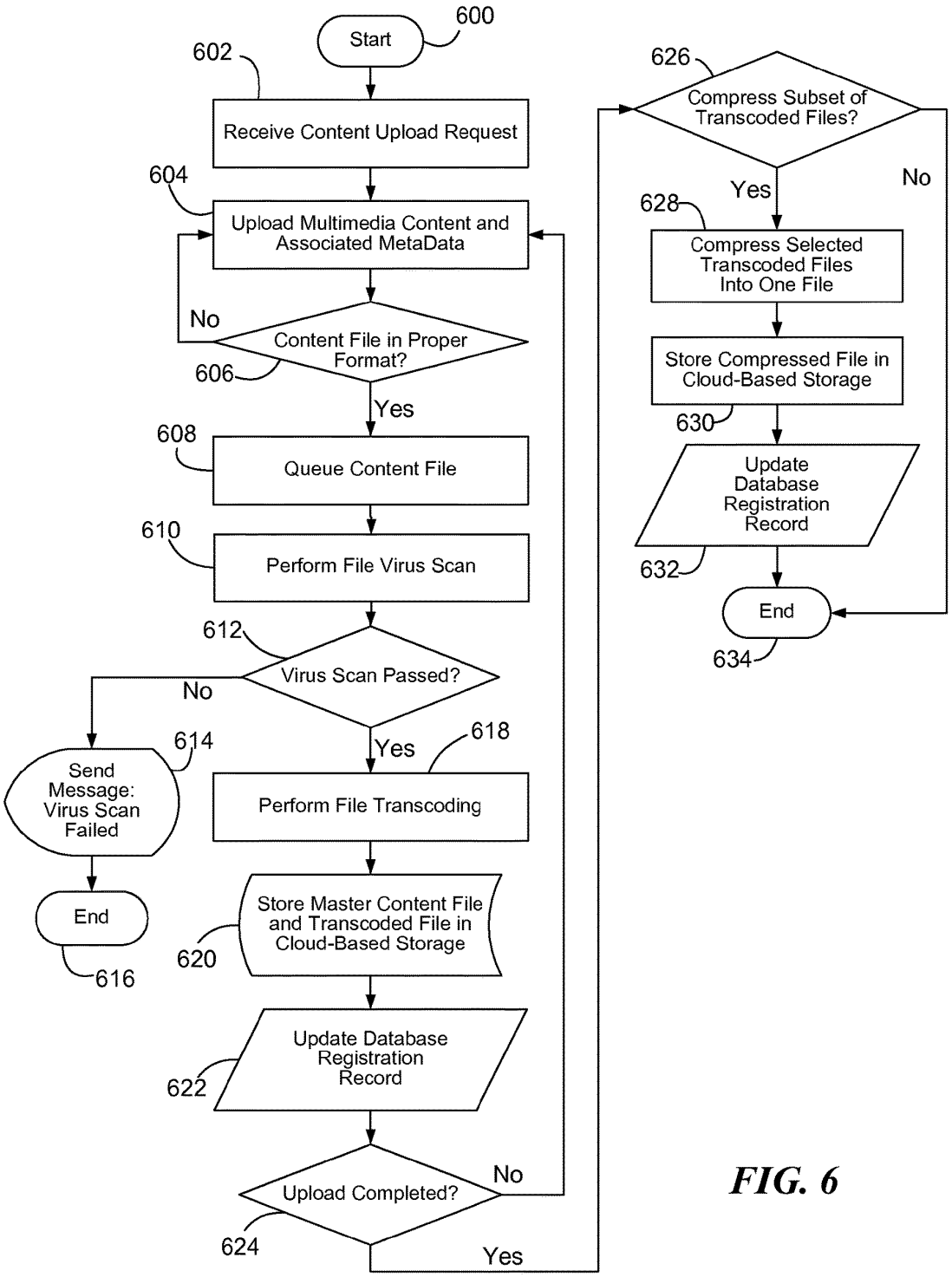

Start
600
602
Receive Content Upload Request
604
Upload Multimedia Content and Associated MetaData
No
Content File in Proper Format?
606
Yes
608
Queue Content File
610
Perform File Virus Scan
612
Virus Scan Passed?
No
614
Send Message: Virus Scan Failed
End
616
Yes
618
Perform File Transcoding
Store Master Content File and Transcoded File in Cloud-Based Storage
620
Update Database Registration Record
622
Upload Completed?
No
624
Yes
626
Compress Subset of Transcoded Files?
Yes
No
628
Compress Selected Transcoded Files Into One File
Store Compressed File in Cloud-Based Storage
630
Update Database Registration Record
632
End
634

FIG. 6

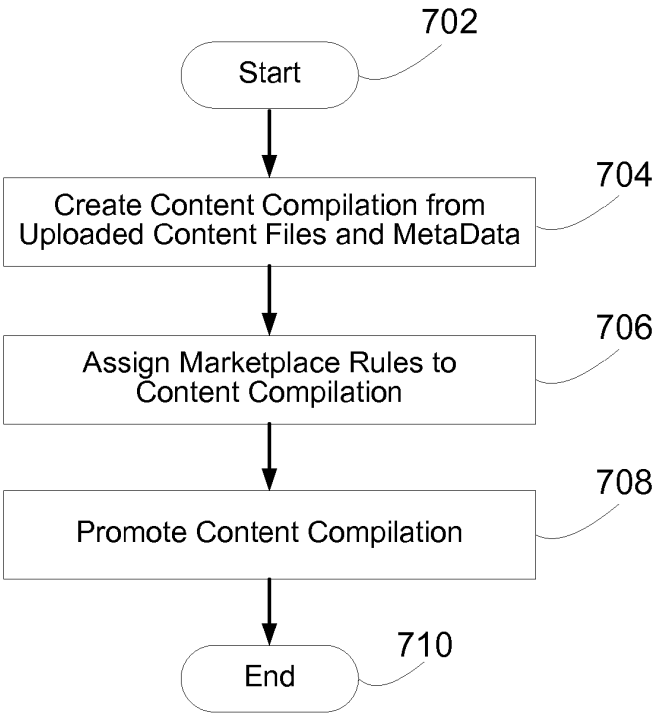

702
Start
704
Create Content Compilation from Uploaded Content Files and MetaData
706
Assign Marketplace Rules to Content Compilation
708
Promote Content Compilation
710
End

FIG. 7A

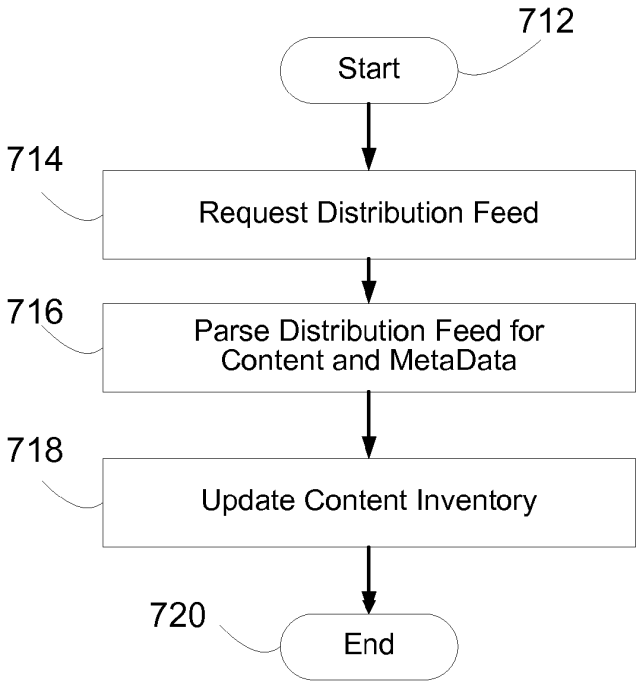

712
Start
714
Request Distribution Feed
716
Parse Distribution Feed for Content and MetaData
718
Update Content Inventory
720
End

FIG. 7B

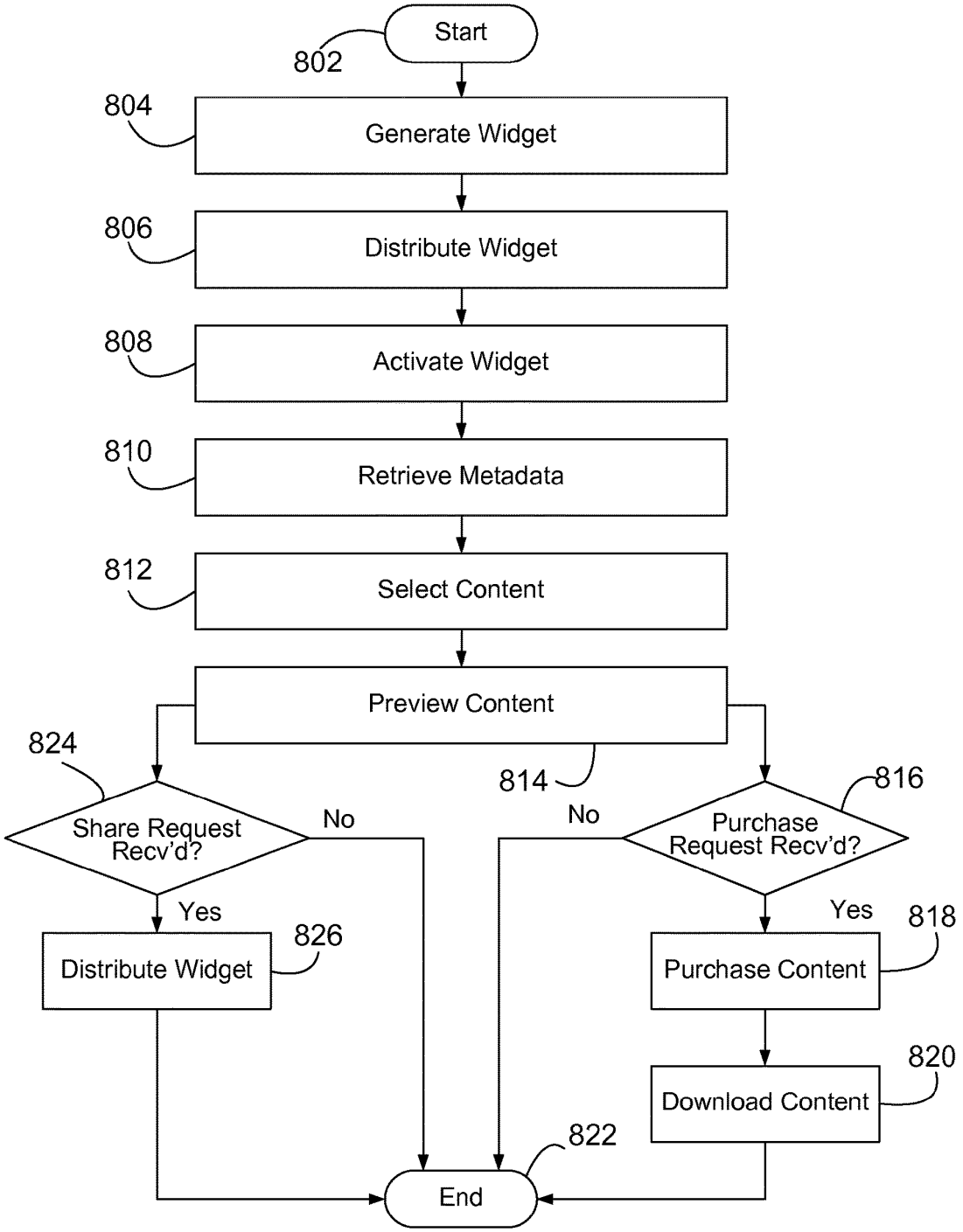

Start
802
804
Generate Widget
806
Distribute Widget
808
Activate Widget
810
Retrieve Metadata
812
Select Content
Preview Content
824
814
816
Share Request Recv'd?
No
No
Purchase Request Recv'd?
Yes
Yes
818
826
Distribute Widget
Purchase Content
820
Download Content
822
End

FIG. 8

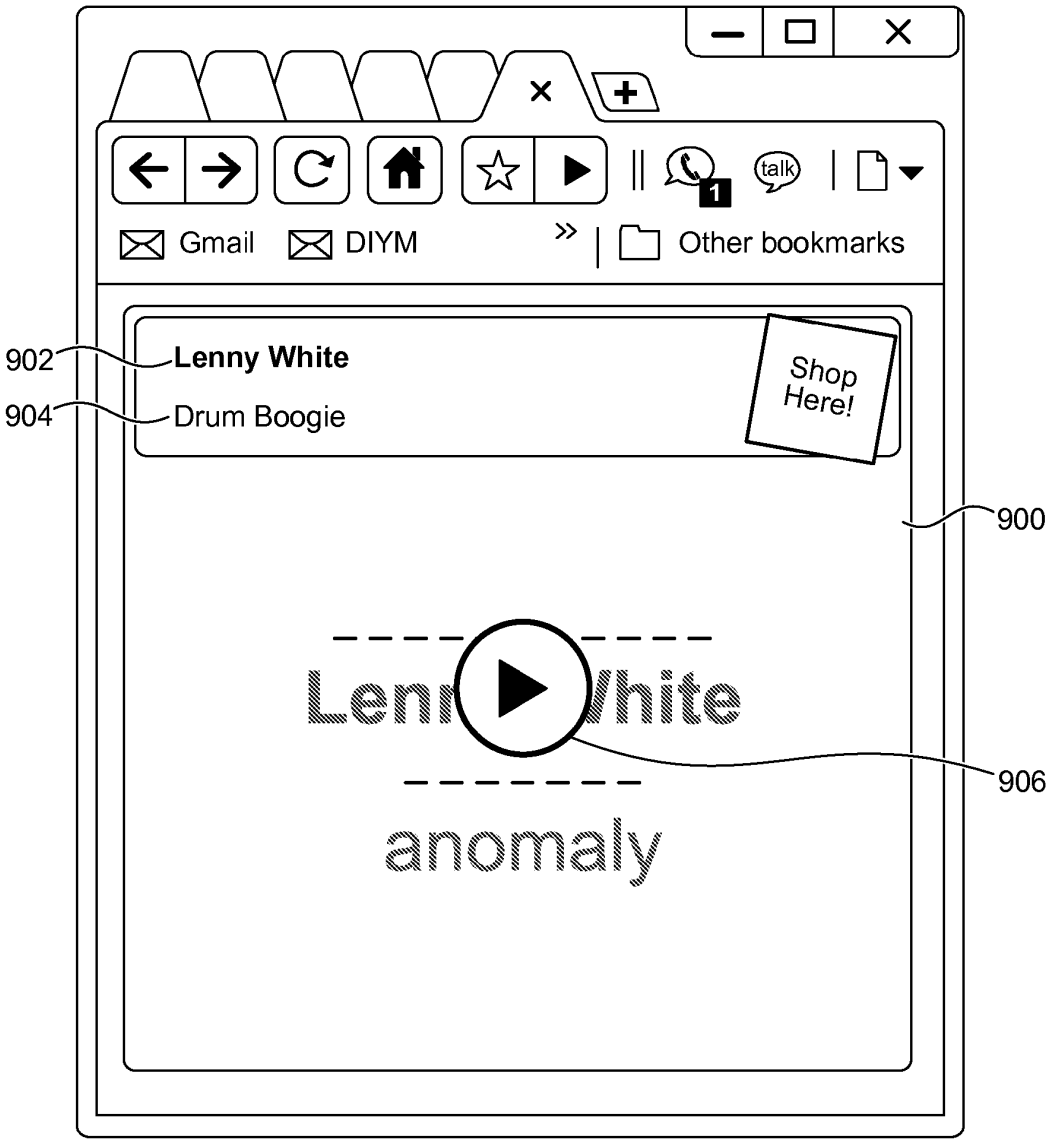

Gmail
DIYM
Other bookmarks
902
Lenny White
904
Drum Boogie
Shop Here!
900
906
anomaly

FIG. 9

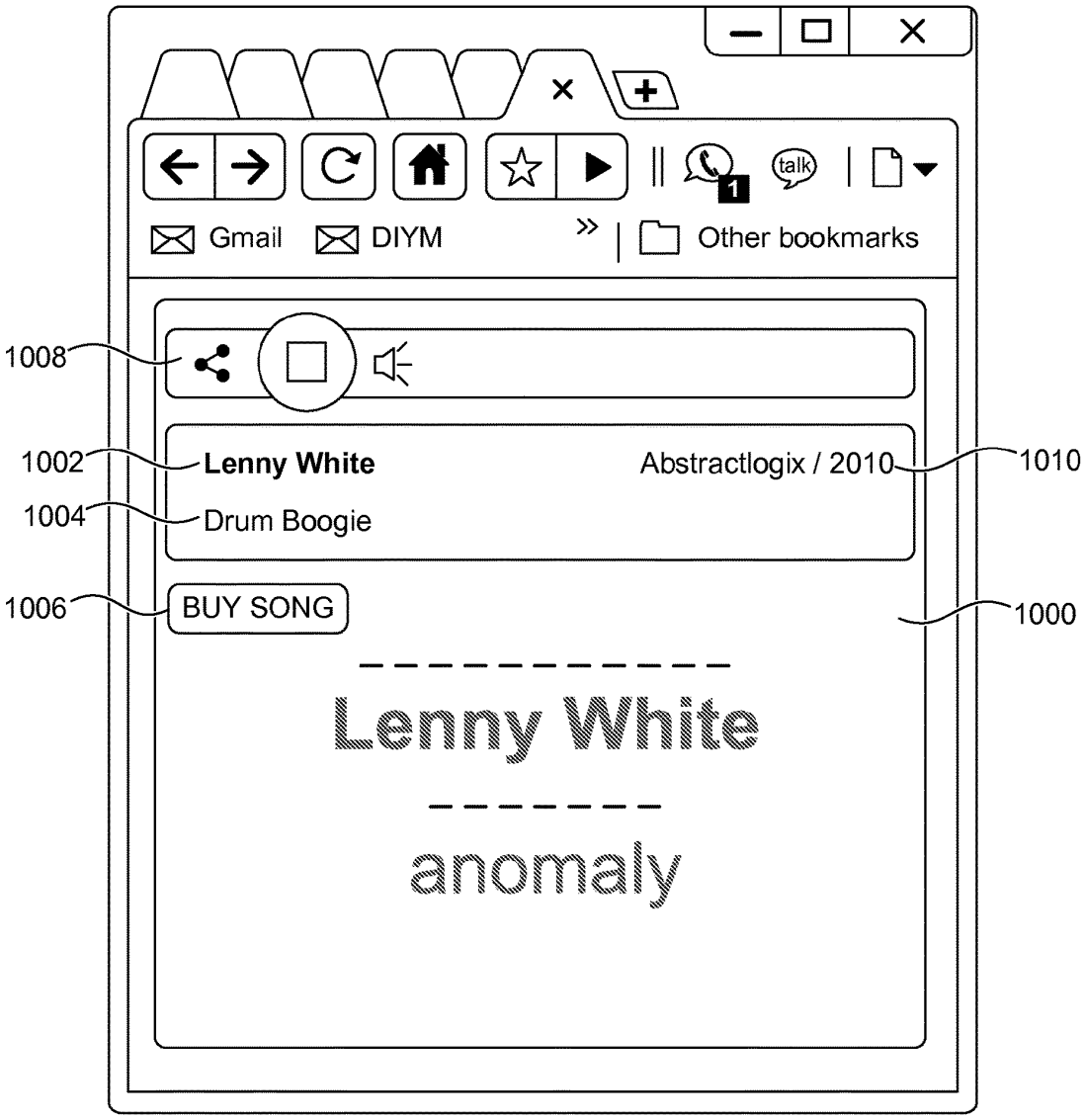

Gmail
DIYM
Other bookmarks
1008
1002
Lenny White
Abstractlogix / 2010
1010
1004
Drum Boogie
1006
BUY SONG
1000
Lenny White
anomaly

FIG. 10

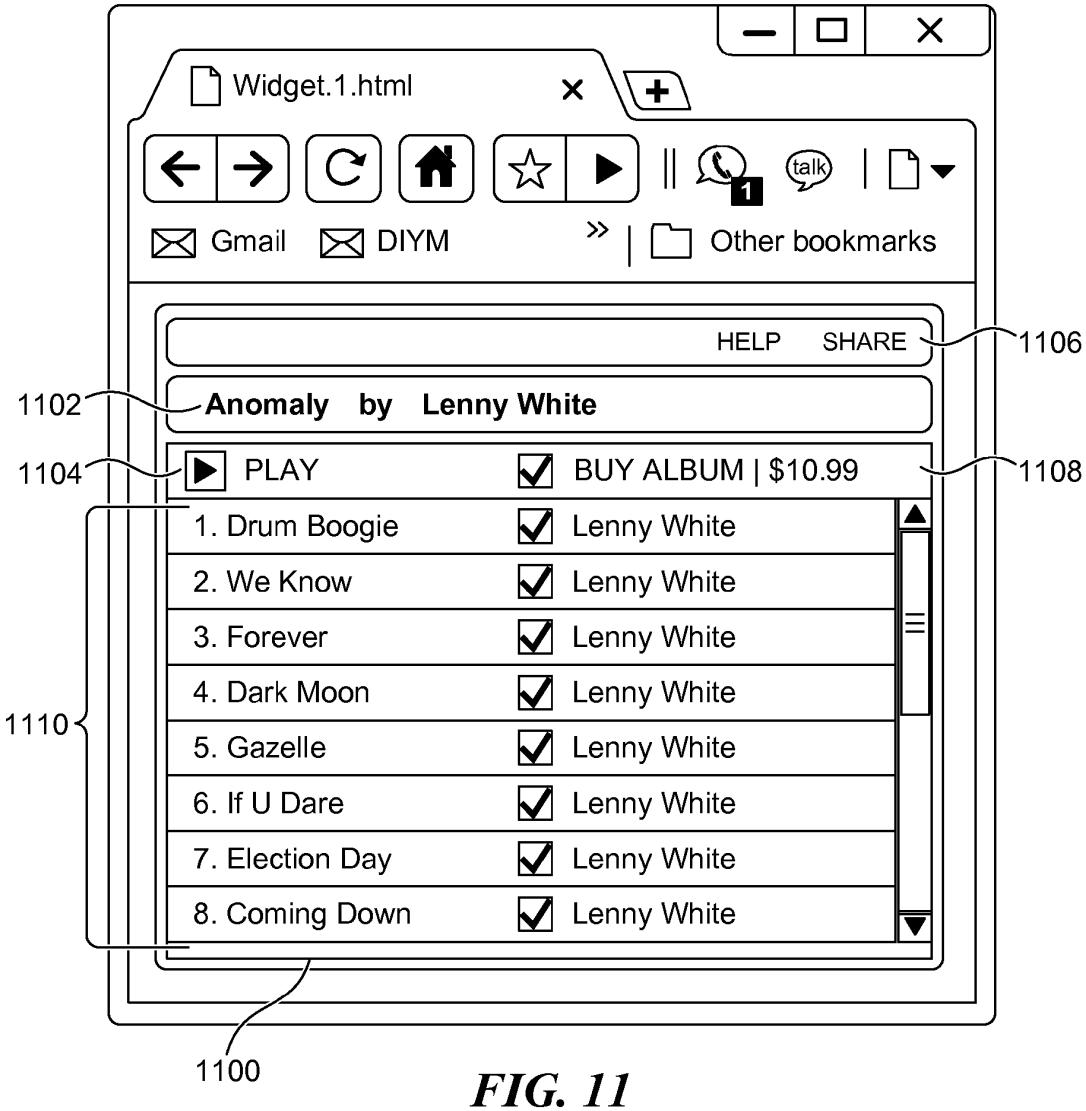

Widget.1.html
Gmail
DIYM
Other bookmarks
HELP
SHARE
1106
1102
Anomaly by Lenny White
1104
PLAY
BUY ALBUM | $10.99
1108
1. Drum Boogie Lenny White
2. We Know Lenny White
3. Forever Lenny White
4. Dark Moon Lenny White
5. Gazelle Lenny White
6. If U Dare Lenny White
7. Election Day Lenny White
8. Coming Down Lenny White
1110
1100

FIG. 11

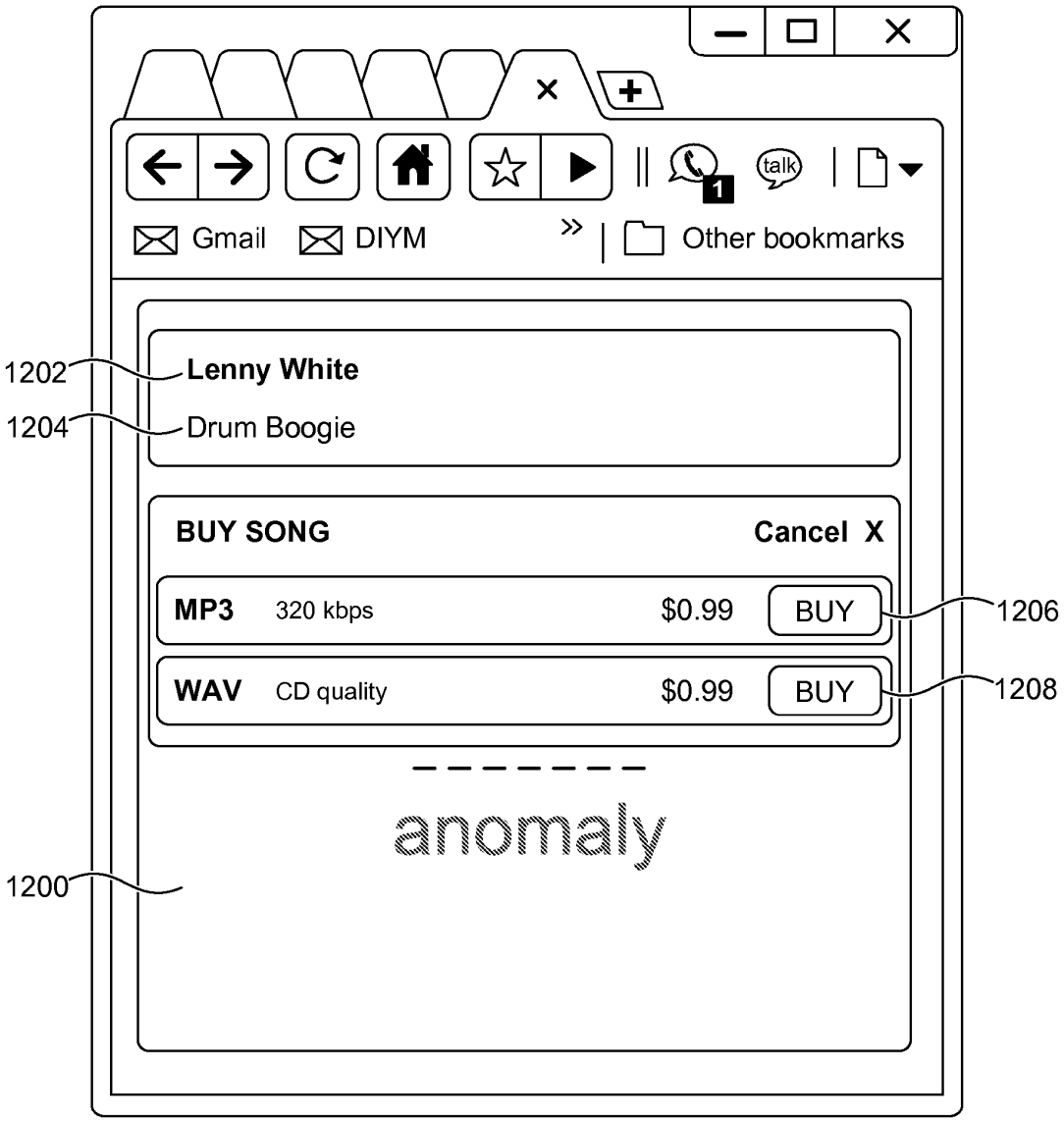

Gmail
DIYM
Other bookmarks
1202
Lenny White
1204
Drum Boogie
BUY SONG
Cancel X
MP3
320 kbps
$0.99
BUY
1206
WAV
CD quality
$0.99
BUY
1208
anomaly
1200

FIG. 12

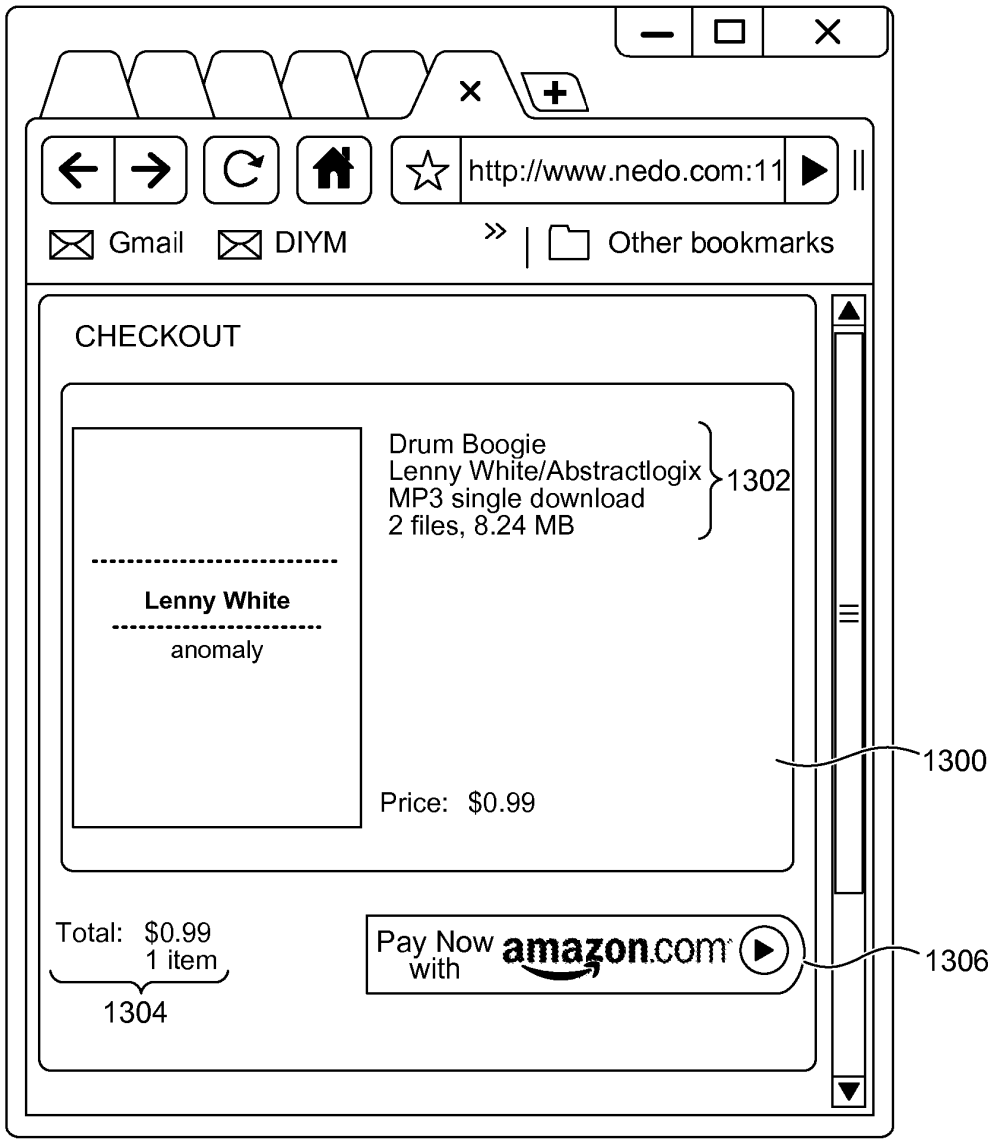

http://www.nedo.com:11
Gmail
DIYM
Other bookmarks
CHECKOUT
Drum Boogie
Lenny White/Abstractlogix
MP3 single download
2 files, 8.24 MB
1302
Lenny White
anomaly
Price: $0.99
1300
Total: $0.99
1 item
1304
Pay Now with amazon.com
1306

FIG. 13

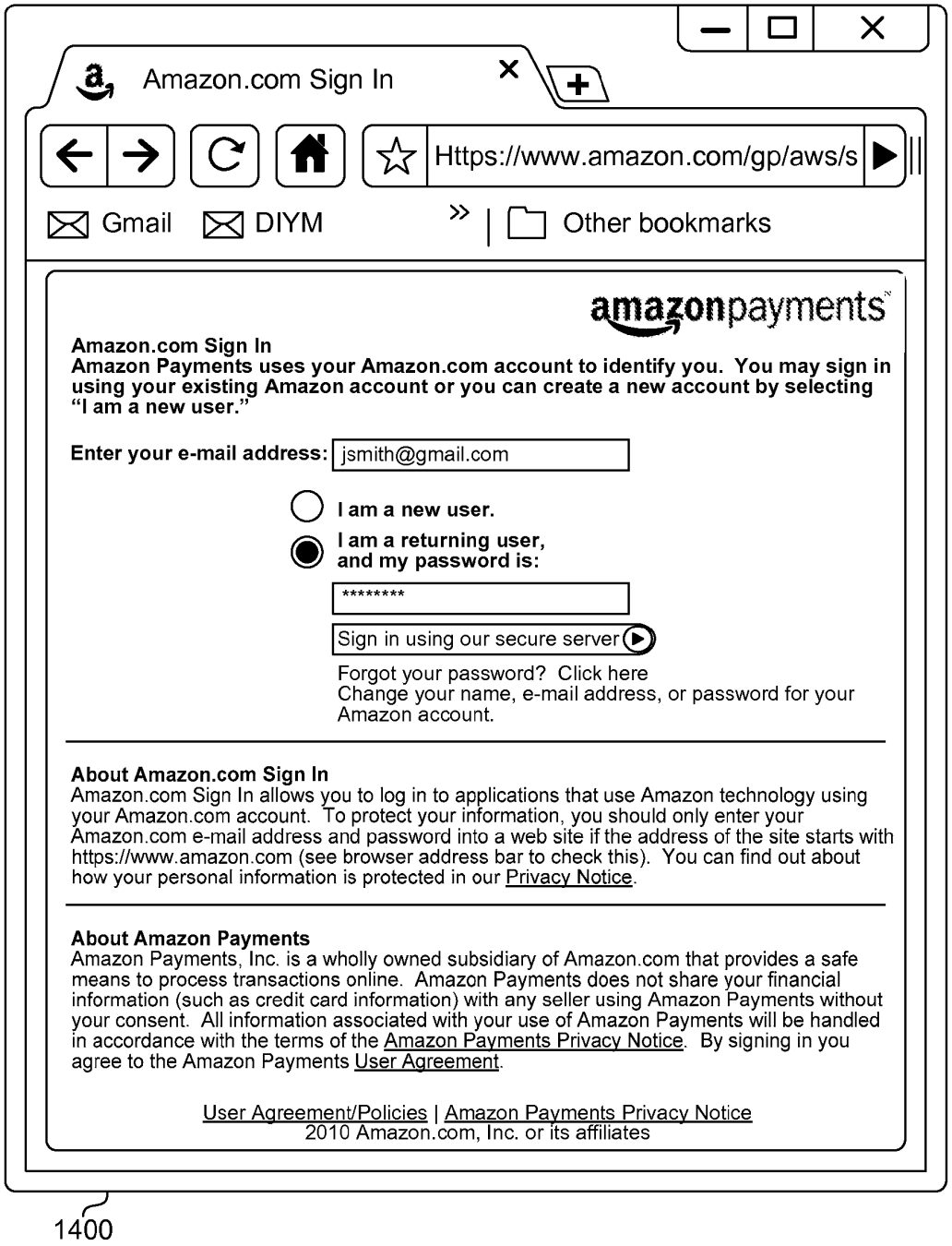

Amazon.com Sign In
Https://www.amazon.com/gp/aws/s
Gmail
DIYM
Other bookmarks
amazonpayments
Amazon.com Sign In
Amazon Payments uses your Amazon.com account to identify you. You may sign in using your existing Amazon account or you can create a new account by selecting "I am a new user."
Enter your e-mail address: jsmith@gmail.com
I am a new user.
I am a returning user, and my password is:
****
Sign in using our secure server
Forgot your password? Click here
Change your name, e-mail address, or password for your Amazon account.
About Amazon.com Sign In
Amazon.com Sign In allows you to log in to applications that use Amazon technology using your Amazon.com account. To protect your information, you should only enter your Amazon.com e-mail address and password into a web site if the address of the site starts with https://www.amazon.com (see browser address bar to check this). You can find out about how your personal information is protected in our Privacy Notice.
About Amazon Payments
Amazon Payments, Inc. is a wholly owned subsidiary of Amazon.com that provides a safe means to process transactions online. Amazon Payments does not share your financial information (such as credit card information) with any seller using Amazon Payments without your consent. All information associated with your use of Amazon Payments will be handled in accordance with the terms of the Amazon Payments Privacy Notice. By signing in you agree to the Amazon Payments User Agreement.
User Agreement/Policies | Amazon Payments Privacy Notice
2010 Amazon.com, Inc. or its affiliates
1400

FIG. 14

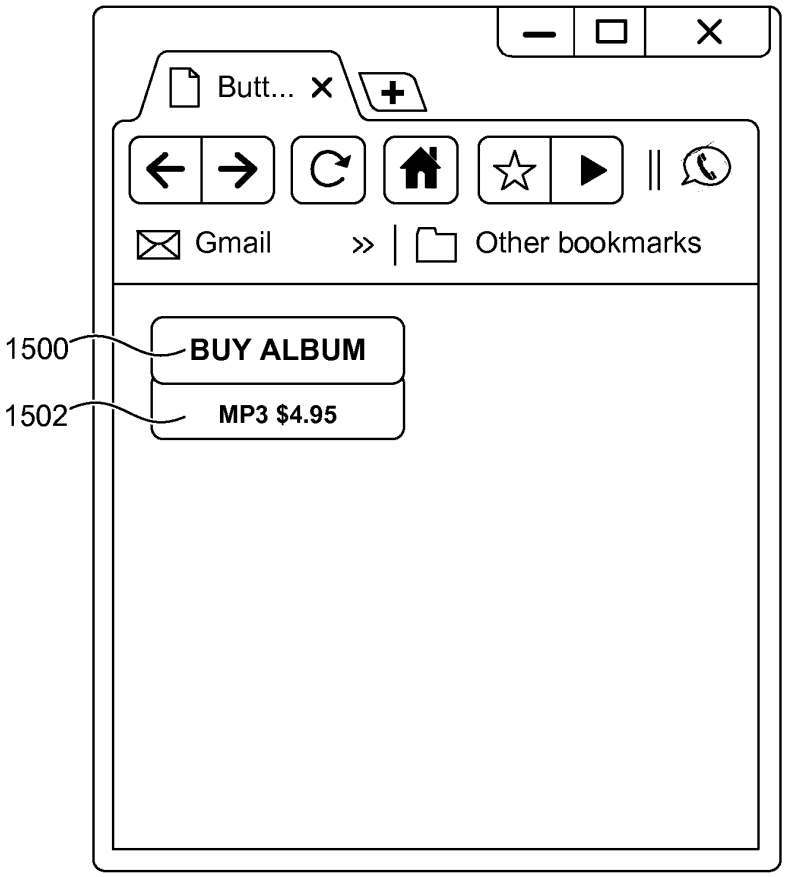


FIG. 15

SYSTEM AND METHOD FOR GENERATING AND DISTRIBUTING EMBEDDABLE BUY BUTTONS

CROSS-REFERENCE TO RELATED APPLICATION

This application is a Continuation of U.S. patent application Ser. No. 13/571,293, filed Aug. 9, 2012, which is a Continuation-In-Part of U.S. patent application Ser. No. 12/852,090, filed Aug. 6, 2010, which are hereby incorporated by reference in their entirety.

FIELD

The present disclosure relates generally to the field of electronic commerce, and in particular but not exclusively, relates to a system and method for the distribution of multimedia content and the consummation of transactions between content owners, content distributors and consumers.

BACKGROUND

Electronic commerce on the Internet has become commonplace. There are many merchants offering goods and services via web sites on the Internet, and an increasing number of consumers purchase goods and services on various Internet websites. In many cases, the electronic commerce transactions involve electronic content and physical goods. For example, many consumers purchase items such as books, compact disks (CDs) and digital video disks (DVDs) via the Internet. Increasingly, however, consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories.

More recently, the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities. When used by businesses to promote their goods and services to such individuals and online communities, this form of networking is called "social media marketing." In many of these online social relationships, users share and identify recommended content for use and consumption by other users with similar interests, hobbies and/or backgrounds. It is this unique ability to share or "virally distribute" content with recommendations and referrals that now enables the Internet to be used as a highly social medium. Furthermore, this "viral" distribution capability can now be used advantageously by content promoters, such as performing artists, visual artists, video and film producers, and content distribution companies, to create creative works that can be circulated to a far greater number of prospects and partners than may have been possible previously with a distribution capability which was limited only to the content creator's current list of customers.

Current methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner. One current approach that is used to distribute applications of limited functionality involves "web widgets." A web widget is portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation. The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal

content into dynamic web applications which can be shared on virtually any website. Current web widgets are limited to executing certain discrete applications as on-screen tools. For example, they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information.

Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Non-limited and non-exhaustive embodiments are described with reference to the following figures, wherein like reference numerals refer to like parts throughout the various views unless otherwise specified.

FIG. **1**A is a block diagram illustrating an operating environment for a multimedia content distribution system.

FIG. **1**B is a block diagram illustrating an alternative operating environment for a multimedia content distribution system.

FIG. **2** is a block diagram illustrating the software components of a multimedia content distribution system in an embodiment.

FIG. **3** is a block diagram illustrating a widget builder resource component used in a multimedia content distribution system in an embodiment.

FIG. **4** is a block diagram illustrating a content management component used in a multimedia content distribution system in an embodiment.

FIG. **5** is a block diagram illustrating a market management component used in a multimedia content distribution system in an embodiment.

FIG. **6** is a flow chart illustrating a method for uploading and converting multimedia content used in a multimedia content distribution system in an embodiment.

FIG. **7**A is a flow chart illustrating a method for creating marketable compilation of multimedia content in a multimedia content distribution system in an embodiment.

FIG. **7**B is a flow chart illustrating a method for updating content inventories in a multimedia content distribution system in an embodiment.

FIG. **8** is a flow chart illustrating a method for distributing multimedia content using a web widget in an embodiment.

FIG. **9** is a block diagram illustrating a web widget for distribution of multimedia content in an embodiment.

FIG. **10** is a block diagram illustrating an active web widget for distribution of a single musical song in an embodiment.

FIG. **11** is a block diagram illustrating an active web widget for distribution of a musical album including a compilation of musical songs in an embodiment.

FIG. **12** is a block diagram illustrating an active web widget operative to receive a purchase request in an embodiment.

FIG. **13** is a block diagram illustrating a purchase request confirmation in an active web widget in an embodiment.

FIG. **14** is a block diagram illustrating user access to a transaction processing service in an active web widget in an embodiment.

FIG. **15** is a block diagram illustrating a graphical button for viral distribution that provides access to a web widget in an embodiment.

DETAILED DESCRIPTION

In the description to follow, various aspects of embodiments web widgets and the computing and communications system which supports their ability to perform electronic commerce transactions will be described, and specific configurations will be set forth. Numerous and specific details are given to provide an understanding of these embodiments. The aspects disclosed herein can be practiced without one or more of the specific details, or with other methods, components, systems, services, etc. In other instances, structures or operations are not shown or described in detail to avoid obscuring relevant inventive aspects.

Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. Thus, the appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment. Furthermore, the particular features, structures, or characteristics may be combined in any suitable manner in one or more embodiments.

FIG. **1**A is an illustration of an operating environment for a multimedia content distribution system in an embodiment. In this operating environment **100**, one or more content distributor client devices **128**, one or more content owner client devices **126**, and one or more consumer client devices **130**, **132**, **134** are illustrated. Among the range of consumer client devices used for the distribution of multimedia content from the multimedia content distribution system are laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants (i.e., PDAs). As used here, the term "personal digital assistant" means both phone-enabled PDAs (i.e., smart phones) and non-phone enabled PDAs. Each of these client devices is communicatively coupled to a network **102** which provides secure computing and communications access through a server **104** executing a firewall software to an application server **106**, which in this embodiment acts as a centralized compute processing and transaction management resource. In the illustrated embodiment, the network **102** is the Internet. However, in other embodiments, the network **102** can be a private computer-communications network, a wireless communications network, or other computer data communications network that can enable communications between and among computer devices, mobile devices, the multimedia content distribution system and its infrastructure resources for storage and transaction processing.

The application server **106** is communicatively coupled to a database server **110**, a transaction processing service **112**, an email server **108** and a file management server **114**. The file management server is communicatively coupled to one or more computing resources that perform file virus scanning **116**, file transcoding **116** and file compression **120** for files which are stored on a cloud-based storage resource **124**. In an embodiment, the database server **110** is used to maintain a lookup table of all content files and related metadata which are stored on the cloud-based storage resource **124**. The file management server **114** is used to control the file conversion process from a first format in a received file to one or more transcoded formats. In an embodiment, a select subset of the transcoded files will then be compressed into a single file using file compression **120** and then stored on the cloud-based storage resource **124** along with related metadata for each file. In one embodiment, the files are compressed into a WinZip file for storage on the cloud-based storage resource **124**. The email server **108** is used in an embodiment to facilitate electronic mail communications between and among content owners and content distributors, as well as email broadcasts to groups of consumers and prospects. In addition to its role in managing the use of resources in the multimedia content distribution system, the application server **106** is also used for the creation of user account profiles, the execution of one or more web servers, and the execution of a content management system including a widget builder resource component and a market management component. The web servers are used to receive and respond to content related requests received from consumer client devices **130**, **132**, **134**.

In one embodiment, content owners using their client devices **126** upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**, **132**, **134** using compilation-specific web widgets that are created and capable of distribution from the application server **106**. In creating web widgets, the application server **106** will check the lookup table stored on the database server **110** to confirm the availability and format of content files included in or associated with the web widgets. This process is also followed when new buttons, links or preview clips are created by content owners for subsequent distribution from the application server **106**. The web servers executed on the application server **106** are used to respond to requests received from web widgets, buttons, links or preview clips executed or selected in browsers running on the consumer client devices **130**, **132**, **134**

The content distributor client devices **128** are used by content distributors to provide content distribution feeds to update the content inventories of content owners with active accounts in the multimedia content distribution system on the application server **106**. These inventories can be updated with content from distribution feeds upon request of the content owners or the operators of the multimedia content distribution system. In one embodiment, the distribution feeds provide content in bulk which is parsed by a content management system executed on the application server **106** to ensure that each content owner receives the content desired for inclusion in their respective content management systems. Each distribution feed is parsed and the content is allocated to each content owner's account as specified in the distribution feed. Once parsed, the content delivered in these distribution feeds is uploaded, master content files are transcoded to one or more alternative file formats preselected by content owners, the content files and their transcoded variants are stored in the cloud-based storage resource **124**, and references to the stored content files and transcoded variants are registered in one or more lookup tables maintained on the database server **110**. Once uploaded and registered on the database server **110**, the content included in these distribution feeds can be accessed and used by content owners to create new content compilations for association with web widgets using a widget builder resource component executed on the application server **106**. In an embodiment, a content compilation is an aggregation

of one or more multimedia content files and associated metadata. Once created and associated with specific multimedia content and related metadata, these web widgets are available for viral distribution by content owners to networks of current and potential consumers.

In one embodiment, the cloud-based storage resource **124** and the transaction processing service **112** are provided by the Amazon Web Services group at Amazon.com, Inc. More particularly, in the embodiment, the cloud-based storage resource is implemented using Amazon's "Simple Storage Service" (S3) which provides a data storage capacity that can be used to store and retrieve any amount of data, at any time, from anywhere on the World Wide Web. Likewise, in an embodiment, the transaction processing service **112** is implemented using Amazon's "Flexible Payments Service" (FPS) to facilitate the payment processing and checkout process once consumers decide to purchase and download content from virally distributed web widgets, buttons, links or preview clips. In this embodiment, the FPS is used to process payments from consumers who wish to purchase registered multimedia content promoted in virally distributed web widgets, buttons, links or preview clips using their credit cards, debit cards or bank account information. Furthermore, in an alternative embodiment, the file virus scanning **116**, file transcoding **118** and file compression **118** processes are implemented using Amazon's "Elastic Compute Cloud" (EC2) resources instead of dedicated, proprietary servers. The EC2 is a web service that provides resizable compute capacity in a cloud-based network that can be scaled to provide computing capacity for applications serving multiple client devices.

Consumers using browsers executing on their client devices **130**, **132**, **134** can activate web widgets directly or indirectly. A web widget can be activated indirectly if a consumer receives a button or link and then clicks on the button or link which results in the activation of a web widget. Likewise, a consumer can directly activate a web widget if it is received from the content owner or a third party who has opted to share or redistribute the web widget. Once activated, a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties or elect to purchase the multimedia content packaged with the web widget. If a consumer elects to purchase specific multimedia content files by clicking on an embedded buy button, then the web widget provides the consumer with a choice of format options and then redirects the consumer to the transaction processing service **112** for the provision of credit card, debit card or bank account information and completion of the purchase transaction. Once the purchase transaction is completed, the selected multimedia content files are downloaded by the web widget from the cloud-based storage resource **124** to the consumer's designated client device **130**, **132**, **134**.

FIG. **1**B is an alternative embodiment of the operating environment of the multimedia content distribution system **100**. In this operating environment, one or more web servers have been added as independent computing resources for use in receiving and responding to content related requests from various client devices **130**, **132**, **134**. This embodiment is computationally more efficient and enables the application server **106** to be dedicated to the operation of a content management system and the control of processes on the other servers used in this operating environment. As discussed above, these servers include an email server **108**, a database server **110**, a file management server **114**, and control over a transaction processing service **112** and content conversion services for file virus scanning **116**, file transcoding **118**, and file compression **120** for storage in the cloud-based storage resource **124**.

FIG. **2** is an illustration of an embodiment of a multimedia content distribution system **200**. In this embodiment, the system **200** is comprised of a content management system **202**, a data management service **208**, an analytics and reporting service **210**, a security service **212**, a transaction payment processing service **214**, a widget management service **216** and an accounting service **218**. The content management system **202** is comprised of three components, a widget builder resource component **204**, a content management component **220**, and a market management component **206**. The content management component **220** is used for the uploading of multimedia content, the editing of metadata related to the content and the creation of compilations of content into marketable packages that can be associated with one or more web widgets. In addition to controlling the uploading, editing and creation of content compilations through the content management component **220**, the content management system **202** also controls the processes applied to uploaded content files for virus scanning, file transcoding and file compression for storage in the cloud-based storage resource **124**. The widget builder resource component **204** is used to create various marketing resources including new web widgets, buy buttons, links and preview clips. In one embodiment, the buy buttons, links and preview clips are each communicatively coupled to a web widget so that the selection or clicking on a button, link or preview clip causes the activation of a web widget Once these marketing resources are created, content owners can use them in viral distribution marketing campaigns to promote their content compilations. The market management component **206** is used by content owners to assign market rules and pricing terms to selected items included in a content compilation. In one embodiment, the items include individual songs, song releases, or entire song catalogues. In a different embodiment, the items include reports, physical merchandising paraphernalia (e.g., cups, t-shirts, hats, etc.), and other electronic goods.

The data management service **208** is used to maintain a lookup table for use in tracking the locations of stored multimedia content files in the cloud-based storage resource, transcoded variants of these files, compressed files including one or more copies of content files and transcoded files, and files storing usage statistics collected by one or more web servers from the web widgets, buy buttons, links, preview clips or other marketing resources which are created and distributed by content owners and third parties. The analytics and reporting service **210** in one embodiment is a subcomponent of the data management service **210** and is used to analyze compiled analytical data, transaction statistics and location statistics for the marketing resources used by content owners in promoting their multimedia contents over one or more networks. More specifically, the analytics and reporting service **210** compiles transaction statistics and location statistics arising from the viral distribution of web widgets and related purchase transactions initiated and completed over web widgets which have been distributed over such networks. In an alternative embodiment, the analytics and reporting service is a stand-alone service which independently interacts with the data management service **210** and the one or more web servers comprising the widget management service **216** which are used for the tracking of web widgets and other marketing resources and the collection of usage statistics from these resources.

The security software service **212** provides content owners, distributor clients and consumer clients with secured access to the multimedia content distribution system **200** and its operating infrastructure. In one embodiment, the security service **212** is implemented using firewall software to restrict access to the application server **106** and other computing resources used as part of the operating environment for the multimedia content distribution system **200**. The payment processing service **214** provides direct access to transaction processing resources for the completion of purchase transactions initiated by consumers who use web widgets to preview, purchase and download multimedia content. In one embodiment, the payment processing service **214** is provided by the Flexible Payment Service (FPS) offered by Amazon.com, Inc. The payment processing service **214** is used for the facilitation and execution of payment transactions using credit cards, debit cards or other bank account information.

The widget management service **216** is implemented on one or more web servers and is used for the tracking of web widgets which have been distributed to and activated on Internet websites or on other accessible locations and resources over other networks. Once a web widget has been distributed or activated from a link, buy button or preview clip, it can be further distributed in a "viral" fashion to other online communities, websites, forums, etc. In one embodiment, the widget management service **216** is implemented on web servers which are co-hosted on the application server **106**. In an alternative embodiment, the widget management service **216** is implemented on one or more independent web servers **136**. In both embodiments, however, the widget management service is used for receiving and responding to requests for multimedia content received from web widgets. In addition, the web servers implementing the widget management service **216** also perform data collection and activity monitoring on deployed web widgets. The data collected by the web servers includes transaction statistics, location statistics, usage statistics and other pertinent market statistics for each web widget which has been created, activated and distributed over the Internet, mobile networks or other computer communication networks by the content owner or third parties, such as consumers and members of their online social networks. Once a web widget is activated, the web servers implementing the widget management service **216** compile the data statistics into one or more files which are stored in the cloud-based storage resource **124** and a reference to the stored data collection files is created in the lookup table maintained by the data management service **208** and associated with the multimedia content files and any related transcoded files which have been packaged with each web widget for which the statistics have been collected. In an alternative embodiment, the one or more data collection files including the data statistics are stored on the database server **110** where the lookup table is maintained by the data management service **208**.

The accounting service **218** provides account transaction reconciliation for each content owner having an active account on the content management system **202**. By using the accounting service **218**, content owners can track the number and type of available content in their inventories of content files, the number of transactions performed relative to the total number of available content files, the number of transactions which have been returned for credit to consumers, the number of completed transactions, and revenue earned from completed transactions.

FIG. **3** depicts an embodiment of a widget builder resource component. The widget builder resource component **300** is used to create an inventory of "web widgets" **316**, buy buttons **310**, buy links **312** and preview clips **314**. In an embodiment, the web widget inventory **316** includes services for creating web widgets for packages of marketable multimedia content including, in one embodiment, full catalogs of digital music content, single releases of digital music content and single song digital music content. The widget builder resource component **300** is also used to create a merchandising widget **308** to promote a content owner's physical goods and related materials as marketing merchandise. Examples of such physical goods are coffee mugs, t-shirts, hats, jackets, etc. In the present embodiment, the web widgets pertain to musical content which is often compiled in the form of musical catalogs, musical releases, and single songs. A full catalog widget **302** is used for the promotion of the full musical catalog of a content owner. In one embodiment, the full catalog widget **302** is used to execute a video clip that provides a preview of the content in a content owner's inventory in the multimedia content distribution system **200** that is packaged with the web widget. The web widgets **302**, **304**, **306**, **308** are also used to facilitate electronic commerce transactions involving the purchase or licensing of multimedia content, such as musical selections as shown in this embodiment, in the specific groupings desired (i.e., catalog, release, or single song).

A single release widget **304** is used to promote a single musical release of a content owner from content stored in a content inventory of the multimedia content distribution system **200** in an embodiment. A single song widget **306** is used to promote a single song provided by a content owner in an embodiment. The merchandising widget **308** is used to promote the merchandise or physical goods that a content owner may choose to promote alone or in association with one or more multimedia content files in an embodiment. The merchandising widget **308** is used when a content owner seeks to create a fully custom content compilation which may include promoted merchandise or physical goods (e.g., cups, hats, t-shirts, etc.), a subset of content from specific releases as well as other content from the content owner's catalogue which is not included in any specific release. The buy buttons **310** are generated by content owners using the widget builder resource component **300** and linked to web widgets. The buy buttons **310** can be customized and distributed to online resources on the Internet, on mobile communication networks or on other computer networks for use in promoting the various groupings of multimedia content available from a content owner. Once a buy button **310** is clicked or selected by a consumer, it will activate its linked web widget and take the consumer to a checkout screen in the web widget. The buy links **312** are Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise. The preview clips **314** created in the widget builder resource component **300** are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices **130**, **132**, **134** to enable those consumers to preview multimedia content and to make informed choices about the multimedia content they may elect to purchase and download to their client devices **130**, **132**, **134**, or to further distribute to third parties in the social networks of these consumers or in other online communities. Upon completion of an executing video clip, the linked web widget which will have been activated at the start of

execution of the preview video clip will be displayed in the browsers of the consumer client devices **130**, **132**, **134** to aid the consumer in making a purchase or distribute decision.

FIG. **4** illustrates an embodiment of a content management component **400**. The content management component **400** is comprised of several services. The content distribution feed **402** is a service that enables content owners to request and receive distribution feeds from content distributors. The content provided by content distributors to content owners through such feeds is used to automatically update and supplement the content inventories of content owners in the content management system **202**. The metadata editor **404** is a service that enables content owners to edit the metadata associated with multimedia content files. In one embodiment, the type of metadata that can be edited includes information pertaining to the musical content of a content owner such as title, artist name, release date, genres, catalogue number and Universal Product Code. Image Content Uploader **406** is a service that uploads, store and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets. In one embodiment the types of image files which can be uploaded using the Image Content Uploader **406** are GIF files, JPEG files and TIF files. Audio Content Uploader **408** is used for uploading audio files. In an embodiment the audio file types that can be uploaded using the Audio Content Uploader **408** include WAV files and MP3 files. The compilation builder **410** is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system **202**. In an embodiment, each content compilation created using the compilation builder **410** is associated with a web widget that will be distributed using the web distribution service **216** to consumers on the Internet, mobile communications networks, or other computer communications. Lastly, the content downloader **412** is used for controlling the downloading of the custom content compilations created by content owners which are packaged with and promoted through web widgets. Upon receipt of a content download request from a web widget, the content downloader **412** initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the cloud-based storage resource **124** or other storage in the multimedia content distribution system **200**, and it also controls the process of downloading the retrieved content compilations to a client device **130**, **132**, **134**.

FIG. **5** illustrates the services provided in an embodiment of a market management component **500**. As shown, one service is a territory manager **502** which is used by content owners to set the sales parameters and the timing of sales campaigns relating to specifically available content from a content owner in different geographic regions of the world. For example, a content owner may choose to provide a subset or only a particular release version of certain musical content for sales and marketing campaigns in Spain, Germany or France. While in other parts of the world, the content owner may choose to set different territorial restrictions on the availability of their content such as limiting the availability of musical content only to earlier releases rather than later releases in an entirely different part of the world, such as South America or in specific South American countries. The sales campaign manager **504** is another service provided in an embodiment of the market management component **500** that enables content owners to enable and disable sales campaigns by specified dates. The content pricing manager **506** is a service that allows content owners to set the pricing of particular files by file type. Although not limited only to musical content, in one embodiment the content pricing manager **506** is used to set pricing for MP3 file types and for WAV file types. Although the present embodiment is described with respect to the use of musical content stored in MP3 and .WAV file formats, the use of a content pricing manager **506** is not limited to the pricing of content for musical files or even to the pricing of files in these two types of file formats, but can be applied broadly to the pricing of content in image files, video files, audio book files, or video game files as well as in other file types and file formats of multimedia content generated by content owners.

FIG. **6** is a flow chart illustrating an embodiment of a process for uploading and transcoding multimedia content files. The process commences at step **600** and begins with the receipt of a content upload request **602** from one or more content owner client devices **126**. Upon receipt of an upload request, the content management system **202** begins the uploading of multimedia content files and associated metadata, as shown at step **604**. In one embodiment, associated metadata includes information about the multimedia content such as artist name, album title, song title release name or catalogue name. Continuing with this process, the content management system **202** will confirm whether each received content file is in a proper format for uploading to the multimedia content distribution system, as shown at step **606**. If the file format is improper, such as when the integrity of the file has been compromised, the process returns to step **604** for the continued uploading of the next multimedia content file and associated metadata. If the content is in a proper format, the process continues with a placement of each newly received content file into a queue, as shown at step **608**. After placement in the queue, the file will be scanned for viruses, as shown at step **610**, and a test will be applied to confirm whether the virus scan was passed, as shown at step **612**. If virus scanning is unsuccessful, the process will transmit a message to the content owner for display in the browser of a content owner client device **126** indicating that the virus scan failed, as shown at step **614**, and that the process will then end, as shown at step **616**. If the virus scan was passed, the process continues with the transcoding of the content file, as shown at step **618**. In an embodiment, the content owner can select one or more file formats for transcoding of each uploaded multimedia content file, which file formats may include Windows Media Audio (WMA), Advanced Audio Coding (AAC), Apple Lossless Audio Codec (ALAC), Free Lossless Audio Codec (FLAC), WMA Lossless and MP3. After a file has been transcoded, the process continues with the storing of the originally uploaded content file, referred to as a "master content file," and each transcoded file specified by a content owner. The master content file and any transcoded files are stored in the cloud-based storage resource **124**, as shown at step **620**. Upon completion of the storing of these files, the process updates a data base registration record, as shown at step **622**. The database registration record is maintained in a lookup table on a database server **110**. If multiple multimedia content files are uploaded, for example as part of an album upload or a catalogue upload, the process confirms whether the uploading has been completed, as shown at step **624**. If the process has not been completed, then the uploading will continue with the uploading of additional multimedia content files and associated metadata, as shown at step **604**. In one embodiment, if the upload process has been completed, the content owner can select a subset of the transcoded files of a given file type to be compressed into

one file, as shown at decision step **626**. For example, in an embodiment, when a master content file in the .WAV format is uploaded, the content owner can have multiple transcoded files (e.g., an MP3 format file, a WMA format file, an FLAC format file) created from the master content file during the transcoding process, shown at step **618**. After selection of the desired files, the content management system **202** will compress the transcoded files (e.g., the WMA format files) into a single compressed file, as shown at step **628**. In an embodiment, the selected subset of transcoded files is compressed into a Winzip file. Upon completion of the compression process, the compressed file is stored in the cloud-based storage resource **124**, as shown at step **630**, and the database registration record will be updated once again, as shown at step **632**, to identify the storage location of the compression file and its logical relationship to the master content file and related transcoded files. The process then ends, as shown at step **632**. Alternatively, if no files are selected for compression at decision step **626**, then the uploading and transcoding process will end, as shown at step **634**.

FIG. **7**A is an illustration of a process used by content owners to convert uploaded content files into marketable products for packaging with web widgets. In an embodiment, each uploaded content file represents an item for promotion and distribution. Each "item" is made available as a "product" for marketing purposes after being associated with a web widget. The process of creating products starts at step **702** and begins with a content owner creating a content compilation from uploaded content files and metadata, as shown in set **704**. Afterwards, the content owner assigns marketplace rules to the content compilation, as shown at step **706**, and then generates one or more web widgets, links, buttons, or preview clips to promote the content compilation, as shown at step **708**, and the process then ends, as shown at step **710**. The content compilation is the "product" for marketing and promotion purposes and the compilation may be comprised of one item (e.g., a single song), multiple items (e.g., the items comprising a musical "release" or a musical "catalog," etc.), identifiers of physical goods or marketing merchandise (e.g., cups, t-shirts, hats, a book of thematic poetry, etc.), or any combination of these items and identifiers. In one embodiment, the identifiers of physical goods or marketing merchandise are either a Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID). In a different embodiment, the marketplace rules assigned by a content owner at step **706** can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, U K and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials.

FIG. **7**B is an illustration of a process for requesting and updating content inventories using distribution feeds. This process commences at step **712** and is initiated by the placement of a request for a distribution feed through the content management system **202** by a content owner, as shown step **714**. In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships. In an alternative embodiment, the operators of the multimedia content distribution system **200** acting on behalf of one or more content owners can request distribution feeds for content owners to ensure that the content inventories maintained in the multimedia content distribution system **200** are updated and available for the creation of content compilations. As illustrated, once a distribution feed is received it is parsed for content and metadata, as shown at step **716**, and the content inventory or inventories maintained by content owners are updated, as shown at step **718**. Upon receipt and updating of one or more content inventories, the process ends, as shown at step **720**. Content distribution feeds received from distributor clients in one embodiment contain content from multiple artists including multiple content items such as songs, album content and catalogue content. The parsing of the distribution feed, as shown at step **716**, selectively parses this distribution feed according to content owner so that each content owner will have each of his or her content inventories automatically updated even though multiple content owners and multiple content files associated with each content owner may be included in a single distribution feed.

FIG. **8** is an illustration of a process for generating web widgets and distributing them over networks to facilitate the promotion, distribution and execution of purchase transactions for multimedia content using web widgets. This process commences as shown at step **802** with the generation of a widget as shown at step **804**. A content owner can generate one or more web widgets to promote different packages of multimedia content. In one embodiment in which the multimedia content consists of musical works, among the types of web widgets that can be generated are single song widgets, song release widgets, song catalogue widgets, and merchandising widgets. A single song widget is used to promote a single song of a content owner. A release widget is used to promote a compilation that includes multiple songs or multiple forms of content created by a content owner (e.g., a combination of musical selections, t-shirt, cup, hat and a book of the content owner's writings, etc.). A catalogue widget is used to promote the entire catalogue of creative works of a content owner. A merchandising widget is used to promote physical goods such as t-shirts, cups, carrying case, etc. that may be associated with the theme set by a content owner for a song, a release of songs, or the content owner's catalogue.

Upon generation of a new web widget, it can be distributed over the Internet or other network, as shown at step **806**, to a website where interested parties can activate it or further distribute it to third parties on a network. Once received within a browser on a client device, a web widget exists in an inactive mode but can be placed into an active mode when an end user clicks upon or makes a selection on the web widget, as shown at step **808**. In the case of laptop computers **130** and desktop computers **132**, the web widget can be executed in web browsers such as Internet Explorer, Firefox, Google Chrome, Safari, Opera and in other popular web browsers. On mobile client devices **134**, such as personal digital assistants, the web widget can be executed in browsers such as Microsoft IE for Mobile devices, Google Android, Bolt, Teashark, Safari and Opera Mini. In one alternative embodiment, a web widget can be activated when an end user clicks on a buy button, HTTP link or preview clips that is communicatively coupled to the web widget. Upon activation of a web widget, it will retrieve multimedia display files and the metadata associated with the multimedia content that has been packaged and associated with it, as shown at step **810**. Afterwards, the web widget will stream a portion of selected content, as shown at step **812**, so that the content portion can be previewed by the end user or consumer who has activated the web widget, as shown at step **814**. The selected content is determined from a selection request that includes one or more content selections made by the consumer or end user on the web widget. The multimedia display files are used to display visual

representations of the multimedia content which is available to be previewed and purchased from within the web widget. In generating a selection request, a consumer will click on a checkbox associated with content, or alternatively, click on one or more of the multimedia display files associated with each of the multimedia content files. In one embodiment of a web widget used for distribution of a musical catalogue, the multimedia display files include visual representations of the cover art used on each album in the musical catalogue. In other embodiments, the multimedia display files include visual representations of other types of works (e.g., book covers in a portfolio, artistic contributions in an art collection, etc.). With respect to content viewing, the segment of content used for streamed previewing and the duration of a streamed preview portion are pre-determined by the content owner or the content distributor. In one embodiment, the content previewed is a thirty second audio clip of a musical selection. In an alternative embodiment, the content previewed is a thirty second audio-visual clip of a multimedia content file. Once previewed, the consumer can elect to share the previewed content with third parties. In this case, if a share request has been received, as shown at step **824**, the web widget can be further distributed to one or more third party recipients, as shown at step **826**. In this manner the content of the artist associated with the web widget can be virally distributed to generate significant buzz or word of mouth marketing in online communities and in channels of prospective consumers whom the artist may have never considered for marketing purposes. Once distributed, the process ends as shown at step **822**. If a share request is not received then the web widget will remain in a dormant state and the process will end as shown at step **822**.

On the other hand, if after previewing the multimedia content, as shown at step **814**, a consumer chooses to initiate a commercial transaction pertaining to the multimedia content, such as a purchase or license of rights pertaining to the content, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will redirect the consumer to a web page to begin the purchase or license transaction for the selected multimedia content, as shown at step **818**. This web page will be coupled to the transaction processing service **112** so that the purchase transaction can be properly completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor operating the multimedia content distribution system **200** as an "approved vendor" with the banks, credit unions and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.), In this embodiment, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget will automatically execute and complete the purchase or license transaction after a receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. All transactions completed through web widgets are tracked in the accounting service **218**, data collection will be performed on the types of transactions and the locations of the transactions by the web servers implementing the widget management service **216**, and an analysis of statistic trends will be performed and compiled by the analytics and reporting service **210**. In one embodiment, the statistical analysis is performed in an autonomous manner. In an alternative embodiment, the analysis of statistical trends is performed upon request by content owners. Once the purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device **130**, **132**, **134**, as shown at step **820**, and the process then ends, as shown at step **822**. Alternatively, if no purchase request is placed though a web widget, the web widget will remain in an inactivate state with no further processing, as shown at step **822**.

FIG. **9** is an illustration of a web widget in one embodiment. In this embodiment, the web widget **900** is shown in an inactive operational mode and includes an activation button **906** and the web widget **900** identifies the content owner name **902** (i.e., "Lenny White") and the name of the multimedia content file **904** (i.e., "Drum Boogie"). In the illustrated embodiment, clicking on the activation button **906** or on any location within the inactive web widget **900** will cause the retrieval of a multimedia display file and the metadata associated with the multimedia content file from the multimedia content distribution system **200** and start the preview of a pre-determined portion of the multimedia content file associated with the web widget. In an alternative embodiment, clicking on any location within the illustrated web widget **900** in an inactive operational mode will cause the web widget to enter an active operational mode. In one embodiment, the multimedia display file includes artwork or a graphic image which visually represents a cover for the content stored in the multimedia content file associated with the web widget **900**. A web widget is received over a network such as the Internet and viewed in a consumer's web browser executing on mobile, laptop or desktop client devices **130**, **132**, **134** such as Internet Explorer, Firefox, Google Chrome, Safari, Opera or other popular web browsers. The content owner may also elect to create an outer package for a web widget with artistic or illustrative materials as is shown in this embodiment.

FIG. **10** is an illustration of a web widget **1000** after a consumer clicks on the activation button **906** or on any location within an inactive web widget to thereby cause the web widget **1000** to enter an active operational mode. In this embodiment, the web widget **1000** includes a field for the content owner's name **1002** (i.e., Lenny White), the name of the musical selection or multimedia content file **1004**, a buy button **1006** which will enable the purchase of the multimedia content, which in this embodiment is the musical selection called "Drum Boogie." The web widget **1000** also includes the name of the distributor and the year of distribution 2010 (i.e., Abstractlogix/2010) and provides a field for limited previewing capabilities **1008**. As shown in this field **1008**, there is a play, pause and end-play button. All functionality provided by the web widget **1000** is performed within the browser on a consumer's client device **130**, **132**, **134**.

In the present embodiment, the web widget **1000** is comprised of a content retrieval component, a content preview component and a transaction processing component. Once the activation button **906** or any location in an inactive web widget is clicked on to thereby cause the web widget **1000** to enter the active operational mode, the content retrieval component will send a request to the widget management service **216** and commence with the retrieval of the multimedia display file and metadata for the multimedia content file which is associated with the web widget **1000** from the cloud-based storage resource **124**, the database server **110** or other storage resources which are accessible

from the application server **106**. Once retrieved, a pre-determined portion of the multimedia content file will be automatically executed by the content preview component to enable the consumer to preview the content prior to making a purchase decision. In executing the pre-determined portion of the selected multimedia content file, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer. The duration and the specific segment of content included in the pre-determined portion of the multimedia content file that is made available for streamed execution on the client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase the multimedia content file, in this embodiment the "Buy Song" button will be clicked on which will cause the execution of the transaction processing component. The transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content file, which in the present embodiment will involve the licensing of the multimedia content file to the consumer. In an alternative embodiment, the commercial transaction is the purchase of rights to the multimedia content files. In both embodiments, however, the consummation of the commercial transaction will redirect a consumer to a third party web page shown within the web widget **1000** where the purchase or license transaction will be completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor that operates the multimedia content distribution system **200** as an "approved vendor" with the banks and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.). In this embodiment, the web widget **1000** will confirm that a purchase or license request has been received and the web widget **1000** will automatically execute the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget **1000** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. In each of these embodiments, once the commercial transaction is completed, all portions of the multimedia content file will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **11** illustrates an embodiment of a web widget **1100** in an active operational mode for a release including multiple selections in an embodiment. All of the multimedia content files included in this embodiment of a web widget **1100** are illustrated and listed in region **1110** as an embedded electronic commerce store. Although the illustrated embodiment shows the multimedia content files as musical selections of an album, it should be apparent to those of ordinary skill in the art that the content of this embedded electronic store can include other types of works such as books, paintings, videos, e-books, audio-visual works, software applications, or other content or commercial products created for marketing and sampling purposes in this embedded store. Additional content files can be previewed using the vertical scroll bar shown on the right side of this illustrated web widget **1100**. As shown, there are multiple musical selections by an artist named Lenny White included within the web widget **1100**. This embodiment of the web widget **1100** also includes a play button **1104**, for use in previewing content that has been packaged with the web widget **1100** for promotional purposes. In this embodiment, a consumer can select individual content files (i.e., musical selections) and click on the play button **1104** to preview the selected files, or click on any content file listed in region **1110** to preview only the selected content file. The buy album button **1108** is shown in the same row as the play button **1104** in this embodiment. In addition, the name of the album **1102** (i.e., Anamoly) is shown in the row above the buy button **1104** and buy album **1108** button. As discussed previously, web widgets can be virally distributed and shared with third parties which has the effect of increasing the marketing buzz and name recognition for a content owner. This viral distribution capability is enabled by the share link **1106**, as illustrated in this embodiment, and it permits subsequent distribution of the web widget **1100** to other potential consumers in the current users online social networks or other online communities.

In this alternative embodiment, the web widget **1100** is comprised of a content search component, a content retrieval component, a content preview component and a transaction processing component. Once an activation button or any location in an inactive web widget is clicked on, the web widget **1100** will enter an active operational mode. After activation, the consumer is presented with the listing of multimedia content files included in the compilation associated with the active web widget **1100**. In this illustrative example, the listing includes the songs provided on the Anamoly album by Lenny White. In reviewing the listing of the content files, a consumer can elect to preview one or more of the content files. If the consumer selects one or more of the listed multimedia content files associated with the web widget **1100** for previewing, the content search component will be activated and configured to search for the selected multimedia content files, which files are accessible from the application server **106**. After the application server **106** locates the content files, the content retrieval component will send a retrieval request to the widget management service **216** and the widget management service **216** will generate and send a content download request to the application server **106** based on the received retrieval request. After receipt of the content download request from the widget management service **216**, the application server **106** will commence the retrieval of multimedia display files and metadata which are associated with the selected multimedia content files. In one embodiment, the multimedia display files include one or more graphic images of artwork which visually represent each song provided in an album widget (also referred to as a "single release widget" **304**). In an alternative embodiment, the multimedia display files include one or more graphic images of the artwork used on the album covers for each album included in a full catalog widget **302**. Once the multimedia display files and metadata are retrieved, a pre-determined portion of the selected multimedia content files will be automatically executed by the content preview component to enable the consumer to preview the content files prior to making a purchase decision. In executing the pre-determined portion of the selected

multimedia content files, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer in selecting the multimedia content files. The pre-determined portion of each multimedia content file which is made available for streamed execution on a client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase or license the compilation of multimedia content files, which in this embodiment is an album containing multiple multimedia content files, the consumer will click on the "Buy Album" button **1108** which will result in the activation of the transaction processing component. In an embodiment, the transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content files resulting in the payment of fees and, in this example, the licensing of the compilation of multimedia content files to the consumer. Consummation of the commercial transaction occurs after the consumer is redirected to a third party web page which is shown within the web widget **1100** where the purchase or license transaction will be completed. In a different embodiment, the web widget **1100** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. Once the commercial transaction is complete, all portions of the content files in the compilation will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **12** is an illustration of a web widget depicting the different format options for content that can be purchased through the web widget **1200**. In this embodiment of the web widget **1200**, there is an MP3 version of the content file available for $0.99 and a separate buy button **1206**. There is also a .WAV format of the content file available for $0.99 and a separate buy button **1208** for that format file. The web widget **1200** also includes the name of the individual song **1204** (i.e., Drum Boogie) and the name of the artist **1202** (i.e., Lenny White).

FIG. **13** is an illustration of the screen shown in a web widget after clicking on a buy button. In this embodiment of a web widget **1300**, after a consumer selects the buy button **1206** to purchase the MP3 format file, a checkout screen appears within the web widget **1300** as shown in this figure. The checkout screen of this web widget **1300** includes the total cost of the content file and the number of files purchased, which items are shown in region **1304**. The name of the selection (i.e., "Drum Boogie"), the artist name (i.e., Lenny White), the format type (i.e., MP3), the number of files (i.e., 2 files) and the combined file size (i.e., 8.24 MB) are shown in region **1302**.

FIG. **14** is an illustration of a web page for a transaction processing service **112** in one embodiment. In the illustrated embodiment, the transaction page for the Amazon Flexible Payment Service (i.e., the "Amazon FPS") is shown. In this embodiment, this web page **1400** is the location where the consumer would enter credit card, debit card or bank account information to complete the purchase of the multimedia content file that is stored and available for download from the cloud-based storage resource **124** used in the operating environment with the multimedia content distribution system **200**. The Amazon FPS is only one of a number of third party transaction processing services that could be made compatible with the operating environment for the multimedia content distribution system **200**. In one alternative embodiment, the alternative transaction processing service can be any one of Authorize.Net, Google Checkout, Storm Pay, PayPal, or other Internet service for transaction processing. In yet another alternative embodiment, the transaction processing service **112** is implemented with a wholly internal, proprietary service that is not generally accessible over the Internet or other public computer communications networks. Each of the foregoing embodiments, however, illustrate how a portable web widget enables commerce through an embedded electronic commerce store regardless of the means used to complete a commercial transaction (i.e., external service such as Authorized.Net, etc. or an internal proprietary service).

FIG. **15** is an illustration of a buy button **1500** that can be distributed "virally" to consumers and third parties included in their online social networks. The buy button **1500** also identifies the file type (in this example it is an MP3 file type) and the price set by the content owner for the multimedia content file, as shown in field **1502**. Upon clicking on the buy button, a web widget will be activated and a checkout screen such as the one illustrated in FIG. **13** in the activated web widget will be displayed in the web browser on the consumer's client device **130**, **132**, **134**.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiments shown and described without departing from the scope of the present disclosure. This application is intended to cover any adaptations or variations of the embodiments discussed herein.

What is claimed is:

1. A method for embedding a buy button for an electronic commerce store, comprising:

receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;

generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and

embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.

2. The method of claim **1**, wherein the embeddable buy button is configured to be embedded into different web sites.

3. The method of claim **1**, wherein the electronic commerce store includes a checkout screen that allows a purchase of the item using a transaction processing service operated by the buy button provider.

4. The method of claim 1, wherein the electronic commerce store includes a checkout screen that allows a purchase of the item using a transaction processing service operated by a third-party server.

5. The method of claim 1, wherein the item is a physical good or service.

6. The method of claim 1, wherein the representation is selected from a group consisting of a static image, a video file, and a multimedia file.

7. A system for embedding buy button for an electronic commerce store, comprising:

a first server operated by a buy button provider;

a database communicatively coupled to the first server, the database configured to store an inventory list of items capable of being offered for sale on the electronic commerce store;

an embeddable buy button builder executed by the first server, wherein the embeddable buy button builder is configured to receive a selection of an item from the inventory list and a representation of the item, the embeddable buy button builder further configured to generate the embeddable buy button, wherein the embeddable buy button is configured to be embedded into a web site by the buy button provider, wherein the embeddable buy button includes a hyperlink; and

a second server configured to execute the web site, wherein the buy button provider controls operation of the embeddable buy button on the web site, and wherein the buy button provider controls operation of the electronic commerce store on the web site upon selection of the hyperlink.

8. The system of claim 7, further comprising a transaction processing service operated by the buy button provider, the transaction processing service configured to process a payment initiated via the electronic commerce store.

9. The system of claim 7, wherein the buy button provider is configured to execute the electronic commerce store.

10. The system of claim 7, wherein the embeddable buy button builder generates hypertext-markup-language code that is configured to be inserted into the web site.

11. The system of claim 7, wherein the representation is selected from a group consisting of a static image, a video file, and a multimedia file.

12. The system of claim 7, wherein the embeddable buy button is configured to be embedded into different web sites.

13. The system of claim 7, wherein the electronic commerce store includes a checkout screen is configured to facilitate the purchase of the item.

14. A method for embedding a buy button for an electronic commerce store, comprising:

receiving, by embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item to sell on a web site and a representation of the item, wherein the web site is executed by a second server not operated by the buy button provider;

generating, by a first server, the embeddable buy button containing software configured to be executed by the first server on the web site;

embedding, by the buy button provider, the embeddable buy button into the web site, wherein the embeddable buy button includes a hyperlink; and

executing, by the buy button provider, the software upon selection of the hyperlink, wherein the software is configured to display the electronic commerce store within the web site.

15. The method of claim 14, wherein the embeddable buy button is configured to be embedded into different web sites.

16. The method of claim 14, wherein the electronic commerce store includes a checkout screen is operated by the buy button provider.

17. The method of claim 16, wherein the checkout screen is configured to facilitate the purchase of the item by a transaction processing service operated by the buy button provider.

18. The method of claim 14, wherein the representation is selected from a group consisting of a static image, a video file, and a multimedia file.

19. The method of claim 14, wherein the item is a physical good or a service.

20. The method of claim 14, wherein checkout screen allows a purchase of the item using at least one of a previously stored credit card, a debit card or bank account information.

* * * * *

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(54) **SYSTEM AND METHOD FOR GENERATING AND DISTRIBUTING EMBEDDABLE ELECTRONIC COMMERCE STORES**

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See application file for complete search history.

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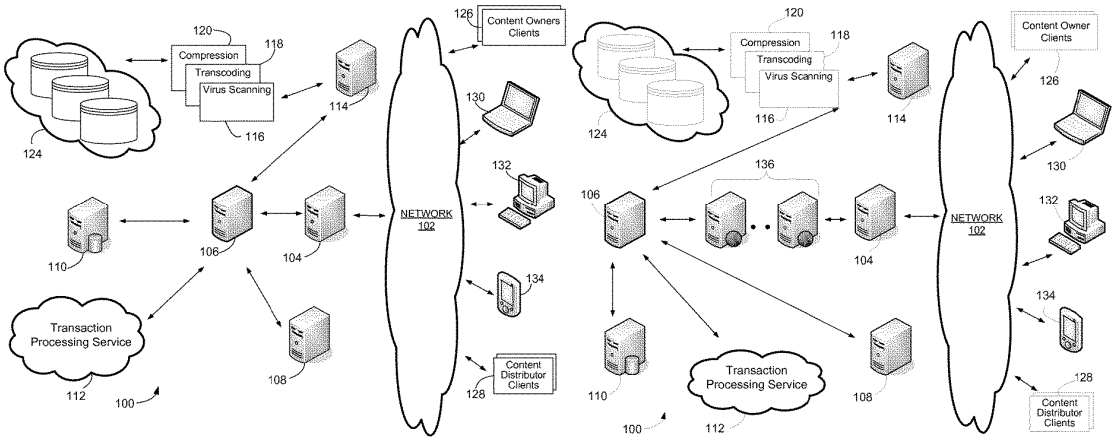
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Primary Examiner — Alexis M Casey

(57) **ABSTRACT**

A content management system capable of generating an embeddable electronic commerce store, where the electronic commerce store is embeddable into various sales channels, such as web pages and social media networks.

14 Claims, 16 Drawing Sheets



Related U.S. Application Data

No. 15/591,208, filed on May 10, 2017, now Pat. No. 10,395,304, which is a continuation of application No. 13/571,293, filed on Aug. 9, 2012, now Pat. No. 9,679,298, which is a continuation-in-part of application No. 12/852,090, filed on Aug. 6, 2010, now abandoned.

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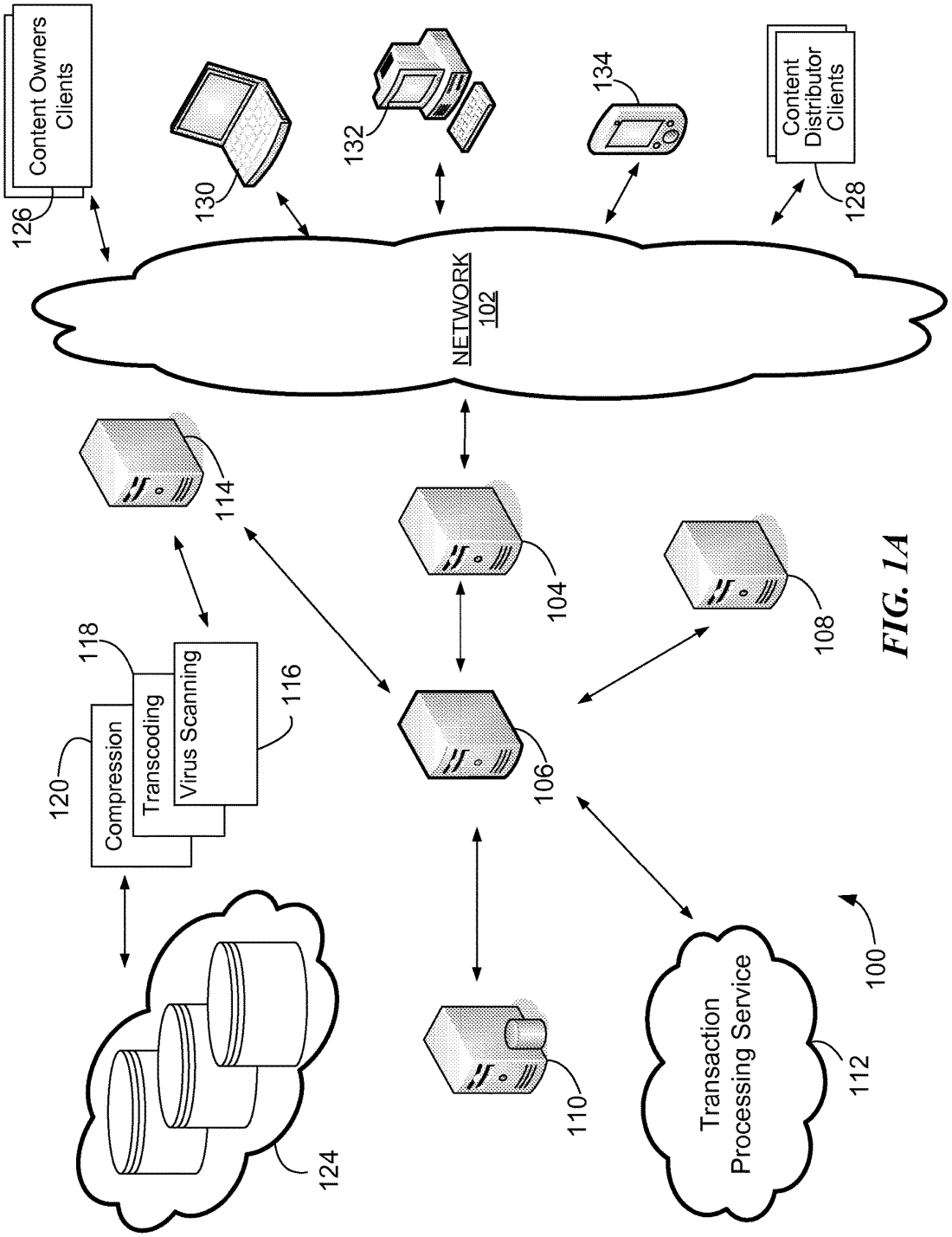

Content Owners Clients
126
130
132
134
Content Distributor Clients
128
NETWORK
102
114
104
108
118
116
120
Compression
Transcoding
Virus Scanning
106
124
110
Transaction Processing Service
112
100

FIG. 1A

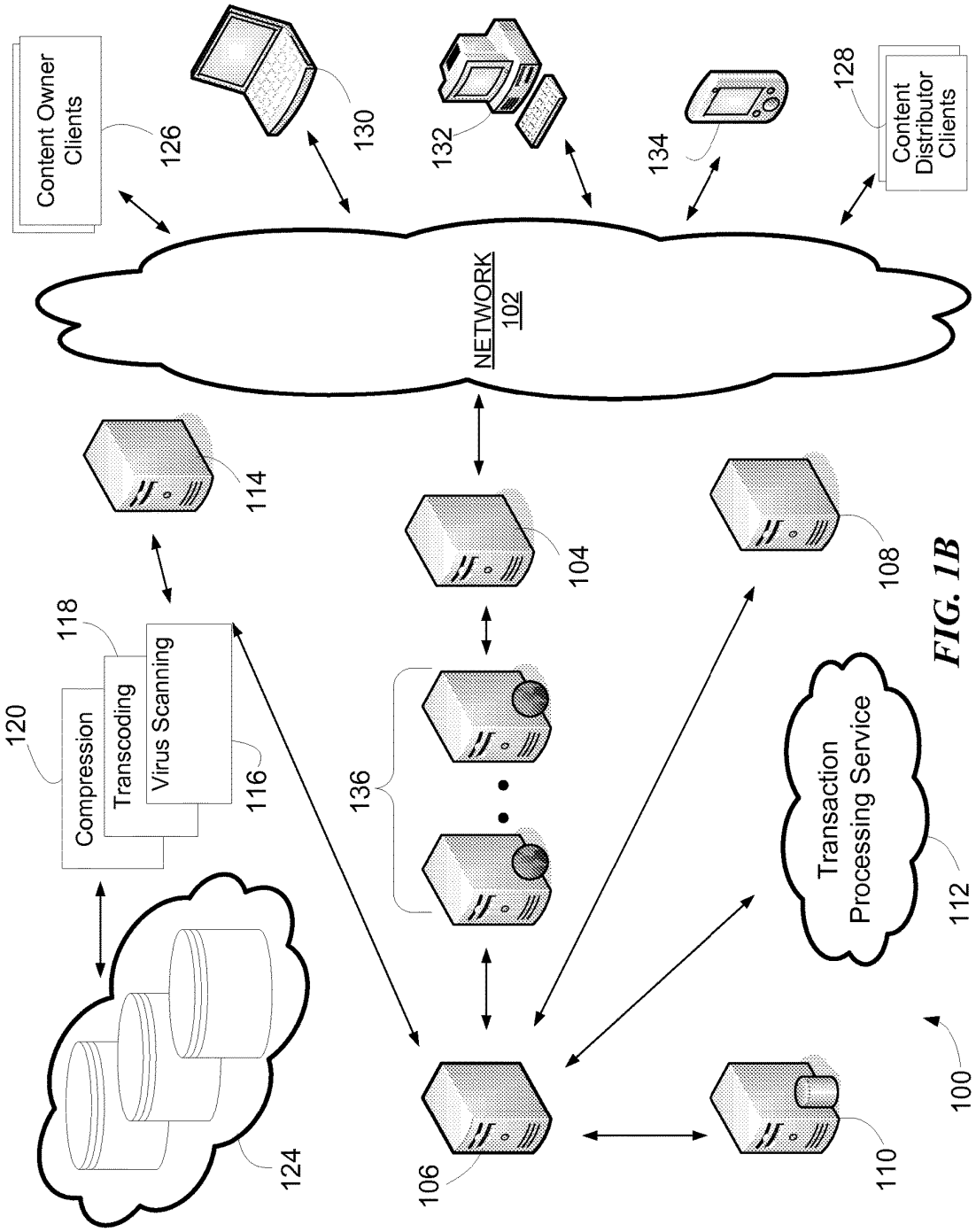

Content Owner Clients
126
130
132
134
128
Content Distributor Clients
NETWORK
102
114
104
108
118
120
Compression
Transcoding
Virus Scanning
116
136
Transaction Processing Service
112
124
106
110
100

FIG. 1B

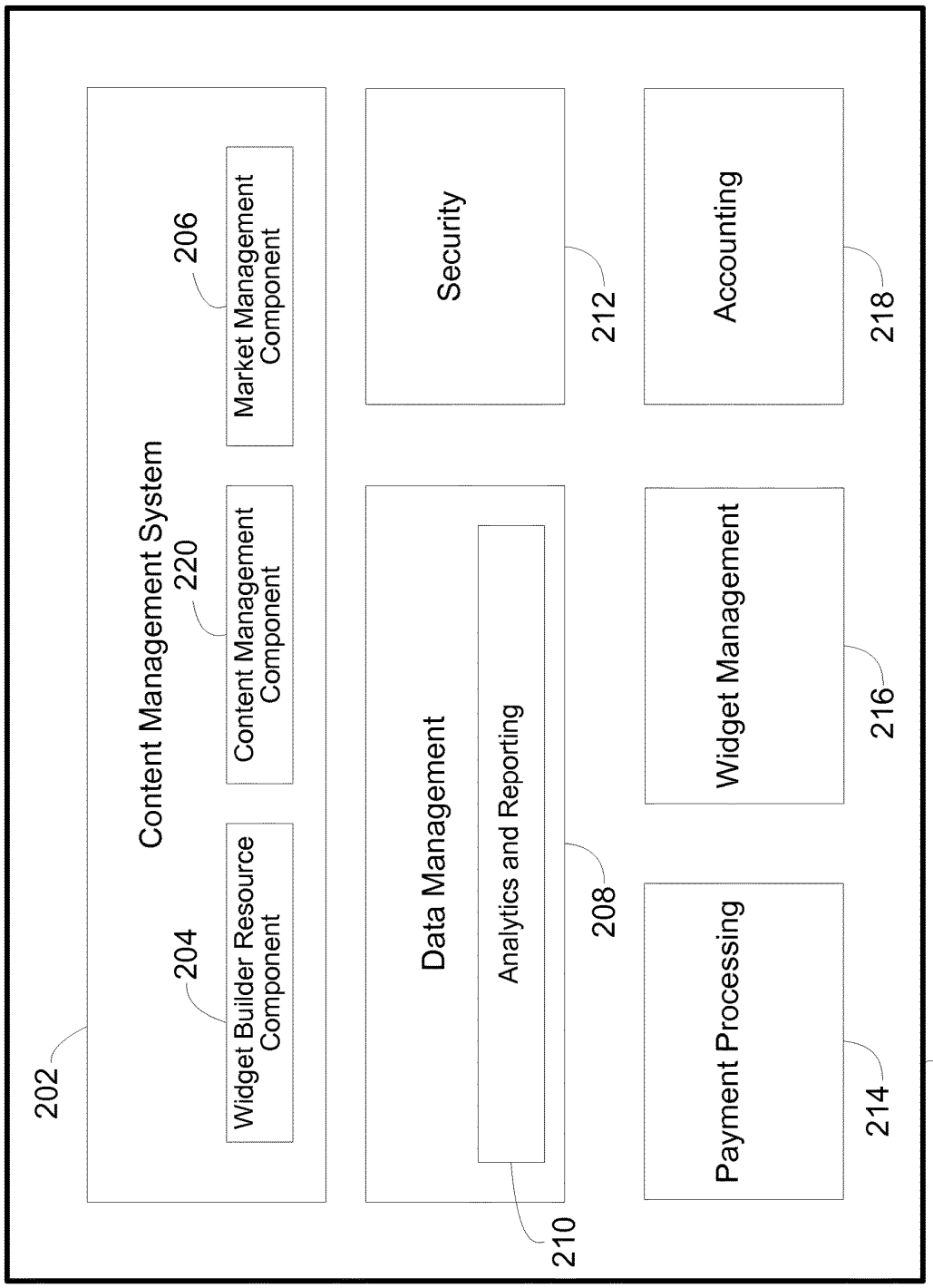

Content Management System
202
Widget Builder Resource Component
204
Content Management Component
220
Market Management Component
206
Data Management
Analytics and Reporting
208
210
Security
212
Widget Management
216
Payment Processing
214
Accounting
218
200

FIG. 2

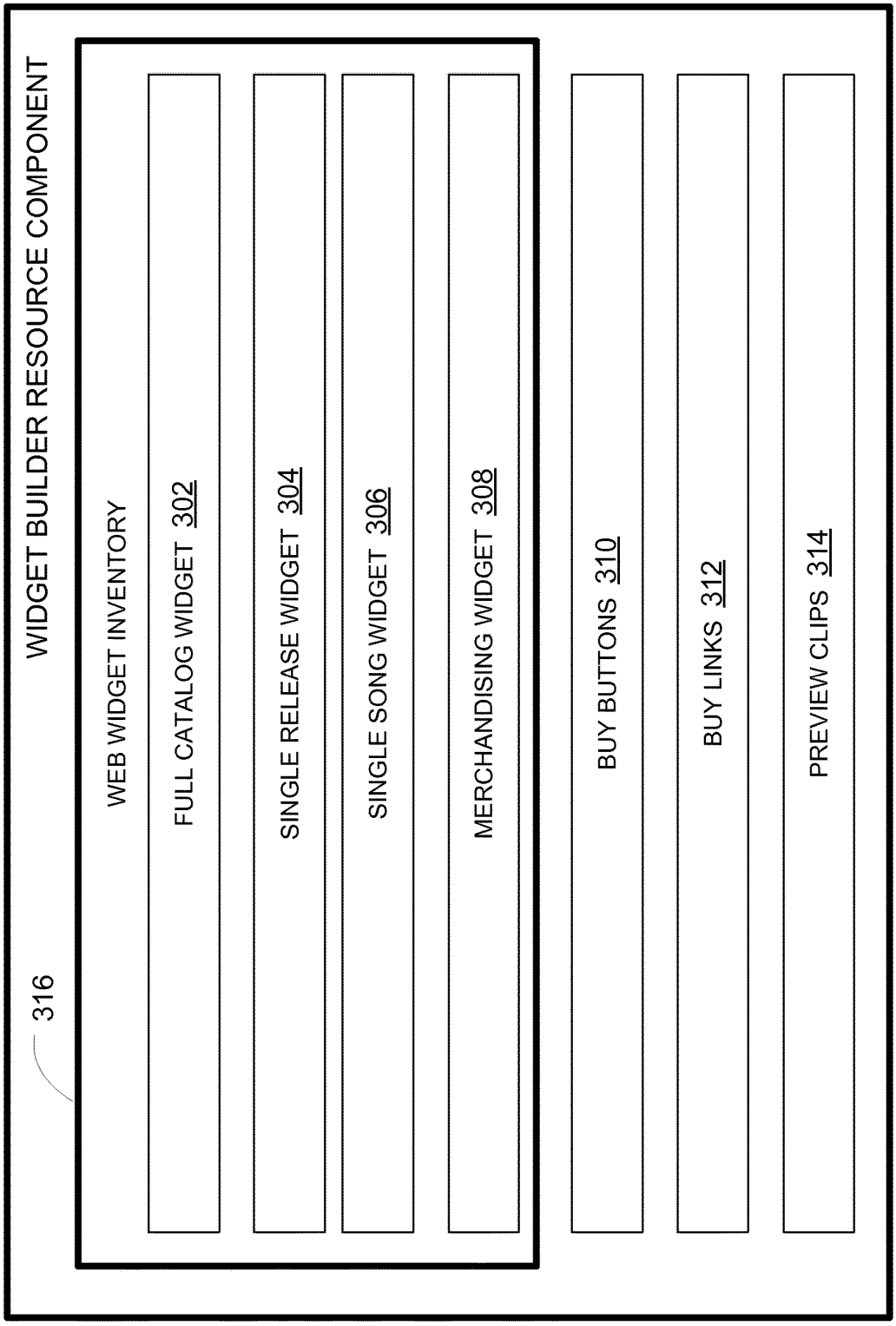

WIDGET BUILDER RESOURCE COMPONENT
316
WEB WIDGET INVENTORY
FULL CATALOG WIDGET 302
SINGLE RELEASE WIDGET 304
SINGLE SONG WIDGET 306
MERCHANDISING WIDGET 308
BUY BUTTONS 310
BUY LINKS 312
PREVIEW CLIPS 314
300

FIG. 3

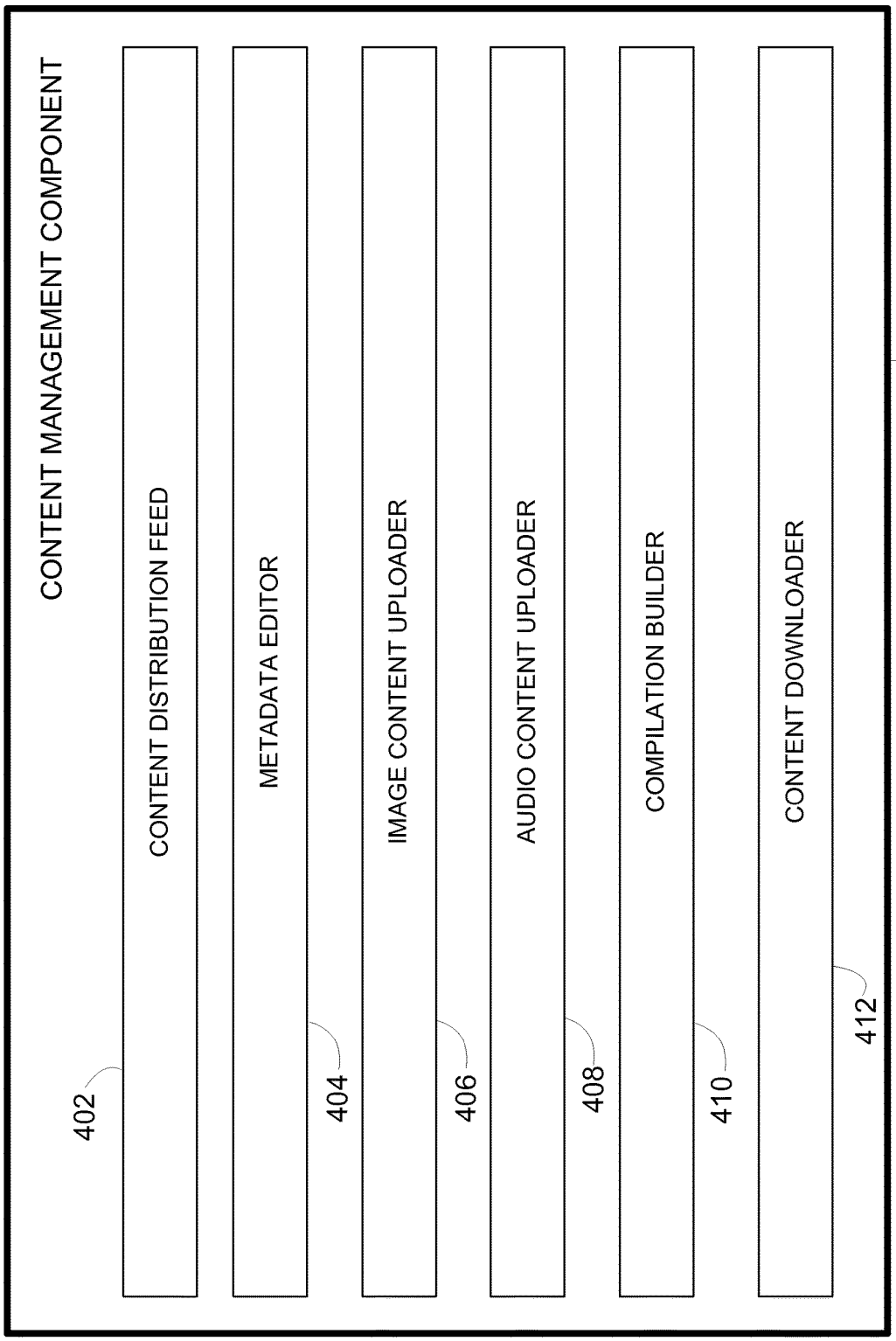

CONTENT MANAGEMENT COMPONENT
CONTENT DISTRIBUTION FEED
METADATA EDITOR
IMAGE CONTENT UPLOADER
AUDIO CONTENT UPLOADER
COMPILATION BUILDER
CONTENT DOWNLOADER
400
402
404
406
408
410
412

FIG. 4

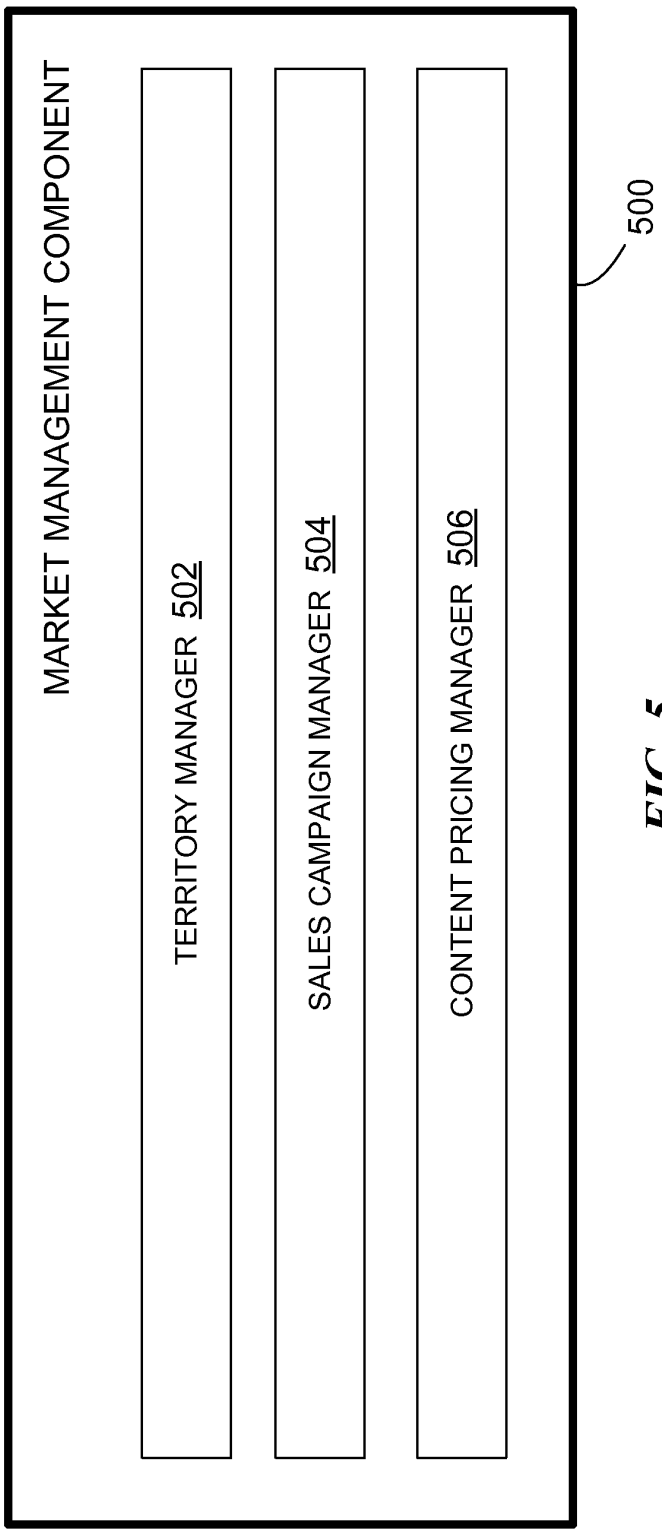

MARKET MANAGEMENT COMPONENT
TERRITORY MANAGER 502
SALES CAMPAIGN MANAGER 504
CONTENT PRICING MANAGER 506
500

FIG. 5

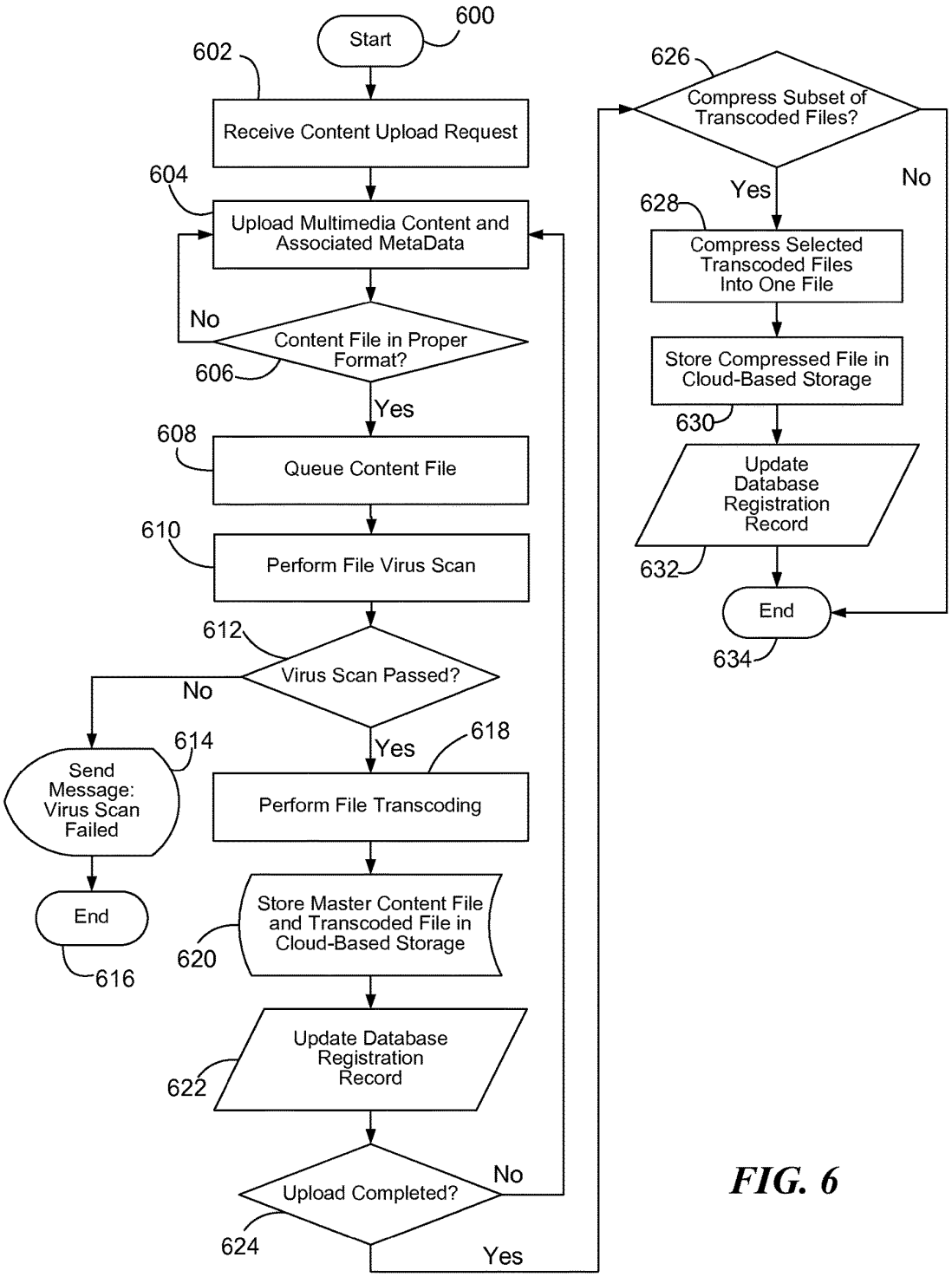

Start
600
602
Receive Content Upload Request
604
Upload Multimedia Content and Associated MetaData
No
Content File in Proper Format?
606
Yes
608
Queue Content File
610
Perform File Virus Scan
612
Virus Scan Passed?
No
614
Send Message: Virus Scan Failed
End
616
Yes
618
Perform File Transcoding
Store Master Content File and Transcoded File in Cloud-Based Storage
620
Update Database Registration Record
622
Upload Completed?
No
624
Yes
626
Compress Subset of Transcoded Files?
Yes
No
628
Compress Selected Transcoded Files Into One File
Store Compressed File in Cloud-Based Storage
630
Update Database Registration Record
632
End
634

FIG. 6

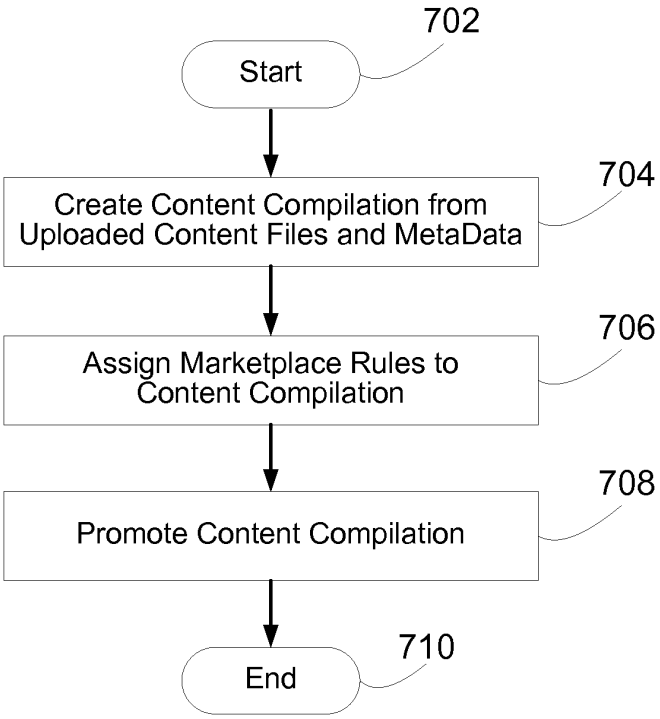

702
Start
704
Create Content Compilation from Uploaded Content Files and MetaData
706
Assign Marketplace Rules to Content Compilation
708
Promote Content Compilation
710
End

FIG. 7A

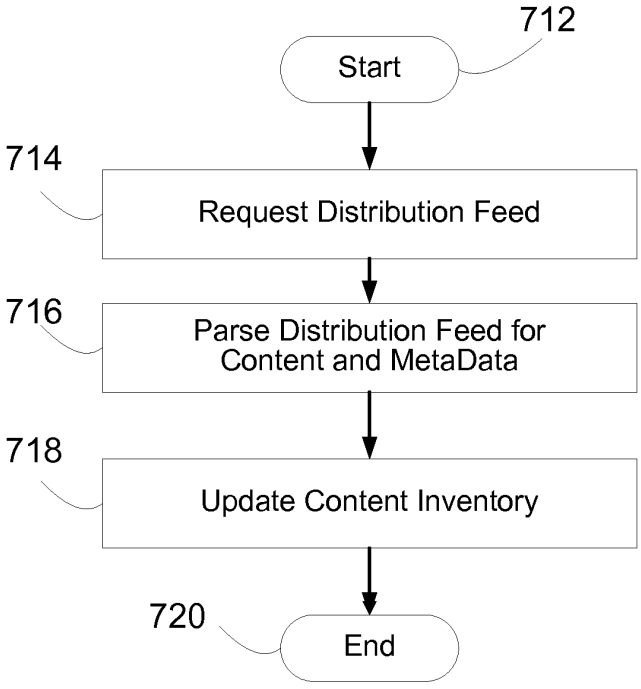

712
Start
714
Request Distribution Feed
716
Parse Distribution Feed for Content and MetaData
718
Update Content Inventory
720
End

FIG. 7B

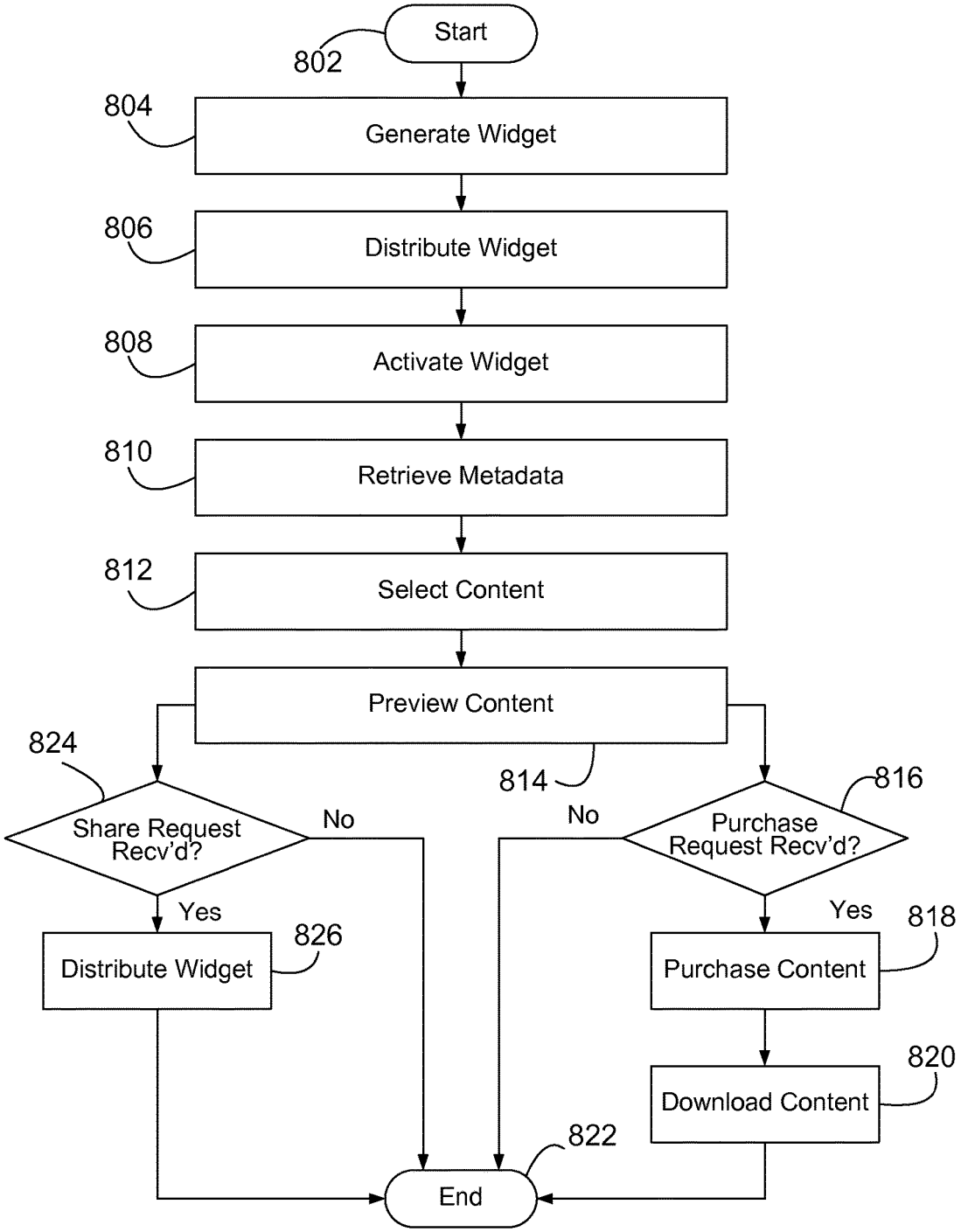

Start
802
804
Generate Widget
806
Distribute Widget
808
Activate Widget
810
Retrieve Metadata
812
Select Content
Preview Content
824
814
816
Share Request Recv'd?
No
No
Purchase Request Recv'd?
Yes
Yes
818
826
Distribute Widget
Purchase Content
820
Download Content
822
End

FIG. 8

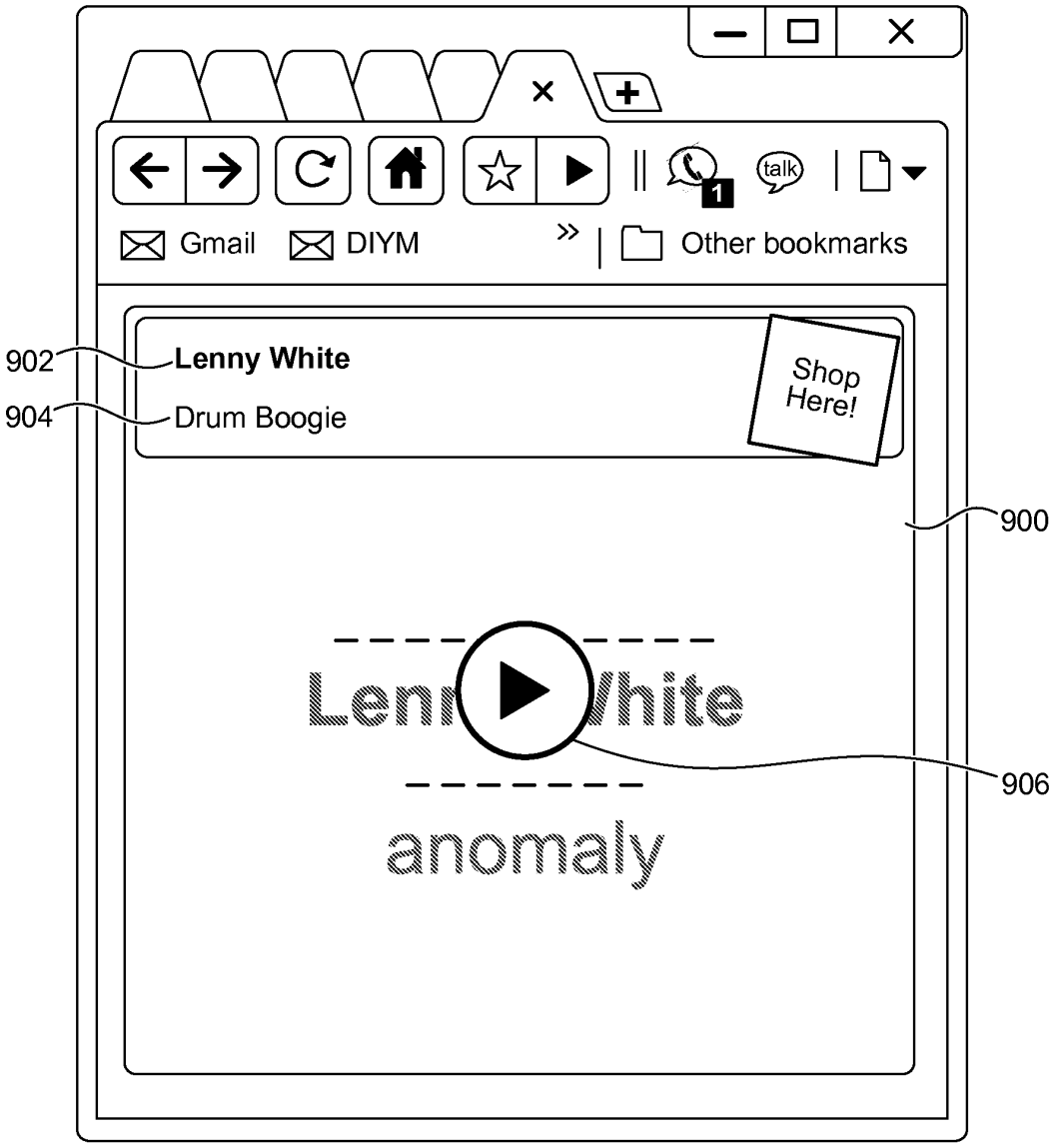

Gmail
DIYM
Other bookmarks
902
Lenny White
904
Drum Boogie
Shop Here!
900
anomaly
906

FIG. 9

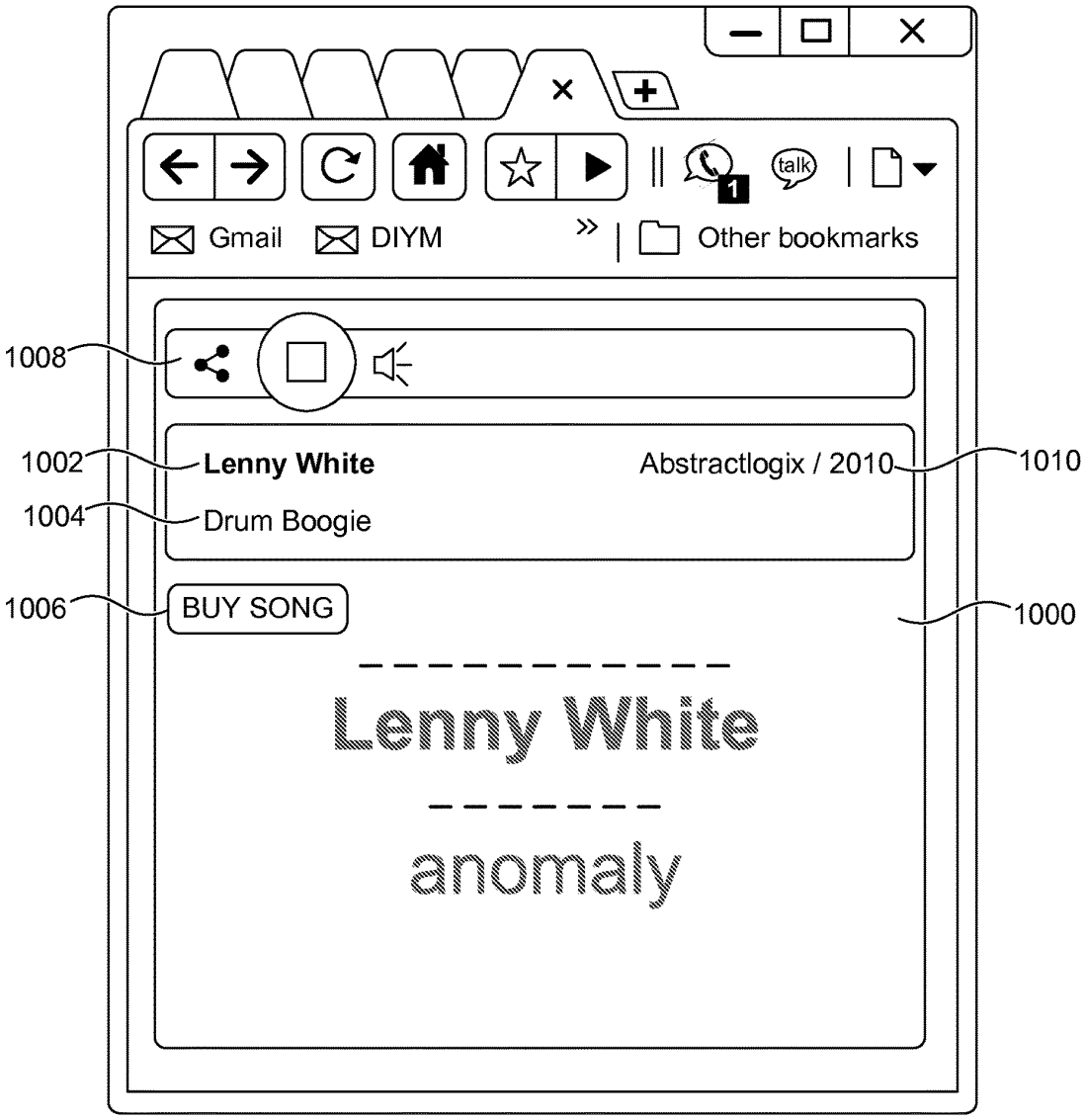

Gmail
DIYM
Other bookmarks
1008
1002
Lenny White
Abstractlogix / 2010
1010
1004
Drum Boogie
1006
BUY SONG
1000
Lenny White
anomaly

FIG. 10

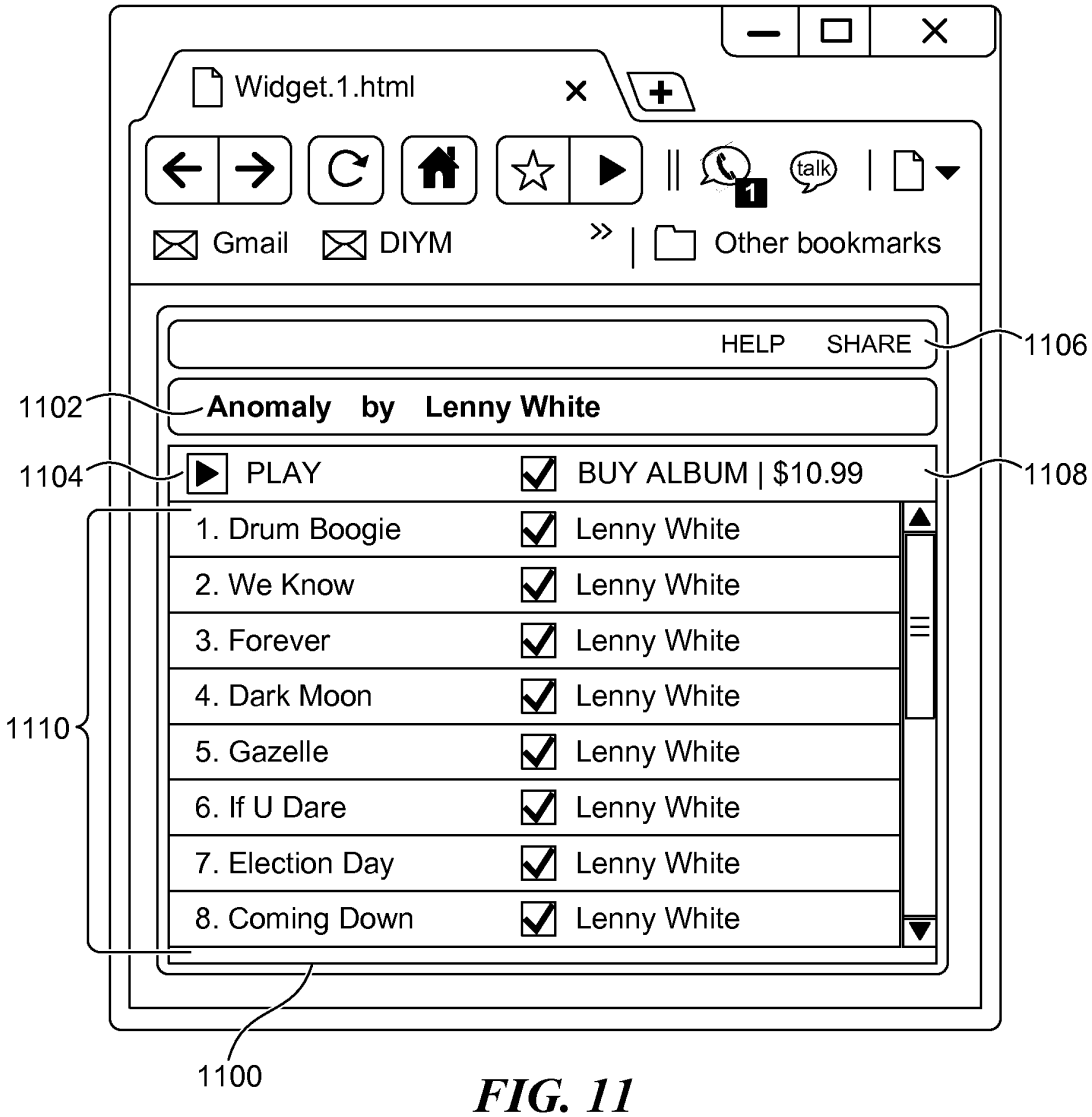

Widget.1.html
talk
Gmail
DIYM
Other bookmarks
HELP
SHARE
1106
1102
Anomaly by Lenny White
1104
PLAY
BUY ALBUM | $10.99
1108
1. Drum Boogie Lenny White
2. We Know Lenny White
3. Forever Lenny White
4. Dark Moon Lenny White
5. Gazelle Lenny White
6. If U Dare Lenny White
7. Election Day Lenny White
8. Coming Down Lenny White
1110
1100

FIG. 11

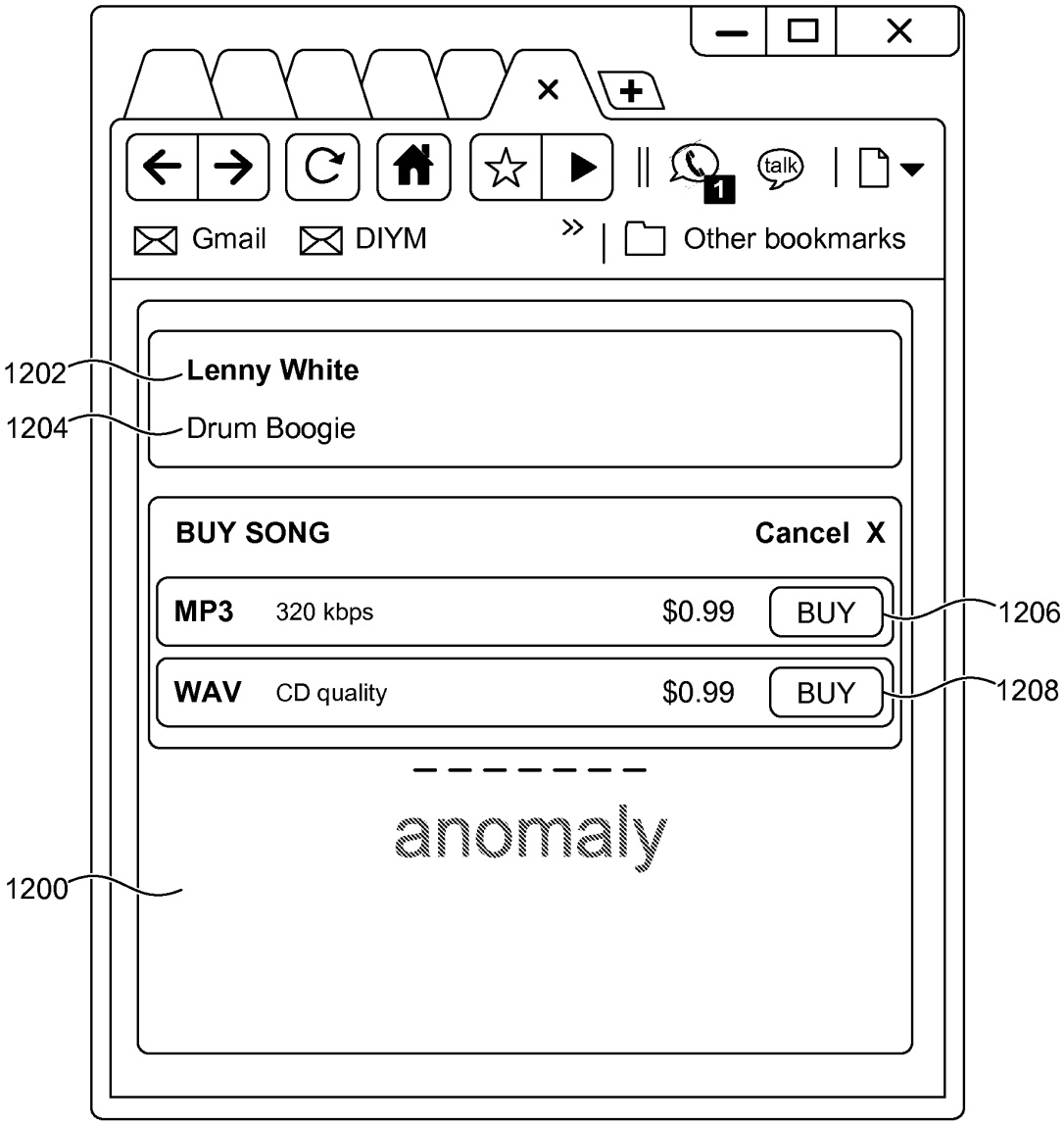

Gmail
DIYM
Other bookmarks
1202
Lenny White
1204
Drum Boogie
BUY SONG
Cancel X
MP3
320 kbps
$0.99
BUY
1206
WAV
CD quality
$0.99
BUY
1208
anomaly
1200

FIG. 12

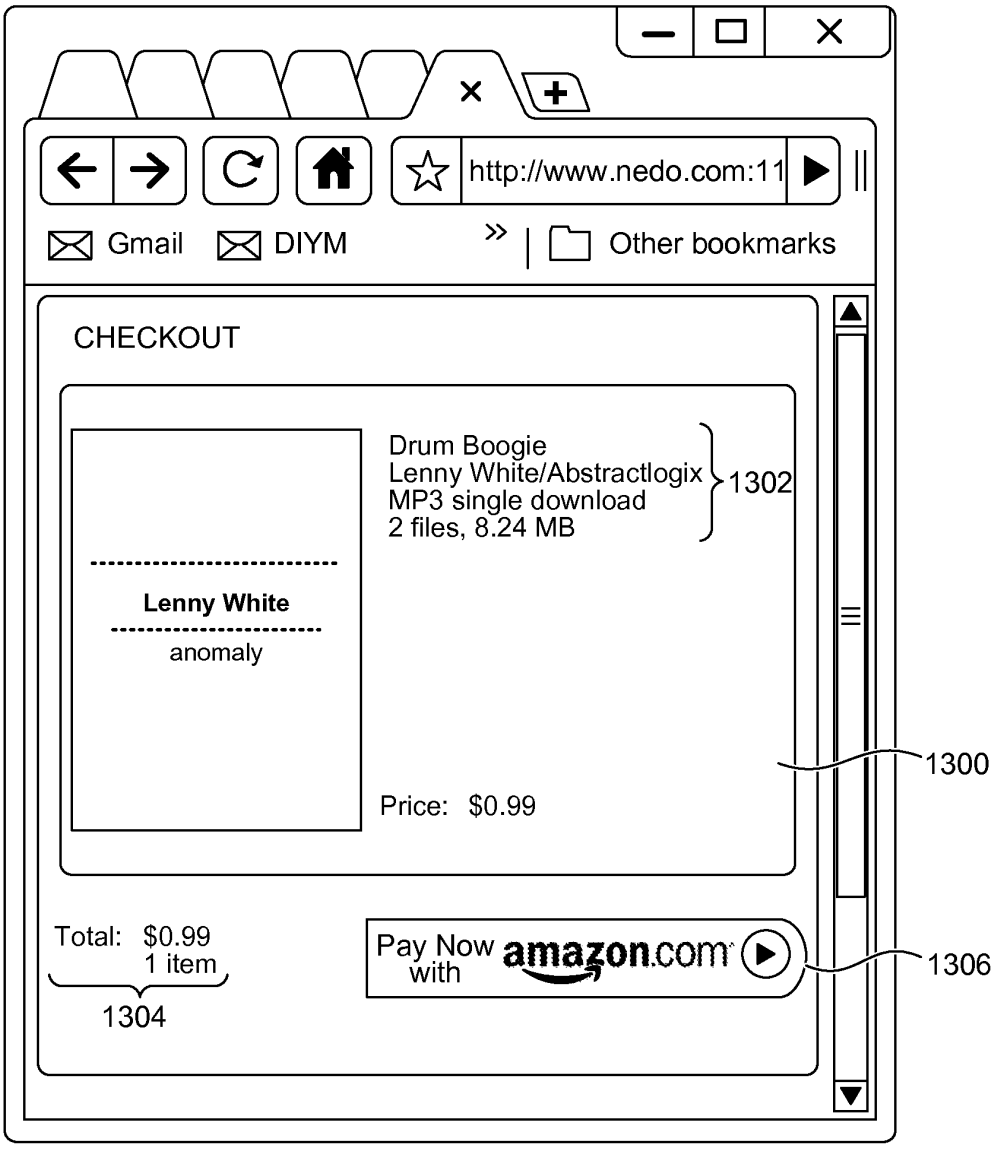

http://www.nedo.com:11
Gmail
DIYM
Other bookmarks
CHECKOUT
Drum Boogie
Lenny White/Abstractlogix
MP3 single download
2 files, 8.24 MB
1302
Lenny White
anomaly
Price: $0.99
1300
Total: $0.99
1 item
1304
Pay Now with amazon.com
1306

FIG. 13

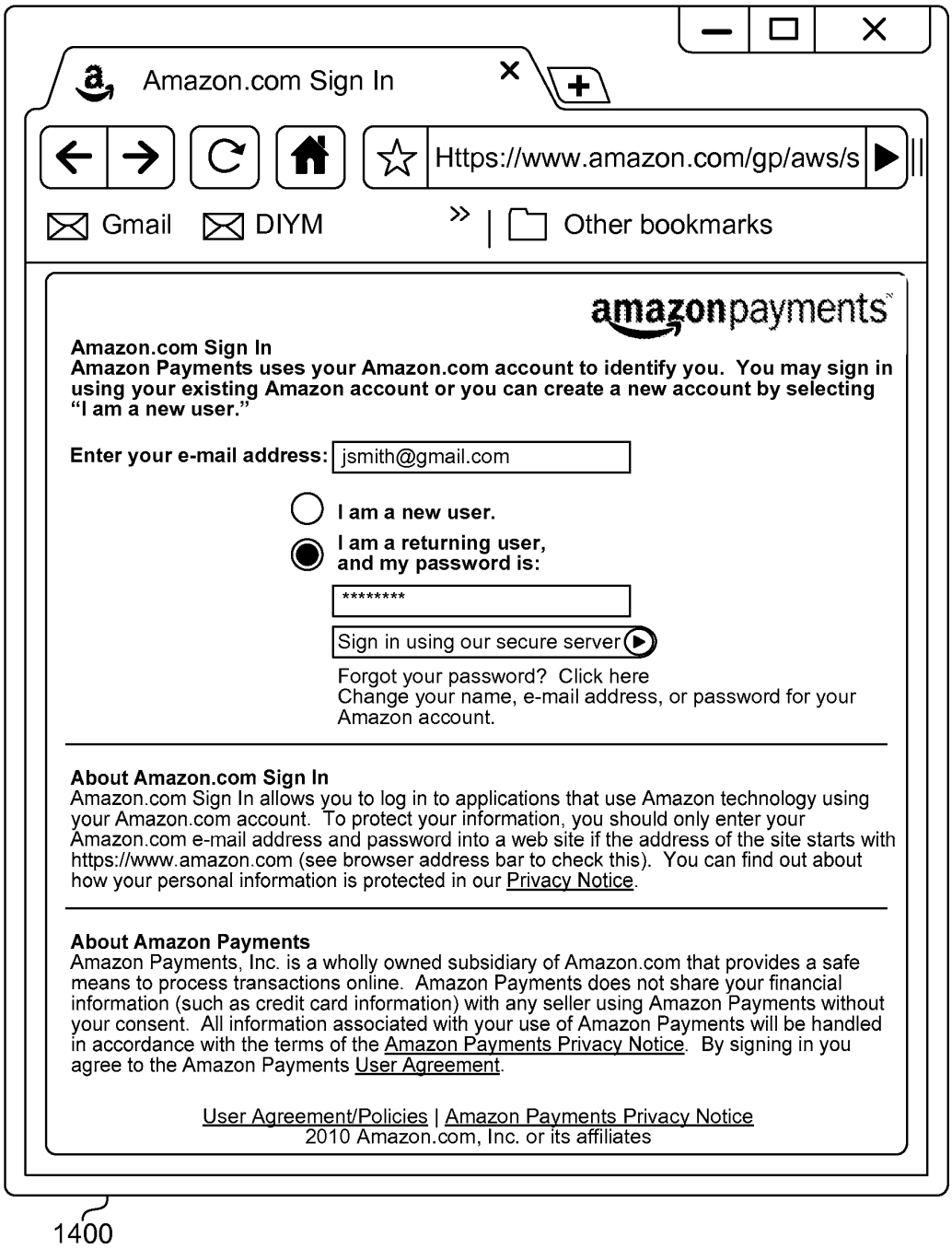

Amazon.com Sign In
Https://www.amazon.com/gp/aws/s
Gmail
DIYM
Other bookmarks
amazonpayments
Amazon.com Sign In
Amazon Payments uses your Amazon.com account to identify you. You may sign in using your existing Amazon account or you can create a new account by selecting "I am a new user."
Enter your e-mail address: jsmith@gmail.com
I am a new user.
I am a returning user, and my password is:
****
Sign in using our secure server
Forgot your password? Click here
Change your name, e-mail address, or password for your Amazon account.
About Amazon.com Sign In
Amazon.com Sign In allows you to log in to applications that use Amazon technology using your Amazon.com account. To protect your information, you should only enter your Amazon.com e-mail address and password into a web site if the address of the site starts with https://www.amazon.com (see browser address bar to check this). You can find out about how your personal information is protected in our Privacy Notice.
About Amazon Payments
Amazon Payments, Inc. is a wholly owned subsidiary of Amazon.com that provides a safe means to process transactions online. Amazon Payments does not share your financial information (such as credit card information) with any seller using Amazon Payments without your consent. All information associated with your use of Amazon Payments will be handled in accordance with the terms of the Amazon Payments Privacy Notice. By signing in you agree to the Amazon Payments User Agreement.
User Agreement/Policies | Amazon Payments Privacy Notice
2010 Amazon.com, Inc. or its affiliates
1400

FIG. 14

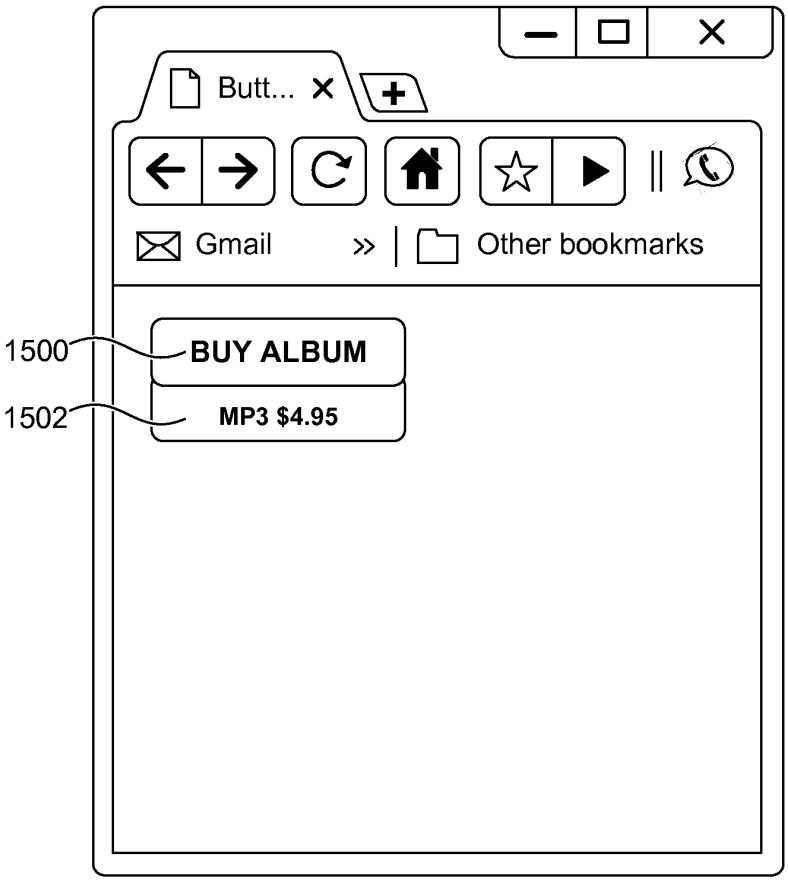


FIG. 15

SYSTEM AND METHOD FOR GENERATING AND DISTRIBUTING EMBEDDABLE ELECTRONIC COMMERCE STORES

CROSS-REFERENCE TO RELATED APPLICATION

This application is a Continuation of U.S. patent application Ser. No. 13/571,293, filed Aug. 9, 2012, which is a Continuation-In-Part of U.S. patent application Ser. No. 12/852,090, filed Aug. 6, 2010, which are hereby incorporated by reference in their entirety.

FIELD

The present disclosure relates generally to the field of electronic commerce, and in particular but not exclusively, relates to a system and method for the distribution of multimedia content and the consummation of transactions between content owners, content distributors and consumers.

BACKGROUND

Electronic commerce on the Internet has become commonplace. There are many merchants offering goods and services via web sites on the Internet, and an increasing number of consumers purchase goods and services on various Internet websites. In many cases, the electronic commerce transactions involve electronic content and physical goods. For example, many consumers purchase items such as books, compact disks (CDs) and digital video disks (DVDs) via the Internet. Increasingly, however, consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories.

More recently, the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities. When used by businesses to promote their goods and services to such individuals and online communities, this form of networking is called "social media marketing." In many of these online social relationships, users share and identify recommended content for use and consumption by other users with similar interests, hobbies and/or backgrounds. It is this unique ability to share or "virally distribute" content with recommendations and referrals that now enables the Internet to be used as a highly social medium. Furthermore, this "viral" distribution capability can now be used advantageously by content promoters, such as performing artists, visual artists, video and film producers, and content distribution companies, to create creative works that can be circulated to a far greater number of prospects and partners than may have been possible previously with a distribution capability which was limited only to the content creator's current list of customers.

Current methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner. One current approach that is used to distribute applications of limited functionality involves "web widgets." A web widget is portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation. The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal

content into dynamic web applications which can be shared on virtually any website. Current web widgets are limited to executing certain discrete applications as on-screen tools. For example, they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information.

Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Non-limited and non-exhaustive embodiments are described with reference to the following figures, wherein like reference numerals refer to like parts throughout the various views unless otherwise specified.

FIG. **1**A is a block diagram illustrating an operating environment for a multimedia content distribution system.

FIG. **1**B is a block diagram illustrating an alternative operating environment for a multimedia content distribution system.

FIG. **2** is a block diagram illustrating the software components of a multimedia content distribution system in an embodiment.

FIG. **3** is a block diagram illustrating a widget builder resource component used in a multimedia content distribution system in an embodiment.

FIG. **4** is a block diagram illustrating a content management component used in a multimedia content distribution system in an embodiment.

FIG. **5** is a block diagram illustrating a market management component used in a multimedia content distribution system in an embodiment.

FIG. **6** is a flow chart illustrating a method for uploading and converting multimedia content used in a multimedia content distribution system in an embodiment.

FIG. **7**A is a flow chart illustrating a method for creating marketable compilation of multimedia content in a multimedia content distribution system in an embodiment.

FIG. **7**B is a flow chart illustrating a method for updating content inventories in a multimedia content distribution system in an embodiment.

FIG. **8** is a flow chart illustrating a method for distributing multimedia content using a web widget in an embodiment.

FIG. **9** is a block diagram illustrating a web widget for distribution of multimedia content in an embodiment.

FIG. **10** is a block diagram illustrating an active web widget for distribution of a single musical song in an embodiment.

FIG. **11** is a block diagram illustrating an active web widget for distribution of a musical album including a compilation of musical songs in an embodiment.

FIG. **12** is a block diagram illustrating an active web widget operative to receive a purchase request in an embodiment.

FIG. **13** is a block diagram illustrating a purchase request confirmation in an active web widget in an embodiment.

FIG. **14** is a block diagram illustrating user access to a transaction processing service in an active web widget in an embodiment.

FIG. **15** is a block diagram illustrating a graphical button for viral distribution that provides access to a web widget in an embodiment.

DETAILED DESCRIPTION

In the description to follow, various aspects of embodiments web widgets and the computing and communications system which supports their ability to perform electronic commerce transactions will be described, and specific configurations will be set forth. Numerous and specific details are given to provide an understanding of these embodiments. The aspects disclosed herein can be practiced without one or more of the specific details, or with other methods, components, systems, services, etc. In other instances, structures or operations are not shown or described in detail to avoid obscuring relevant inventive aspects.

Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. Thus, the appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment. Furthermore, the particular features, structures, or characteristics may be combined in any suitable manner in one or more embodiments.

FIG. **1**A is an illustration of an operating environment for a multimedia content distribution system in an embodiment. In this operating environment **100**, one or more content distributor client devices **128**, one or more content owner client devices **126**, and one or more consumer client devices **130**, **132**, **134** are illustrated. Among the range of consumer client devices used for the distribution of multimedia content from the multimedia content distribution system are laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants (i.e., PDAs). As used here, the term "personal digital assistant" means both phone-enabled PDAs (i.e., smart phones) and non-phone enabled PDAs. Each of these client devices is communicatively coupled to a network **102** which provides secure computing and communications access through a server **104** executing a firewall software to an application server **106**, which in this embodiment acts as a centralized compute processing and transaction management resource. In the illustrated embodiment, the network **102** is the Internet. However, in other embodiments, the network **102** can be a private computer-communications network, a wireless communications network, or other computer data communications network that can enable communications between and among computer devices, mobile devices, the multimedia content distribution system and its infrastructure resources for storage and transaction processing.

The application server **106** is communicatively coupled to a database server **110**, a transaction processing service **112**, an email server **108** and a file management server **114**. The file management server is communicatively coupled to one or more computing resources that perform file virus scanning **116**, file transcoding **116** and file compression **120** for files which are stored on a cloud-based storage resource **124**. In an embodiment, the database server **110** is used to maintain a lookup table of all content files and related metadata which are stored on the cloud-based storage resource **124**. The file management server **114** is used to control the file conversion process from a first format in a received file to one or more transcoded formats. In an embodiment, a select subset of the transcoded files will then be compressed into a single file using file compression **120** and then stored on the cloud-based storage resource **124** along with related metadata for each file. In one embodiment, the files are compressed into a WinZip file for storage on the cloud-based storage resource **124**. The email server **108** is used in an embodiment to facilitate electronic mail communications between and among content owners and content distributors, as well as email broadcasts to groups of consumers and prospects. In addition to its role in managing the use of resources in the multimedia content distribution system, the application server **106** is also used for the creation of user account profiles, the execution of one or more web servers, and the execution of a content management system including a widget builder resource component and a market management component. The web servers are used to receive and respond to content related requests received from consumer client devices **130**, **132**, **134**.

In one embodiment, content owners using their client devices **126** upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**, **132**, **134** using compilation-specific web widgets that are created and capable of distribution from the application server **106**. In creating web widgets, the application server **106** will check the lookup table stored on the database server **110** to confirm the availability and format of content files included in or associated with the web widgets. This process is also followed when new buttons, links or preview clips are created by content owners for subsequent distribution from the application server **106**. The web servers executed on the application server **106** are used to respond to requests received from web widgets, buttons, links or preview clips executed or selected in browsers running on the consumer client devices **130**, **132**, **134**

The content distributor client devices **128** are used by content distributors to provide content distribution feeds to update the content inventories of content owners with active accounts in the multimedia content distribution system on the application server **106**. These inventories can be updated with content from distribution feeds upon request of the content owners or the operators of the multimedia content distribution system. In one embodiment, the distribution feeds provide content in bulk which is parsed by a content management system executed on the application server **106** to ensure that each content owner receives the content desired for inclusion in their respective content management systems. Each distribution feed is parsed and the content is allocated to each content owner's account as specified in the distribution feed. Once parsed, the content delivered in these distribution feeds is uploaded, master content files are transcoded to one or more alternative file formats preselected by content owners, the content files and their transcoded variants are stored in the cloud-based storage resource **124**, and references to the stored content files and transcoded variants are registered in one or more lookup tables maintained on the database server **110**. Once uploaded and registered on the database server **110**, the content included in these distribution feeds can be accessed and used by content owners to create new content compilations for association with web widgets using a widget builder resource component executed on the application server **106**. In an embodiment, a content compilation is an aggregation

of one or more multimedia content files and associated metadata. Once created and associated with specific multimedia content and related metadata, these web widgets are available for viral distribution by content owners to networks of current and potential consumers.

In one embodiment, the cloud-based storage resource **124** and the transaction processing service **112** are provided by the Amazon Web Services group at Amazon.com, Inc. More particularly, in the embodiment, the cloud-based storage resource is implemented using Amazon's "Simple Storage Service" (S3) which provides a data storage capacity that can be used to store and retrieve any amount of data, at any time, from anywhere on the World Wide Web. Likewise, in an embodiment, the transaction processing service **112** is implemented using Amazon's "Flexible Payments Service" (FPS) to facilitate the payment processing and checkout process once consumers decide to purchase and download content from virally distributed web widgets, buttons, links or preview clips. In this embodiment, the FPS is used to process payments from consumers who wish to purchase registered multimedia content promoted in virally distributed web widgets, buttons, links or preview clips using their credit cards, debit cards or bank account information. Furthermore, in an alternative embodiment, the file virus scanning **116**, file transcoding **118** and file compression **118** processes are implemented using Amazon's "Elastic Compute Cloud" (EC2) resources instead of dedicated, proprietary servers. The EC2 is a web service that provides resizable compute capacity in a cloud-based network that can be scaled to provide computing capacity for applications serving multiple client devices.

Consumers using browsers executing on their client devices **130**, **132**, **134** can activate web widgets directly or indirectly. A web widget can be activated indirectly if a consumer receives a button or link and then clicks on the button or link which results in the activation of a web widget. Likewise, a consumer can directly activate a web widget if it is received from the content owner or a third party who has opted to share or redistribute the web widget. Once activated, a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties or elect to purchase the multimedia content packaged with the web widget. If a consumer elects to purchase specific multimedia content files by clicking on an embedded buy button, then the web widget provides the consumer with a choice of format options and then redirects the consumer to the transaction processing service **112** for the provision of credit card, debit card or bank account information and completion of the purchase transaction. Once the purchase transaction is completed, the selected multimedia content files are downloaded by the web widget from the cloud-based storage resource **124** to the consumer's designated client device **130**, **132**, **134**.

FIG. **1**B is an alternative embodiment of the operating environment of the multimedia content distribution system **100**. In this operating environment, one or more web servers have been added as independent computing resources for use in receiving and responding to content related requests from various client devices **130**, **132**, **134**. This embodiment is computationally more efficient and enables the application server **106** to be dedicated to the operation of a content management system and the control of processes on the other servers used in this operating environment. As discussed above, these servers include an email server **108**, a database server **110**, a file management server **114**, and control over a transaction processing service **112** and content conversion services for file virus scanning **116**, file transcoding **118**, and file compression **120** for storage in the cloud-based storage resource **124**.

FIG. **2** is an illustration of an embodiment of a multimedia content distribution system **200**. In this embodiment, the system **200** is comprised of a content management system **202**, a data management service **208**, an analytics and reporting service **210**, a security service **212**, a transaction payment processing service **214**, a widget management service **216** and an accounting service **218**. The content management system **202** is comprised of three components, a widget builder resource component **204**, a content management component **220**, and a market management component **206**. The content management component **220** is used for the uploading of multimedia content, the editing of metadata related to the content and the creation of compilations of content into marketable packages that can be associated with one or more web widgets. In addition to controlling the uploading, editing and creation of content compilations through the content management component **220**, the content management system **202** also controls the processes applied to uploaded content files for virus scanning, file transcoding and file compression for storage in the cloud-based storage resource **124**. The widget builder resource component **204** is used to create various marketing resources including new web widgets, buy buttons, links and preview clips. In one embodiment, the buy buttons, links and preview clips are each communicatively coupled to a web widget so that the selection or clicking on a button, link or preview clip causes the activation of a web widget Once these marketing resources are created, content owners can use them in viral distribution marketing campaigns to promote their content compilations. The market management component **206** is used by content owners to assign market rules and pricing terms to selected items included in a content compilation. In one embodiment, the items include individual songs, song releases, or entire song catalogues. In a different embodiment, the items include reports, physical merchandising paraphernalia (e.g., cups, t-shirts, hats, etc.), and other electronic goods.

The data management service **208** is used to maintain a lookup table for use in tracking the locations of stored multimedia content files in the cloud-based storage resource, transcoded variants of these files, compressed files including one or more copies of content files and transcoded files, and files storing usage statistics collected by one or more web servers from the web widgets, buy buttons, links, preview clips or other marketing resources which are created and distributed by content owners and third parties. The analytics and reporting service **210** in one embodiment is a subcomponent of the data management service **210** and is used to analyze compiled analytical data, transaction statistics and location statistics for the marketing resources used by content owners in promoting their multimedia contents over one or more networks. More specifically, the analytics and reporting service **210** compiles transaction statistics and location statistics arising from the viral distribution of web widgets and related purchase transactions initiated and completed over web widgets which have been distributed over such networks. In an alternative embodiment, the analytics and reporting service is a stand-alone service which independently interacts with the data management service **210** and the one or more web servers comprising the widget management service **216** which are used for the tracking of web widgets and other marketing resources and the collection of usage statistics from these resources.

The security software service **212** provides content owners, distributor clients and consumer clients with secured access to the multimedia content distribution system **200** and its operating infrastructure. In one embodiment, the security service **212** is implemented using firewall software to restrict access to the application server **106** and other computing resources used as part of the operating environment for the multimedia content distribution system **200**. The payment processing service **214** provides direct access to transaction processing resources for the completion of purchase transactions initiated by consumers who use web widgets to preview, purchase and download multimedia content. In one embodiment, the payment processing service **214** is provided by the Flexible Payment Service (FPS) offered by Amazon.com, Inc. The payment processing service **214** is used for the facilitation and execution of payment transactions using credit cards, debit cards or other bank account information.

The widget management service **216** is implemented on one or more web servers and is used for the tracking of web widgets which have been distributed to and activated on Internet websites or on other accessible locations and resources over other networks. Once a web widget has been distributed or activated from a link, buy button or preview clip, it can be further distributed in a "viral" fashion to other online communities, websites, forums, etc. In one embodiment, the widget management service **216** is implemented on web servers which are co-hosted on the application server **106**. In an alternative embodiment, the widget management service **216** is implemented on one or more independent web servers **136**. In both embodiments, however, the widget management service is used for receiving and responding to requests for multimedia content received from web widgets. In addition, the web servers implementing the widget management service **216** also perform data collection and activity monitoring on deployed web widgets. The data collected by the web servers includes transaction statistics, location statistics, usage statistics and other pertinent market statistics for each web widget which has been created, activated and distributed over the Internet, mobile networks or other computer communication networks by the content owner or third parties, such as consumers and members of their online social networks. Once a web widget is activated, the web servers implementing the widget management service **216** compile the data statistics into one or more files which are stored in the cloud-based storage resource **124** and a reference to the stored data collection files is created in the lookup table maintained by the data management service **208** and associated with the multimedia content files and any related transcoded files which have been packaged with each web widget for which the statistics have been collected. In an alternative embodiment, the one or more data collection files including the data statistics are stored on the database server **110** where the lookup table is maintained by the data management service **208**.

The accounting service **218** provides account transaction reconciliation for each content owner having an active account on the content management system **202**. By using the accounting service **218**, content owners can track the number and type of available content in their inventories of content files, the number of transactions performed relative to the total number of available content files, the number of transactions which have been returned for credit to consumers, the number of completed transactions, and revenue earned from completed transactions.

FIG. **3** depicts an embodiment of a widget builder resource component. The widget builder resource component **300** is used to create an inventory of "web widgets" **316**, buy buttons **310**, buy links **312** and preview clips **314**. In an embodiment, the web widget inventory **316** includes services for creating web widgets for packages of marketable multimedia content including, in one embodiment, full catalogs of digital music content, single releases of digital music content and single song digital music content. The widget builder resource component **300** is also used to create a merchandising widget **308** to promote a content owner's physical goods and related materials as marketing merchandise. Examples of such physical goods are coffee mugs, t-shirts, hats, jackets, etc. In the present embodiment, the web widgets pertain to musical content which is often compiled in the form of musical catalogs, musical releases, and single songs. A full catalog widget **302** is used for the promotion of the full musical catalog of a content owner. In one embodiment, the full catalog widget **302** is used to execute a video clip that provides a preview of the content in a content owner's inventory in the multimedia content distribution system **200** that is packaged with the web widget. The web widgets **302**, **304**, **306**, **308** are also used to facilitate electronic commerce transactions involving the purchase or licensing of multimedia content, such as musical selections as shown in this embodiment, in the specific groupings desired (i.e., catalog, release, or single song).

A single release widget **304** is used to promote a single musical release of a content owner from content stored in a content inventory of the multimedia content distribution system **200** in an embodiment. A single song widget **306** is used to promote a single song provided by a content owner in an embodiment. The merchandising widget **308** is used to promote the merchandise or physical goods that a content owner may choose to promote alone or in association with one or more multimedia content files in an embodiment. The merchandising widget **308** is used when a content owner seeks to create a fully custom content compilation which may include promoted merchandise or physical goods (e.g., cups, hats, t-shirts, etc.), a subset of content from specific releases as well as other content from the content owner's catalogue which is not included in any specific release. The buy buttons **310** are generated by content owners using the widget builder resource component **300** and linked to web widgets. The buy buttons **310** can be customized and distributed to online resources on the Internet, on mobile communication networks or on other computer networks for use in promoting the various groupings of multimedia content available from a content owner. Once a buy button **310** is clicked or selected by a consumer, it will activate its linked web widget and take the consumer to a checkout screen in the web widget. The buy links **312** are Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise. The preview clips **314** created in the widget builder resource component **300** are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices **130**, **132**, **134** to enable those consumers to preview multimedia content and to make informed choices about the multimedia content they may elect to purchase and download to their client devices **130**, **132**, **134**, or to further distribute to third parties in the social networks of these consumers or in other online communities. Upon completion of an executing video clip, the linked web widget which will have been activated at the start of

execution of the preview video clip will be displayed in the browsers of the consumer client devices **130**, **132**, **134** to aid the consumer in making a purchase or distribute decision.

FIG. **4** illustrates an embodiment of a content management component **400**. The content management component **400** is comprised of several services. The content distribution feed **402** is a service that enables content owners to request and receive distribution feeds from content distributors. The content provided by content distributors to content owners through such feeds is used to automatically update and supplement the content inventories of content owners in the content management system **202**. The metadata editor **404** is a service that enables content owners to edit the metadata associated with multimedia content files. In one embodiment, the type of metadata that can be edited includes information pertaining to the musical content of a content owner such as title, artist name, release date, genres, catalogue number and Universal Product Code. Image Content Uploader **406** is a service that uploads, store and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets. In one embodiment the types of image files which can be uploaded using the Image Content Uploader **406** are GIF files, JPEG files and TIF files. Audio Content Uploader **408** is used for uploading audio files. In an embodiment the audio file types that can be uploaded using the Audio Content Uploader **408** include WAV files and MP3 files. The compilation builder **410** is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system **202**. In an embodiment, each content compilation created using the compilation builder **410** is associated with a web widget that will be distributed using the web distribution service **216** to consumers on the Internet, mobile communications networks, or other computer communications. Lastly, the content downloader **412** is used for controlling the downloading of the custom content compilations created by content owners which are packaged with and promoted through web widgets. Upon receipt of a content download request from a web widget, the content downloader **412** initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the cloud-based storage resource **124** or other storage in the multimedia content distribution system **200**, and it also controls the process of downloading the retrieved content compilations to a client device **130**, **132**, **134**.

FIG. **5** illustrates the services provided in an embodiment of a market management component **500**. As shown, one service is a territory manager **502** which is used by content owners to set the sales parameters and the timing of sales campaigns relating to specifically available content from a content owner in different geographic regions of the world. For example, a content owner may choose to provide a subset or only a particular release version of certain musical content for sales and marketing campaigns in Spain, Germany or France. While in other parts of the world, the content owner may choose to set different territorial restrictions on the availability of their content such as limiting the availability of musical content only to earlier releases rather than later releases in an entirely different part of the world, such as South America or in specific South American countries. The sales campaign manager **504** is another service provided in an embodiment of the market management component **500** that enables content owners to enable and disable sales campaigns by specified dates. The content pricing manager **506** is a service that allows content owners to set the pricing of particular files by file type. Although not limited only to musical content, in one embodiment the content pricing manager **506** is used to set pricing for MP3 file types and for WAV file types. Although the present embodiment is described with respect to the use of musical content stored in MP3 and .WAV file formats, the use of a content pricing manager **506** is not limited to the pricing of content for musical files or even to the pricing of files in these two types of file formats, but can be applied broadly to the pricing of content in image files, video files, audio book files, or video game files as well as in other file types and file formats of multimedia content generated by content owners.

FIG. **6** is a flow chart illustrating an embodiment of a process for uploading and transcoding multimedia content files. The process commences at step **600** and begins with the receipt of a content upload request **602** from one or more content owner client devices **126**. Upon receipt of an upload request, the content management system **202** begins the uploading of multimedia content files and associated metadata, as shown at step **604**. In one embodiment, associated metadata includes information about the multimedia content such as artist name, album title, song title release name or catalogue name. Continuing with this process, the content management system **202** will confirm whether each received content file is in a proper format for uploading to the multimedia content distribution system, as shown at step **606**. If the file format is improper, such as when the integrity of the file has been compromised, the process returns to step **604** for the continued uploading of the next multimedia content file and associated metadata. If the content is in a proper format, the process continues with a placement of each newly received content file into a queue, as shown at step **608**. After placement in the queue, the file will be scanned for viruses, as shown at step **610**, and a test will be applied to confirm whether the virus scan was passed, as shown at step **612**. If virus scanning is unsuccessful, the process will transmit a message to the content owner for display in the browser of a content owner client device **126** indicating that the virus scan failed, as shown at step **614**, and that the process will then end, as shown at step **616**. If the virus scan was passed, the process continues with the transcoding of the content file, as shown at step **618**. In an embodiment, the content owner can select one or more file formats for transcoding of each uploaded multimedia content file, which file formats may include Windows Media Audio (WMA), Advanced Audio Coding (AAC), Apple Lossless Audio Codec (ALAC), Free Lossless Audio Codec (FLAC), WMA Lossless and MP3. After a file has been transcoded, the process continues with the storing of the originally uploaded content file, referred to as a "master content file," and each transcoded file specified by a content owner. The master content file and any transcoded files are stored in the cloud-based storage resource **124**, as shown at step **620**. Upon completion of the storing of these files, the process updates a data base registration record, as shown at step **622**. The database registration record is maintained in a lookup table on a database server **110**. If multiple multimedia content files are uploaded, for example as part of an album upload or a catalogue upload, the process confirms whether the uploading has been completed, as shown at step **624**. If the process has not been completed, then the uploading will continue with the uploading of additional multimedia content files and associated metadata, as shown at step **604**. In one embodiment, if the upload process has been completed, the content owner can select a subset of the transcoded files of a given file type to be compressed into

one file, as shown at decision step **626**. For example, in an embodiment, when a master content file in the .WAV format is uploaded, the content owner can have multiple transcoded files (e.g., an MP3 format file, a WMA format file, an FLAC format file) created from the master content file during the transcoding process, shown at step **618**. After selection of the desired files, the content management system **202** will compress the transcoded files (e.g., the WMA format files) into a single compressed file, as shown at step **628**. In an embodiment, the selected subset of transcoded files is compressed into a Winzip file. Upon completion of the compression process, the compressed file is stored in the cloud-based storage resource **124**, as shown at step **630**, and the database registration record will be updated once again, as shown at step **632**, to identify the storage location of the compression file and its logical relationship to the master content file and related transcoded files. The process then ends, as shown at step **632**. Alternatively, if no files are selected for compression at decision step **626**, then the uploading and transcoding process will end, as shown at step **634**.

FIG. **7**A is an illustration of a process used by content owners to convert uploaded content files into marketable products for packaging with web widgets. In an embodiment, each uploaded content file represents an item for promotion and distribution. Each "item" is made available as a "product" for marketing purposes after being associated with a web widget. The process of creating products starts at step **702** and begins with a content owner creating a content compilation from uploaded content files and metadata, as shown in set **704**. Afterwards, the content owner assigns marketplace rules to the content compilation, as shown at step **706**, and then generates one or more web widgets, links, buttons, or preview clips to promote the content compilation, as shown at step **708**, and the process then ends, as shown at step **710**. The content compilation is the "product" for marketing and promotion purposes and the compilation may be comprised of one item (e.g., a single song), multiple items (e.g., the items comprising a musical "release" or a musical "catalog," etc.), identifiers of physical goods or marketing merchandise (e.g., cups, t-shirts, hats, a book of thematic poetry, etc.), or any combination of these items and identifiers. In one embodiment, the identifiers of physical goods or marketing merchandise are either a Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID). In a different embodiment, the marketplace rules assigned by a content owner at step **706** can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, U K and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials.

FIG. **7**B is an illustration of a process for requesting and updating content inventories using distribution feeds. This process commences at step **712** and is initiated by the placement of a request for a distribution feed through the content management system **202** by a content owner, as shown step **714**. In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships. In an alternative embodiment, the operators of the multimedia content distribution system **200** acting on behalf of one or more content owners can request distribution feeds for content owners to ensure that the content inventories maintained in the multimedia content distribution system **200** are updated and available for the creation of content compilations. As illustrated, once a distribution feed is received it is parsed for content and metadata, as shown at step **716**, and the content inventory or inventories maintained by content owners are updated, as shown at step **718**. Upon receipt and updating of one or more content inventories, the process ends, as shown at step **720**. Content distribution feeds received from distributor clients in one embodiment contain content from multiple artists including multiple content items such as songs, album content and catalogue content. The parsing of the distribution feed, as shown at step **716**, selectively parses this distribution feed according to content owner so that each content owner will have each of his or her content inventories automatically updated even though multiple content owners and multiple content files associated with each content owner may be included in a single distribution feed.

FIG. **8** is an illustration of a process for generating web widgets and distributing them over networks to facilitate the promotion, distribution and execution of purchase transactions for multimedia content using web widgets. This process commences as shown at step **802** with the generation of a widget as shown at step **804**. A content owner can generate one or more web widgets to promote different packages of multimedia content. In one embodiment in which the multimedia content consists of musical works, among the types of web widgets that can be generated are single song widgets, song release widgets, song catalogue widgets, and merchandising widgets. A single song widget is used to promote a single song of a content owner. A release widget is used to promote a compilation that includes multiple songs or multiple forms of content created by a content owner (e.g., a combination of musical selections, t-shirt, cup, hat and a book of the content owner's writings, etc.). A catalogue widget is used to promote the entire catalogue of creative works of a content owner. A merchandising widget is used to promote physical goods such as t-shirts, cups, carrying case, etc. that may be associated with the theme set by a content owner for a song, a release of songs, or the content owner's catalogue.

Upon generation of a new web widget, it can be distributed over the Internet or other network, as shown at step **806**, to a website where interested parties can activate it or further distribute it to third parties on a network. Once received within a browser on a client device, a web widget exists in an inactive mode but can be placed into an active mode when an end user clicks upon or makes a selection on the web widget, as shown at step **808**. In the case of laptop computers **130** and desktop computers **132**, the web widget can be executed in web browsers such as Internet Explorer, Firefox, Google Chrome, Safari, Opera and in other popular web browsers. On mobile client devices **134**, such as personal digital assistants, the web widget can be executed in browsers such as Microsoft IE for Mobile devices, Google Android, Bolt, Teashark, Safari and Opera Mini. In one alternative embodiment, a web widget can be activated when an end user clicks on a buy button, HTTP link or preview clips that is communicatively coupled to the web widget. Upon activation of a web widget, it will retrieve multimedia display files and the metadata associated with the multimedia content that has been packaged and associated with it, as shown at step **810**. Afterwards, the web widget will stream a portion of selected content, as shown at step **812**, so that the content portion can be previewed by the end user or consumer who has activated the web widget, as shown at step **814**. The selected content is determined from a selection request that includes one or more content selections made by the consumer or end user on the web widget. The multimedia display files are used to display visual

representations of the multimedia content which is available to be previewed and purchased from within the web widget. In generating a selection request, a consumer will click on a checkbox associated with content, or alternatively, click on one or more of the multimedia display files associated with each of the multimedia content files. In one embodiment of a web widget used for distribution of a musical catalogue, the multimedia display files include visual representations of the cover art used on each album in the musical catalogue. In other embodiments, the multimedia display files include visual representations of other types of works (e.g., book covers in a portfolio, artistic contributions in an art collection, etc.). With respect to content viewing, the segment of content used for streamed previewing and the duration of a streamed preview portion are pre-determined by the content owner or the content distributor. In one embodiment, the content previewed is a thirty second audio clip of a musical selection. In an alternative embodiment, the content previewed is a thirty second audio-visual clip of a multimedia content file. Once previewed, the consumer can elect to share the previewed content with third parties. In this case, if a share request has been received, as shown at step **824**, the web widget can be further distributed to one or more third party recipients, as shown at step **826**. In this manner the content of the artist associated with the web widget can be virally distributed to generate significant buzz or word of mouth marketing in online communities and in channels of prospective consumers whom the artist may have never considered for marketing purposes. Once distributed, the process ends as shown at step **822**. If a share request is not received then the web widget will remain in a dormant state and the process will end as shown at step **822**.

On the other hand, if after previewing the multimedia content, as shown at step **814**, a consumer chooses to initiate a commercial transaction pertaining to the multimedia content, such as a purchase or license of rights pertaining to the content, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will redirect the consumer to a web page to begin the purchase or license transaction for the selected multimedia content, as shown at step **818**. This web page will be coupled to the transaction processing service **112** so that the purchase transaction can be properly completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor operating the multimedia content distribution system **200** as an "approved vendor" with the banks, credit unions and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.), In this embodiment, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget will automatically execute and complete the purchase or license transaction after a receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. All transactions completed through web widgets are tracked in the accounting service **218**, data collection will be performed on the types of transactions and the locations of the transactions by the web servers implementing the widget management service **216**, and an analysis of statistic trends will be performed and compiled by the analytics and reporting service **210**. In one embodiment, the statistical analysis is performed in an autonomous manner. In an alternative embodiment, the analysis of statistical trends is performed upon request by content owners. Once the purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device **130**, **132**, **134**, as shown at step **820**, and the process then ends, as shown at step **822**. Alternatively, if no purchase request is placed though a web widget, the web widget will remain in an inactivate state with no further processing, as shown at step **822**.

FIG. **9** is an illustration of a web widget in one embodiment. In this embodiment, the web widget **900** is shown in an inactive operational mode and includes an activation button **906** and the web widget **900** identifies the content owner name **902** (i.e., "Lenny White") and the name of the multimedia content file **904** (i.e., "Drum Boogie"). In the illustrated embodiment, clicking on the activation button **906** or on any location within the inactive web widget **900** will cause the retrieval of a multimedia display file and the metadata associated with the multimedia content file from the multimedia content distribution system **200** and start the preview of a pre-determined portion of the multimedia content file associated with the web widget. In an alternative embodiment, clicking on any location within the illustrated web widget **900** in an inactive operational mode will cause the web widget to enter an active operational mode. In one embodiment, the multimedia display file includes artwork or a graphic image which visually represents a cover for the content stored in the multimedia content file associated with the web widget **900**. A web widget is received over a network such as the Internet and viewed in a consumer's web browser executing on mobile, laptop or desktop client devices **130**, **132**, **134** such as Internet Explorer, Firefox, Google Chrome, Safari, Opera or other popular web browsers. The content owner may also elect to create an outer package for a web widget with artistic or illustrative materials as is shown in this embodiment.

FIG. **10** is an illustration of a web widget **1000** after a consumer clicks on the activation button **906** or on any location within an inactive web widget to thereby cause the web widget **1000** to enter an active operational mode. In this embodiment, the web widget **1000** includes a field for the content owner's name **1002** (i.e., Lenny White), the name of the musical selection or multimedia content file **1004**, a buy button **1006** which will enable the purchase of the multimedia content, which in this embodiment is the musical selection called "Drum Boogie." The web widget **1000** also includes the name of the distributor and the year of distribution 2010 (i.e., Abstractlogix/2010) and provides a field for limited previewing capabilities **1008**. As shown in this field **1008**, there is a play, pause and end-play button. All functionality provided by the web widget **1000** is performed within the browser on a consumer's client device **130**, **132**, **134**.

In the present embodiment, the web widget **1000** is comprised of a content retrieval component, a content preview component and a transaction processing component. Once the activation button **906** or any location in an inactive web widget is clicked on to thereby cause the web widget **1000** to enter the active operational mode, the content retrieval component will send a request to the widget management service **216** and commence with the retrieval of the multimedia display file and metadata for the multimedia content file which is associated with the web widget **1000** from the cloud-based storage resource **124**, the database server **110** or other storage resources which are accessible

from the application server **106**. Once retrieved, a pre-determined portion of the multimedia content file will be automatically executed by the content preview component to enable the consumer to preview the content prior to making a purchase decision. In executing the pre-determined portion of the selected multimedia content file, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer. The duration and the specific segment of content included in the pre-determined portion of the multimedia content file that is made available for streamed execution on the client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase the multimedia content file, in this embodiment the "Buy Song" button will be clicked on which will cause the execution of the transaction processing component. The transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content file, which in the present embodiment will involve the licensing of the multimedia content file to the consumer. In an alternative embodiment, the commercial transaction is the purchase of rights to the multimedia content files. In both embodiments, however, the consummation of the commercial transaction will redirect a consumer to a third party web page shown within the web widget **1000** where the purchase or license transaction will be completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor that operates the multimedia content distribution system **200** as an "approved vendor" with the banks and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.). In this embodiment, the web widget **1000** will confirm that a purchase or license request has been received and the web widget **1000** will automatically execute the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget **1000** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. In each of these embodiments, once the commercial transaction is completed, all portions of the multimedia content file will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **11** illustrates an embodiment of a web widget **1100** in an active operational mode for a release including multiple selections in an embodiment. All of the multimedia content files included in this embodiment of a web widget **1100** are illustrated and listed in region **1110** as an embedded electronic commerce store. Although the illustrated embodiment shows the multimedia content files as musical selections of an album, it should be apparent to those of ordinary skill in the art that the content of this embedded electronic store can include other types of works such as books, paintings, videos, e-books, audio-visual works, software applications, or other content or commercial products created for marketing and sampling purposes in this embedded store. Additional content files can be previewed using the vertical scroll bar shown on the right side of this illustrated web widget **1100**. As shown, there are multiple musical selections by an artist named Lenny White included within the web widget **1100**. This embodiment of the web widget **1100** also includes a play button **1104**, for use in previewing content that has been packaged with the web widget **1100** for promotional purposes. In this embodiment, a consumer can select individual content files (i.e., musical selections) and click on the play button **1104** to preview the selected files, or click on any content file listed in region **1110** to preview only the selected content file. The buy album button **1108** is shown in the same row as the play button **1104** in this embodiment. In addition, the name of the album **1102** (i.e., Anamoly) is shown in the row above the buy button **1104** and buy album **1108** button. As discussed previously, web widgets can be virally distributed and shared with third parties which has the effect of increasing the marketing buzz and name recognition for a content owner. This viral distribution capability is enabled by the share link **1106**, as illustrated in this embodiment, and it permits subsequent distribution of the web widget **1100** to other potential consumers in the current users online social networks or other online communities.

In this alternative embodiment, the web widget **1100** is comprised of a content search component, a content retrieval component, a content preview component and a transaction processing component. Once an activation button or any location in an inactive web widget is clicked on, the web widget **1100** will enter an active operational mode. After activation, the consumer is presented with the listing of multimedia content files included in the compilation associated with the active web widget **1100**. In this illustrative example, the listing includes the songs provided on the Anamoly album by Lenny White. In reviewing the listing of the content files, a consumer can elect to preview one or more of the content files. If the consumer selects one or more of the listed multimedia content files associated with the web widget **1100** for previewing, the content search component will be activated and configured to search for the selected multimedia content files, which files are accessible from the application server **106**. After the application server **106** locates the content files, the content retrieval component will send a retrieval request to the widget management service **216** and the widget management service **216** will generate and send a content download request to the application server **106** based on the received retrieval request. After receipt of the content download request from the widget management service **216**, the application server **106** will commence the retrieval of multimedia display files and metadata which are associated with the selected multimedia content files. In one embodiment, the multimedia display files include one or more graphic images of artwork which visually represent each song provided in an album widget (also referred to as a "single release widget" **304**). In an alternative embodiment, the multimedia display files include one or more graphic images of the artwork used on the album covers for each album included in a full catalog widget **302**. Once the multimedia display files and metadata are retrieved, a pre-determined portion of the selected multimedia content files will be automatically executed by the content preview component to enable the consumer to preview the content files prior to making a purchase decision. In executing the pre-determined portion of the selected

multimedia content files, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer in selecting the multimedia content files. The pre-determined portion of each multimedia content file which is made available for streamed execution on a client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase or license the compilation of multimedia content files, which in this embodiment is an album containing multiple multimedia content files, the consumer will click on the "Buy Album" button **1108** which will result in the activation of the transaction processing component. In an embodiment, the transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content files resulting in the payment of fees and, in this example, the licensing of the compilation of multimedia content files to the consumer. Consummation of the commercial transaction occurs after the consumer is redirected to a third party web page which is shown within the web widget **1100** where the purchase or license transaction will be completed. In a different embodiment, the web widget **1100** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. Once the commercial transaction is complete, all portions of the content files in the compilation will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **12** is an illustration of a web widget depicting the different format options for content that can be purchased through the web widget **1200**. In this embodiment of the web widget **1200**, there is an MP3 version of the content file available for $0.99 and a separate buy button **1206**. There is also a .WAV format of the content file available for $0.99 and a separate buy button **1208** for that format file. The web widget **1200** also includes the name of the individual song **1204** (i.e., Drum Boogie) and the name of the artist **1202** (i.e., Lenny White).

FIG. **13** is an illustration of the screen shown in a web widget after clicking on a buy button. In this embodiment of a web widget **1300**, after a consumer selects the buy button **1206** to purchase the MP3 format file, a checkout screen appears within the web widget **1300** as shown in this figure. The checkout screen of this web widget **1300** includes the total cost of the content file and the number of files purchased, which items are shown in region **1304**. The name of the selection (i.e., "Drum Boogie"), the artist name (i.e., Lenny White), the format type (i.e., MP3), the number of files (i.e., 2 files) and the combined file size (i.e., 8.24 MB) are shown in region **1302**.

FIG. **14** is an illustration of a web page for a transaction processing service **112** in one embodiment. In the illustrated embodiment, the transaction page for the Amazon Flexible Payment Service (i.e., the "Amazon FPS") is shown. In this embodiment, this web page **1400** is the location where the consumer would enter credit card, debit card or bank account information to complete the purchase of the multimedia content file that is stored and available for download from the cloud-based storage resource **124** used in the operating environment with the multimedia content distribution system **200**. The Amazon FPS is only one of a number of third party transaction processing services that could be made compatible with the operating environment for the multimedia content distribution system **200**. In one alternative embodiment, the alternative transaction processing service can be any one of Authorize.Net, Google Checkout, Storm Pay, PayPal, or other Internet service for transaction processing. In yet another alternative embodiment, the transaction processing service **112** is implemented with a wholly internal, proprietary service that is not generally accessible over the Internet or other public computer communications networks. Each of the foregoing embodiments, however, illustrate how a portable web widget enables commerce through an embedded electronic commerce store regardless of the means used to complete a commercial transaction (i.e., external service such as Authorized.Net, etc. or an internal proprietary service).

FIG. **15** is an illustration of a buy button **1500** that can be distributed "virally" to consumers and third parties included in their online social networks. The buy button **1500** also identifies the file type (in this example it is an MP3 file type) and the price set by the content owner for the multimedia content file, as shown in field **1502**. Upon clicking on the buy button, a web widget will be activated and a checkout screen such as the one illustrated in FIG. **13** in the activated web widget will be displayed in the web browser on the consumer's client device **130**, **132**, **134**.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiments shown and described without departing from the scope of the present disclosure. This application is intended to cover any adaptations or variations of the embodiments discussed herein.

The invention claimed is:

1. A system for generating an electronic commerce store, comprising:

an application server, the application server controlling a transaction processing service;

a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product;

a widget builder resource executing on the application server, the widget builder resource configured to:

receive the image and metadata from the storage resource; and

generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and

wherein the application server is configured to embed the product listing into a web site and into a social media network, and

wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet communication with the web site, the application server provides a checkout screen to the client device, wherein the transaction processing service processes a payment transaction for a purchase of the product initiated from the checkout screen using the client device.

2. The system of claim 1, wherein the metadata includes at least one of a title, a description, or a price.

3. The system of claim 1, wherein the web site is a social media web site.

4. The system of claim 1, wherein the transaction processing service accepts a credit card.

5. The system of claim 1, further comprising, distributing the product listing to a social media network.

6. A system for generating an electronic commerce store, comprising:

an application server, the application server controlling a transaction processing service;

a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product;

a widget builder resource executing on the application server, the widget builder resource is programmed to:

(i) receive the image and metadata from the storage resource;

(ii) generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, and

wherein the clickable link is a buy button and includes a preview of the product, and

wherein the application server is configured to embed the product listing into a web site not operated by the application server and into a social media network, and

wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet communication with the web site, the application server provides a checkout screen to the client device, wherein the transaction processing service processes a payment transaction for a purchase of the product initiated from the checkout screen using the client device.

7. The system of claim 6, wherein the application server is capable of compiling analytics related to the product listing.

8. The system of claim 6, wherein the product listing further includes a share link.

9. The system of claim 6, wherein the web site is a social media network site.

10. The system of claim 6, wherein the transaction processing service is a proprietary service controlled by the application server.

11. A system for generating an electronic commerce store, comprising:

an application server, the application server controlling a transaction processing service;

a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product;

a widget builder resource executing on the application server, the widget builder resource configured to:

receive the image and metadata from the storage resource;

generate a product listing that includes the image, the metadata, and a clickable link,

wherein the clickable link is a buy button and includes a preview of the product, and

wherein the application server is configured to embed the product listing into a social media network and into a web site, and

wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet communication with the social media network, the application server provides a checkout screen to the client device, wherein the transaction processing service is configured to process a payment transaction for a purchase of the product initiated from the checkout screen using the client device.

12. The system of claim 11, wherein the social media network is capable of displaying multiple product listings.

13. The system of claim 11, wherein the product listing includes at least one of a title, a description, or a price.

14. The system of claim 11, wherein the transaction processing service is a proprietary service operated by the application server.

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(12) **United States Patent**
Robb et al.

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(54) **SYSTEM AND METHOD FOR DISTRIBUTABLE E-COMMERCE PRODUCT LISTINGS**

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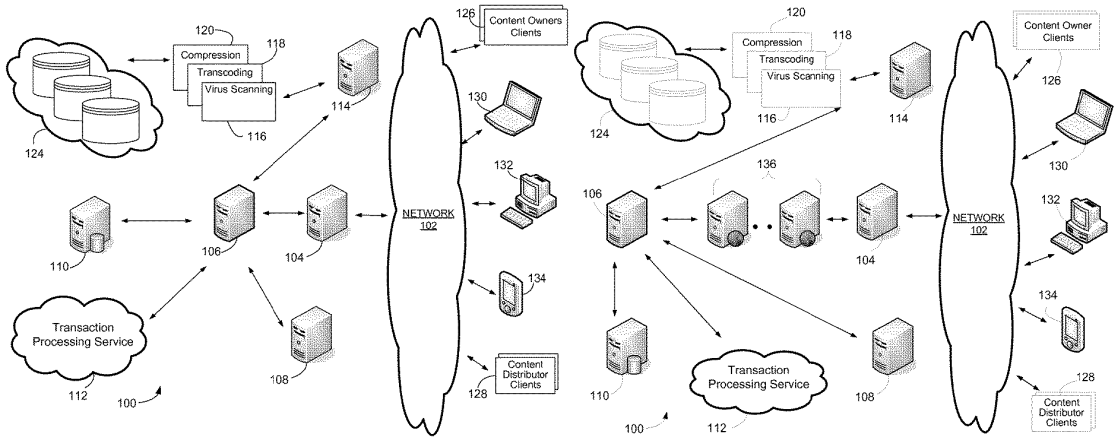
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(57) **ABSTRACT**

A portable web widget for distribution of multimedia content over a computer communications network, the web widget adapted for viral distribution and execution in a web browser on a client device wherein the widget includes a content retrieval component communicatively coupled to an application server over the computer communications network, the content retrieval component configured to retrieve one or more multimedia display files and metadata into an embedded electronic commerce store in the web widget after it enters an active operational mode, the widget also including a content preview component configured to enable a streamed execution of a portion of the multimedia content files associated with each of the multimedia display files from a multimedia content distribution system executing on the application server, and a transaction processing component operative to execute and complete a commercial trans-
(Continued)



action in the embedded electronic commerce store pertaining to the multimedia content files.

20 Claims, 16 Drawing Sheets

Related U.S. Application Data

continuation of application No. 13/571,293, filed on Aug. 9, 2012, now Pat. No. 9,679,298, which is a continuation-in-part of application No. 12/852,090, filed on Aug. 6, 2010, now abandoned.

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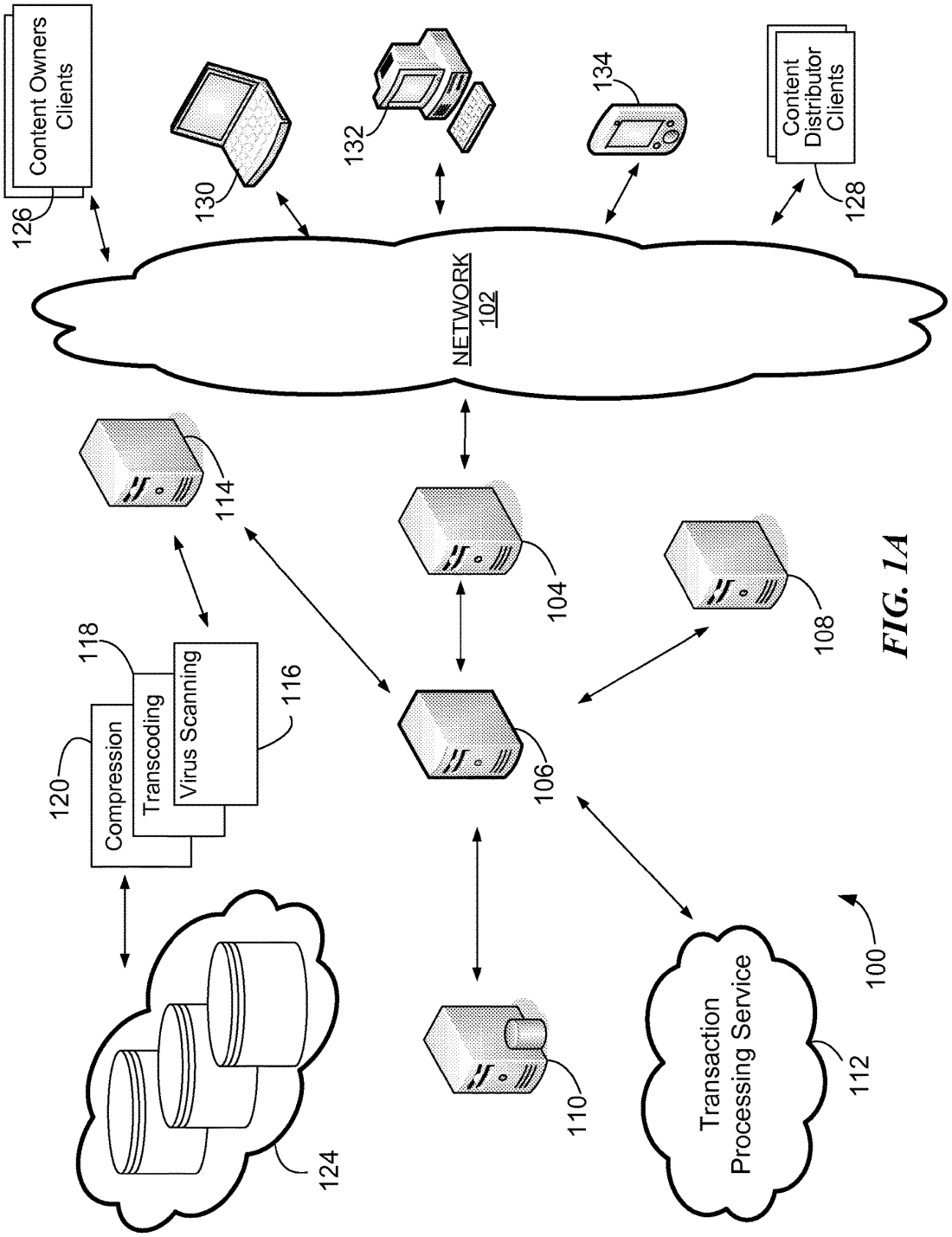

Content Owners Clients
126
130
132
134
Content Distributor Clients
128
NETWORK
102
114
104
108
118
116
120
Compression
Transcoding
Virus Scanning
106
124
110
Transaction Processing Service
112
100

FIG. 1A

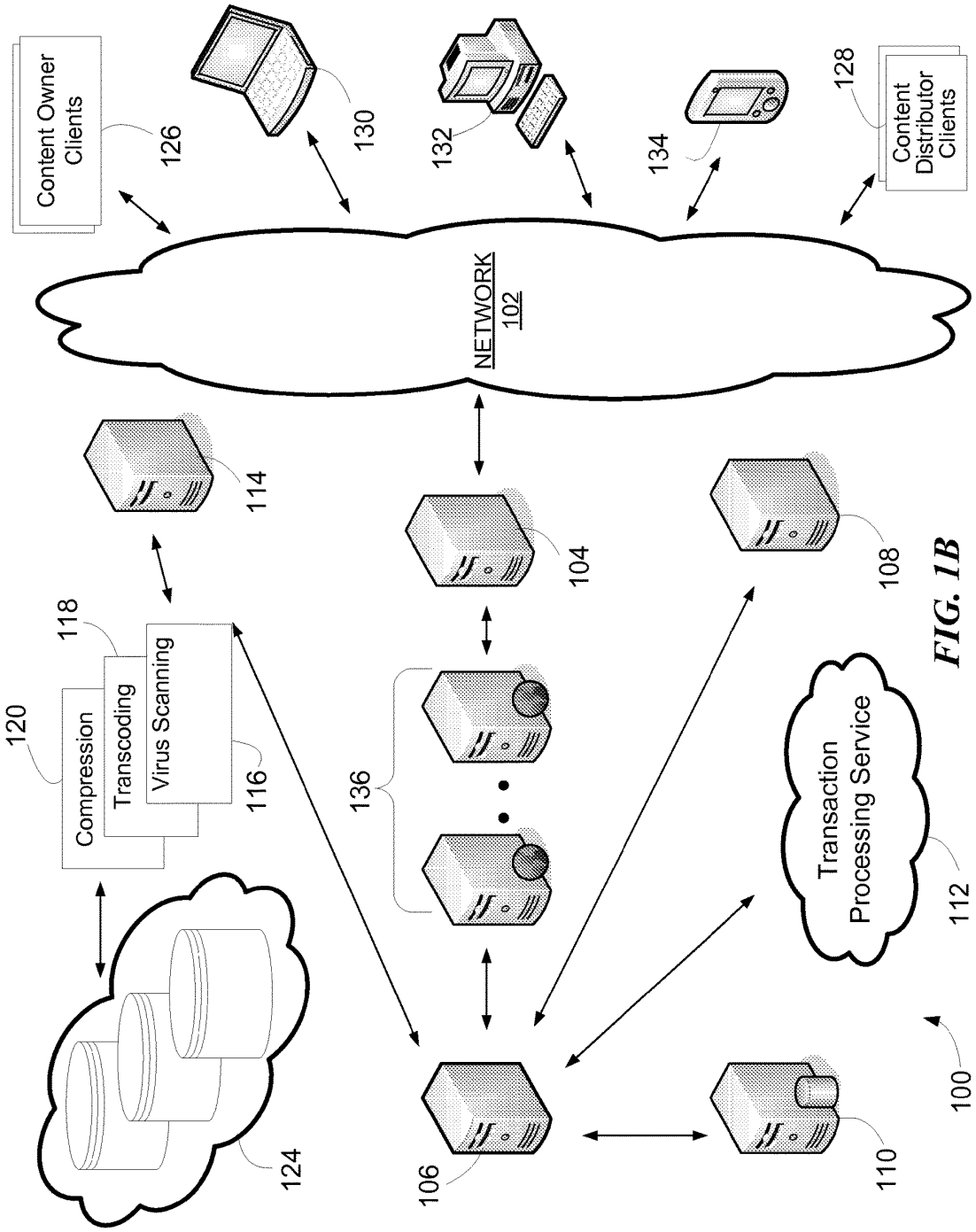

Content Owner Clients
126
130
132
134
128
Content Distributor Clients
NETWORK
102
114
104
108
118
120
Compression
Transcoding
Virus Scanning
116
136
Transaction Processing Service
112
124
106
110
100

FIG. 1B

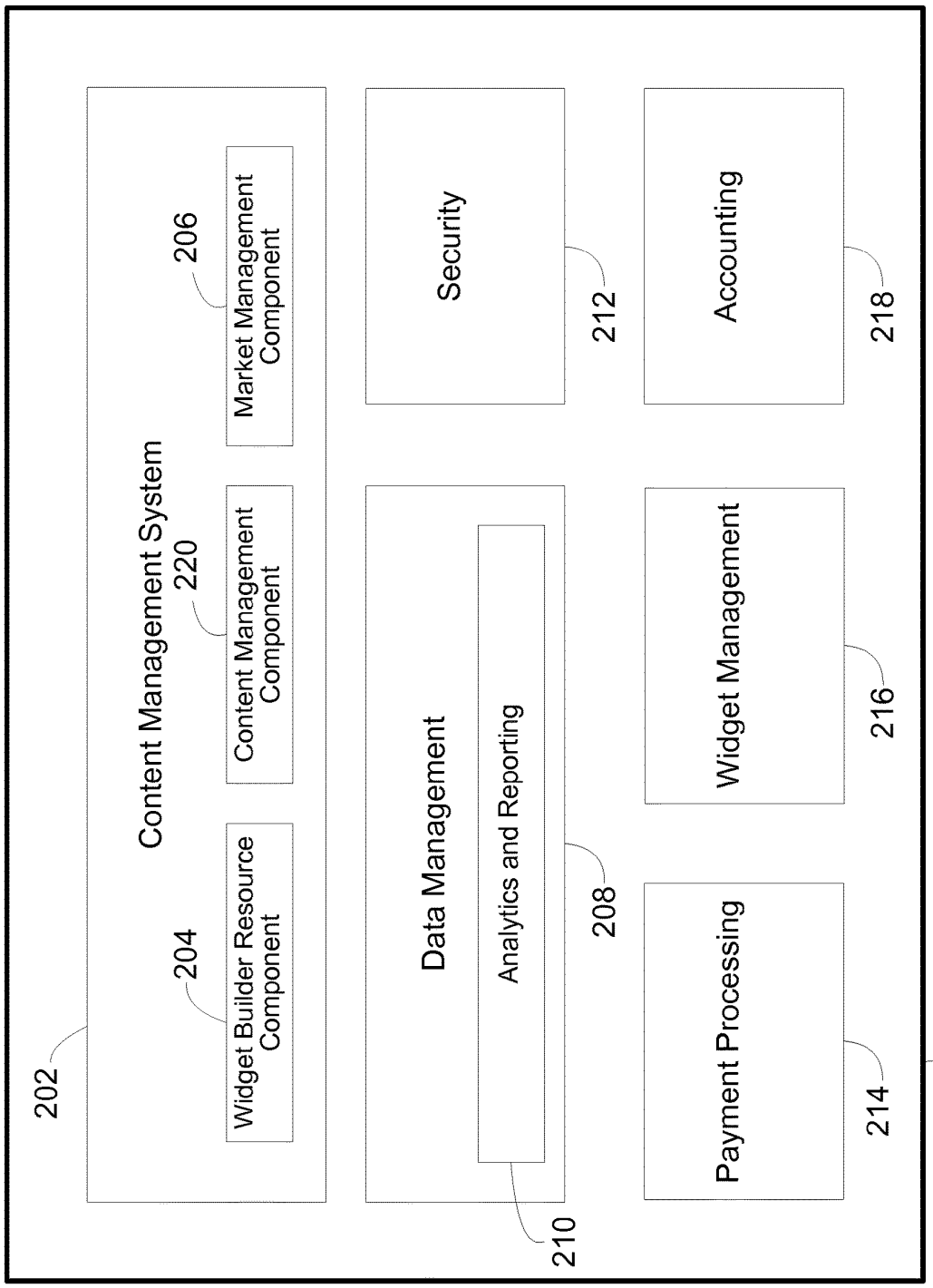

Content Management System
202
Widget Builder Resource Component
204
Content Management Component
220
Market Management Component
206
Data Management
Analytics and Reporting
208
210
Security
212
Widget Management
216
Payment Processing
214
Accounting
218
200

FIG. 2

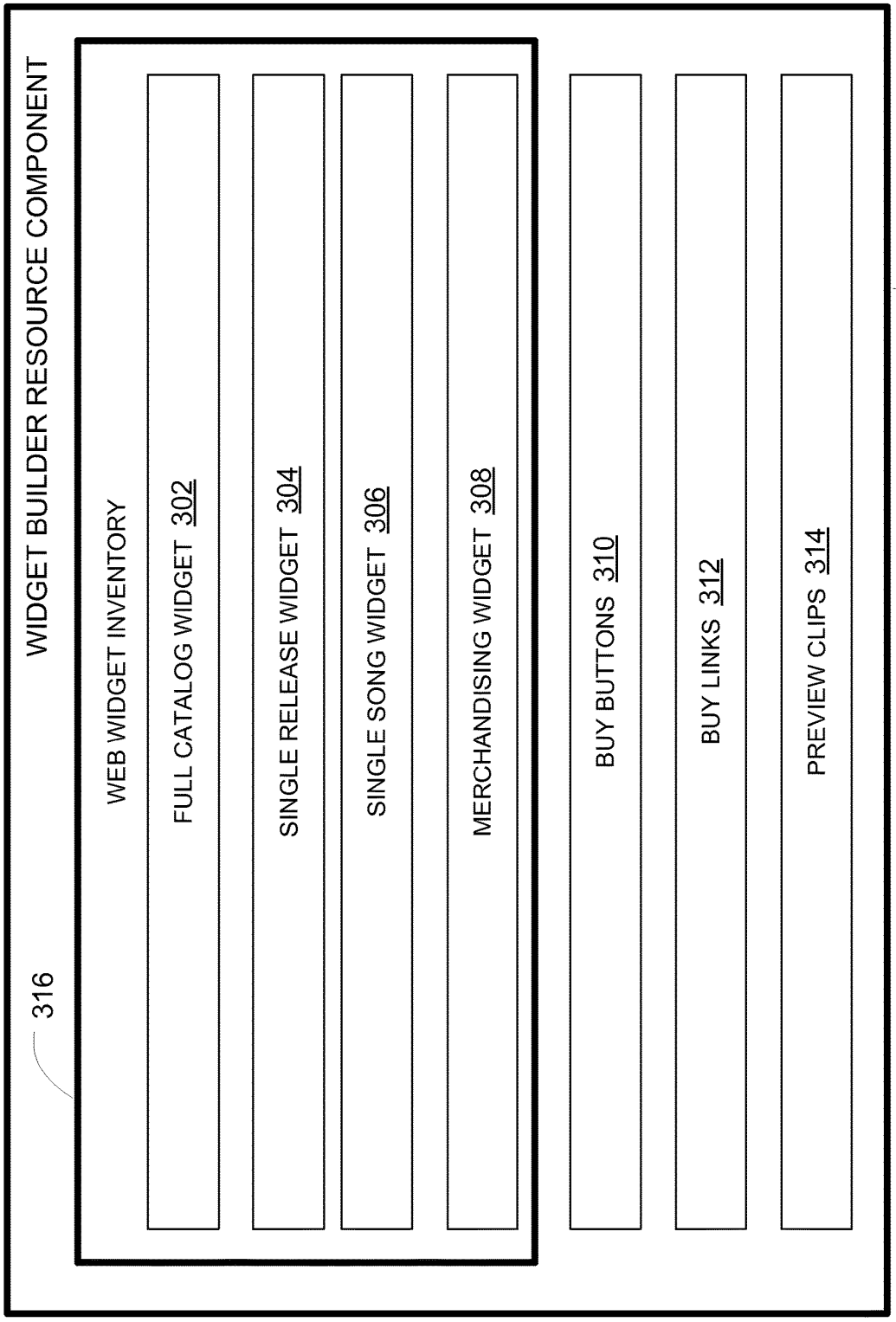

WIDGET BUILDER RESOURCE COMPONENT
316
WEB WIDGET INVENTORY
FULL CATALOG WIDGET 302
SINGLE RELEASE WIDGET 304
SINGLE SONG WIDGET 306
MERCHANDISING WIDGET 308
BUY BUTTONS 310
BUY LINKS 312
PREVIEW CLIPS 314
300

FIG. 3

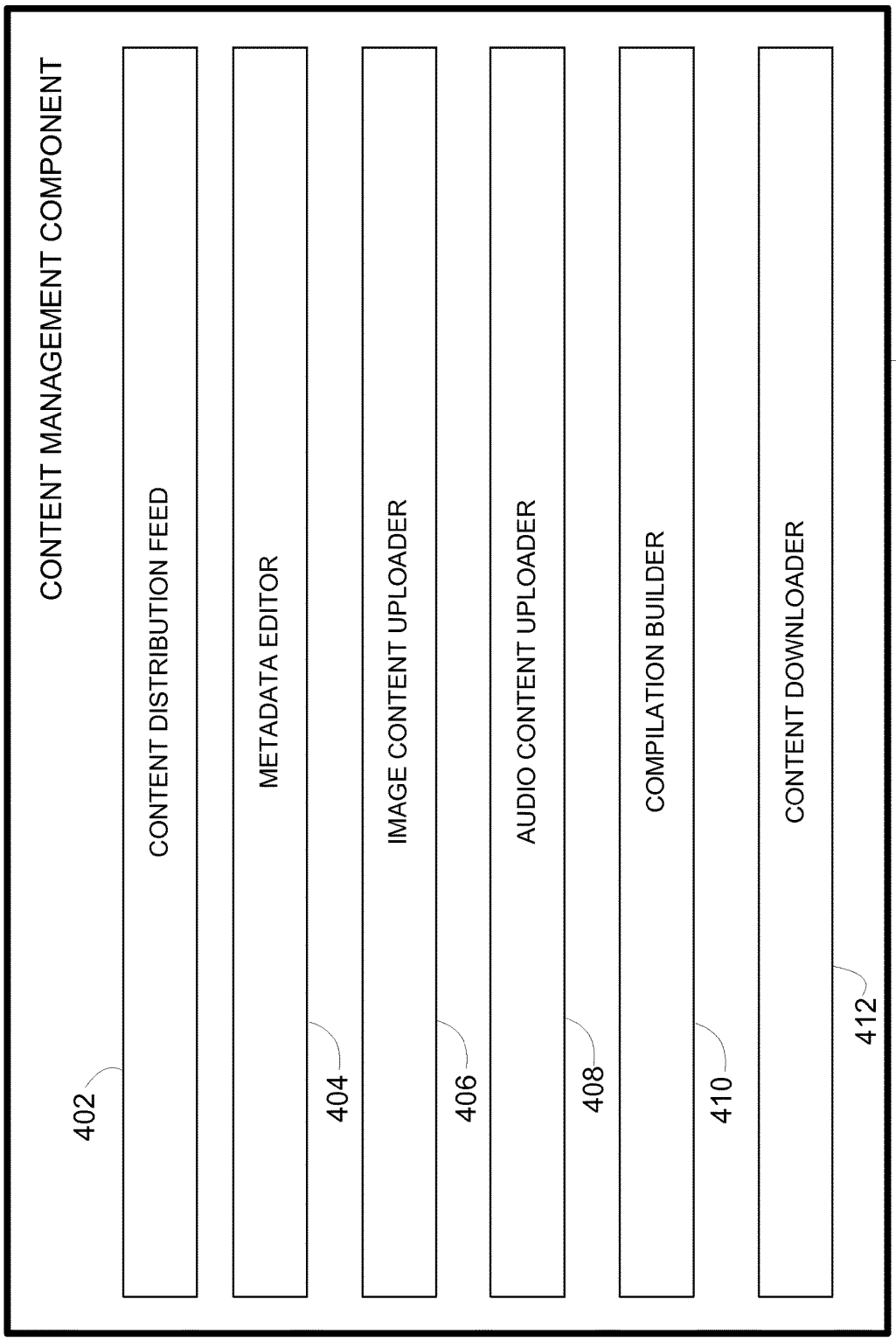

CONTENT MANAGEMENT COMPONENT
CONTENT DISTRIBUTION FEED
METADATA EDITOR
IMAGE CONTENT UPLOADER
AUDIO CONTENT UPLOADER
COMPILATION BUILDER
CONTENT DOWNLOADER
400
402
404
406
408
410
412

FIG. 4

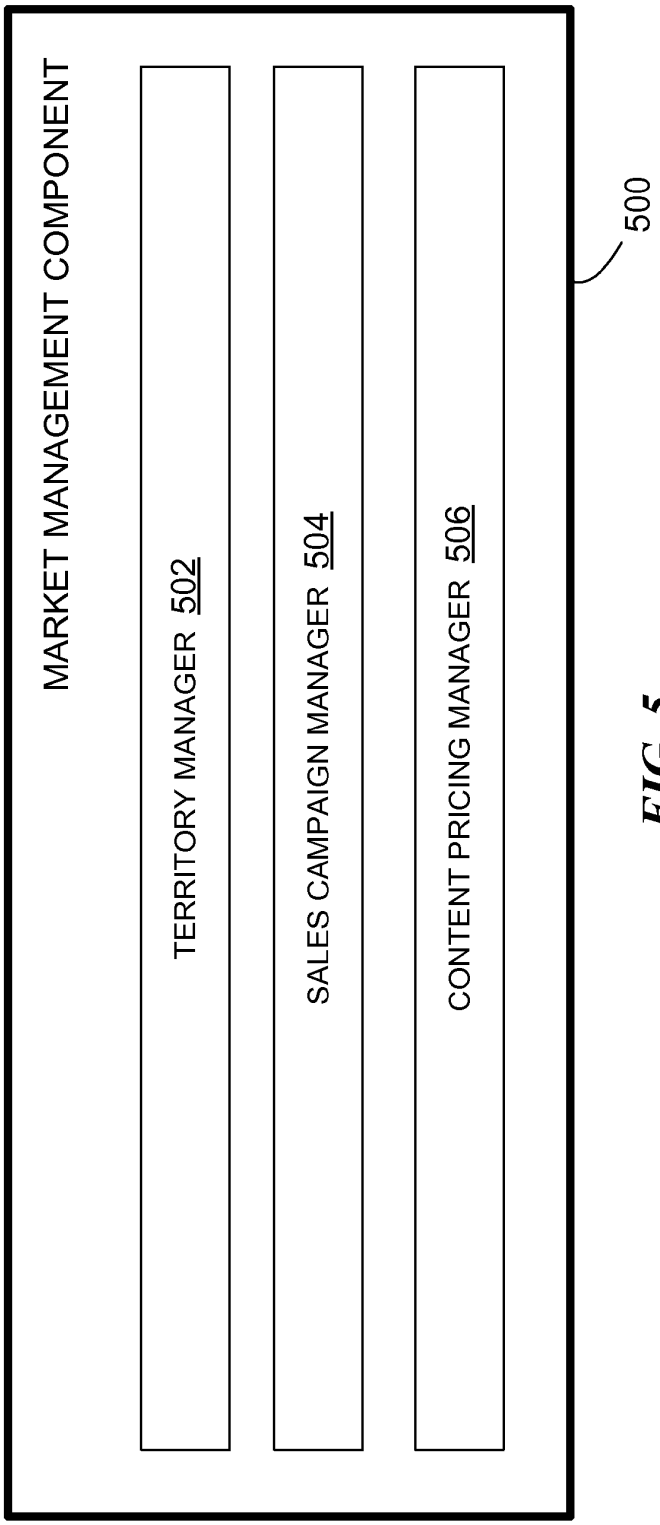

MARKET MANAGEMENT COMPONENT
TERRITORY MANAGER 502
SALES CAMPAIGN MANAGER 504
CONTENT PRICING MANAGER 506
500

FIG. 5

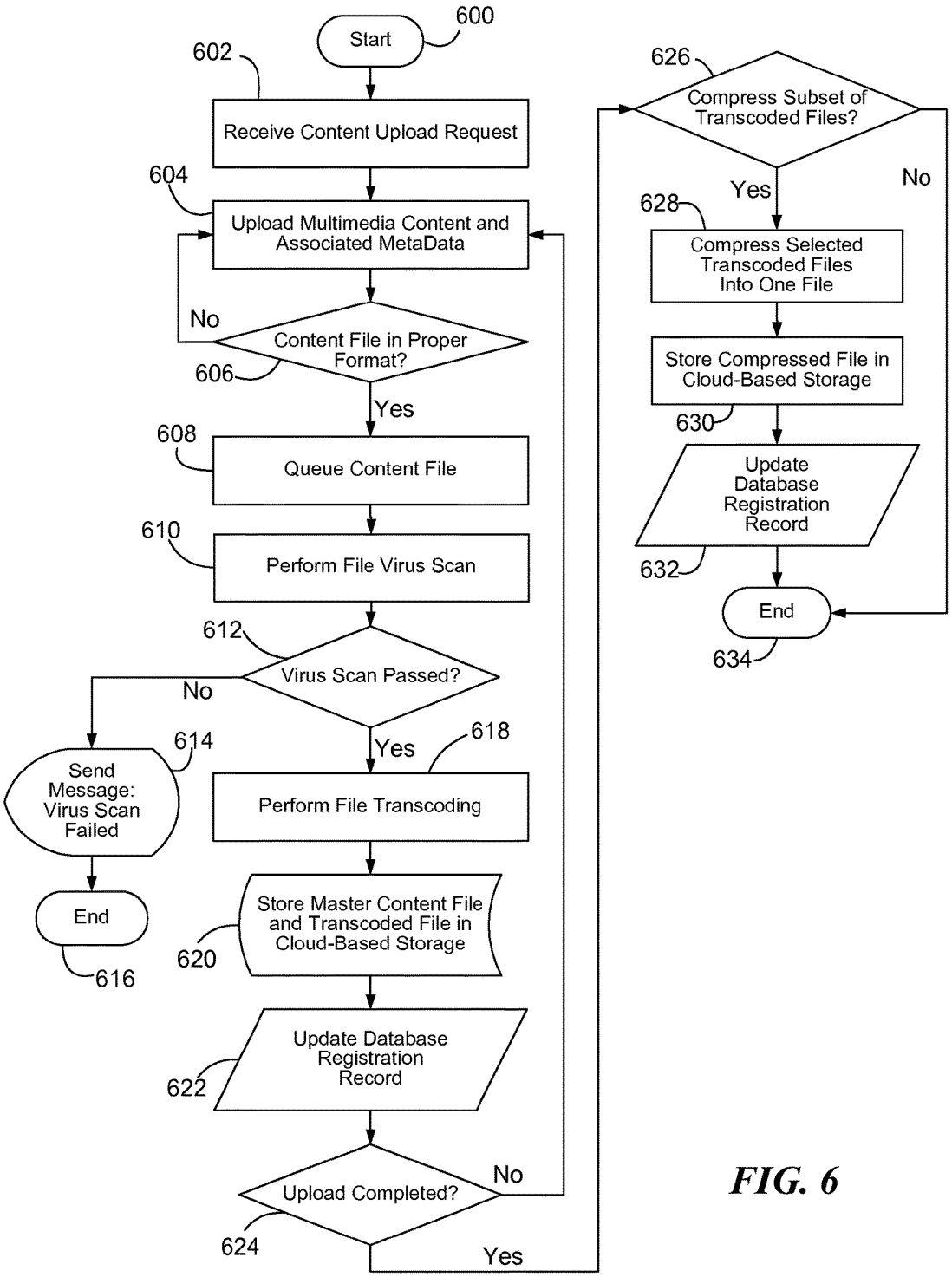

Start
600
602
Receive Content Upload Request
604
Upload Multimedia Content and Associated MetaData
No
Content File in Proper Format?
606
Yes
608
Queue Content File
610
Perform File Virus Scan
612
Virus Scan Passed?
No
614
Send Message: Virus Scan Failed
End
616
Yes
618
Perform File Transcoding
Store Master Content File and Transcoded File in Cloud-Based Storage
620
Update Database Registration Record
622
Upload Completed?
No
624
Yes
626
Compress Subset of Transcoded Files?
Yes
No
628
Compress Selected Transcoded Files Into One File
Store Compressed File in Cloud-Based Storage
630
Update Database Registration Record
632
End
634

FIG. 6

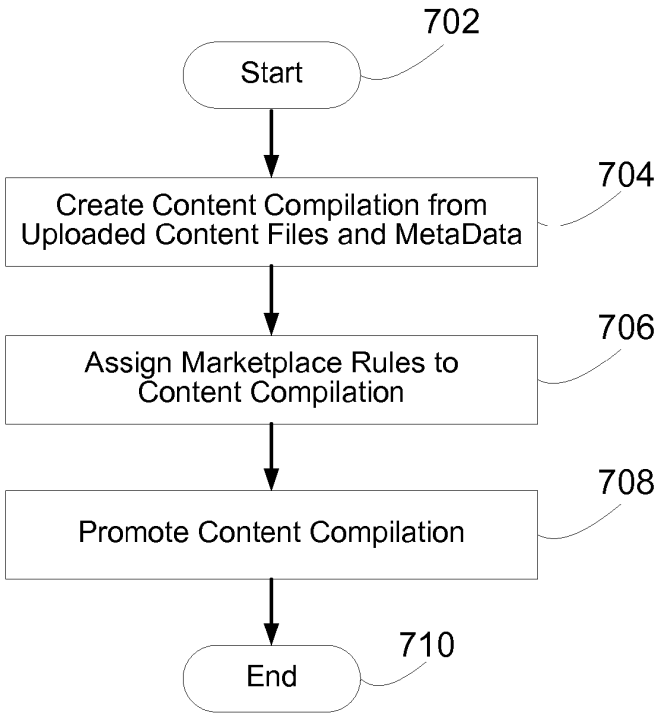

702
Start
704
Create Content Compilation from Uploaded Content Files and MetaData
706
Assign Marketplace Rules to Content Compilation
708
Promote Content Compilation
710
End

FIG. 7A

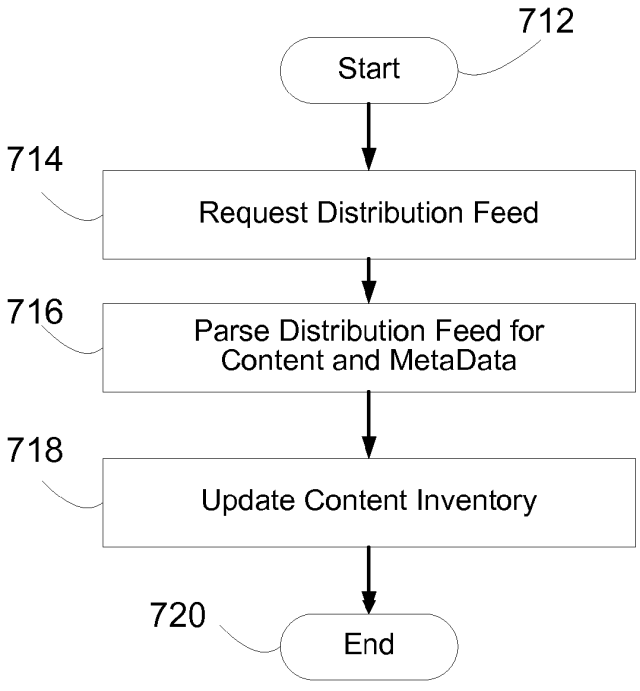

712
Start
714
Request Distribution Feed
716
Parse Distribution Feed for Content and MetaData
718
Update Content Inventory
720
End

FIG. 7B

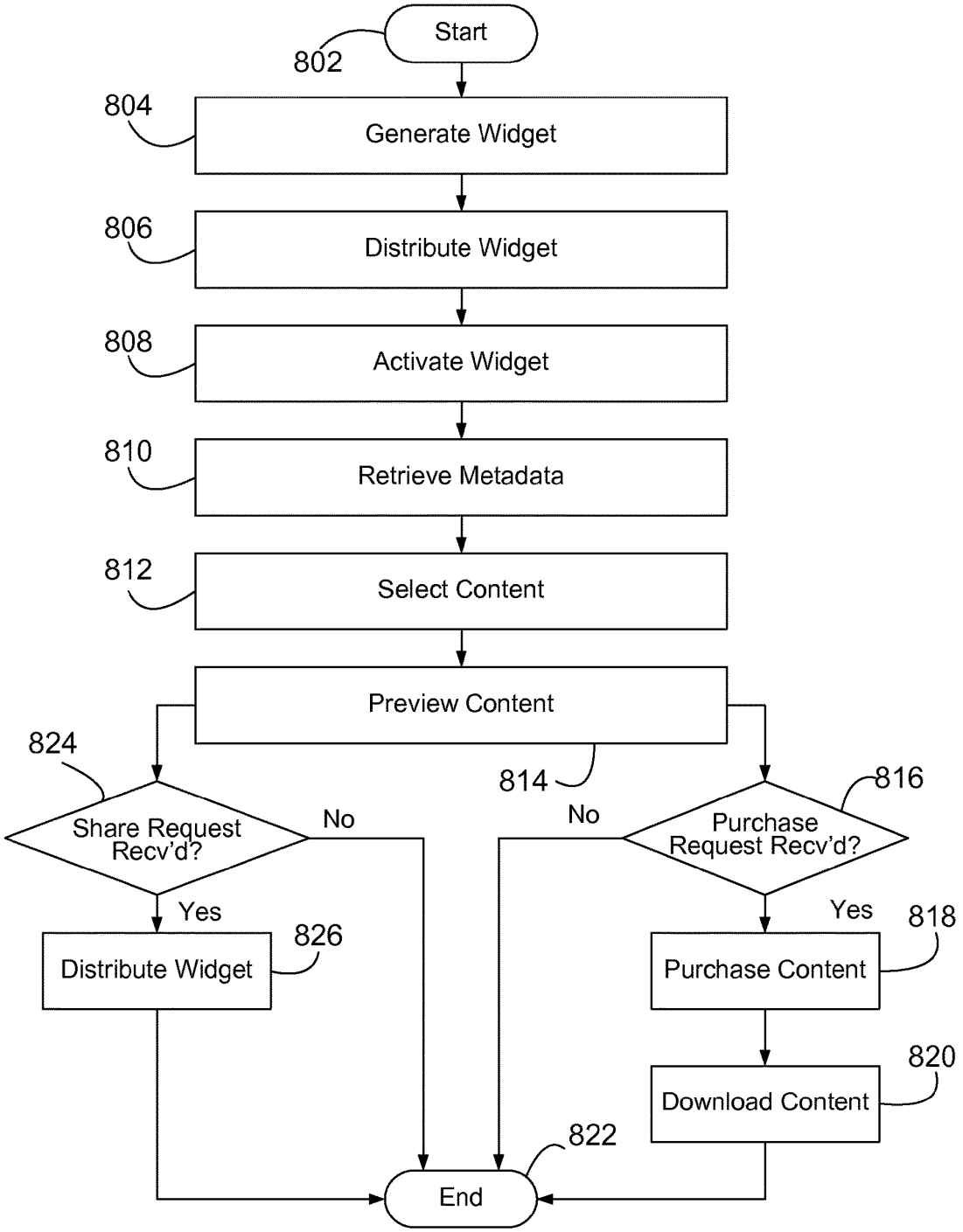

Start
802
804
Generate Widget
806
Distribute Widget
808
Activate Widget
810
Retrieve Metadata
812
Select Content
Preview Content
824
814
816
Share Request Recv'd?
No
No
Purchase Request Recv'd?
Yes
Yes
818
826
Distribute Widget
Purchase Content
820
Download Content
822
End

FIG. 8

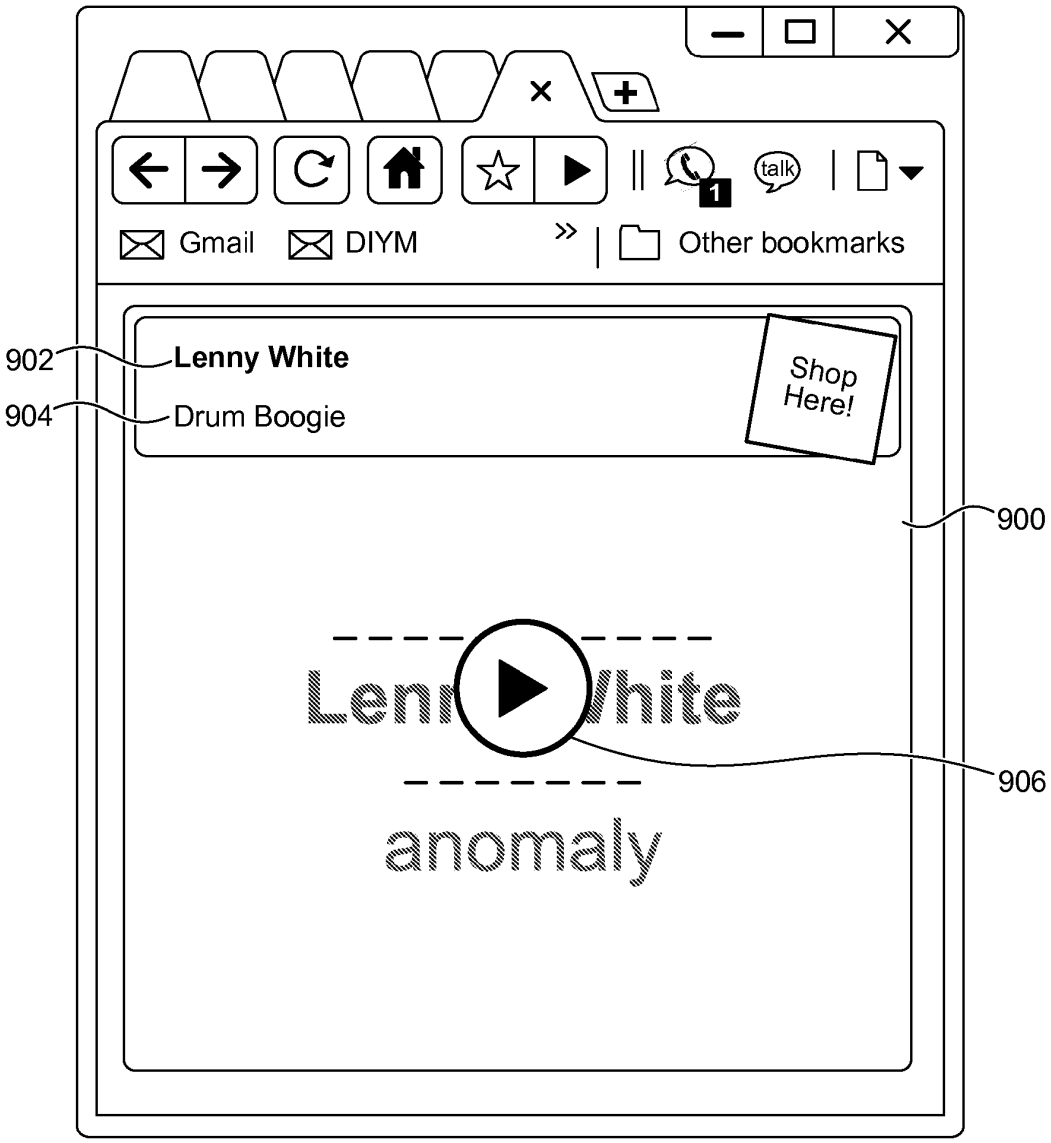

Gmail
DIYM
Other bookmarks
902
Lenny White
904
Drum Boogie
Shop Here!
900
906
anomaly

FIG. 9

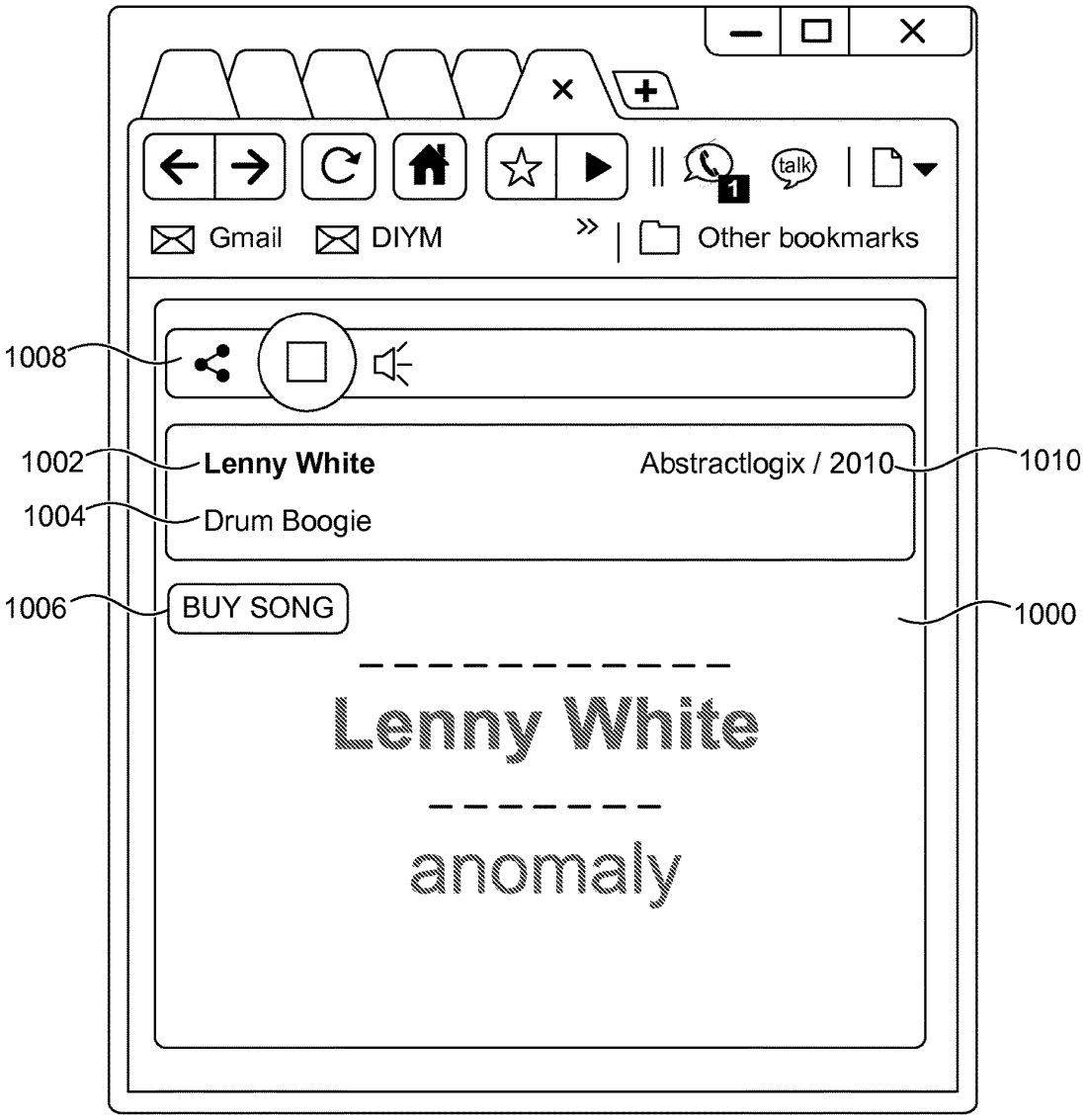

Gmail
DIYM
Other bookmarks
1008
1002
Lenny White
Abstractlogix / 2010
1010
1004
Drum Boogie
1006
BUY SONG
1000
Lenny White
anomaly

FIG. 10

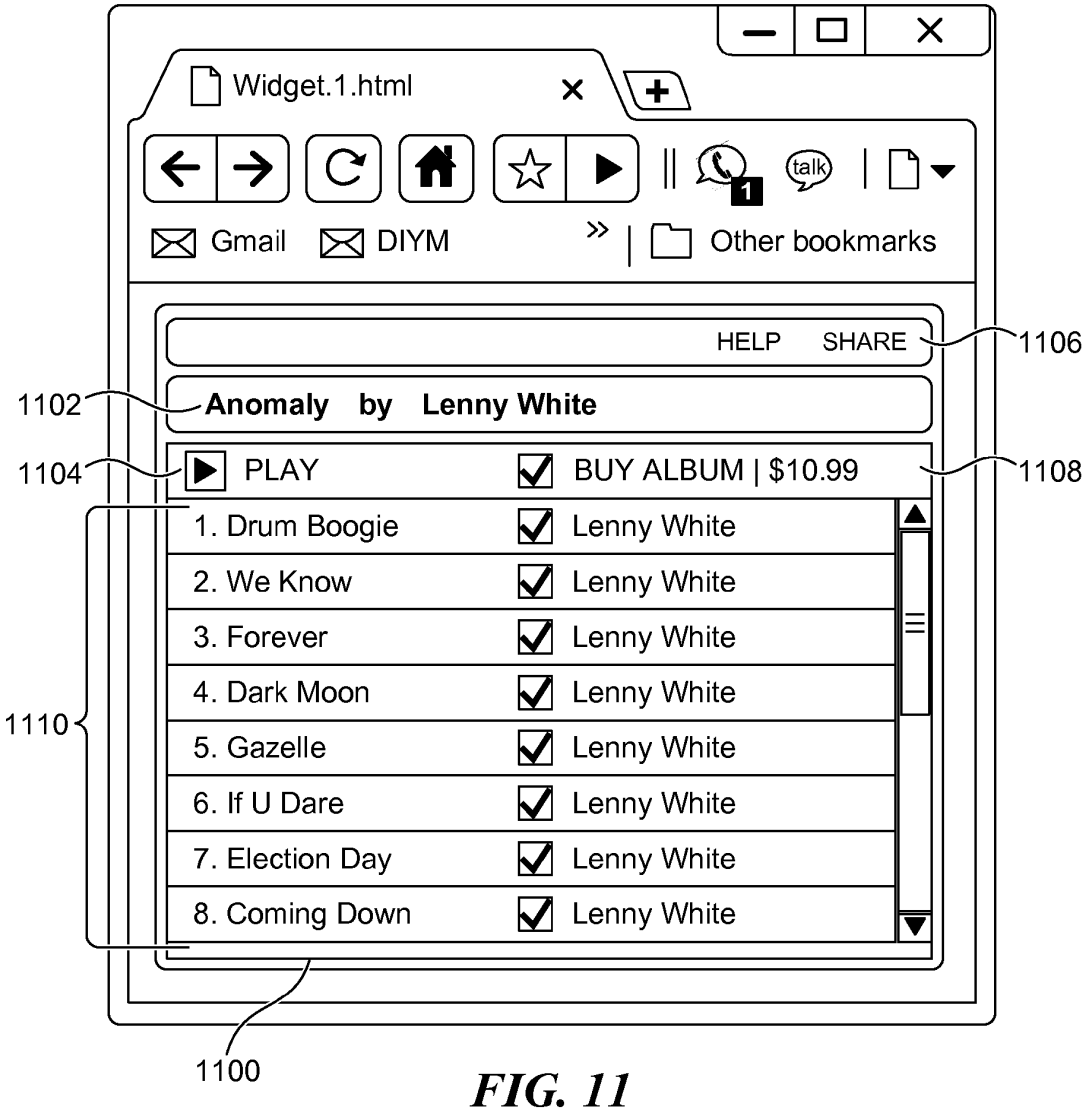

Widget.1.html
talk
Gmail
DIYM
Other bookmarks
HELP
SHARE
1106
1102
Anomaly by Lenny White
1104
PLAY
BUY ALBUM | $10.99
1108
1. Drum Boogie Lenny White
2. We Know Lenny White
3. Forever Lenny White
4. Dark Moon Lenny White
5. Gazelle Lenny White
6. If U Dare Lenny White
7. Election Day Lenny White
8. Coming Down Lenny White
1110
1100

FIG. 11

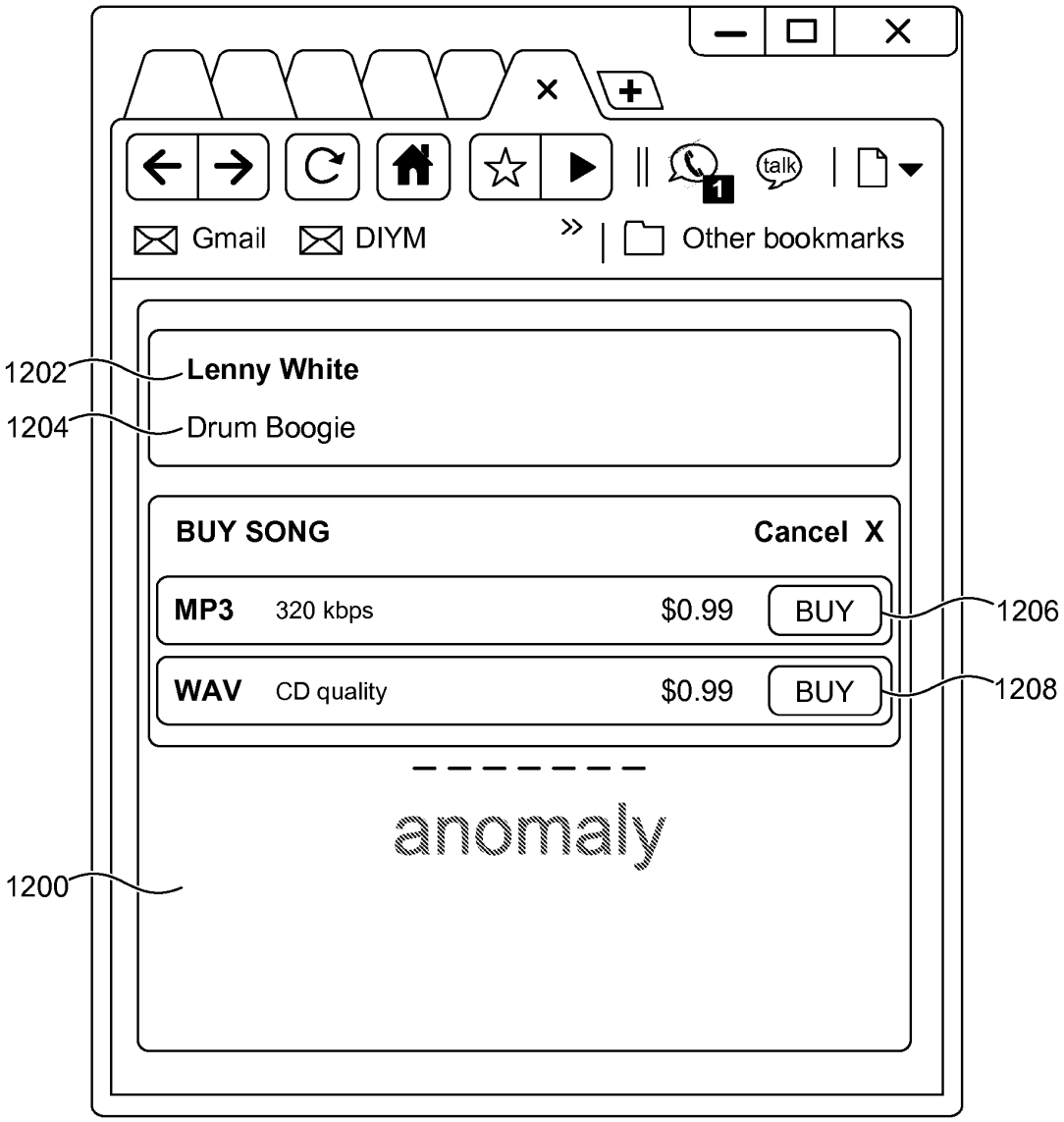

Gmail
DIYM
Other bookmarks
1202
Lenny White
1204
Drum Boogie
BUY SONG
Cancel X
MP3
320 kbps
$0.99
BUY
1206
WAV
CD quality
$0.99
BUY
1208
anomaly
1200

FIG. 12

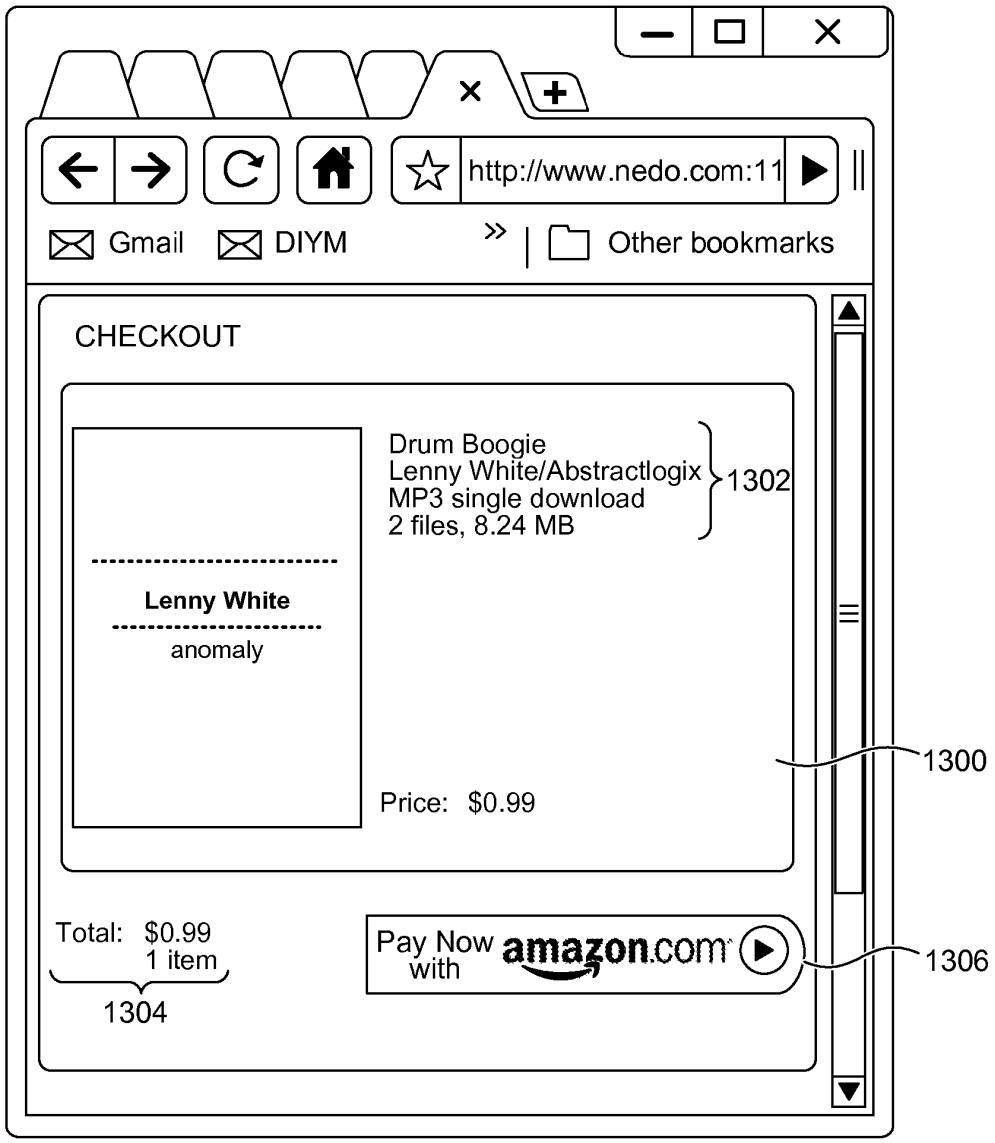

http://www.nedo.com:11
Gmail
DIYM
Other bookmarks
CHECKOUT
Drum Boogie
Lenny White/Abstractlogix
MP3 single download
2 files, 8.24 MB
1302
Lenny White
anomaly
Price: $0.99
1300
Total: $0.99
1 item
1304
Pay Now with amazon.com
1306

FIG. 13

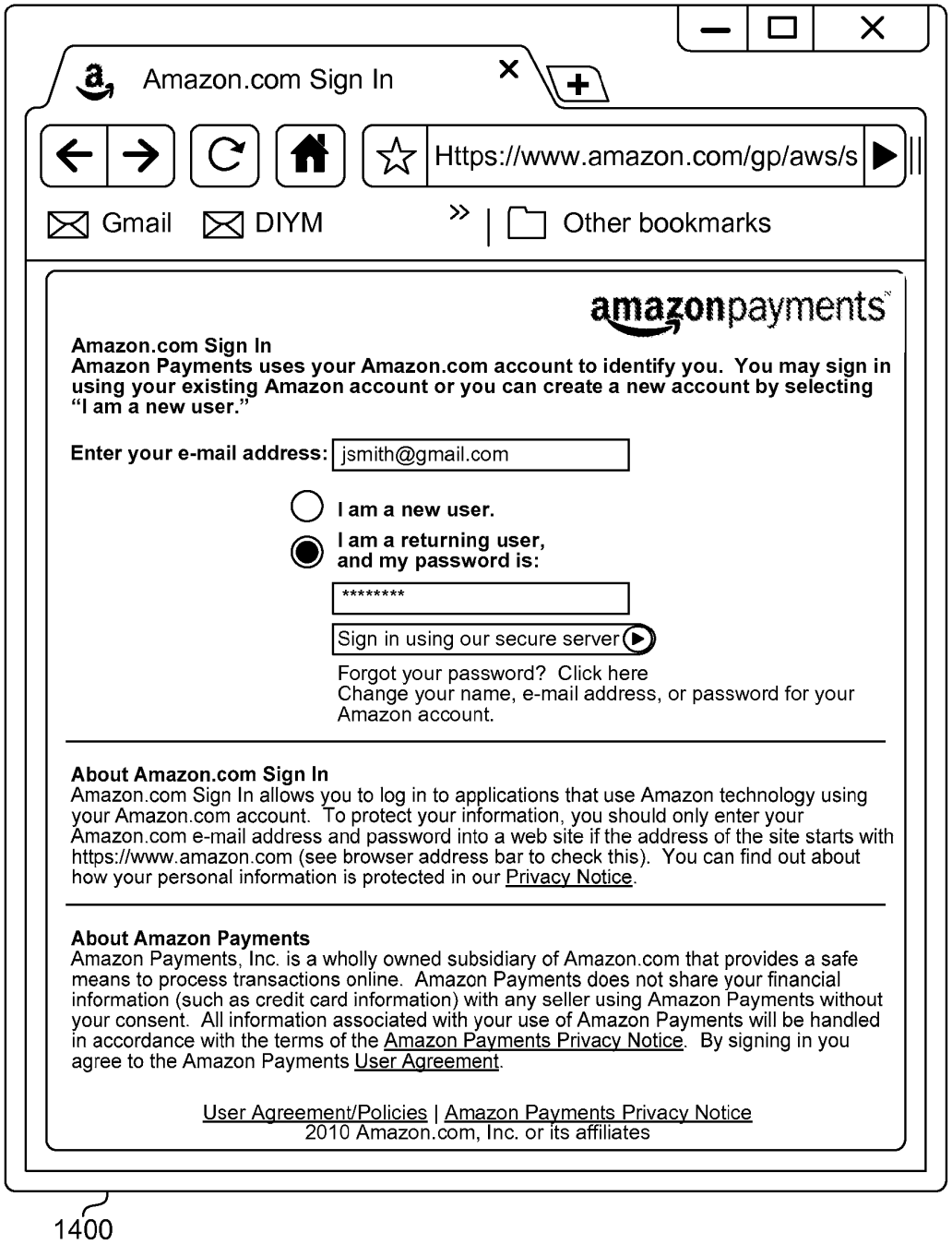

Amazon.com Sign In
Https://www.amazon.com/gp/aws/s
Gmail
DIYM
Other bookmarks
amazonpayments
Amazon.com Sign In
Amazon Payments uses your Amazon.com account to identify you. You may sign in using your existing Amazon account or you can create a new account by selecting "I am a new user."
Enter your e-mail address: jsmith@gmail.com
I am a new user.
I am a returning user, and my password is:
****
Sign in using our secure server
Forgot your password? Click here
Change your name, e-mail address, or password for your Amazon account.
About Amazon.com Sign In
Amazon.com Sign In allows you to log in to applications that use Amazon technology using your Amazon.com account. To protect your information, you should only enter your Amazon.com e-mail address and password into a web site if the address of the site starts with https://www.amazon.com (see browser address bar to check this). You can find out about how your personal information is protected in our Privacy Notice.
About Amazon Payments
Amazon Payments, Inc. is a wholly owned subsidiary of Amazon.com that provides a safe means to process transactions online. Amazon Payments does not share your financial information (such as credit card information) with any seller using Amazon Payments without your consent. All information associated with your use of Amazon Payments will be handled in accordance with the terms of the Amazon Payments Privacy Notice. By signing in you agree to the Amazon Payments User Agreement.
User Agreement/Policies | Amazon Payments Privacy Notice
2010 Amazon.com, Inc. or its affiliates
1400

FIG. 14

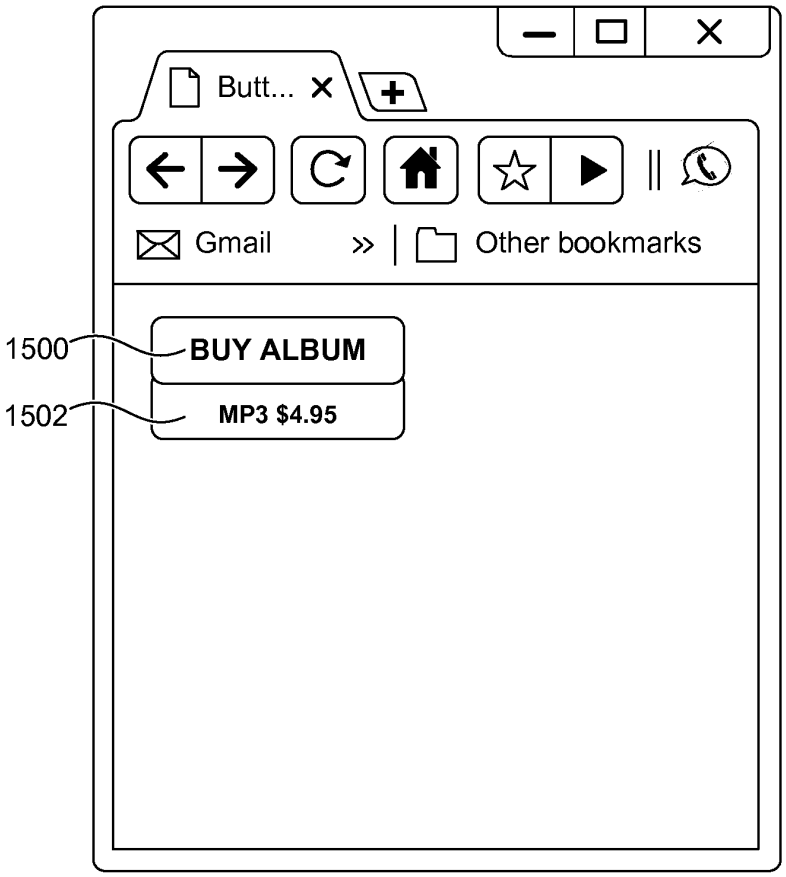


FIG. 15

SYSTEM AND METHOD FOR DISTRIBUTABLE E-COMMERCE PRODUCT LISTINGS

CROSS-REFERENCE TO RELATED APPLICATION

This application is a Continuation of U.S. patent application Ser. No. 13/571,293, filed Aug. 9, 2012, which is a Continuation-In-Part of U.S. patent application Ser. No. 12/852,090, filed Aug. 6, 2010, which are hereby incorporated by reference in their entirety.

FIELD

The present disclosure relates generally to the field of electronic commerce, and in particular but not exclusively, relates to a system and method for the distribution of multimedia content and the consummation of transactions between content owners, content distributors and consumers.

BACKGROUND

Electronic commerce on the Internet has become commonplace. There are many merchants offering goods and services via web sites on the Internet, and an increasing number of consumers purchase goods and services on various Internet websites. In many cases, the electronic commerce transactions involve electronic content and physical goods. For example, many consumers purchase items such as books, compact disks (CDs) and digital video disks (DVDs) via the Internet. Increasingly, however, consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories.

More recently, the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities. When used by businesses to promote their goods and services to such individuals and online communities, this form of networking is called "social media marketing." In many of these online social relationships, users share and identify recommended content for use and consumption by other users with similar interests, hobbies and/or backgrounds. It is this unique ability to share or "virally distribute" content with recommendations and referrals that now enables the Internet to be used as a highly social medium. Furthermore, this "viral" distribution capability can now be used advantageously by content promoters, such as performing artists, visual artists, video and film producers, and content distribution companies, to create creative works that can be circulated to a far greater number of prospects and partners than may have been possible previously with a distribution capability which was limited only to the content creator's current list of customers.

Current methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner. One current approach that is used to distribute applications of limited functionality involves "web widgets." A web widget is portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation. The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal

content into dynamic web applications which can be shared on virtually any website. Current web widgets are limited to executing certain discrete applications as on-screen tools. For example, they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information.

Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Non-limited and non-exhaustive embodiments are described with reference to the following figures, wherein like reference numerals refer to like parts throughout the various views unless otherwise specified.

FIG. **1**A is a block diagram illustrating an operating environment for a multimedia content distribution system.

FIG. **1**B is a block diagram illustrating an alternative operating environment for a multimedia content distribution system.

FIG. **2** is a block diagram illustrating the software components of a multimedia content distribution system in an embodiment.

FIG. **3** is a block diagram illustrating a widget builder resource component used in a multimedia content distribution system in an embodiment.

FIG. **4** is a block diagram illustrating a content management component used in a multimedia content distribution system in an embodiment.

FIG. **5** is a block diagram illustrating a market management component used in a multimedia content distribution system in an embodiment.

FIG. **6** is a flow chart illustrating a method for uploading and converting multimedia content used in a multimedia content distribution system in an embodiment.

FIG. **7**A is a flow chart illustrating a method for creating marketable compilation of multimedia content in a multimedia content distribution system in an embodiment.

FIG. **7**B is a flow chart illustrating a method for updating content inventories in a multimedia content distribution system in an embodiment.

FIG. **8** is a flow chart illustrating a method for distributing multimedia content using a web widget in an embodiment.

FIG. **9** is a block diagram illustrating a web widget for distribution of multimedia content in an embodiment.

FIG. **10** is a block diagram illustrating an active web widget for distribution of a single musical song in an embodiment.

FIG. **11** is a block diagram illustrating an active web widget for distribution of a musical album including a compilation of musical songs in an embodiment.

FIG. **12** is a block diagram illustrating an active web widget operative to receive a purchase request in an embodiment.

FIG. **13** is a block diagram illustrating a purchase request confirmation in an active web widget in an embodiment.

FIG. **14** is a block diagram illustrating user access to a transaction processing service in an active web widget in an embodiment.

FIG. **15** is a block diagram illustrating a graphical button for viral distribution that provides access to a web widget in an embodiment.

DETAILED DESCRIPTION

In the description to follow, various aspects of embodiments web widgets and the computing and communications system which supports their ability to perform electronic commerce transactions will be described, and specific configurations will be set forth. Numerous and specific details are given to provide an understanding of these embodiments. The aspects disclosed herein can be practiced without one or more of the specific details, or with other methods, components, systems, services, etc. In other instances, structures or operations are not shown or described in detail to avoid obscuring relevant inventive aspects.

Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. Thus, the appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment. Furthermore, the particular features, structures, or characteristics may be combined in any suitable manner in one or more embodiments.

FIG. **1**A is an illustration of an operating environment for a multimedia content distribution system in an embodiment. In this operating environment **100**, one or more content distributor client devices **128**, one or more content owner client devices **126**, and one or more consumer client devices **130**, **132**, **134** are illustrated. Among the range of consumer client devices used for the distribution of multimedia content from the multimedia content distribution system are laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants (i.e., PDAs). As used here, the term "personal digital assistant" means both phone-enabled PDAs (i.e., smart phones) and non-phone enabled PDAs. Each of these client devices is communicatively coupled to a network **102** which provides secure computing and communications access through a server **104** executing a firewall software to an application server **106**, which in this embodiment acts as a centralized compute processing and transaction management resource. In the illustrated embodiment, the network **102** is the Internet. However, in other embodiments, the network **102** can be a private computer-communications network, a wireless communications network, or other computer data communications network that can enable communications between and among computer devices, mobile devices, the multimedia content distribution system and its infrastructure resources for storage and transaction processing.

The application server **106** is communicatively coupled to a database server **110**, a transaction processing service **112**, an email server **108** and a file management server **114**. The file management server is communicatively coupled to one or more computing resources that perform file virus scanning **116**, file transcoding **116** and file compression **120** for files which are stored on a cloud-based storage resource **124**. In an embodiment, the database server **110** is used to maintain a lookup table of all content files and related metadata which are stored on the cloud-based storage resource **124**. The file management server **114** is used to control the file conversion process from a first format in a received file to one or more transcoded formats. In an embodiment, a select subset of the transcoded files will then be compressed into a single file using file compression **120** and then stored on the cloud-based storage resource **124** along with related metadata for each file. In one embodiment, the files are compressed into a WinZip file for storage on the cloud-based storage resource **124**. The email server **108** is used in an embodiment to facilitate electronic mail communications between and among content owners and content distributors, as well as email broadcasts to groups of consumers and prospects. In addition to its role in managing the use of resources in the multimedia content distribution system, the application server **106** is also used for the creation of user account profiles, the execution of one or more web servers, and the execution of a content management system including a widget builder resource component and a market management component. The web servers are used to receive and respond to content related requests received from consumer client devices **130**, **132**, **134**.

In one embodiment, content owners using their client devices **126** upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**, **132**, **134** using compilation-specific web widgets that are created and capable of distribution from the application server **106**. In creating web widgets, the application server **106** will check the lookup table stored on the database server **110** to confirm the availability and format of content files included in or associated with the web widgets. This process is also followed when new buttons, links or preview clips are created by content owners for subsequent distribution from the application server **106**. The web servers executed on the application server **106** are used to respond to requests received from web widgets, buttons, links or preview clips executed or selected in browsers running on the consumer client devices **130**, **132**, **134**

The content distributor client devices **128** are used by content distributors to provide content distribution feeds to update the content inventories of content owners with active accounts in the multimedia content distribution system on the application server **106**. These inventories can be updated with content from distribution feeds upon request of the content owners or the operators of the multimedia content distribution system. In one embodiment, the distribution feeds provide content in bulk which is parsed by a content management system executed on the application server **106** to ensure that each content owner receives the content desired for inclusion in their respective content management systems. Each distribution feed is parsed and the content is allocated to each content owner's account as specified in the distribution feed. Once parsed, the content delivered in these distribution feeds is uploaded, master content files are transcoded to one or more alternative file formats preselected by content owners, the content files and their transcoded variants are stored in the cloud-based storage resource **124**, and references to the stored content files and transcoded variants are registered in one or more lookup tables maintained on the database server **110**. Once uploaded and registered on the database server **110**, the content included in these distribution feeds can be accessed and used by content owners to create new content compilations for association with web widgets using a widget builder resource component executed on the application server **106**. In an embodiment, a content compilation is an aggregation

of one or more multimedia content files and associated metadata. Once created and associated with specific multimedia content and related metadata, these web widgets are available for viral distribution by content owners to networks of current and potential consumers.

In one embodiment, the cloud-based storage resource **124** and the transaction processing service **112** are provided by the Amazon Web Services group at Amazon.com, Inc. More particularly, in the embodiment, the cloud-based storage resource is implemented using Amazon's "Simple Storage Service" (S3) which provides a data storage capacity that can be used to store and retrieve any amount of data, at any time, from anywhere on the World Wide Web. Likewise, in an embodiment, the transaction processing service **112** is implemented using Amazon's "Flexible Payments Service" (FPS) to facilitate the payment processing and checkout process once consumers decide to purchase and download content from virally distributed web widgets, buttons, links or preview clips. In this embodiment, the FPS is used to process payments from consumers who wish to purchase registered multimedia content promoted in virally distributed web widgets, buttons, links or preview clips using their credit cards, debit cards or bank account information. Furthermore, in an alternative embodiment, the file virus scanning **116**, file transcoding **118** and file compression **118** processes are implemented using Amazon's "Elastic Compute Cloud" (EC2) resources instead of dedicated, proprietary servers. The EC2 is a web service that provides resizable compute capacity in a cloud-based network that can be scaled to provide computing capacity for applications serving multiple client devices.

Consumers using browsers executing on their client devices **130**, **132**, **134** can activate web widgets directly or indirectly. A web widget can be activated indirectly if a consumer receives a button or link and then clicks on the button or link which results in the activation of a web widget. Likewise, a consumer can directly activate a web widget if it is received from the content owner or a third party who has opted to share or redistribute the web widget. Once activated, a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties or elect to purchase the multimedia content packaged with the web widget. If a consumer elects to purchase specific multimedia content files by clicking on an embedded buy button, then the web widget provides the consumer with a choice of format options and then redirects the consumer to the transaction processing service **112** for the provision of credit card, debit card or bank account information and completion of the purchase transaction. Once the purchase transaction is completed, the selected multimedia content files are downloaded by the web widget from the cloud-based storage resource **124** to the consumer's designated client device **130**, **132**, **134**.

FIG. **1**B is an alternative embodiment of the operating environment of the multimedia content distribution system **100**. In this operating environment, one or more web servers have been added as independent computing resources for use in receiving and responding to content related requests from various client devices **130**, **132**, **134**. This embodiment is computationally more efficient and enables the application server **106** to be dedicated to the operation of a content management system and the control of processes on the other servers used in this operating environment. As discussed above, these servers include an email server **108**, a database server **110**, a file management server **114**, and control over a transaction processing service **112** and content conversion services for file virus scanning **116**, file transcoding **118**, and file compression **120** for storage in the cloud-based storage resource **124**.

FIG. **2** is an illustration of an embodiment of a multimedia content distribution system **200**. In this embodiment, the system **200** is comprised of a content management system **202**, a data management service **208**, an analytics and reporting service **210**, a security service **212**, a transaction payment processing service **214**, a widget management service **216** and an accounting service **218**. The content management system **202** is comprised of three components, a widget builder resource component **204**, a content management component **220**, and a market management component **206**. The content management component **220** is used for the uploading of multimedia content, the editing of metadata related to the content and the creation of compilations of content into marketable packages that can be associated with one or more web widgets. In addition to controlling the uploading, editing and creation of content compilations through the content management component **220**, the content management system **202** also controls the processes applied to uploaded content files for virus scanning, file transcoding and file compression for storage in the cloud-based storage resource **124**. The widget builder resource component **204** is used to create various marketing resources including new web widgets, buy buttons, links and preview clips. In one embodiment, the buy buttons, links and preview clips are each communicatively coupled to a web widget so that the selection or clicking on a button, link or preview clip causes the activation of a web widget Once these marketing resources are created, content owners can use them in viral distribution marketing campaigns to promote their content compilations. The market management component **206** is used by content owners to assign market rules and pricing terms to selected items included in a content compilation. In one embodiment, the items include individual songs, song releases, or entire song catalogues. In a different embodiment, the items include reports, physical merchandising paraphernalia (e.g., cups, t-shirts, hats, etc.), and other electronic goods.

The data management service **208** is used to maintain a lookup table for use in tracking the locations of stored multimedia content files in the cloud-based storage resource, transcoded variants of these files, compressed files including one or more copies of content files and transcoded files, and files storing usage statistics collected by one or more web servers from the web widgets, buy buttons, links, preview clips or other marketing resources which are created and distributed by content owners and third parties. The analytics and reporting service **210** in one embodiment is a subcomponent of the data management service **210** and is used to analyze compiled analytical data, transaction statistics and location statistics for the marketing resources used by content owners in promoting their multimedia contents over one or more networks. More specifically, the analytics and reporting service **210** compiles transaction statistics and location statistics arising from the viral distribution of web widgets and related purchase transactions initiated and completed over web widgets which have been distributed over such networks. In an alternative embodiment, the analytics and reporting service is a stand-alone service which independently interacts with the data management service **210** and the one or more web servers comprising the widget management service **216** which are used for the tracking of web widgets and other marketing resources and the collection of usage statistics from these resources.

The security software service **212** provides content owners, distributor clients and consumer clients with secured access to the multimedia content distribution system **200** and its operating infrastructure. In one embodiment, the security service **212** is implemented using firewall software to restrict access to the application server **106** and other computing resources used as part of the operating environment for the multimedia content distribution system **200**. The payment processing service **214** provides direct access to transaction processing resources for the completion of purchase transactions initiated by consumers who use web widgets to preview, purchase and download multimedia content. In one embodiment, the payment processing service **214** is provided by the Flexible Payment Service (FPS) offered by Amazon.com, Inc. The payment processing service **214** is used for the facilitation and execution of payment transactions using credit cards, debit cards or other bank account information.

The widget management service **216** is implemented on one or more web servers and is used for the tracking of web widgets which have been distributed to and activated on Internet websites or on other accessible locations and resources over other networks. Once a web widget has been distributed or activated from a link, buy button or preview clip, it can be further distributed in a "viral" fashion to other online communities, websites, forums, etc. In one embodiment, the widget management service **216** is implemented on web servers which are co-hosted on the application server **106**. In an alternative embodiment, the widget management service **216** is implemented on one or more independent web servers **136**. In both embodiments, however, the widget management service is used for receiving and responding to requests for multimedia content received from web widgets. In addition, the web servers implementing the widget management service **216** also perform data collection and activity monitoring on deployed web widgets. The data collected by the web servers includes transaction statistics, location statistics, usage statistics and other pertinent market statistics for each web widget which has been created, activated and distributed over the Internet, mobile networks or other computer communication networks by the content owner or third parties, such as consumers and members of their online social networks. Once a web widget is activated, the web servers implementing the widget management service **216** compile the data statistics into one or more files which are stored in the cloud-based storage resource **124** and a reference to the stored data collection files is created in the lookup table maintained by the data management service **208** and associated with the multimedia content files and any related transcoded files which have been packaged with each web widget for which the statistics have been collected. In an alternative embodiment, the one or more data collection files including the data statistics are stored on the database server **110** where the lookup table is maintained by the data management service **208**.

The accounting service **218** provides account transaction reconciliation for each content owner having an active account on the content management system **202**. By using the accounting service **218**, content owners can track the number and type of available content in their inventories of content files, the number of transactions performed relative to the total number of available content files, the number of transactions which have been returned for credit to consumers, the number of completed transactions, and revenue earned from completed transactions.

FIG. **3** depicts an embodiment of a widget builder resource component. The widget builder resource component **300** is used to create an inventory of "web widgets" **316**, buy buttons **310**, buy links **312** and preview clips **314**. In an embodiment, the web widget inventory **316** includes services for creating web widgets for packages of marketable multimedia content including, in one embodiment, full catalogs of digital music content, single releases of digital music content and single song digital music content. The widget builder resource component **300** is also used to create a merchandising widget **308** to promote a content owner's physical goods and related materials as marketing merchandise. Examples of such physical goods are coffee mugs, t-shirts, hats, jackets, etc. In the present embodiment, the web widgets pertain to musical content which is often compiled in the form of musical catalogs, musical releases, and single songs. A full catalog widget **302** is used for the promotion of the full musical catalog of a content owner. In one embodiment, the full catalog widget **302** is used to execute a video clip that provides a preview of the content in a content owner's inventory in the multimedia content distribution system **200** that is packaged with the web widget. The web widgets **302**, **304**, **306**, **308** are also used to facilitate electronic commerce transactions involving the purchase or licensing of multimedia content, such as musical selections as shown in this embodiment, in the specific groupings desired (i.e., catalog, release, or single song).

A single release widget **304** is used to promote a single musical release of a content owner from content stored in a content inventory of the multimedia content distribution system **200** in an embodiment. A single song widget **306** is used to promote a single song provided by a content owner in an embodiment. The merchandising widget **308** is used to promote the merchandise or physical goods that a content owner may choose to promote alone or in association with one or more multimedia content files in an embodiment. The merchandising widget **308** is used when a content owner seeks to create a fully custom content compilation which may include promoted merchandise or physical goods (e.g., cups, hats, t-shirts, etc.), a subset of content from specific releases as well as other content from the content owner's catalogue which is not included in any specific release. The buy buttons **310** are generated by content owners using the widget builder resource component **300** and linked to web widgets. The buy buttons **310** can be customized and distributed to online resources on the Internet, on mobile communication networks or on other computer networks for use in promoting the various groupings of multimedia content available from a content owner. Once a buy button **310** is clicked or selected by a consumer, it will activate its linked web widget and take the consumer to a checkout screen in the web widget. The buy links **312** are Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise. The preview clips **314** created in the widget builder resource component **300** are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices **130**, **132**, **134** to enable those consumers to preview multimedia content and to make informed choices about the multimedia content they may elect to purchase and download to their client devices **130**, **132**, **134**, or to further distribute to third parties in the social networks of these consumers or in other online communities. Upon completion of an executing video clip, the linked web widget which will have been activated at the start of

execution of the preview video clip will be displayed in the browsers of the consumer client devices **130**, **132**, **134** to aid the consumer in making a purchase or distribute decision.

FIG. **4** illustrates an embodiment of a content management component **400**. The content management component **400** is comprised of several services. The content distribution feed **402** is a service that enables content owners to request and receive distribution feeds from content distributors. The content provided by content distributors to content owners through such feeds is used to automatically update and supplement the content inventories of content owners in the content management system **202**. The metadata editor **404** is a service that enables content owners to edit the metadata associated with multimedia content files. In one embodiment, the type of metadata that can be edited includes information pertaining to the musical content of a content owner such as title, artist name, release date, genres, catalogue number and Universal Product Code. Image Content Uploader **406** is a service that uploads, store and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets. In one embodiment the types of image files which can be uploaded using the Image Content Uploader **406** are GIF files, JPEG files and TIF files. Audio Content Uploader **408** is used for uploading audio files. In an embodiment the audio file types that can be uploaded using the Audio Content Uploader **408** include WAV files and MP3 files. The compilation builder **410** is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system **202**. In an embodiment, each content compilation created using the compilation builder **410** is associated with a web widget that will be distributed using the web distribution service **216** to consumers on the Internet, mobile communications networks, or other computer communications. Lastly, the content downloader **412** is used for controlling the downloading of the custom content compilations created by content owners which are packaged with and promoted through web widgets. Upon receipt of a content download request from a web widget, the content downloader **412** initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the cloud-based storage resource **124** or other storage in the multimedia content distribution system **200**, and it also controls the process of downloading the retrieved content compilations to a client device **130**, **132**, **134**.

FIG. **5** illustrates the services provided in an embodiment of a market management component **500**. As shown, one service is a territory manager **502** which is used by content owners to set the sales parameters and the timing of sales campaigns relating to specifically available content from a content owner in different geographic regions of the world. For example, a content owner may choose to provide a subset or only a particular release version of certain musical content for sales and marketing campaigns in Spain, Germany or France. While in other parts of the world, the content owner may choose to set different territorial restrictions on the availability of their content such as limiting the availability of musical content only to earlier releases rather than later releases in an entirely different part of the world, such as South America or in specific South American countries. The sales campaign manager **504** is another service provided in an embodiment of the market management component **500** that enables content owners to enable and disable sales campaigns by specified dates. The content pricing manager **506** is a service that allows content owners to set the pricing of particular files by file type. Although not limited only to musical content, in one embodiment the content pricing manager **506** is used to set pricing for MP3 file types and for WAV file types. Although the present embodiment is described with respect to the use of musical content stored in MP3 and .WAV file formats, the use of a content pricing manager **506** is not limited to the pricing of content for musical files or even to the pricing of files in these two types of file formats, but can be applied broadly to the pricing of content in image files, video files, audio book files, or video game files as well as in other file types and file formats of multimedia content generated by content owners.

FIG. **6** is a flow chart illustrating an embodiment of a process for uploading and transcoding multimedia content files. The process commences at step **600** and begins with the receipt of a content upload request **602** from one or more content owner client devices **126**. Upon receipt of an upload request, the content management system **202** begins the uploading of multimedia content files and associated metadata, as shown at step **604**. In one embodiment, associated metadata includes information about the multimedia content such as artist name, album title, song title release name or catalogue name. Continuing with this process, the content management system **202** will confirm whether each received content file is in a proper format for uploading to the multimedia content distribution system, as shown at step **606**. If the file format is improper, such as when the integrity of the file has been compromised, the process returns to step **604** for the continued uploading of the next multimedia content file and associated metadata. If the content is in a proper format, the process continues with a placement of each newly received content file into a queue, as shown at step **608**. After placement in the queue, the file will be scanned for viruses, as shown at step **610**, and a test will be applied to confirm whether the virus scan was passed, as shown at step **612**. If virus scanning is unsuccessful, the process will transmit a message to the content owner for display in the browser of a content owner client device **126** indicating that the virus scan failed, as shown at step **614**, and that the process will then end, as shown at step **616**. If the virus scan was passed, the process continues with the transcoding of the content file, as shown at step **618**. In an embodiment, the content owner can select one or more file formats for transcoding of each uploaded multimedia content file, which file formats may include Windows Media Audio (WMA), Advanced Audio Coding (AAC), Apple Lossless Audio Codec (ALAC), Free Lossless Audio Codec (FLAC), WMA Lossless and MP3. After a file has been transcoded, the process continues with the storing of the originally uploaded content file, referred to as a "master content file," and each transcoded file specified by a content owner. The master content file and any transcoded files are stored in the cloud-based storage resource **124**, as shown at step **620**. Upon completion of the storing of these files, the process updates a data base registration record, as shown at step **622**. The database registration record is maintained in a lookup table on a database server **110**. If multiple multimedia content files are uploaded, for example as part of an album upload or a catalogue upload, the process confirms whether the uploading has been completed, as shown at step **624**. If the process has not been completed, then the uploading will continue with the uploading of additional multimedia content files and associated metadata, as shown at step **604**. In one embodiment, if the upload process has been completed, the content owner can select a subset of the transcoded files of a given file type to be compressed into

one file, as shown at decision step **626**. For example, in an embodiment, when a master content file in the .WAV format is uploaded, the content owner can have multiple transcoded files (e.g., an MP3 format file, a WMA format file, an FLAC format file) created from the master content file during the transcoding process, shown at step **618**. After selection of the desired files, the content management system **202** will compress the transcoded files (e.g., the WMA format files) into a single compressed file, as shown at step **628**. In an embodiment, the selected subset of transcoded files is compressed into a Winzip file. Upon completion of the compression process, the compressed file is stored in the cloud-based storage resource **124**, as shown at step **630**, and the database registration record will be updated once again, as shown at step **632**, to identify the storage location of the compression file and its logical relationship to the master content file and related transcoded files. The process then ends, as shown at step **632**. Alternatively, if no files are selected for compression at decision step **626**, then the uploading and transcoding process will end, as shown at step **634**.

FIG. **7**A is an illustration of a process used by content owners to convert uploaded content files into marketable products for packaging with web widgets. In an embodiment, each uploaded content file represents an item for promotion and distribution. Each "item" is made available as a "product" for marketing purposes after being associated with a web widget. The process of creating products starts at step **702** and begins with a content owner creating a content compilation from uploaded content files and metadata, as shown in set **704**. Afterwards, the content owner assigns marketplace rules to the content compilation, as shown at step **706**, and then generates one or more web widgets, links, buttons, or preview clips to promote the content compilation, as shown at step **708**, and the process then ends, as shown at step **710**. The content compilation is the "product" for marketing and promotion purposes and the compilation may be comprised of one item (e.g., a single song), multiple items (e.g., the items comprising a musical "release" or a musical "catalog," etc.), identifiers of physical goods or marketing merchandise (e.g., cups, t-shirts, hats, a book of thematic poetry, etc.), or any combination of these items and identifiers. In one embodiment, the identifiers of physical goods or marketing merchandise are either a Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID). In a different embodiment, the marketplace rules assigned by a content owner at step **706** can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, U K and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials.

FIG. **7**B is an illustration of a process for requesting and updating content inventories using distribution feeds. This process commences at step **712** and is initiated by the placement of a request for a distribution feed through the content management system **202** by a content owner, as shown step **714**. In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships. In an alternative embodiment, the operators of the multimedia content distribution system **200** acting on behalf of one or more content owners can request distribution feeds for content owners to ensure that the content inventories maintained in the multimedia content distribution system **200** are updated and available for the creation of content compilations. As illustrated, once a distribution feed is received it is parsed for content and metadata, as shown at step **716**, and the content inventory or inventories maintained by content owners are updated, as shown at step **718**. Upon receipt and updating of one or more content inventories, the process ends, as shown at step **720**. Content distribution feeds received from distributor clients in one embodiment contain content from multiple artists including multiple content items such as songs, album content and catalogue content. The parsing of the distribution feed, as shown at step **716**, selectively parses this distribution feed according to content owner so that each content owner will have each of his or her content inventories automatically updated even though multiple content owners and multiple content files associated with each content owner may be included in a single distribution feed.

FIG. **8** is an illustration of a process for generating web widgets and distributing them over networks to facilitate the promotion, distribution and execution of purchase transactions for multimedia content using web widgets. This process commences as shown at step **802** with the generation of a widget as shown at step **804**. A content owner can generate one or more web widgets to promote different packages of multimedia content. In one embodiment in which the multimedia content consists of musical works, among the types of web widgets that can be generated are single song widgets, song release widgets, song catalogue widgets, and merchandising widgets. A single song widget is used to promote a single song of a content owner. A release widget is used to promote a compilation that includes multiple songs or multiple forms of content created by a content owner (e.g., a combination of musical selections, t-shirt, cup, hat and a book of the content owner's writings, etc.). A catalogue widget is used to promote the entire catalogue of creative works of a content owner. A merchandising widget is used to promote physical goods such as t-shirts, cups, carrying case, etc. that may be associated with the theme set by a content owner for a song, a release of songs, or the content owner's catalogue.

Upon generation of a new web widget, it can be distributed over the Internet or other network, as shown at step **806**, to a website where interested parties can activate it or further distribute it to third parties on a network. Once received within a browser on a client device, a web widget exists in an inactive mode but can be placed into an active mode when an end user clicks upon or makes a selection on the web widget, as shown at step **808**. In the case of laptop computers **130** and desktop computers **132**, the web widget can be executed in web browsers such as Internet Explorer, Firefox, Google Chrome, Safari, Opera and in other popular web browsers. On mobile client devices **134**, such as personal digital assistants, the web widget can be executed in browsers such as Microsoft IE for Mobile devices, Google Android, Bolt, Teashark, Safari and Opera Mini. In one alternative embodiment, a web widget can be activated when an end user clicks on a buy button, HTTP link or preview clips that is communicatively coupled to the web widget. Upon activation of a web widget, it will retrieve multimedia display files and the metadata associated with the multimedia content that has been packaged and associated with it, as shown at step **810**. Afterwards, the web widget will stream a portion of selected content, as shown at step **812**, so that the content portion can be previewed by the end user or consumer who has activated the web widget, as shown at step **814**. The selected content is determined from a selection request that includes one or more content selections made by the consumer or end user on the web widget. The multimedia display files are used to display visual

representations of the multimedia content which is available to be previewed and purchased from within the web widget. In generating a selection request, a consumer will click on a checkbox associated with content, or alternatively, click on one or more of the multimedia display files associated with each of the multimedia content files. In one embodiment of a web widget used for distribution of a musical catalogue, the multimedia display files include visual representations of the cover art used on each album in the musical catalogue. In other embodiments, the multimedia display files include visual representations of other types of works (e.g., book covers in a portfolio, artistic contributions in an art collection, etc.). With respect to content viewing, the segment of content used for streamed previewing and the duration of a streamed preview portion are pre-determined by the content owner or the content distributor. In one embodiment, the content previewed is a thirty second audio clip of a musical selection. In an alternative embodiment, the content previewed is a thirty second audio-visual clip of a multimedia content file. Once previewed, the consumer can elect to share the previewed content with third parties. In this case, if a share request has been received, as shown at step **824**, the web widget can be further distributed to one or more third party recipients, as shown at step **826**. In this manner the content of the artist associated with the web widget can be virally distributed to generate significant buzz or word of mouth marketing in online communities and in channels of prospective consumers whom the artist may have never considered for marketing purposes. Once distributed, the process ends as shown at step **822**. If a share request is not received then the web widget will remain in a dormant state and the process will end as shown at step **822**.

On the other hand, if after previewing the multimedia content, as shown at step **814**, a consumer chooses to initiate a commercial transaction pertaining to the multimedia content, such as a purchase or license of rights pertaining to the content, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will redirect the consumer to a web page to begin the purchase or license transaction for the selected multimedia content, as shown at step **818**. This web page will be coupled to the transaction processing service **112** so that the purchase transaction can be properly completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor operating the multimedia content distribution system **200** as an "approved vendor" with the banks, credit unions and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.), In this embodiment, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget will automatically execute and complete the purchase or license transaction after a receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. All transactions completed through web widgets are tracked in the accounting service **218**, data collection will be performed on the types of transactions and the locations of the transactions by the web servers implementing the widget management service **216**, and an analysis of statistic trends will be performed and compiled by the analytics and reporting service **210**. In one embodiment, the statistical analysis is performed in an autonomous manner. In an alternative embodiment, the analysis of statistical trends is performed upon request by content owners. Once the purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device **130**, **132**, **134**, as shown at step **820**, and the process then ends, as shown at step **822**. Alternatively, if no purchase request is placed though a web widget, the web widget will remain in an inactivate state with no further processing, as shown at step **822**.

FIG. **9** is an illustration of a web widget in one embodiment. In this embodiment, the web widget **900** is shown in an inactive operational mode and includes an activation button **906** and the web widget **900** identifies the content owner name **902** (i.e., "Lenny White") and the name of the multimedia content file **904** (i.e., "Drum Boogie"). In the illustrated embodiment, clicking on the activation button **906** or on any location within the inactive web widget **900** will cause the retrieval of a multimedia display file and the metadata associated with the multimedia content file from the multimedia content distribution system **200** and start the preview of a pre-determined portion of the multimedia content file associated with the web widget. In an alternative embodiment, clicking on any location within the illustrated web widget **900** in an inactive operational mode will cause the web widget to enter an active operational mode. In one embodiment, the multimedia display file includes artwork or a graphic image which visually represents a cover for the content stored in the multimedia content file associated with the web widget **900**. A web widget is received over a network such as the Internet and viewed in a consumer's web browser executing on mobile, laptop or desktop client devices **130**, **132**, **134** such as Internet Explorer, Firefox, Google Chrome, Safari, Opera or other popular web browsers. The content owner may also elect to create an outer package for a web widget with artistic or illustrative materials as is shown in this embodiment.

FIG. **10** is an illustration of a web widget **1000** after a consumer clicks on the activation button **906** or on any location within an inactive web widget to thereby cause the web widget **1000** to enter an active operational mode. In this embodiment, the web widget **1000** includes a field for the content owner's name **1002** (i.e., Lenny White), the name of the musical selection or multimedia content file **1004**, a buy button **1006** which will enable the purchase of the multimedia content, which in this embodiment is the musical selection called "Drum Boogie." The web widget **1000** also includes the name of the distributor and the year of distribution **2010** (i.e., Abstractlogix/2010) and provides a field for limited previewing capabilities **1008**. As shown in this field **1008**, there is a play, pause and end-play button. All functionality provided by the web widget **1000** is performed within the browser on a consumer's client device **130**, **132**, **134**.

In the present embodiment, the web widget **1000** is comprised of a content retrieval component, a content preview component and a transaction processing component. Once the activation button **906** or any location in an inactive web widget is clicked on to thereby cause the web widget **1000** to enter the active operational mode, the content retrieval component will send a request to the widget management service **216** and commence with the retrieval of the multimedia display file and metadata for the multimedia content file which is associated with the web widget **1000** from the cloud-based storage resource **124**, the database server **110** or other storage resources which are accessible

from the application server **106**. Once retrieved, a pre-determined portion of the multimedia content file will be automatically executed by the content preview component to enable the consumer to preview the content prior to making a purchase decision. In executing the pre-determined portion of the selected multimedia content file, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer. The duration and the specific segment of content included in the pre-determined portion of the multimedia content file that is made available for streamed execution on the client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase the multimedia content file, in this embodiment the "Buy Song" button will be clicked on which will cause the execution of the transaction processing component. The transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content file, which in the present embodiment will involve the licensing of the multimedia content file to the consumer. In an alternative embodiment, the commercial transaction is the purchase of rights to the multimedia content files. In both embodiments, however, the consummation of the commercial transaction will redirect a consumer to a third party web page shown within the web widget **1000** where the purchase or license transaction will be completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor that operates the multimedia content distribution system **200** as an "approved vendor" with the banks and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.). In this embodiment, the web widget **1000** will confirm that a purchase or license request has been received and the web widget **1000** will automatically execute the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget **1000** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. In each of these embodiments, once the commercial transaction is completed, all portions of the multimedia content file will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **11** illustrates an embodiment of a web widget **1100** in an active operational mode for a release including multiple selections in an embodiment. All of the multimedia content files included in this embodiment of a web widget **1100** are illustrated and listed in region **1110** as an embedded electronic commerce store. Although the illustrated embodiment shows the multimedia content files as musical selections of an album, it should be apparent to those of ordinary skill in the art that the content of this embedded electronic store can include other types of works such as books, paintings, videos, e-books, audio-visual works, software applications, or other content or commercial products created for marketing and sampling purposes in this embedded store. Additional content files can be previewed using the vertical scroll bar shown on the right side of this illustrated web widget **1100**. As shown, there are multiple musical selections by an artist named Lenny White included within the web widget **1100**. This embodiment of the web widget **1100** also includes a play button **1104**, for use in previewing content that has been packaged with the web widget **1100** for promotional purposes. In this embodiment, a consumer can select individual content files (i.e., musical selections) and click on the play button **1104** to preview the selected files, or click on any content file listed in region **1110** to preview only the selected content file. The buy album button **1108** is shown in the same row as the play button **1104** in this embodiment. In addition, the name of the album **1102** (i.e., Anamoly) is shown in the row above the buy button **1104** and buy album **1108** button. As discussed previously, web widgets can be virally distributed and shared with third parties which has the effect of increasing the marketing buzz and name recognition for a content owner. This viral distribution capability is enabled by the share link **1106**, as illustrated in this embodiment, and it permits subsequent distribution of the web widget **1100** to other potential consumers in the current users online social networks or other online communities.

In this alternative embodiment, the web widget **1100** is comprised of a content search component, a content retrieval component, a content preview component and a transaction processing component. Once an activation button or any location in an inactive web widget is clicked on, the web widget **1100** will enter an active operational mode. After activation, the consumer is presented with the listing of multimedia content files included in the compilation associated with the active web widget **1100**. In this illustrative example, the listing includes the songs provided on the Anamoly album by Lenny White. In reviewing the listing of the content files, a consumer can elect to preview one or more of the content files. If the consumer selects one or more of the listed multimedia content files associated with the web widget **1100** for previewing, the content search component will be activated and configured to search for the selected multimedia content files, which files are accessible from the application server **106**. After the application server **106** locates the content files, the content retrieval component will send a retrieval request to the widget management service **216** and the widget management service **216** will generate and send a content download request to the application server **106** based on the received retrieval request. After receipt of the content download request from the widget management service **216**, the application server **106** will commence the retrieval of multimedia display files and metadata which are associated with the selected multimedia content files. In one embodiment, the multimedia display files include one or more graphic images of artwork which visually represent each song provided in an album widget (also referred to as a "single release widget" **304**). In an alternative embodiment, the multimedia display files include one or more graphic images of the artwork used on the album covers for each album included in a full catalog widget **302**. Once the multimedia display files and metadata are retrieved, a pre-determined portion of the selected multimedia content files will be automatically executed by the content preview component to enable the consumer to preview the content files prior to making a purchase decision. In executing the pre-determined portion of the selected

multimedia content files, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer in selecting the multimedia content files. The pre-determined portion of each multimedia content file which is made available for streamed execution on a client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase or license the compilation of multimedia content files, which in this embodiment is an album containing multiple multimedia content files, the consumer will click on the "Buy Album" button **1108** which will result in the activation of the transaction processing component. In an embodiment, the transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content files resulting in the payment of fees and, in this example, the licensing of the compilation of multimedia content files to the consumer. Consummation of the commercial transaction occurs after the consumer is redirected to a third party web page which is shown within the web widget **1100** where the purchase or license transaction will be completed. In a different embodiment, the web widget **1100** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. Once the commercial transaction is complete, all portions of the content files in the compilation will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **12** is an illustration of a web widget depicting the different format options for content that can be purchased through the web widget **1200**. In this embodiment of the web widget **1200**, there is an MP3 version of the content file available for $0.99 and a separate buy button **1206**. There is also a .WAV format of the content file available for $0.99 and a separate buy button **1208** for that format file. The web widget **1200** also includes the name of the individual song **1204** (i.e., Drum Boogie) and the name of the artist **1202** (i.e., Lenny White).

FIG. **13** is an illustration of the screen shown in a web widget after clicking on a buy button. In this embodiment of a web widget **1300**, after a consumer selects the buy button **1206** to purchase the MP3 format file, a checkout screen appears within the web widget **1300** as shown in this figure. The checkout screen of this web widget **1300** includes the total cost of the content file and the number of files purchased, which items are shown in region **1304**. The name of the selection (i.e., "Drum Boogie"), the artist name (i.e., Lenny White), the format type (i.e., MP3), the number of files (i.e., 2 files) and the combined file size (i.e., 8.24 MB) are shown in region **1302**.

FIG. **14** is an illustration of a web page for a transaction processing service **112** in one embodiment. In the illustrated embodiment, the transaction page for the Amazon Flexible Payment Service (i.e., the "Amazon FPS") is shown. In this embodiment, this web page **1400** is the location where the consumer would enter credit card, debit card or bank account information to complete the purchase of the multimedia content file that is stored and available for download from the cloud-based storage resource **124** used in the operating environment with the multimedia content distribution system **200**. The Amazon FPS is only one of a number of third party transaction processing services that could be made compatible with the operating environment for the multimedia content distribution system **200**. In one alternative embodiment, the alternative transaction processing service can be any one of Authorize.Net, Google Checkout, Storm Pay, PayPal, or other Internet service for transaction processing. In yet another alternative embodiment, the transaction processing service **112** is implemented with a wholly internal, proprietary service that is not generally accessible over the Internet or other public computer communications networks. Each of the foregoing embodiments, however, illustrate how a portable web widget enables commerce through an embedded electronic commerce store regardless of the means used to complete a commercial transaction (i.e., external service such as Authorized.Net, etc. or an internal proprietary service).

FIG. **15** is an illustration of a buy button **1500** that can be distributed "virally" to consumers and third parties included in their online social networks. The buy button **1500** also identifies the file type (in this example it is an MP3 file type) and the price set by the content owner for the multimedia content file, as shown in field **1502**. Upon clicking on the buy button, a web widget will be activated and a checkout screen such as the one illustrated in FIG. **13** in the activated web widget will be displayed in the web browser on the consumer's client device **130**, **132**, **134**.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiments shown and described without departing from the scope of the present disclosure. This application is intended to cover any adaptations or variations of the embodiments discussed herein.

What is claimed is:

1. A system for distributing multimedia content over a network, comprising:

a server configured to control a transaction processing service; and

a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,

wherein the server is configured to:

receive the item from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;

distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on the marketplace rule;

receive an indication that the clickable buy button has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

2. The system of claim 1, wherein the metadata includes a title or textual description.

3. The system of claim 1, wherein the remote computing device is a smartphone.

4. The system of claim 1, wherein the marketplace rule comprises one or more of: a price, sales campaign date, or geographic availability.

5. The system of claim 1, wherein the product listing includes a share link.

6. The system of claim 5, wherein when the server receives an indication that the share link has been selected activated by the remote computing device, the server distributes the product listing to a social media network.

7. The system of claim 1, wherein the transaction processing service comprises a managed service in communication with the server.

8. The system of claim 1, wherein the server comprises one or more cloud-based servers.

9. A system for generating distributing multimedia content over a network, comprising:

a server configured to control a transaction processing service; and

a storage resource communicatively coupled to the server, and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,

wherein the server is configured to:

receive the item from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;

distribute the product listing to a web site operated by the server or to a distributed application not operated by the server based on the marketplace rule;

receive an indication that the clickable buy button has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

10. The system of claim 9, wherein the metadata includes a title or textual description.

11. The system of claim 9, wherein the remote computing device is a smartphone.

12. The system of claim 9, wherein the marketplace rule comprises one or more of: a price, sales campaign date, or geographic availability.

13. The system of claim 9, wherein the product listing includes a share link.

14. The system of claim 13, wherein when the server receives an indication that the share link has been selected by the remote computing device, the server distributes the product listing to a social media network.

15. A system for generating distributing multimedia content over a network, comprising:

a server configured to control a transaction processing service; and

a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,

wherein the server is configured to:

receive the item from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;

distribute the product listing to a web site or to a social media network based on the marketplace rule;

receive an indication that the clickable buy button has been selected by a remote computing device; and

provide a checkout screen to the remote computing device for purchasing a product associated with the product listing,

wherein transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

16. The system of claim 15, wherein the metadata includes a title or textual description.

17. The system of claim 15, wherein the remote computing device is a smartphone.

18. The system of claim 15, wherein the marketplace rule comprises one or more of: a price, sales campaign date, or geographic availability.

19. The system of claim 15, wherein the product listing includes a share link.

20. The system of claim 19, wherein when the server receives an indication that the share link has been selected by the remote computing device, the server distributes the product listing to a second remote computing device.

* * * * *

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(54) **SYSTEM AND METHOD FOR FACILITATING SOCIAL SHOPPING**

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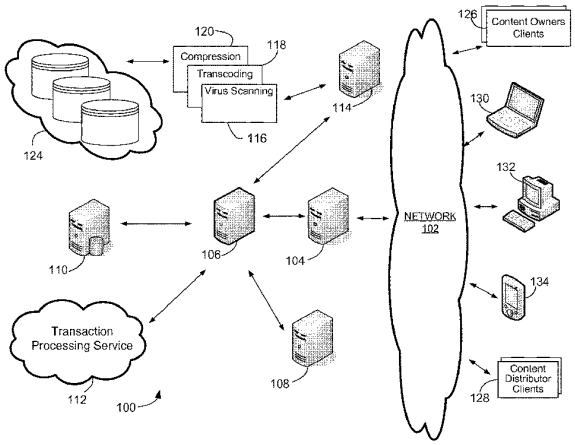
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(57) **ABSTRACT**

A portable web widget for distribution of multimedia content over a computer communications network, the web widget adapted for viral distribution and execution in a web browser on a client device wherein the widget includes a content retrieval component communicatively coupled to an application server over the computer communications network, the content retrieval component configured to retrieve one or more multimedia display files and metadata into an embedded electronic commerce store in the web widget after it enters an active operational mode, the widget also including a content preview component configured to enable a streamed execution of a portion of the multimedia content files associated with each of the multimedia display files from a multimedia content distribution system executing on the application server, and a transaction processing component operative to execute and complete a commercial trans-
(Continued)



action in the embedded electronic commerce store pertaining to the multimedia content files.

20 Claims, 16 Drawing Sheets

Related U.S. Application Data

continuation of application No. 16/512,018, filed on Jul. 15, 2019, which is a continuation of application No. 15/591,208, filed on May 10, 2017, now Pat. No. 10,395,304, which is a continuation of application No. 13/571,293, filed on Aug. 9, 2012, now Pat. No. 9,679,298, which is a continuation-in-part of application No. 12/852,090, filed on Aug. 6, 2010, now abandoned.

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2020/0104846 A1 4/2020 Singhal et al.
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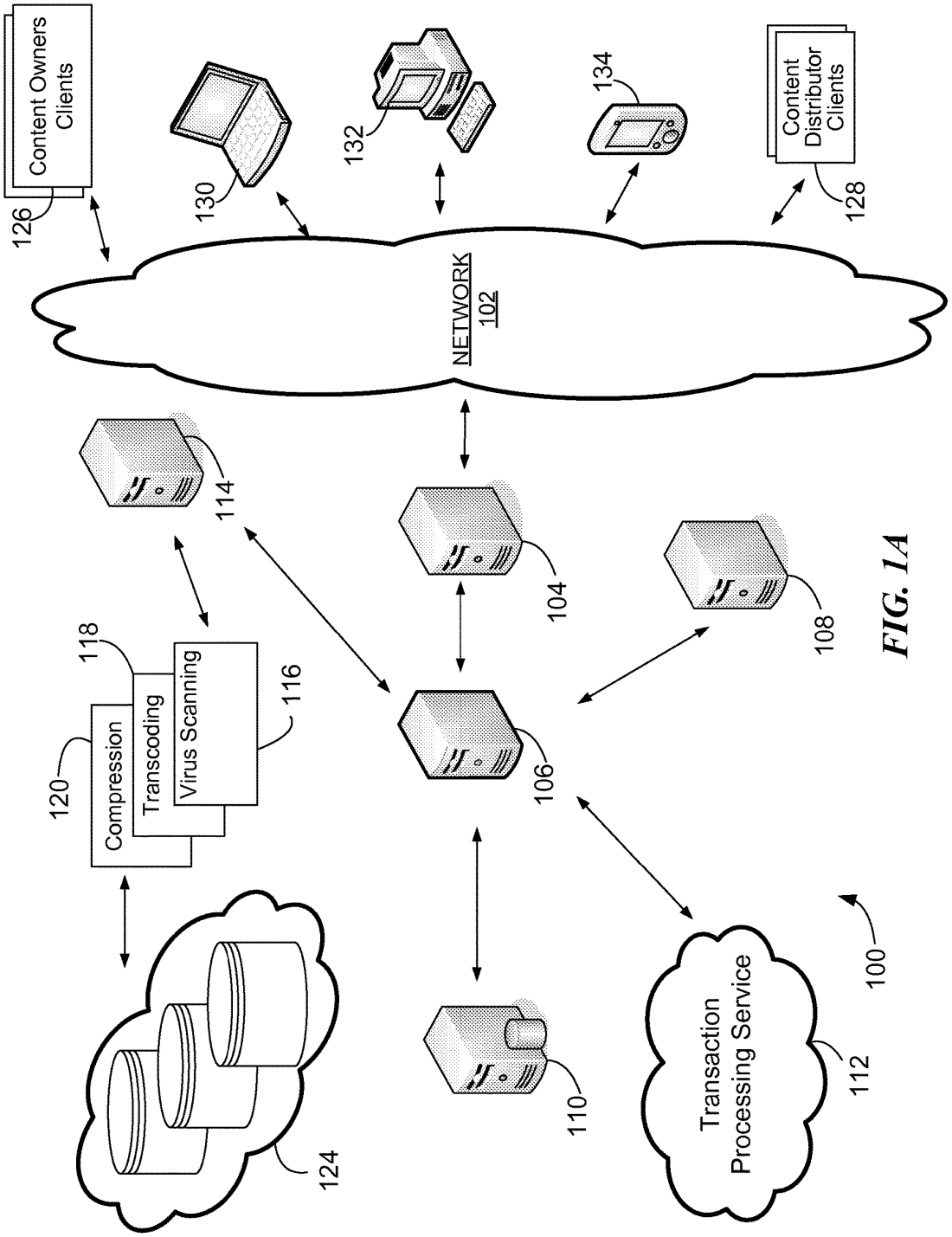

Content Owners Clients
126
130
132
134
Content Distributor Clients
128
NETWORK
102
114
104
108
118
116
120
Compression
Transcoding
Virus Scanning
106
124
110
Transaction Processing Service
112
100

FIG. 1A

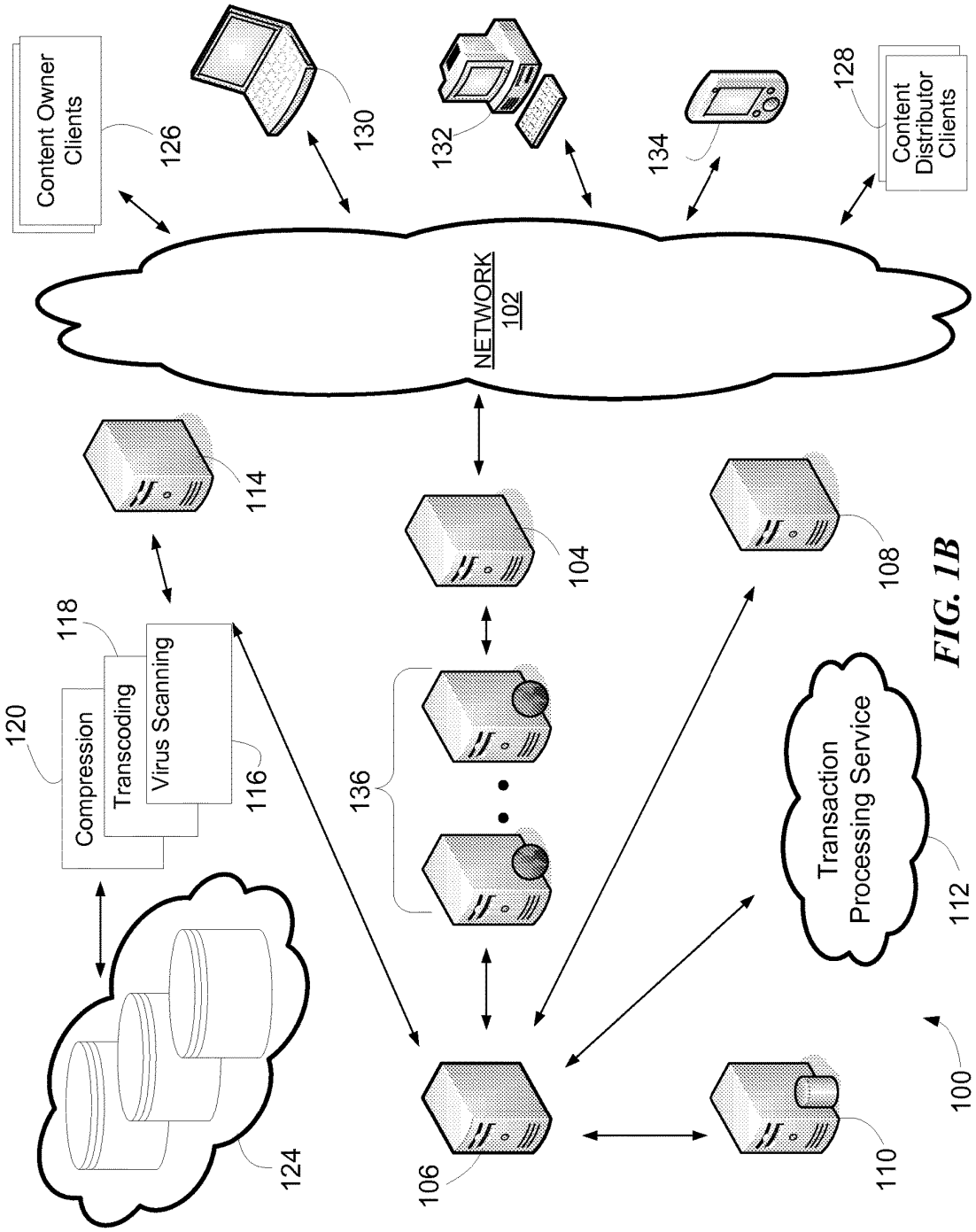

Content Owner Clients
126
130
132
134
128
Content Distributor Clients
NETWORK
102
114
104
108
118
120
Compression
Transcoding
Virus Scanning
116
136
Transaction Processing Service
112
124
106
110
100

FIG. 1B

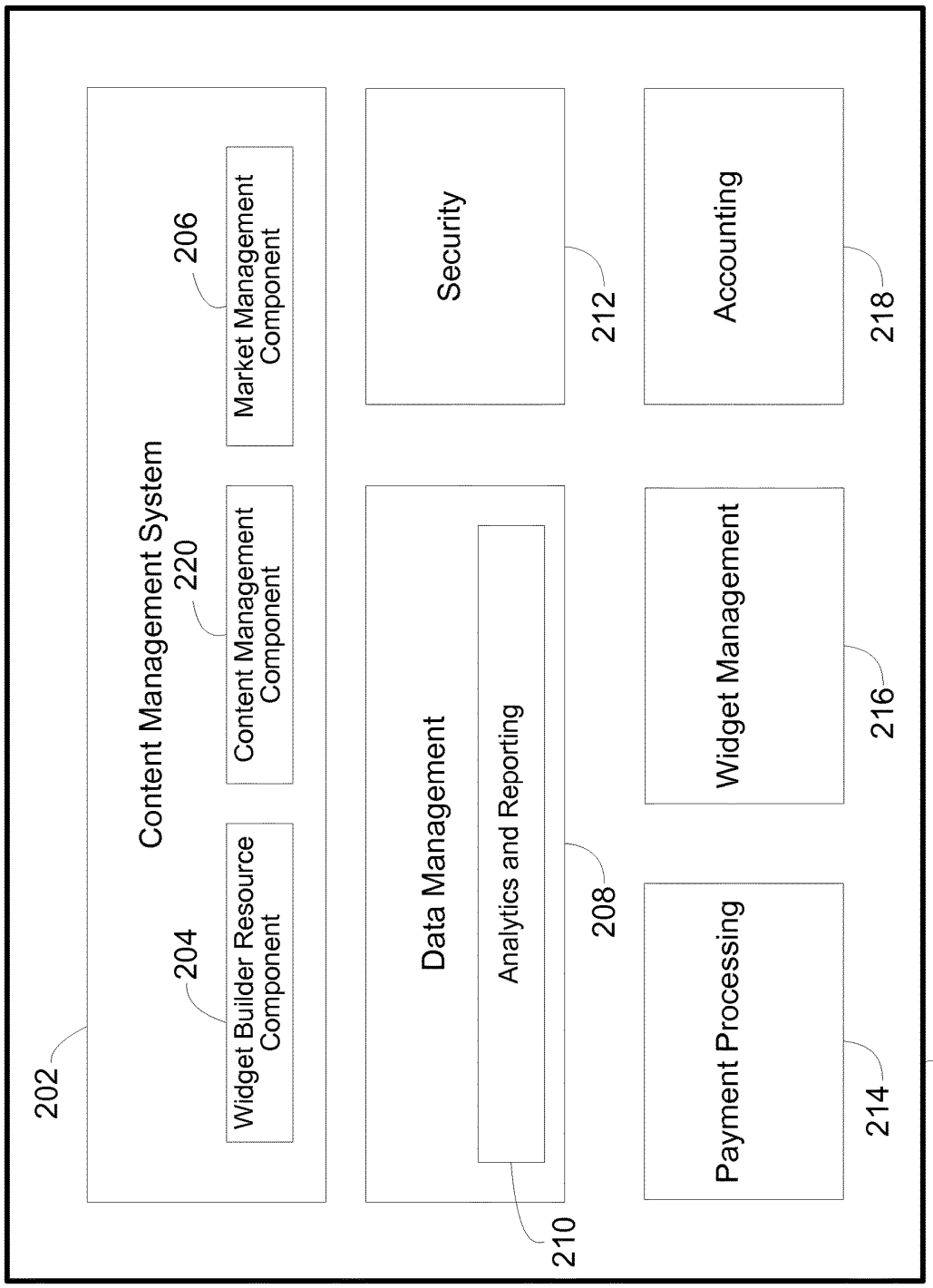

Content Management System
202
Widget Builder Resource Component
204
Content Management Component
220
Market Management Component
206
Data Management
Analytics and Reporting
208
210
Security
212
Widget Management
216
Payment Processing
214
Accounting
218
200

FIG. 2

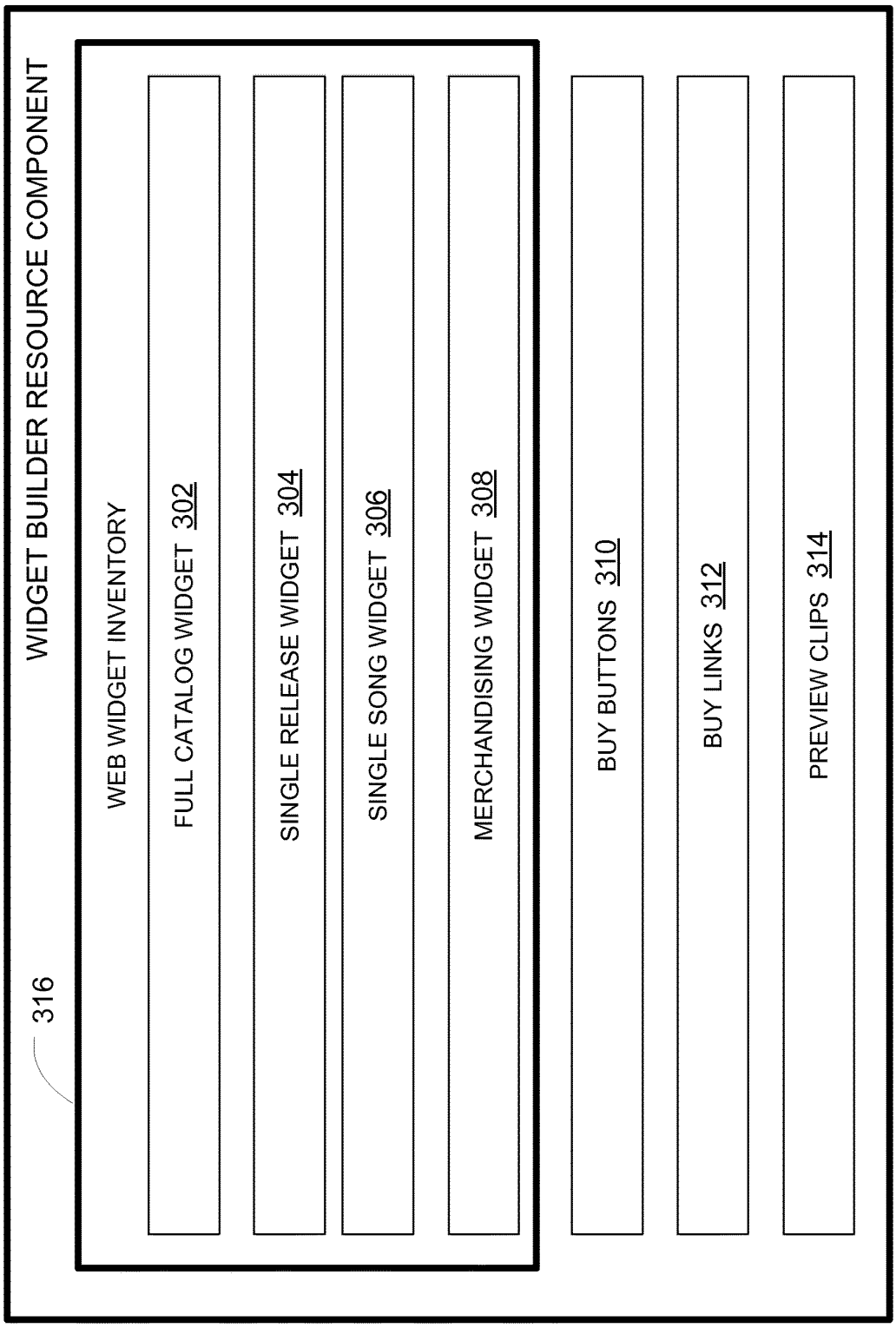

WIDGET BUILDER RESOURCE COMPONENT
316
WEB WIDGET INVENTORY
FULL CATALOG WIDGET 302
SINGLE RELEASE WIDGET 304
SINGLE SONG WIDGET 306
MERCHANDISING WIDGET 308
BUY BUTTONS 310
BUY LINKS 312
PREVIEW CLIPS 314
300

FIG. 3

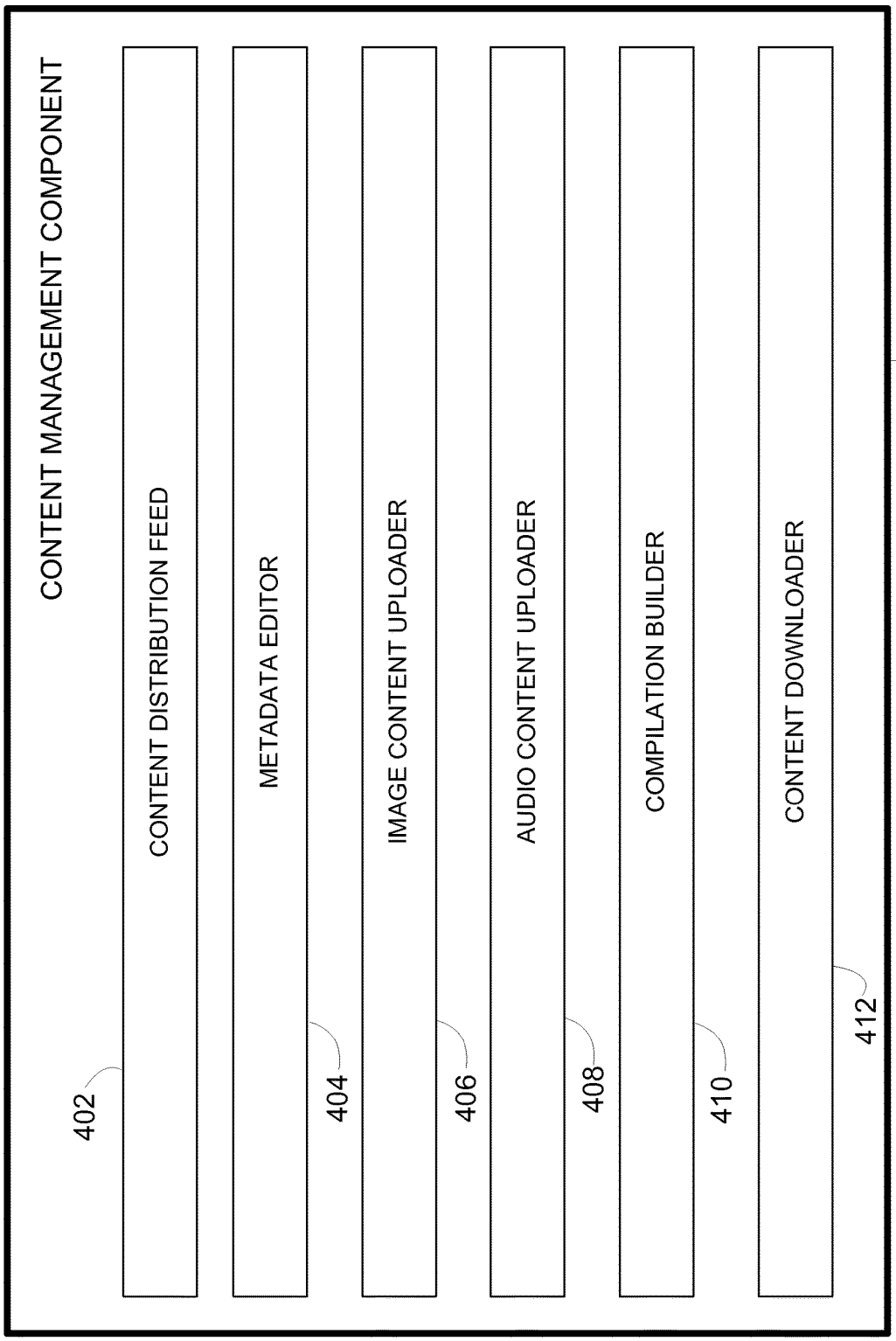

CONTENT MANAGEMENT COMPONENT
CONTENT DISTRIBUTION FEED
METADATA EDITOR
IMAGE CONTENT UPLOADER
AUDIO CONTENT UPLOADER
COMPILATION BUILDER
CONTENT DOWNLOADER
400
402
404
406
408
410
412

FIG. 4

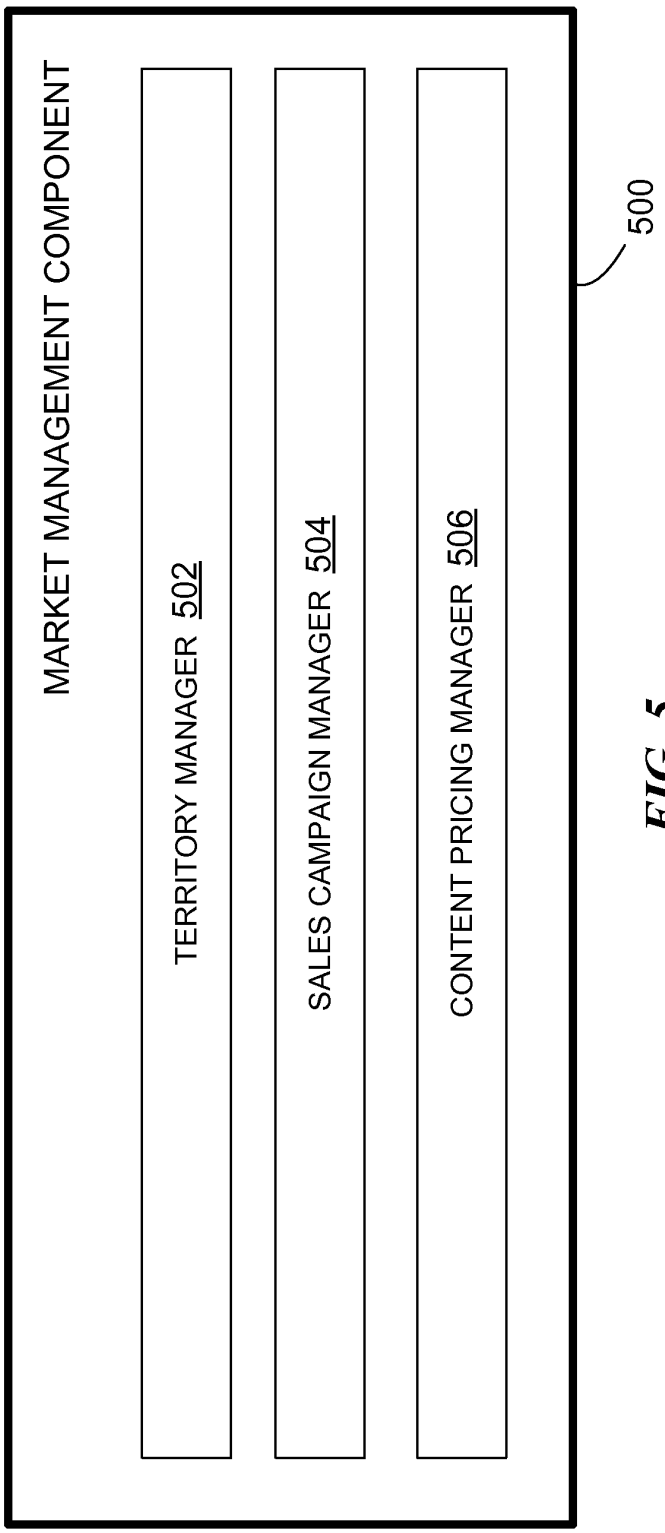

MARKET MANAGEMENT COMPONENT
TERRITORY MANAGER 502
SALES CAMPAIGN MANAGER 504
CONTENT PRICING MANAGER 506
500

FIG. 5

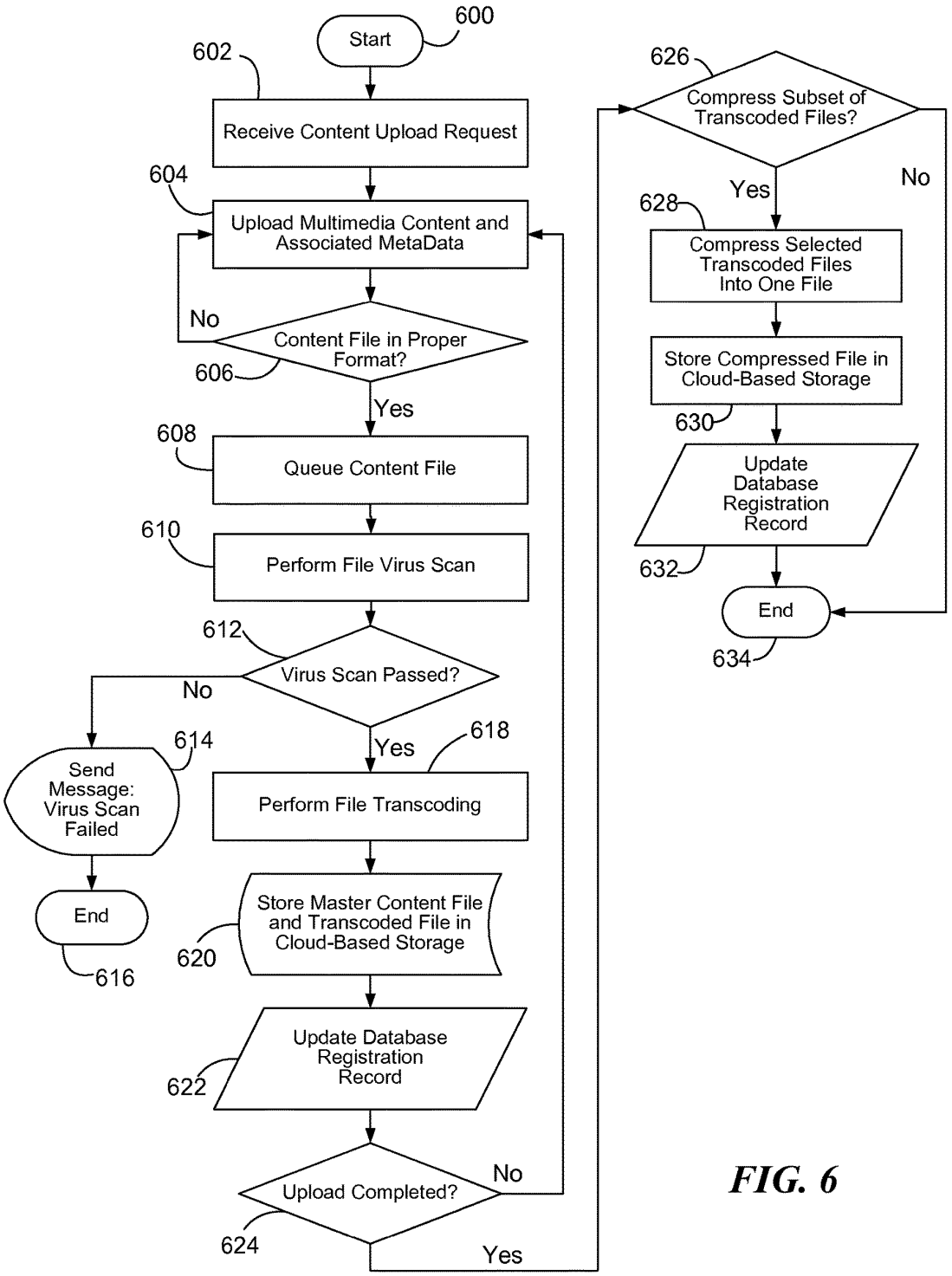

Start
600
602
Receive Content Upload Request
604
Upload Multimedia Content and Associated MetaData
No
Content File in Proper Format?
606
Yes
608
Queue Content File
610
Perform File Virus Scan
612
Virus Scan Passed?
No
614
Send Message: Virus Scan Failed
End
616
Yes
618
Perform File Transcoding
Store Master Content File and Transcoded File in Cloud-Based Storage
620
Update Database Registration Record
622
Upload Completed?
No
624
Yes
626
Compress Subset of Transcoded Files?
Yes
No
628
Compress Selected Transcoded Files Into One File
Store Compressed File in Cloud-Based Storage
630
Update Database Registration Record
632
End
634

FIG. 6

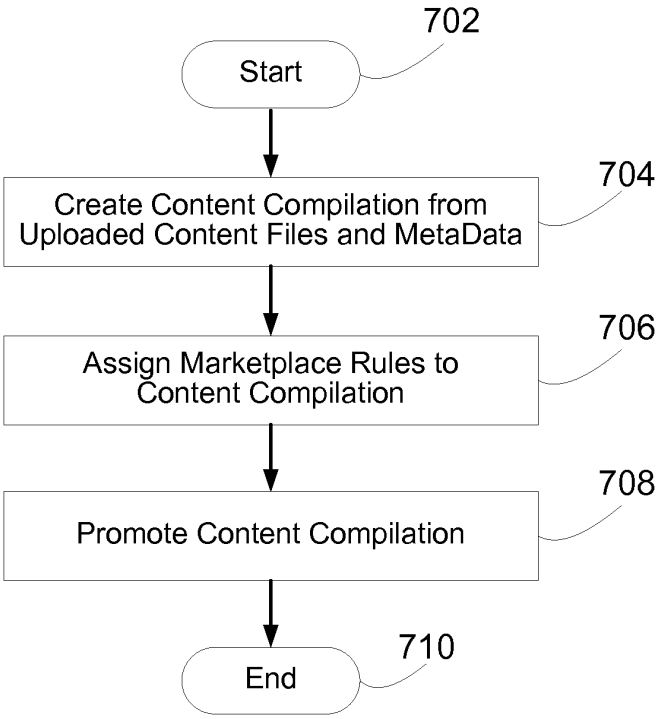

702
Start
704
Create Content Compilation from Uploaded Content Files and MetaData
706
Assign Marketplace Rules to Content Compilation
708
Promote Content Compilation
710
End

FIG. 7A

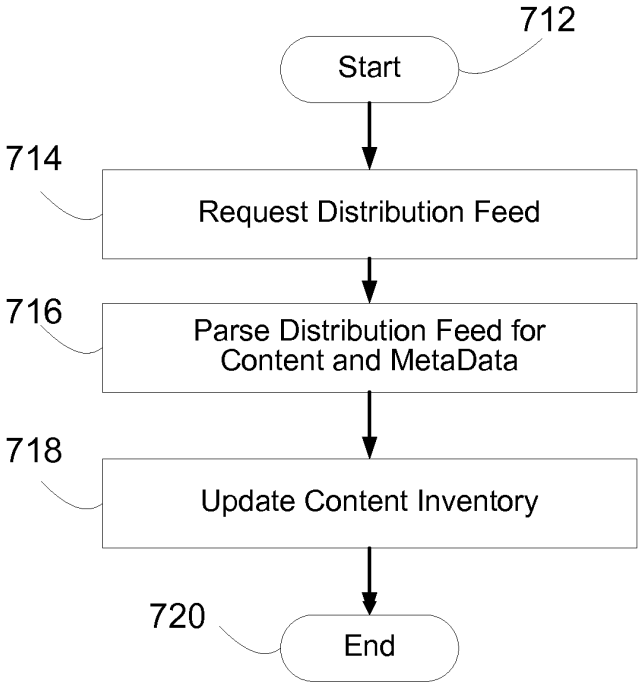

712
Start
714
Request Distribution Feed
716
Parse Distribution Feed for Content and MetaData
718
Update Content Inventory
720
End

FIG. 7B

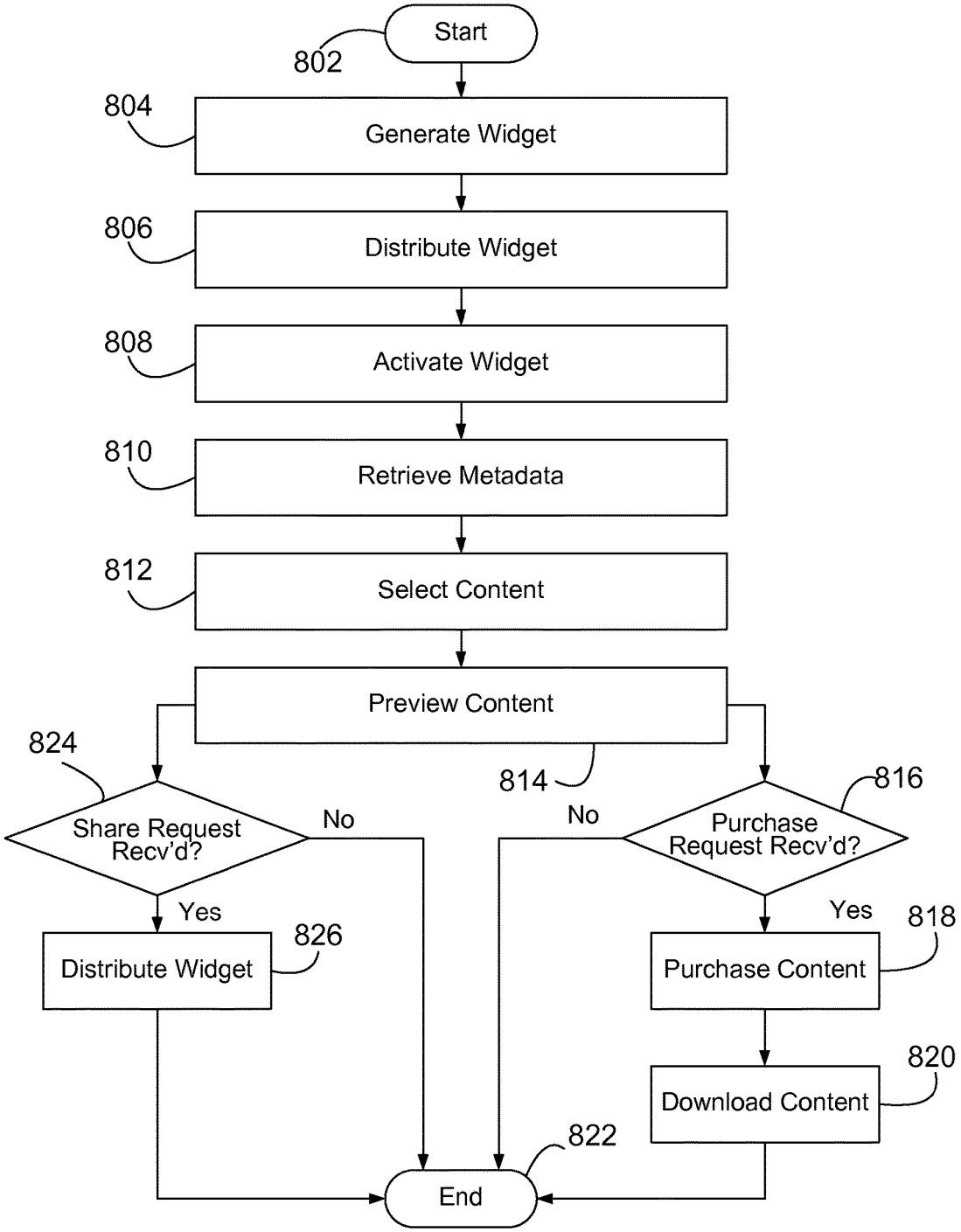

Start
802
804
Generate Widget
806
Distribute Widget
808
Activate Widget
810
Retrieve Metadata
812
Select Content
Preview Content
824
814
816
Share Request Recv'd?
No
No
Purchase Request Recv'd?
Yes
Yes
818
826
Distribute Widget
Purchase Content
820
Download Content
822
End

FIG. 8

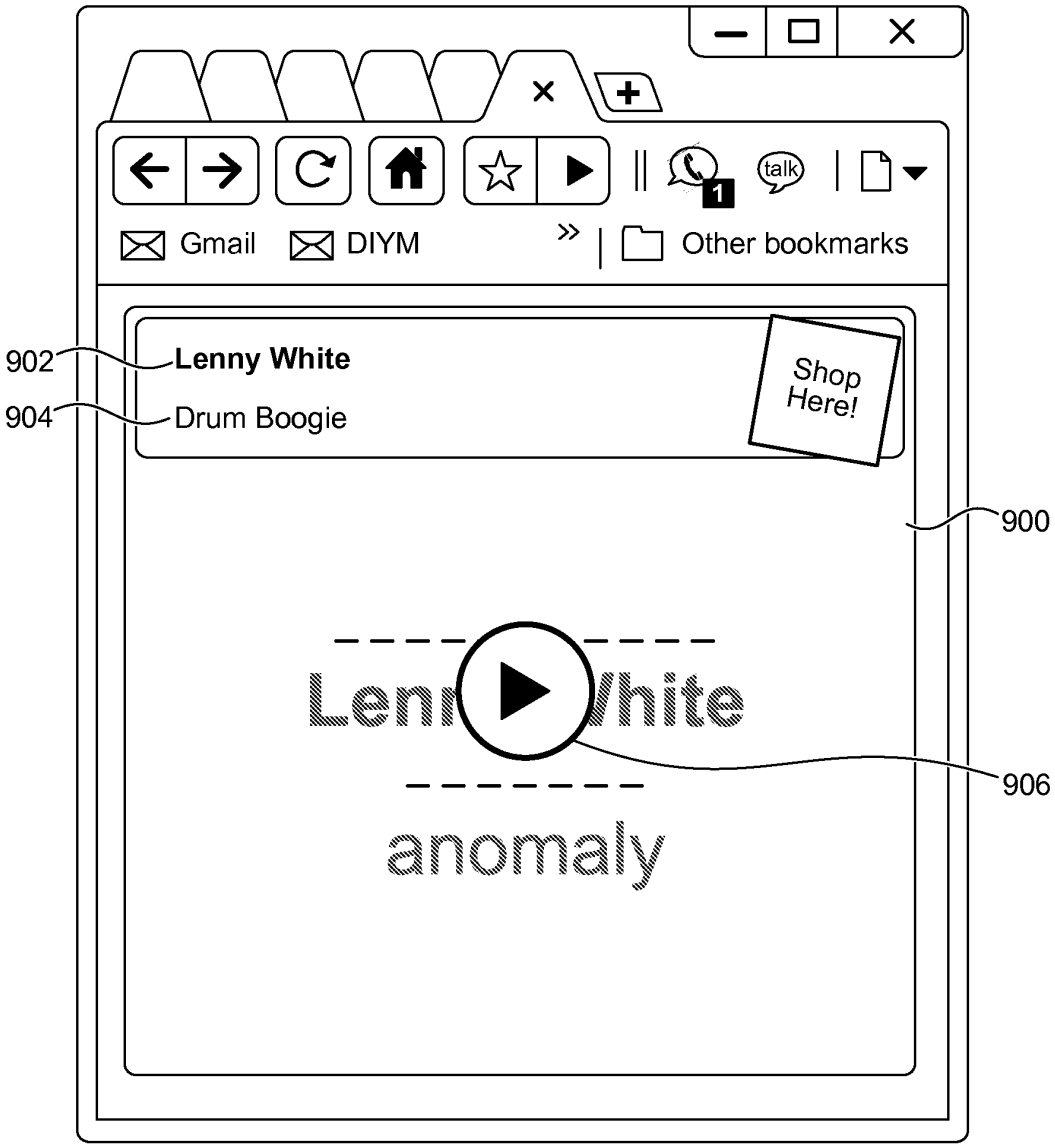

Gmail
DIYM
Other bookmarks
902
Lenny White
904
Drum Boogie
Shop Here!
900
906
anomaly

FIG. 9

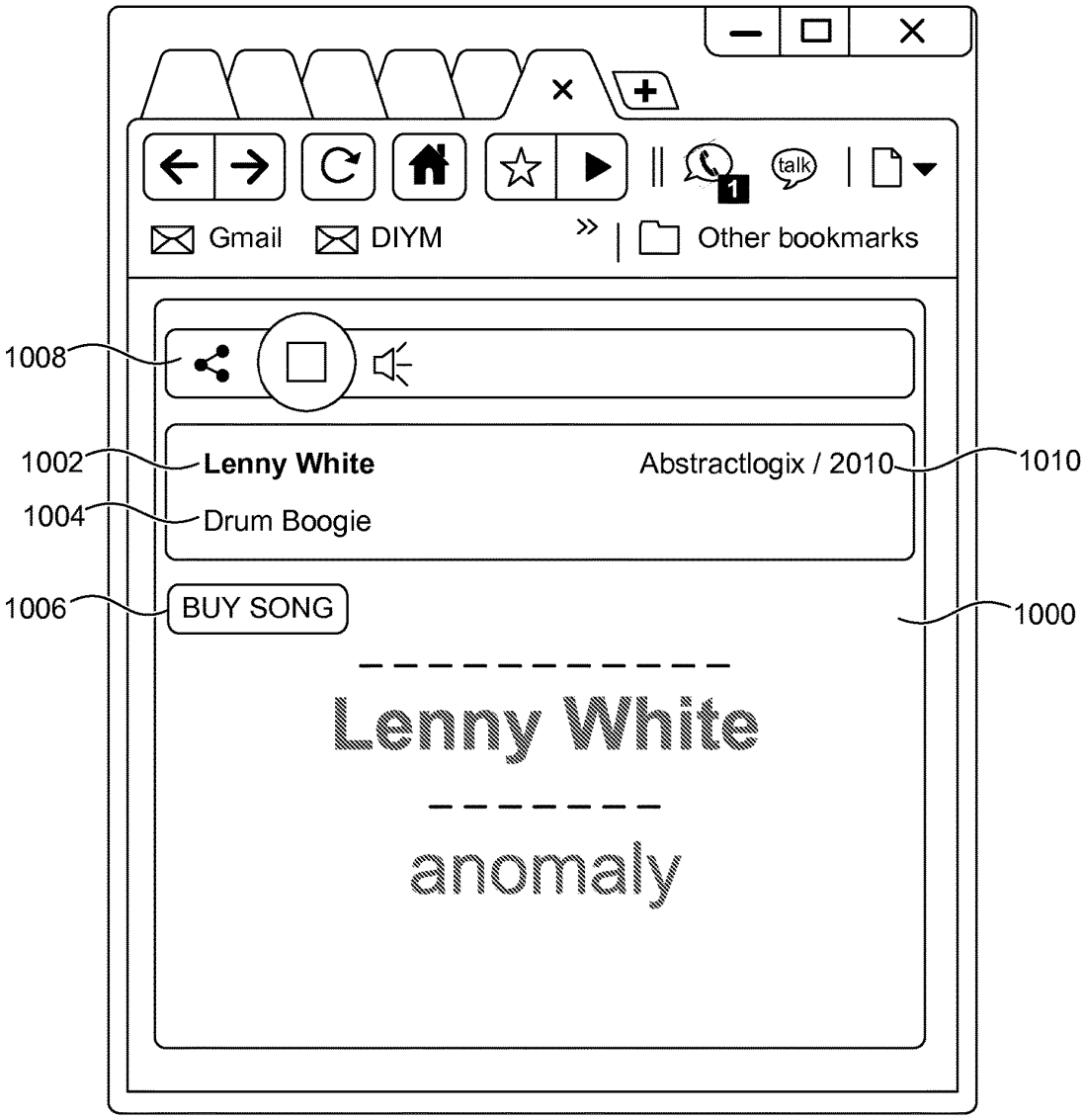

Gmail
DIYM
Other bookmarks
1008
1002
Lenny White
Abstractlogix / 2010
1010
1004
Drum Boogie
1006
BUY SONG
1000
Lenny White
anomaly

FIG. 10

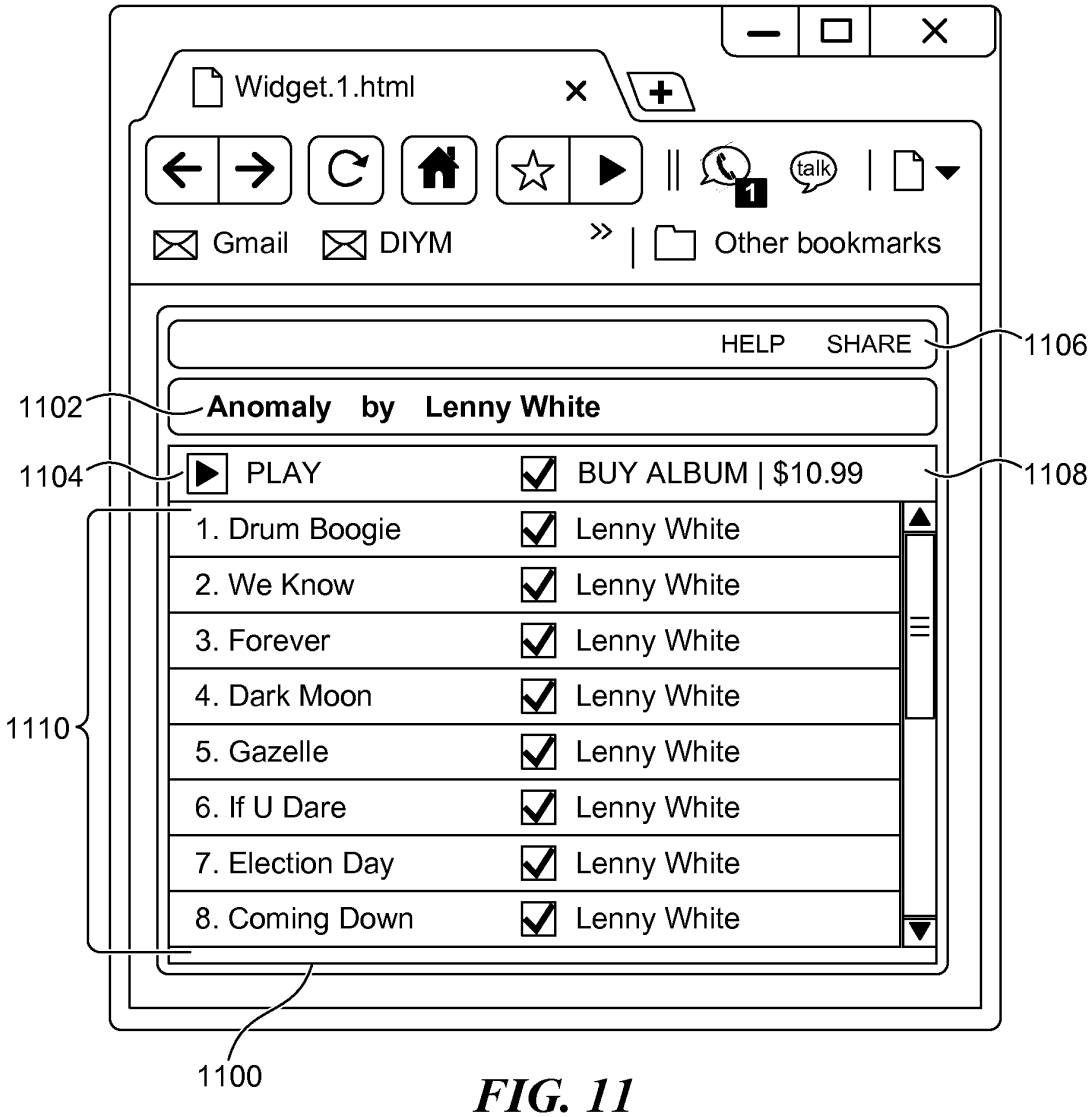

Widget.1.html
Gmail
DIYM
Other bookmarks
HELP
SHARE
1106
1102
Anomaly by Lenny White
1104
PLAY
BUY ALBUM | $10.99
1108
1. Drum Boogie Lenny White
2. We Know Lenny White
3. Forever Lenny White
4. Dark Moon Lenny White
5. Gazelle Lenny White
6. If U Dare Lenny White
7. Election Day Lenny White
8. Coming Down Lenny White
1110
1100

FIG. 11

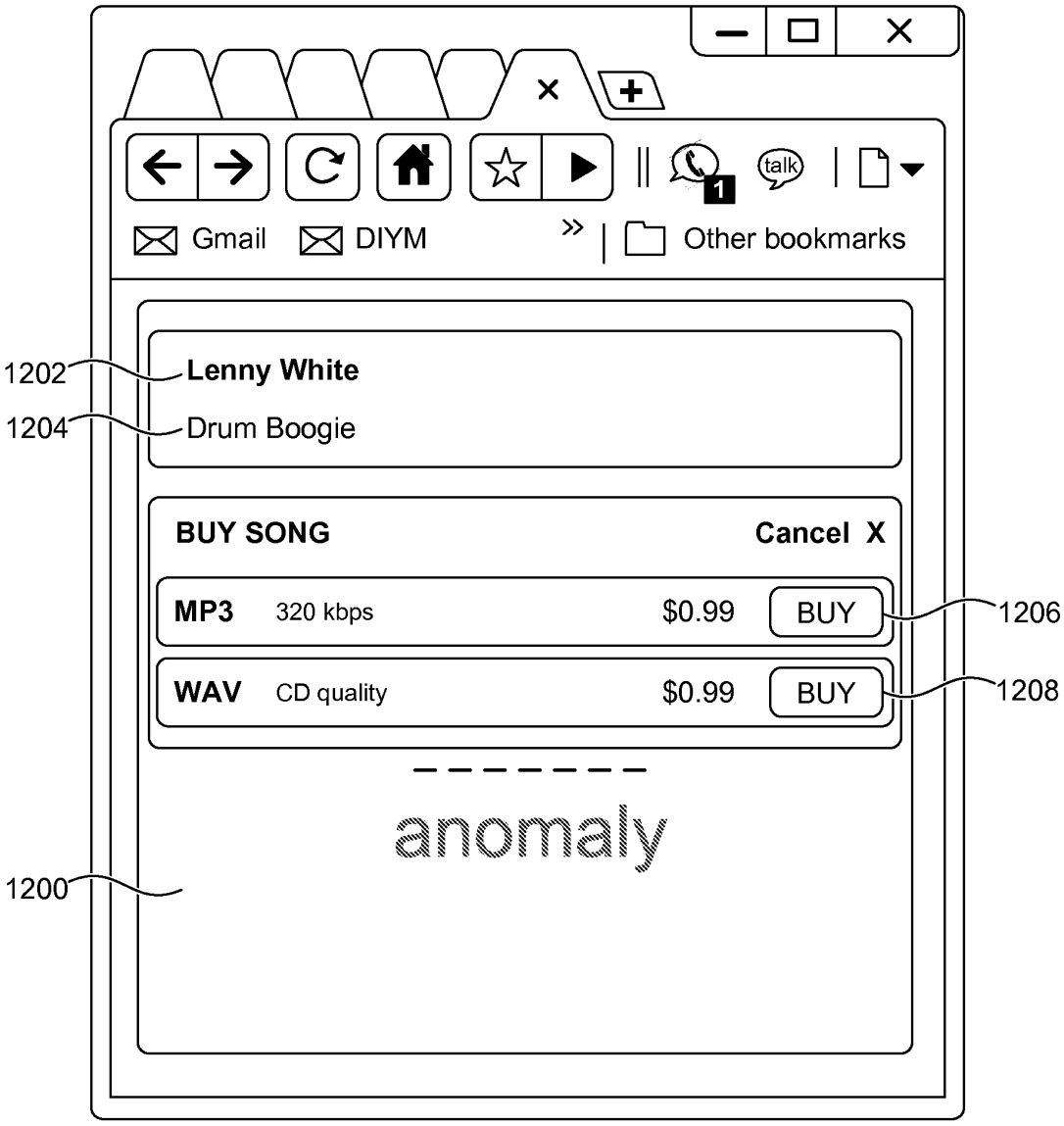

Gmail
DIYM
Other bookmarks
1202
Lenny White
1204
Drum Boogie
BUY SONG
Cancel X
MP3
320 kbps
$0.99
BUY
1206
WAV
CD quality
$0.99
BUY
1208
anomaly
1200

FIG. 12

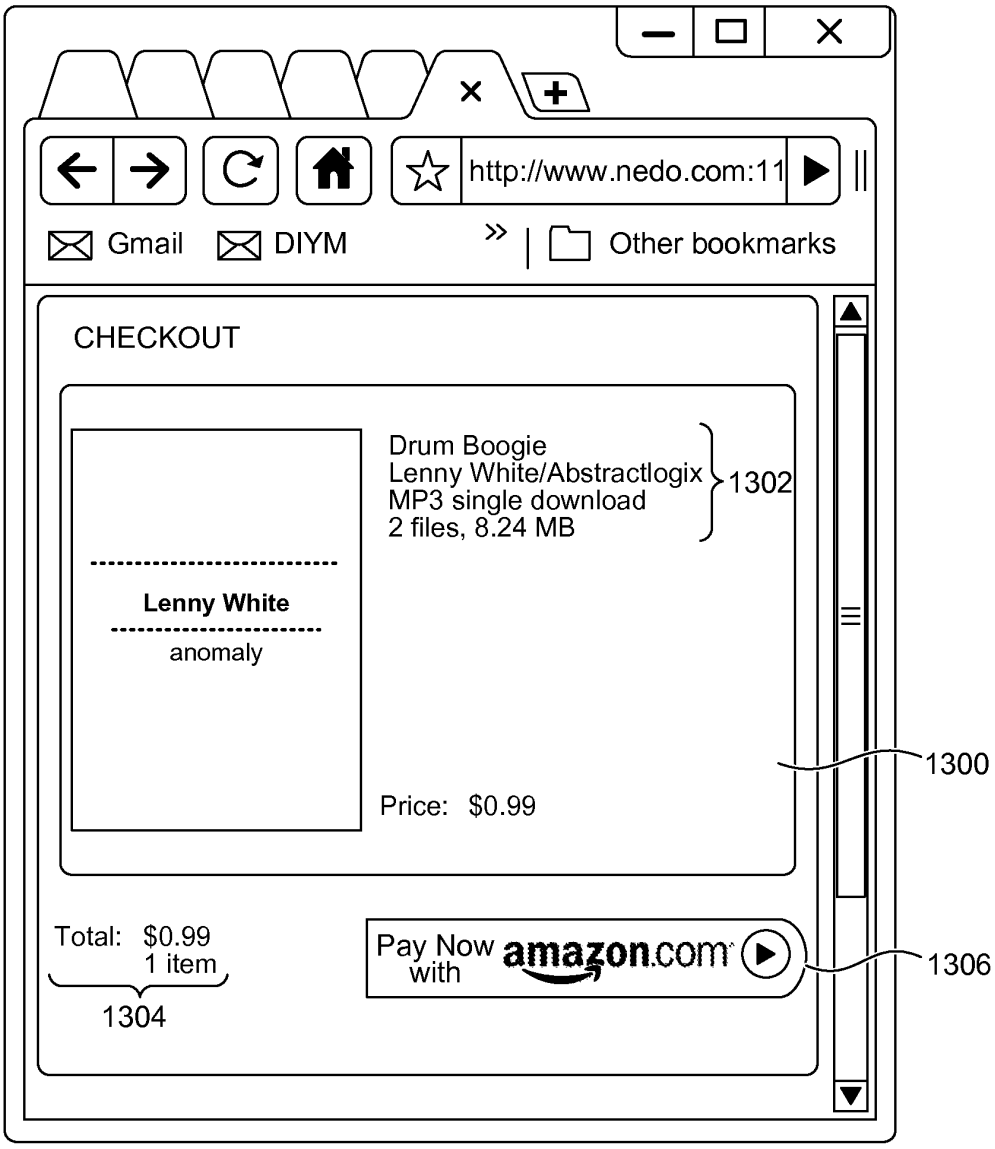

http://www.nedo.com:11
Gmail
DIYM
Other bookmarks
CHECKOUT
Drum Boogie
Lenny White/Abstractlogix
MP3 single download
2 files, 8.24 MB
1302
Lenny White
anomaly
Price: $0.99
1300
Total: $0.99
1 item
1304
Pay Now with amazon.com
1306

FIG. 13

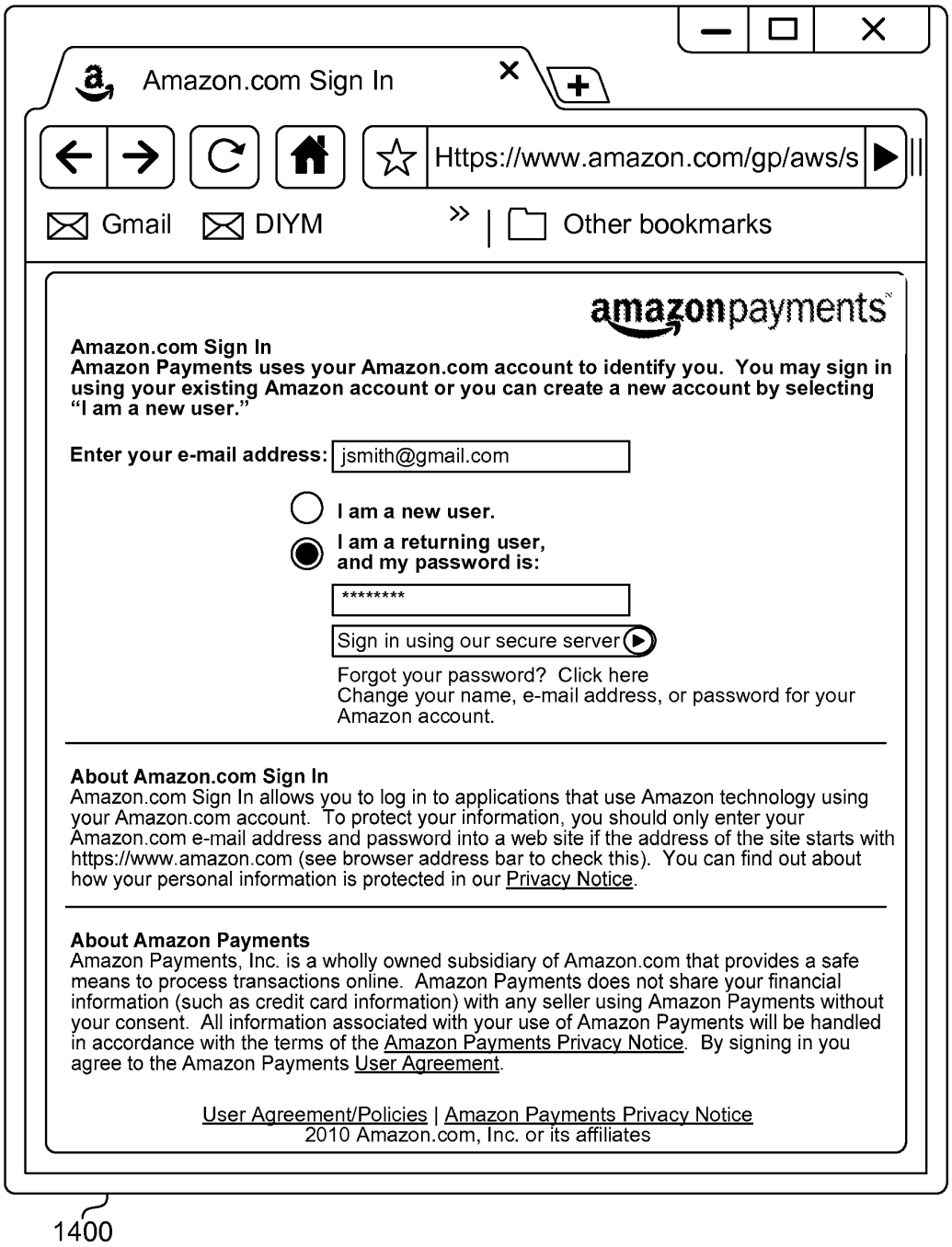

Amazon.com Sign In
Https://www.amazon.com/gp/aws/s
Gmail
DIYM
Other bookmarks
amazonpayments
Amazon.com Sign In
Amazon Payments uses your Amazon.com account to identify you. You may sign in using your existing Amazon account or you can create a new account by selecting "I am a new user."
Enter your e-mail address: jsmith@gmail.com
I am a new user.
I am a returning user, and my password is:
****
Sign in using our secure server
Forgot your password? Click here
Change your name, e-mail address, or password for your Amazon account.
About Amazon.com Sign In
Amazon.com Sign In allows you to log in to applications that use Amazon technology using your Amazon.com account. To protect your information, you should only enter your Amazon.com e-mail address and password into a web site if the address of the site starts with https://www.amazon.com (see browser address bar to check this). You can find out about how your personal information is protected in our Privacy Notice.
About Amazon Payments
Amazon Payments, Inc. is a wholly owned subsidiary of Amazon.com that provides a safe means to process transactions online. Amazon Payments does not share your financial information (such as credit card information) with any seller using Amazon Payments without your consent. All information associated with your use of Amazon Payments will be handled in accordance with the terms of the Amazon Payments Privacy Notice. By signing in you agree to the Amazon Payments User Agreement.
User Agreement/Policies | Amazon Payments Privacy Notice
2010 Amazon.com, Inc. or its affiliates
1400

FIG. 14

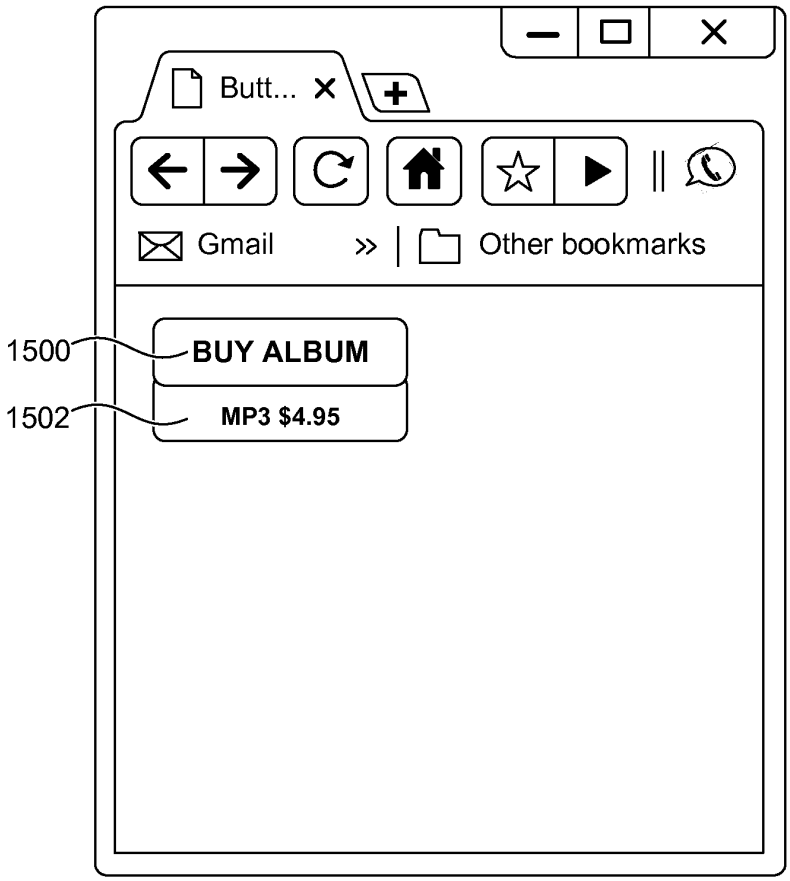


FIG. 15

SYSTEM AND METHOD FOR FACILITATING SOCIAL SHOPPING

CROSS-REFERENCE TO RELATED APPLICATION

This application is a Continuation of U.S. patent application Ser. No. 13/571,293, filed Aug. 9, 2012, which is a Continuation-In-Part of U.S. patent application Ser. No. 12/852,090, filed Aug. 6, 2010, which are hereby incorporated by reference in their entirety.

FIELD

The present disclosure relates generally to the field of electronic commerce, and in particular but not exclusively, relates to a system and method for the distribution of multimedia content and the consummation of transactions between content owners, content distributors and consumers.

BACKGROUND

Electronic commerce on the Internet has become commonplace. There are many merchants offering goods and services via web sites on the Internet, and an increasing number of consumers purchase goods and services on various Internet websites. In many cases, the electronic commerce transactions involve electronic content and physical goods. For example, many consumers purchase items such as books, compact disks (CDs) and digital video disks (DVDs) via the Internet. Increasingly, however, consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories.

More recently, the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities. When used by businesses to promote their goods and services to such individuals and online communities, this form of networking is called "social media marketing." In many of these online social relationships, users share and identify recommended content for use and consumption by other users with similar interests, hobbies and/or backgrounds. It is this unique ability to share or "virally distribute" content with recommendations and referrals that now enables the Internet to be used as a highly social medium. Furthermore, this "viral" distribution capability can now be used advantageously by content promoters, such as performing artists, visual artists, video and film producers, and content distribution companies, to create creative works that can be circulated to a far greater number of prospects and partners than may have been possible previously with a distribution capability which was limited only to the content creator's current list of customers.

Current methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner. One current approach that is used to distribute applications of limited functionality involves "web widgets." A web widget is portable software that can be installed and executed within a hypertext-markup-language web page by an end user that does not require additional compilation. The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal content into dynamic web applications which can be shared on virtually any website. Current web widgets are limited to executing certain discrete applications as on-screen tools. For example, they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information.

Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Non-limited and non-exhaustive embodiments are described with reference to the following figures, wherein like reference numerals refer to like parts throughout the various views unless otherwise specified.

FIG. **1**A is a block diagram illustrating an operating environment for a multimedia content distribution system.

FIG. **1**B is a block diagram illustrating an alternative operating environment for a multimedia content distribution system.

FIG. **2** is a block diagram illustrating the software components of a multimedia content distribution system in an embodiment.

FIG. **3** is a block diagram illustrating a widget builder resource component used in a multimedia content distribution system in an embodiment.

FIG. **4** is a block diagram illustrating a content management component used in a multimedia content distribution system in an embodiment.

FIG. **5** is a block diagram illustrating a market management component used in a multimedia content distribution system in an embodiment.

FIG. **6** is a flow chart illustrating a method for uploading and converting multimedia content used in a multimedia content distribution system in an embodiment.

FIG. **7**A is a flow chart illustrating a method for creating marketable compilation of multimedia content in a multimedia content distribution system in an embodiment.

FIG. **7**B is a flow chart illustrating a method for updating content inventories in a multimedia content distribution system in an embodiment.

FIG. **8** is a flow chart illustrating a method for distributing multimedia content using a web widget in an embodiment.

FIG. **9** is a block diagram illustrating a web widget for distribution of multimedia content in an embodiment.

FIG. **10** is a block diagram illustrating an active web widget for distribution of a single musical song in an embodiment.

FIG. **11** is a block diagram illustrating an active web widget for distribution of a musical album including a compilation of musical songs in an embodiment.

FIG. **12** is a block diagram illustrating an active web widget operative to receive a purchase request in an embodiment.

FIG. **13** is a block diagram illustrating a purchase request confirmation in an active web widget in an embodiment.

FIG. **14** is a block diagram illustrating user access to a transaction processing service in an active web widget in an embodiment.

FIG. **15** is a block diagram illustrating a graphical button for viral distribution that provides access to a web widget in an embodiment.

DETAILED DESCRIPTION

In the description to follow, various aspects of embodiments web widgets and the computing and communications system which supports their ability to perform electronic commerce transactions will be described, and specific configurations will be set forth. Numerous and specific details are given to provide an understanding of these embodiments. The aspects disclosed herein can be practiced without one or more of the specific details, or with other methods, components, systems, services, etc. In other instances, structures or operations are not shown or described in detail to avoid obscuring relevant inventive aspects.

Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. Thus, the appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment. Furthermore, the particular features, structures, or characteristics may be combined in any suitable manner in one or more embodiments.

FIG. **1**A is an illustration of an operating environment for a multimedia content distribution system in an embodiment. In this operating environment **100**, one or more content distributor client devices **128**, one or more content owner client devices **126**, and one or more consumer client devices **130**, **132**, **134** are illustrated. Among the range of consumer client devices used for the distribution of multimedia content from the multimedia content distribution system are laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants (i.e., PDAs). As used here, the term "personal digital assistant" means both phone-enabled PDAs (i.e., smart phones) and non-phone enabled PDAs. Each of these client devices is communicatively coupled to a network **102** which provides secure computing and communications access through a server **104** executing a firewall software to an application server **106**, which in this embodiment acts as a centralized compute processing and transaction management resource. In the illustrated embodiment, the network **102** is the Internet. However, in other embodiments, the network **102** can be a private computer-communications network, a wireless communications network, or other computer data communications network that can enable communications between and among computer devices, mobile devices, the multimedia content distribution system and its infrastructure resources for storage and transaction processing.

The application server **106** is communicatively coupled to a database server **110**, a transaction processing service **112**, an email server **108** and a file management server **114**. The file management server is communicatively coupled to one or more computing resources that perform file virus scanning **116**, file transcoding **116** and file compression **120** for files which are stored on a cloud-based storage resource **124**. In an embodiment, the database server **110** is used to maintain a lookup table of all content files and related metadata which are stored on the cloud-based storage resource **124**. The file management server **114** is used to control the file conversion process from a first format in a received file to one or more transcoded formats. In an embodiment, a select subset of the transcoded files will then be compressed into a single file using file compression **120** and then stored on the cloud-based storage resource **124** along with related metadata for each file. In one embodiment, the files are compressed into a WinZip file for storage on the cloud-based storage resource **124**. The email server **108** is used in an embodiment to facilitate electronic mail communications between and among content owners and content distributors, as well as email broadcasts to groups of consumers and prospects. In addition to its role in managing the use of resources in the multimedia content distribution system, the application server **106** is also used for the creation of user account profiles, the execution of one or more web servers, and the execution of a content management system including a widget builder resource component and a market management component. The web servers are used to receive and respond to content related requests received from consumer client devices **130**, **132**, **134**.

In one embodiment, content owners using their client devices **126** upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**, **132**, **134** using compilation-specific web widgets that are created and capable of distribution from the application server **106**. In creating web widgets, the application server **106** will check the lookup table stored on the database server **110** to confirm the availability and format of content files included in or associated with the web widgets. This process is also followed when new buttons, links or preview clips are created by content owners for subsequent distribution from the application server **106**. The web servers executed on the application server **106** are used to respond to requests received from web widgets, buttons, links or preview clips executed or selected in browsers running on the consumer client devices **130**, **132**, **134**

The content distributor client devices **128** are used by content distributors to provide content distribution feeds to update the content inventories of content owners with active accounts in the multimedia content distribution system on the application server **106**. These inventories can be updated with content from distribution feeds upon request of the content owners or the operators of the multimedia content distribution system. In one embodiment, the distribution feeds provide content in bulk which is parsed by a content management system executed on the application server **106** to ensure that each content owner receives the content desired for inclusion in their respective content management systems. Each distribution feed is parsed and the content is allocated to each content owner's account as specified in the distribution feed. Once parsed, the content delivered in these distribution feeds is uploaded, master content files are transcoded to one or more alternative file formats preselected by content owners, the content files and their transcoded variants are stored in the cloud-based storage resource **124**, and references to the stored content files and transcoded variants are registered in one or more lookup tables maintained on the database server **110**. Once uploaded and registered on the database server **110**, the content included in these distribution feeds can be accessed and used by content owners to create new content compilations for association with web widgets using a widget builder resource component executed on the application server **106**. In an embodiment, a content compilation is an aggregation of one or more multimedia content files and associated metadata. Once created and associated with specific multimedia content and related metadata, these web widgets are

available for viral distribution by content owners to networks of current and potential consumers.

In one embodiment, the cloud-based storage resource **124** and the transaction processing service **112** are provided by the Amazon Web Services group at Amazon.com, Inc. More particularly, in the embodiment, the cloud-based storage resource is implemented using Amazon's "Simple Storage Service" (S3) which provides a data storage capacity that can be used to store and retrieve any amount of data, at any time, from anywhere on the World Wide Web. Likewise, in an embodiment, the transaction processing service **112** is implemented using Amazon's "Flexible Payments Service" (FPS) to facilitate the payment processing and checkout process once consumers decide to purchase and download content from virally distributed web widgets, buttons, links or preview clips. In this embodiment, the FPS is used to process payments from consumers who wish to purchase registered multimedia content promoted in virally distributed web widgets, buttons, links or preview clips using their credit cards, debit cards or bank account information. Furthermore, in an alternative embodiment, the file virus scanning **116**, file transcoding **118** and file compression **118** processes are implemented using Amazon's "Elastic Compute Cloud" (EC2) resources instead of dedicated, proprietary servers. The EC2 is a web service that provides resizable compute capacity in a cloud-based network that can be scaled to provide computing capacity for applications serving multiple client devices.

Consumers using browsers executing on their client devices **130**, **132**, **134** can activate web widgets directly or indirectly. A web widget can be activated indirectly if a consumer receives a button or link and then clicks on the button or link which results in the activation of a web widget. Likewise, a consumer can directly activate a web widget if it is received from the content owner or a third party who has opted to share or redistribute the web widget. Once activated, a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties or elect to purchase the multimedia content packaged with the web widget. If a consumer elects to purchase specific multimedia content files by clicking on an embedded buy button, then the web widget provides the consumer with a choice of format options and then redirects the consumer to the transaction processing service **112** for the provision of credit card, debit card or bank account information and completion of the purchase transaction. Once the purchase transaction is completed, the selected multimedia content files are downloaded by the web widget from the cloud-based storage resource **124** to the consumer's designated client device **130**, **132**, **134**.

FIG. **1**B is an alternative embodiment of the operating environment of the multimedia content distribution system **100**. In this operating environment, one or more web servers have been added as independent computing resources for use in receiving and responding to content related requests from various client devices **130**, **132**, **134**. This embodiment is computationally more efficient and enables the application server **106** to be dedicated to the operation of a content management system and the control of processes on the other servers used in this operating environment. As discussed above, these servers include an email server **108**, a database server **110**, a file management server **114**, and control over a transaction processing service **112** and content conversion services for file virus scanning **116**, file transcoding **118**, and file compression **120** for storage in the cloud-based storage resource **124**.

FIG. **2** is an illustration of an embodiment of a multimedia content distribution system **200**. In this embodiment, the system **200** is comprised of a content management system **202**, a data management service **208**, an analytics and reporting service **210**, a security service **212**, a transaction payment processing service **214**, a widget management service **216** and an accounting service **218**. The content management system **202** is comprised of three components, a widget builder resource component **204**, a content management component **220**, and a market management component **206**. The content management component **220** is used for the uploading of multimedia content, the editing of metadata related to the content and the creation of compilations of content into marketable packages that can be associated with one or more web widgets. In addition to controlling the uploading, editing and creation of content compilations through the content management component **220**, the content management system **202** also controls the processes applied to uploaded content files for virus scanning, file transcoding and file compression for storage in the cloud-based storage resource **124**. The widget builder resource component **204** is used to create various marketing resources including new web widgets, buy buttons, links and preview clips. In one embodiment, the buy buttons, links and preview clips are each communicatively coupled to a web widget so that the selection or clicking on a button, link or preview clip causes the activation of a web widget Once these marketing resources are created, content owners can use them in viral distribution marketing campaigns to promote their content compilations. The market management component **206** is used by content owners to assign market rules and pricing terms to selected items included in a content compilation. In one embodiment, the items include individual songs, song releases, or entire song catalogues. In a different embodiment, the items include reports, physical merchandising paraphernalia (e.g., cups, t-shirts, hats, etc.), and other electronic goods.

The data management service **208** is used to maintain a lookup table for use in tracking the locations of stored multimedia content files in the cloud-based storage resource, transcoded variants of these files, compressed files including one or more copies of content files and transcoded files, and files storing usage statistics collected by one or more web servers from the web widgets, buy buttons, links, preview clips or other marketing resources which are created and distributed by content owners and third parties. The analytics and reporting service **210** in one embodiment is a subcomponent of the data management service **210** and is used to analyze compiled analytical data, transaction statistics and location statistics for the marketing resources used by content owners in promoting their multimedia contents over one or more networks. More specifically, the analytics and reporting service **210** compiles transaction statistics and location statistics arising from the viral distribution of web widgets and related purchase transactions initiated and completed over web widgets which have been distributed over such networks. In an alternative embodiment, the analytics and reporting service is a stand-alone service which independently interacts with the data management service **210** and the one or more web servers comprising the widget management service **216** which are used for the tracking of web widgets and other marketing resources and the collection of usage statistics from these resources.

The security software service **212** provides content owners, distributor clients and consumer clients with secured access to the multimedia content distribution system **200** and its operating infrastructure. In one embodiment, the security

service **212** is implemented using firewall software to restrict access to the application server **106** and other computing resources used as part of the operating environment for the multimedia content distribution system **200**. The payment processing service **214** provides direct access to transaction processing resources for the completion of purchase transactions initiated by consumers who use web widgets to preview, purchase and download multimedia content. In one embodiment, the payment processing service **214** is provided by the Flexible Payment Service (FPS) offered by Amazon.com, Inc. The payment processing service **214** is used for the facilitation and execution of payment transactions using credit cards, debit cards or other bank account information.

The widget management service **216** is implemented on one or more web servers and is used for the tracking of web widgets which have been distributed to and activated on Internet websites or on other accessible locations and resources over other networks. Once a web widget has been distributed or activated from a link, buy button or preview clip, it can be further distributed in a "viral" fashion to other online communities, websites, forums, etc. In one embodiment, the widget management service **216** is implemented on web servers which are co-hosted on the application server **106**. In an alternative embodiment, the widget management service **216** is implemented on one or more independent web servers **136**. In both embodiments, however, the widget management service is used for receiving and responding to requests for multimedia content received from web widgets. In addition, the web servers implementing the widget management service **216** also perform data collection and activity monitoring on deployed web widgets. The data collected by the web servers includes transaction statistics, location statistics, usage statistics and other pertinent market statistics for each web widget which has been created, activated and distributed over the Internet, mobile networks or other computer communication networks by the content owner or third parties, such as consumers and members of their online social networks. Once a web widget is activated, the web servers implementing the widget management service **216** compile the data statistics into one or more files which are stored in the cloud-based storage resource **124** and a reference to the stored data collection files is created in the lookup table maintained by the data management service **208** and associated with the multimedia content files and any related transcoded files which have been packaged with each web widget for which the statistics have been collected. In an alternative embodiment, the one or more data collection files including the data statistics are stored on the database server **110** where the lookup table is maintained by the data management service **208**.

The accounting service **218** provides account transaction reconciliation for each content owner having an active account on the content management system **202**. By using the accounting service **218**, content owners can track the number and type of available content in their inventories of content files, the number of transactions performed relative to the total number of available content files, the number of transactions which have been returned for credit to consumers, the number of completed transactions, and revenue earned from completed transactions.

FIG. **3** depicts an embodiment of a widget builder resource component. The widget builder resource component **300** is used to create an inventory of "web widgets" **316**, buy buttons **310**, buy links **312** and preview clips **314**. In an embodiment, the web widget inventory **316** includes services for creating web widgets for packages of marketable multimedia content including, in one embodiment, full catalogs of digital music content, single releases of digital music content and single song digital music content. The widget builder resource component **300** is also used to create a merchandising widget **308** to promote a content owner's physical goods and related materials as marketing merchandise. Examples of such physical goods are coffee mugs, t-shirts, hats, jackets, etc. In the present embodiment, the web widgets pertain to musical content which is often compiled in the form of musical catalogs, musical releases, and single songs. A full catalog widget **302** is used for the promotion of the full musical catalog of a content owner. In one embodiment, the full catalog widget **302** is used to execute a video clip that provides a preview of the content in a content owner's inventory in the multimedia content distribution system **200** that is packaged with the web widget. The web widgets **302**, **304**, **306**, **308** are also used to facilitate electronic commerce transactions involving the purchase or licensing of multimedia content, such as musical selections as shown in this embodiment, in the specific groupings desired (i.e., catalog, release, or single song).

A single release widget **304** is used to promote a single musical release of a content owner from content stored in a content inventory of the multimedia content distribution system **200** in an embodiment. A single song widget **306** is used to promote a single song provided by a content owner in an embodiment. The merchandising widget **308** is used to promote the merchandise or physical goods that a content owner may choose to promote alone or in association with one or more multimedia content files in an embodiment. The merchandising widget **308** is used when a content owner seeks to create a fully custom content compilation which may include promoted merchandise or physical goods (e.g., cups, hats, t-shirts, etc.), a subset of content from specific releases as well as other content from the content owner's catalogue which is not included in any specific release. The buy buttons **310** are generated by content owners using the widget builder resource component **300** and linked to web widgets. The buy buttons **310** can be customized and distributed to online resources on the Internet, on mobile communication networks or on other computer networks for use in promoting the various groupings of multimedia content available from a content owner. Once a buy button **310** is clicked or selected by a consumer, it will activate its linked web widget and take the consumer to a checkout screen in the web widget. The buy links **312** are Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise. The preview clips **314** created in the widget builder resource component **300** are linked to web widgets but are designed to automatically execute video and audio clips in the browsers of consumer client devices **130**, **132**, **134** to enable those consumers to preview multimedia content and to make informed choices about the multimedia content they may elect to purchase and download to their client devices **130**, **132**, **134**, or to further distribute to third parties in the social networks of these consumers or in other online communities. Upon completion of an executing video clip, the linked web widget which will have been activated at the start of execution of the preview video clip will be displayed in the browsers of the consumer client devices **130**, **132**, **134** to aid the consumer in making a purchase or distribute decision.

FIG. **4** illustrates an embodiment of a content management component **400**. The content management component **400** is comprised of several services. The content distribution feed **402** is a service that enables content owners to request and receive distribution feeds from content distributors. The content provided by content distributors to content owners through such feeds is used to automatically update and supplement the content inventories of content owners in the content management system **202**. The metadata editor **404** is a service that enables content owners to edit the metadata associated with multimedia content files. In one embodiment, the type of metadata that can be edited includes information pertaining to the musical content of a content owner such as title, artist name, release date, genres, catalogue number and Universal Product Code. Image Content Uploader **406** is a service that uploads, store and registers image files provided by content owners for use in creating marketable compilations of content associated with web widgets. In one embodiment the types of image files which can be uploaded using the Image Content Uploader **406** are GIF files, JPEG files and TIF files. Audio Content Uploader **408** is used for uploading audio files. In an embodiment the audio file types that can be uploaded using the Audio Content Uploader **408** include WAV files and MP3 files. The compilation builder **410** is used by content owners to create custom compilations from the content available in the content inventories managed by the content management system **202**. In an embodiment, each content compilation created using the compilation builder **410** is associated with a web widget that will be distributed using the web distribution service **216** to consumers on the Internet, mobile communications networks, or other computer communications. Lastly, the content downloader **412** is used for controlling the downloading of the custom content compilations created by content owners which are packaged with and promoted through web widgets. Upon receipt of a content download request from a web widget, the content downloader **412** initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the cloud-based storage resource **124** or other storage in the multimedia content distribution system **200**, and it also controls the process of downloading the retrieved content compilations to a client device **130**, **132**, **134**.

FIG. **5** illustrates the services provided in an embodiment of a market management component **500**. As shown, one service is a territory manager **502** which is used by content owners to set the sales parameters and the timing of sales campaigns relating to specifically available content from a content owner in different geographic regions of the world. For example, a content owner may choose to provide a subset or only a particular release version of certain musical content for sales and marketing campaigns in Spain, Germany or France. While in other parts of the world, the content owner may choose to set different territorial restrictions on the availability of their content such as limiting the availability of musical content only to earlier releases rather than later releases in an entirely different part of the world, such as South America or in specific South American countries. The sales campaign manager **504** is another service provided in an embodiment of the market management component **500** that enables content owners to enable and disable sales campaigns by specified dates. The content pricing manager **506** is a service that allows content owners to set the pricing of particular files by file type. Although not limited only to musical content, in one embodiment the content pricing manager **506** is used to set pricing for MP3 file types and for WAV file types. Although the present embodiment is described with respect to the use of musical content stored in MP3 and .WAV file formats, the use of a content pricing manager **506** is not limited to the pricing of content for musical files or even to the pricing of files in these two types of file formats, but can be applied broadly to the pricing of content in image files, video files, audio book files, or video game files as well as in other file types and file formats of multimedia content generated by content owners.

FIG. **6** is a flow chart illustrating an embodiment of a process for uploading and transcoding multimedia content files. The process commences at step **600** and begins with the receipt of a content upload request **602** from one or more content owner client devices **126**. Upon receipt of an upload request, the content management system **202** begins the uploading of multimedia content files and associated metadata, as shown at step **604**. In one embodiment, associated metadata includes information about the multimedia content such as artist name, album title, song title release name or catalogue name. Continuing with this process, the content management system **202** will confirm whether each received content file is in a proper format for uploading to the multimedia content distribution system, as shown at step **606**. If the file format is improper, such as when the integrity of the file has been compromised, the process returns to step **604** for the continued uploading of the next multimedia content file and associated metadata. If the content is in a proper format, the process continues with a placement of each newly received content file into a queue, as shown at step **608**. After placement in the queue, the file will be scanned for viruses, as shown at step **610**, and a test will be applied to confirm whether the virus scan was passed, as shown at step **612**. If virus scanning is unsuccessful, the process will transmit a message to the content owner for display in the browser of a content owner client device **126** indicating that the virus scan failed, as shown at step **614**, and that the process will then end, as shown at step **616**. If the virus scan was passed, the process continues with the transcoding of the content file, as shown at step **618**. In an embodiment, the content owner can select one or more file formats for transcoding of each uploaded multimedia content file, which file formats may include Windows Media Audio (WMA), Advanced Audio Coding (AAC), Apple Lossless Audio Codec (ALAC), Free Lossless Audio Codec (FLAC), WMA Lossless and MP3. After a file has been transcoded, the process continues with the storing of the originally uploaded content file, referred to as a "master content file," and each transcoded file specified by a content owner. The master content file and any transcoded files are stored in the cloud-based storage resource **124**, as shown at step **620**. Upon completion of the storing of these files, the process updates a data base registration record, as shown at step **622**. The database registration record is maintained in a lookup table on a database server **110**. If multiple multimedia content files are uploaded, for example as part of an album upload or a catalogue upload, the process confirms whether the uploading has been completed, as shown at step **624**. If the process has not been completed, then the uploading will continue with the uploading of additional multimedia content files and associated metadata, as shown at step **604**. In one embodiment, if the upload process has been completed, the content owner can select a subset of the transcoded files of a given file type to be compressed into one file, as shown at decision step **626**. For example, in an embodiment, when a master content file in the .WAV format is uploaded, the content owner can have multiple transcoded

files (e.g., an MP3 format file, a WMA format file, an FLAC format file) created from the master content file during the transcoding process, shown at step **618**. After selection of the desired files, the content management system **202** will compress the transcoded files (e.g., the WMA format files) into a single compressed file, as shown at step **628**. In an embodiment, the selected subset of transcoded files is compressed into a Winzip file. Upon completion of the compression process, the compressed file is stored in the cloud-based storage resource **124**, as shown at step **630**, and the database registration record will be updated once again, as shown at step **632**, to identify the storage location of the compression file and its logical relationship to the master content file and related transcoded files. The process then ends, as shown at step **632**. Alternatively, if no files are selected for compression at decision step **626**, then the uploading and transcoding process will end, as shown at step **634**.

FIG. **7**A is an illustration of a process used by content owners to convert uploaded content files into marketable products for packaging with web widgets. In an embodiment, each uploaded content file represents an item for promotion and distribution. Each "item" is made available as a "product" for marketing purposes after being associated with a web widget. The process of creating products starts at step **702** and begins with a content owner creating a content compilation from uploaded content files and metadata, as shown in set **704**. Afterwards, the content owner assigns marketplace rules to the content compilation, as shown at step **706**, and then generates one or more web widgets, links, buttons, or preview clips to promote the content compilation, as shown at step **708**, and the process then ends, as shown at step **710**. The content compilation is the "product" for marketing and promotion purposes and the compilation may be comprised of one item (e.g., a single song), multiple items (e.g., the items comprising a musical "release" or a musical "catalog," etc.), identifiers of physical goods or marketing merchandise (e.g., cups, t-shirts, hats, a book of thematic poetry, etc.), or any combination of these items and identifiers. In one embodiment, the identifiers of physical goods or marketing merchandise are either a Universal Product Code (UPC), a Stock Keeping Unit (SKU) number, or a Globally Unique Identifier (GUID). In a different embodiment, the marketplace rules assigned by a content owner at step **706** can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, U K and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials.

FIG. **7**B is an illustration of a process for requesting and updating content inventories using distribution feeds. This process commences at step **712** and is initiated by the placement of a request for a distribution feed through the content management system **202** by a content owner, as shown step **714**. In one embodiment, content owners may explicitly request or opt to receive distribution feeds from content distributors with whom they have existing business relationships. In an alternative embodiment, the operators of the multimedia content distribution system **200** acting on behalf of one or more content owners can request distribution feeds for content owners to ensure that the content inventories maintained in the multimedia content distribution system **200** are updated and available for the creation of content compilations. As illustrated, once a distribution feed is received it is parsed for content and metadata, as shown at step **716**, and the content inventory or inventories maintained by content owners are updated, as shown at step **718**. Upon receipt and updating of one or more content inventories, the process ends, as shown at step **720**. Content distribution feeds received from distributor clients in one embodiment contain content from multiple artists including multiple content items such as songs, album content and catalogue content. The parsing of the distribution feed, as shown at step **716**, selectively parses this distribution feed according to content owner so that each content owner will have each of his or her content inventories automatically updated even though multiple content owners and multiple content files associated with each content owner may be included in a single distribution feed.

FIG. **8** is an illustration of a process for generating web widgets and distributing them over networks to facilitate the promotion, distribution and execution of purchase transactions for multimedia content using web widgets. This process commences as shown at step **802** with the generation of a widget as shown at step **804**. A content owner can generate one or more web widgets to promote different packages of multimedia content. In one embodiment in which the multimedia content consists of musical works, among the types of web widgets that can be generated are single song widgets, song release widgets, song catalogue widgets, and merchandising widgets. A single song widget is used to promote a single song of a content owner. A release widget is used to promote a compilation that includes multiple songs or multiple forms of content created by a content owner (e.g., a combination of musical selections, t-shirt, cup, hat and a book of the content owner's writings, etc.). A catalogue widget is used to promote the entire catalogue of creative works of a content owner. A merchandising widget is used to promote physical goods such as t-shirts, cups, carrying case, etc. that may be associated with the theme set by a content owner for a song, a release of songs, or the content owner's catalogue.

Upon generation of a new web widget, it can be distributed over the Internet or other network, as shown at step **806**, to a website where interested parties can activate it or further distribute it to third parties on a network. Once received within a browser on a client device, a web widget exists in an inactive mode but can be placed into an active mode when an end user clicks upon or makes a selection on the web widget, as shown at step **808**. In the case of laptop computers **130** and desktop computers **132**, the web widget can be executed in web browsers such as Internet Explorer, Firefox, Google Chrome, Safari, Opera and in other popular web browsers. On mobile client devices **134**, such as personal digital assistants, the web widget can be executed in browsers such as Microsoft IE for Mobile devices, Google Android, Bolt, Teashark, Safari and Opera Mini. In one alternative embodiment, a web widget can be activated when an end user clicks on a buy button, HTTP link or preview clips that is communicatively coupled to the web widget. Upon activation of a web widget, it will retrieve multimedia display files and the metadata associated with the multimedia content that has been packaged and associated with it, as shown at step **810**. Afterwards, the web widget will stream a portion of selected content, as shown at step **812**, so that the content portion can be previewed by the end user or consumer who has activated the web widget, as shown at step **814**. The selected content is determined from a selection request that includes one or more content selections made by the consumer or end user on the web widget. The multimedia display files are used to display visual representations of the multimedia content which is available to be previewed and purchased from within the web widget. In generating a selection request, a consumer will click on

a checkbox associated with content, or alternatively, click on one or more of the multimedia display files associated with each of the multimedia content files. In one embodiment of a web widget used for distribution of a musical catalogue, the multimedia display files include visual representations of the cover art used on each album in the musical catalogue. In other embodiments, the multimedia display files include visual representations of other types of works (e.g., book covers in a portfolio, artistic contributions in an art collection, etc.). With respect to content viewing, the segment of content used for streamed previewing and the duration of a streamed preview portion are pre-determined by the content owner or the content distributor. In one embodiment, the content previewed is a thirty second audio clip of a musical selection. In an alternative embodiment, the content previewed is a thirty second audio-visual clip of a multimedia content file. Once previewed, the consumer can elect to share the previewed content with third parties. In this case, if a share request has been received, as shown at step **824**, the web widget can be further distributed to one or more third party recipients, as shown at step **826**. In this manner the content of the artist associated with the web widget can be virally distributed to generate significant buzz or word of mouth marketing in online communities and in channels of prospective consumers whom the artist may have never considered for marketing purposes. Once distributed, the process ends as shown at step **822**. If a share request is not received then the web widget will remain in a dormant state and the process will end as shown at step **822**.

On the other hand, if after previewing the multimedia content, as shown at step **814**, a consumer chooses to initiate a commercial transaction pertaining to the multimedia content, such as a purchase or license of rights pertaining to the content, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will redirect the consumer to a web page to begin the purchase or license transaction for the selected multimedia content, as shown at step **818**. This web page will be coupled to the transaction processing service **112** so that the purchase transaction can be properly completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor operating the multimedia content distribution system **200** as an "approved vendor" with the banks, credit unions and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.), In this embodiment, the web widget will confirm that a purchase or license request has been received, as shown at step **816**, and will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget will automatically execute and complete the purchase or license transaction after a receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. All transactions completed through web widgets are tracked in the accounting service **218**, data collection will be performed on the types of transactions and the locations of the transactions by the web servers implementing the widget management service **216**, and an analysis of statistic trends will be performed and compiled by the analytics and reporting service **210**. In one embodiment, the statistical analysis is performed in an autonomous manner. In an alternative embodiment, the analysis of statistical trends is performed upon request by content owners. Once the purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device **130**, **132**, **134**, as shown at step **820**, and the process then ends, as shown at step **822**. Alternatively, if no purchase request is placed though a web widget, the web widget will remain in an inactivate state with no further processing, as shown at step **822**.

FIG. **9** is an illustration of a web widget in one embodiment. In this embodiment, the web widget **900** is shown in an inactive operational mode and includes an activation button **906** and the web widget **900** identifies the content owner name **902** (i.e., "Lenny White") and the name of the multimedia content file **904** (i.e., "Drum Boogie"). In the illustrated embodiment, clicking on the activation button **906** or on any location within the inactive web widget **900** will cause the retrieval of a multimedia display file and the metadata associated with the multimedia content file from the multimedia content distribution system **200** and start the preview of a pre-determined portion of the multimedia content file associated with the web widget. In an alternative embodiment, clicking on any location within the illustrated web widget **900** in an inactive operational mode will cause the web widget to enter an active operational mode. In one embodiment, the multimedia display file includes artwork or a graphic image which visually represents a cover for the content stored in the multimedia content file associated with the web widget **900**. A web widget is received over a network such as the Internet and viewed in a consumer's web browser executing on mobile, laptop or desktop client devices **130**, **132**, **134** such as Internet Explorer, Firefox, Google Chrome, Safari, Opera or other popular web browsers. The content owner may also elect to create an outer package for a web widget with artistic or illustrative materials as is shown in this embodiment.

FIG. **10** is an illustration of a web widget **1000** after a consumer clicks on the activation button **906** or on any location within an inactive web widget to thereby cause the web widget **1000** to enter an active operational mode. In this embodiment, the web widget **1000** includes a field for the content owner's name **1002** (i.e., Lenny White), the name of the musical selection or multimedia content file **1004**, a buy button **1006** which will enable the purchase of the multimedia content, which in this embodiment is the musical selection called "Drum Boogie." The web widget **1000** also includes the name of the distributor and the year of distribution **2010** (i.e., Abstractlogix/2010) and provides a field for limited previewing capabilities **1008**. As shown in this field **1008**, there is a play, pause and end-play button. All functionality provided by the web widget **1000** is performed within the browser on a consumer's client device **130**, **132**, **134**.

In the present embodiment, the web widget **1000** is comprised of a content retrieval component, a content preview component and a transaction processing component. Once the activation button **906** or any location in an inactive web widget is clicked on to thereby cause the web widget **1000** to enter the active operational mode, the content retrieval component will send a request to the widget management service **216** and commence with the retrieval of the multimedia display file and metadata for the multimedia content file which is associated with the web widget **1000** from the cloud-based storage resource **124**, the database server **110** or other storage resources which are accessible from the application server **106**. Once retrieved, a predetermined portion of the multimedia content file will be automatically executed by the content preview component to

enable the consumer to preview the content prior to making a purchase decision. In executing the pre-determined portion of the selected multimedia content file, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion in a web browser executing on a client device **130**, **132**, **134** used by the consumer. The duration and the specific segment of content included in the pre-determined portion of the multimedia content file that is made available for streamed execution on the client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase the multimedia content file, in this embodiment the "Buy Song" button will be clicked on which will cause the execution of the transaction processing component. The transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content file, which in the present embodiment will involve the licensing of the multimedia content file to the consumer. In an alternative embodiment, the commercial transaction is the purchase of rights to the multimedia content files. In both embodiments, however, the consummation of the commercial transaction will redirect a consumer to a third party web page shown within the web widget **1000** where the purchase or license transaction will be completed. In an alternative embodiment, the consumer can specifically pre-designate the vendor that operates the multimedia content distribution system **200** as an "approved vendor" with the banks and other financial institutions with which it maintains credit cards, debit cards or other financial accounts (e.g., checking accounts, savings accounts, trading accounts, etc.). In this embodiment, the web widget **1000** will confirm that a purchase or license request has been received and the web widget **1000** will automatically execute the purchase or license transaction after receipt of an information signal generated from a single click of a mouse by the consumer on a client device **130**, **132**, **134** and generate a web page confirming the terms and conditions of the transaction. In an alternative embodiment, the web widget **1000** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. In each of these embodiments, once the commercial transaction is completed, all portions of the multimedia content file will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **11** illustrates an embodiment of a web widget **1100** in an active operational mode for a release including multiple selections in an embodiment. All of the multimedia content files included in this embodiment of a web widget **1100** are illustrated and listed in region **1110** as an embedded electronic commerce store. Although the illustrated embodiment shows the multimedia content files as musical selections of an album, it should be apparent to those of ordinary skill in the art that the content of this embedded electronic store can include other types of works such as books, paintings, videos, e-books, audio-visual works, software applications, or other content or commercial products created for marketing and sampling purposes in this embedded store. Additional content files can be previewed using the vertical scroll bar shown on the right side of this illustrated web widget **1100**. As shown, there are multiple musical selections by an artist named Lenny White included within the web widget **1100**. This embodiment of the web widget **1100** also includes a play button **1104**, for use in previewing content that has been packaged with the web widget **1100** for promotional purposes. In this embodiment, a consumer can select individual content files (i.e., musical selections) and click on the play button **1104** to preview the selected files, or click on any content file listed in region **1110** to preview only the selected content file. The buy album button **1108** is shown in the same row as the play button **1104** in this embodiment. In addition, the name of the album **1102** (i.e., Anamoly) is shown in the row above the buy button **1104** and buy album **1108** button. As discussed previously, web widgets can be virally distributed and shared with third parties which has the effect of increasing the marketing buzz and name recognition for a content owner. This viral distribution capability is enabled by the share link **1106**, as illustrated in this embodiment, and it permits subsequent distribution of the web widget **1100** to other potential consumers in the current users online social networks or other online communities.

In this alternative embodiment, the web widget **1100** is comprised of a content search component, a content retrieval component, a content preview component and a transaction processing component. Once an activation button or any location in an inactive web widget is clicked on, the web widget **1100** will enter an active operational mode. After activation, the consumer is presented with the listing of multimedia content files included in the compilation associated with the active web widget **1100**. In this illustrative example, the listing includes the songs provided on the Anamoly album by Lenny White. In reviewing the listing of the content files, a consumer can elect to preview one or more of the content files. If the consumer selects one or more of the listed multimedia content files associated with the web widget **1100** for previewing, the content search component will be activated and configured to search for the selected multimedia content files, which files are accessible from the application server **106**. After the application server **106** locates the content files, the content retrieval component will send a retrieval request to the widget management service **216** and the widget management service **216** will generate and send a content download request to the application server **106** based on the received retrieval request. After receipt of the content download request from the widget management service **216**, the application server **106** will commence the retrieval of multimedia display files and metadata which are associated with the selected multimedia content files. In one embodiment, the multimedia display files include one or more graphic images of artwork which visually represent each song provided in an album widget (also referred to as a "single release widget" **304**). In an alternative embodiment, the multimedia display files include one or more graphic images of the artwork used on the album covers for each album included in a full catalog widget **302**. Once the multimedia display files and metadata are retrieved, a pre-determined portion of the selected multimedia content files will be automatically executed by the content preview component to enable the consumer to preview the content files prior to making a purchase decision. In executing the pre-determined portion of the selected multimedia content files, the content preview component will enable the multimedia content distribution system to perform a streamed execution of the pre-determined portion

in a web browser executing on a client device **130**, **132**, **134** used by the consumer in selecting the multimedia content files. The pre-determined portion of each multimedia content file which is made available for streamed execution on a client device is determined by either the content owner or the content distributor who is responsible for updating the content inventories of content owners having active accounts in the multimedia content distribution system **200** on the application server **106**. In one embodiment, the pre-determined portion is a thirty second audio clip of a musical selection. In an alternative embodiment, the pre-determined portion is a thirty second audio-visual clip of a multimedia content file. If the consumer elects to purchase or license the compilation of multimedia content files, which in this embodiment is an album containing multiple multimedia content files, the consumer will click on the "Buy Album" button **1108** which will result in the activation of the transaction processing component. In an embodiment, the transaction processing component will initiate, execute and complete a commercial transaction pertaining to the multimedia content files resulting in the payment of fees and, in this example, the licensing of the compilation of multimedia content files to the consumer. Consummation of the commercial transaction occurs after the consumer is redirected to a third party web page which is shown within the web widget **1100** where the purchase or license transaction will be completed. In a different embodiment, the web widget **1100** will automatically execute and complete the purchase or license transaction after receipt of an information signal generated from the pressing of a key on the client device **130**, **132**, **134** or a gesture on a touchpad provided on the client device **130**, **132**, **134**. Once the commercial transaction is complete, all portions of the content files in the compilation will be downloaded to the consumer client device **130**, **132**, **134** for full execution on the client device **130**, **132**, **134** by the consumer.

FIG. **12** is an illustration of a web widget depicting the different format options for content that can be purchased through the web widget **1200**. In this embodiment of the web widget **1200**, there is an MP3 version of the content file available for $0.99 and a separate buy button **1206**. There is also a .WAV format of the content file available for $0.99 and a separate buy button **1208** for that format file. The web widget **1200** also includes the name of the individual song **1204** (i.e., Drum Boogie) and the name of the artist **1202** (i.e., Lenny White).

FIG. **13** is an illustration of the screen shown in a web widget after clicking on a buy button. In this embodiment of a web widget **1300**, after a consumer selects the buy button **1206** to purchase the MP3 format file, a checkout screen appears within the web widget **1300** as shown in this figure. The checkout screen of this web widget **1300** includes the total cost of the content file and the number of files purchased, which items are shown in region **1304**. The name of the selection (i.e., "Drum Boogie"), the artist name (i.e., Lenny White), the format type (i.e., MP3), the number of files (i.e., 2 files) and the combined file size (i.e., 8.24 MB) are shown in region **1302**.

FIG. **14** is an illustration of a web page for a transaction processing service **112** in one embodiment. In the illustrated embodiment, the transaction page for the Amazon Flexible Payment Service (i.e., the "Amazon FPS") is shown. In this embodiment, this web page **1400** is the location where the consumer would enter credit card, debit card or bank account information to complete the purchase of the multimedia content file that is stored and available for download from the cloud-based storage resource **124** used in the operating environment with the multimedia content distribution system **200**. The Amazon FPS is only one of a number of third party transaction processing services that could be made compatible with the operating environment for the multimedia content distribution system **200**. In one alternative embodiment, the alternative transaction processing service can be any one of Authorize.Net, Google Checkout, Storm Pay, PayPal, or other Internet service for transaction processing. In yet another alternative embodiment, the transaction processing service **112** is implemented with a wholly internal, proprietary service that is not generally accessible over the Internet or other public computer communications networks. Each of the foregoing embodiments, however, illustrate how a portable web widget enables commerce through an embedded electronic commerce store regardless of the means used to complete a commercial transaction (i.e., external service such as Authorized.Net, etc. or an internal proprietary service).

FIG. **15** is an illustration of a buy button **1500** that can be distributed "virally" to consumers and third parties included in their online social networks. The buy button **1500** also identifies the file type (in this example it is an MP3 file type) and the price set by the content owner for the multimedia content file, as shown in field **1502**. Upon clicking on the buy button, a web widget will be activated and a checkout screen such as the one illustrated in FIG. **13** in the activated web widget will be displayed in the web browser on the consumer's client device **130**, **132**, **134**.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiments shown and described without departing from the scope of the present disclosure. This application is intended to cover any adaptations or variations of the embodiments discussed herein.

The invention claimed is:

1. A system for generating an electronic commerce store, comprising:

an application server configured to control a transaction processing service; and

a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product,

the application server configured to:

receive the information from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button;

distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application;

receive an indication that the clickable link has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

2. The system of claim **1**, wherein the metadata includes at least one of a title, a description, or a price.

3. The system of claim 1, wherein the remote computing device is a mobile device.

4. The system of claim 1, wherein the information is selected from a group consisting of an image, a video, and a multimedia file.

5. The system of claim 1, wherein the product listing includes a share link.

6. The system of claim 5, wherein when the application server receives an indication that the share link has been selected activated by the remote computing device, the application server distributes the product listing to a social media network.

7. The system of claim 1, wherein the transaction processing service is a proprietary service controlled by the application server.

8. The system of claim 1, wherein the application server includes one or more servers.

9. A system for generating an electronic commerce store, comprising:

an application server configured to control a transaction processing service; and

a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product,

the application server configured to:

receive the information from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information and (ii) a clickable link, wherein the clickable link comprises a buy button;

distribute the product listing to a web site operated by the application server or to a distributed application not operated by the application server;

receive an indication that the clickable link has been selected by a remote computing device; and

provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

10. The system of claim 9, wherein the metadata includes at least one of a title, a description, or a price.

11. The system of claim 9, wherein the remote computing device is a mobile device.

12. The system of claim 9, wherein the information is selected from a group consisting of an image, a video, and a multimedia file.

13. The system of claim 9, wherein the product listing includes a share link.

14. The system of claim 13, wherein when the application server receives an indication that the share link has been selected by the remote computing device, the application server distributes the product listing to a social media network.

15. A system for generating an electronic commerce store, comprising:

an application server configured to control a transaction processing service; and

a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising: (i) multimedia content associated with the product and (ii) metadata associated with the product,

the application server configured to:

receive the information from the storage resource;

execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button;

distribute the product listing to a web site or to a social media network;

receive an indication that the clickable link has been selected by a remote computing device; and

provide a checkout screen to the remote computing device for purchasing the product, wherein transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.

16. The system of claim 15, wherein the metadata includes at least one of a title, a description, or a price.

17. The system of claim 15, wherein the remote computing device is a mobile device.

18. The system of claim 15, wherein the information is selected from a group consisting of an image, a video, and a multimedia file.

19. The system of claim 15, wherein the product listing includes a share link.

20. The system of claim 19, wherein when the application server receives an indication that the share link has been selected by the remote computing device, the application server distributes the product listing to a second remote computing device.

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

DKR CONSULTING LLC, *Plaintiff*, v. SHOPIFY, INC., *Defendant*.	Case No. 2:23-cv-6904 **COMPLAINT FOR PATENT INFRINGEMENT** ***JURY TRIAL DEMANDED***

Plaintiff DKR Consulting, LLC ("DKR") files this Complaint against Shopify, Inc. ("Shopify") for patent infringement of United States Patent No. 10,846,785, No. 11,157,995, No. 11,455,678, and No. 11,488,237 (collectively the "patents-in-suit") and alleges as follows:

JURISDICTION

1. This action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq*. This Court therefore has subject matter jurisdiction under 28 U.S.C. § 1331 (federal question) and § 1338(a) (patents).

THE PARTIES

2. Plaintiff DKR is a limited liability company organized under the laws of the State of North Carolina with its principal place of business at 1101 Granville Road, Charlotte, North Carolina.

3. Plaintiff's principal, Mr. David K. Robb ("Mr. Robb") was the CEO/Owner of DIY Media, Inc., which previously owned the patents-in-suit.

4. DIY Media, Inc. had a business relationship with the Defendant, which among other things included having DIY Media's Shoppost platform integrated with Shopify's platform for a period of time.

5. On information and belief, Defendant Shopify is a Canadian company with a principal address at 150 Elgin Street, 8th Floor, Ottawa, ON K2P 1L4, Canada.

PERSONAL JURISDICTION AND VENUE

6. On information and belief, Shopify is subject to this Court's personal jurisdiction, in accordance with due process and/or the California Long Arm Statute because, in part, Shopify has committed, and continues to commit, acts of infringement in the State of California, has conducted business in the State of California, and/or has engaged in continuous and systemic activities in the State of California.

7. On information and belief, Shopify makes, uses, offers to sell, or sells a variety of products and services that rely, utilize, and/or employ in whole or in part functionality relating to an e-commerce store including without limitation, Shopify's E-commerce app, products and services incorporating in whole or in part Shopify's Admin API,[1] products and services incorporating in whole or in part Shopify's Storefront API,[2]

[1] *See e.g.*, https://shopify.dev/api/admin.
[2] *See e.g.*, https://shopify.dev/api/storefront.

products and services incorporating in whole or in part Shopify's Partner API,[3] products and services incorporating in whole or in part Shopify's Payment Apps API,[4] products and services incorporating in whole or in part Shopify's Marketplaces API,[5] Shopify's Buy-Button,[6] Shop Pay,[7] among other Shopify products and service offerings that operate in a substantially similar manner to the above referenced examples (hereinafter referred to collectively and individually as the "Shopify e-commerce Products and Services".)

8. On information and belief, the accused Shopify e-commerce Products and Services infringe one or more claims of each of the patents-in suit.

9. This Court has personal jurisdiction over Shopify because it committed and continues to commit acts of infringement in this judicial district in violation of 35 U.S.C. § 271(a) and (b). In particular, on information and belief, Shopify has made, used, offered to sell and/or sold infringing products, services and/or systems in this judicial district, including the accused Shopify e-commerce Products and Services.

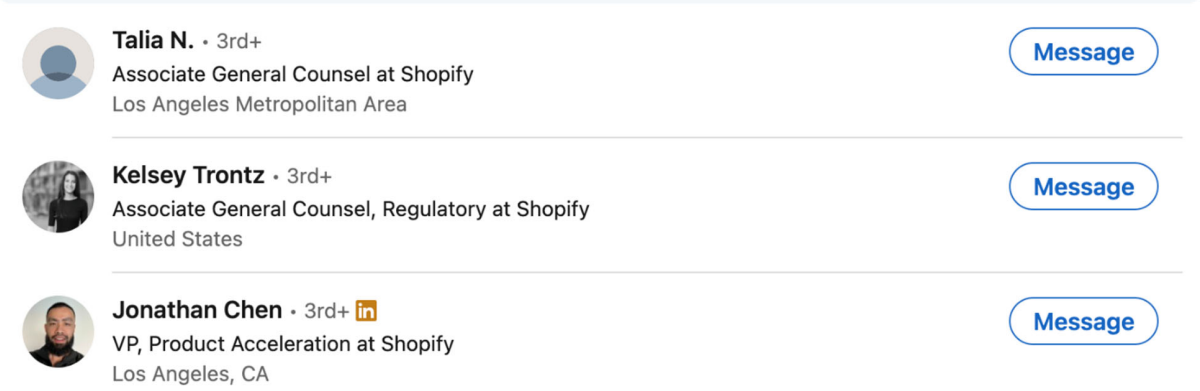
10. On information and belief, Shopify is subject to the Court's jurisdiction because it regularly conducts and solicits business, or otherwise engages in a persistent courses of conduct in this district, and/or derives substantial revenue from the sale and distribution of goods and services provided to individuals and businesses in this district.

11. This Court has personal jurisdiction over Shopify because, on information and belief, Shopify: (1) has committed acts of patent

[3] *See e.g.*, https://shopify.dev/api/partner.
[4] *See e.g.*, https://shopify.dev/api/payments-apps.
[5] *See e.g.*, https://shopify.dev/api/marketplaces.
[6] *See e.g.*, https://www.shopify.com/buy-button.
[7] *See e.g.*, https://shop.app/shop-pay.

infringement in this judicial district, (2) has substantial, continuous, and systematic contacts with this State and this judicial district; (3) owns, manages, and operates facilities in this State and this judicial district; (4) enjoys substantial income from its operations and sales in this State and this judicial district; (5) employs California residents in this State, and (6) solicits business and markets products, systems and/or services in this State and judicial district including, without limitation, the infringing Shopify e-commerce Products and Services.

12. Venue is also proper pursuant to 28 U.S.C. § 1391(b), (c)(3), or (d) and/or 28 U.S.C. § 1400(b) and the Federal Circuit's decision in *In re Monolithic Power Sys.*, 50 F.4th 157 (Fed. Cir. 2022), at least because, upon information and belief, Shopify has multiple employees based out of this district (see screenshot below of a search conducted on LinkedIn).



13. Venue is proper also because Shopify has transacted business in this district and has directly committed acts of patent infringement in this district, and because Shopify is a foreign corporation not residing in a United States judicial district, and, therefore, may be sued in any judicial district in accordance with 28 U.S.C. § 1391(c)(3).

SHOPIFY'S WILLFUL INFRINGEMENT

14. Before and/or during development of the infringing Shopify technologies, (a) Shopify was in possession of DIY Media's confidential technical information, which is the subject of the patents-in-suit and (b) on information and belief, Shopify had knowledge of DIY Media's pending patent applications and the asserted patents as they were issued.

15. Shopify obtained DIY Media's confidential technical information through meetings/discussions with DIY Media when the parties were discussing potential technical and business collaborations from around 2011 to 2015.

16. Meetings to discuss the ways to integrate Shopify with Shoppost were conducted starting in or around 2011.

17. The parties met at SxSW in Austin in 2013 to further discuss the potential relationship between the companies, as well as features for upcoming releases.

18. The patent applications that were filed at the time DIY Media and Shopify were having discussions, as well as their progeny, are the patents-in-suit.

19. A Shopify/Shoppost partnership began in March 2014, and this was Shopify's first integration partner within an e-Commerce platform ecosystem.

20. From July 9, 2014, to July 19, 2014, DIY Media's Shoppost app was promoted by Shopify and placed on the homepage of their app store.

21. In late 2016, Shopify created a feature that exactly mirrored the functionality of Shoppost, knowing that this was DIY Media's patented technology.

THE ASSERTED PATENTS

United States Patent No. 11,455,678

22. On September 27, 2022, the United States Patent and Trademark Office ("USPTO") duly and legally issued United States Patent No. 11,455,678 ("the '678 patent") entitled "System and Method for Distributable E-Commerce Product Listings" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

23. The '678 patent is presumed valid under 35 U.S.C. § 282.

24. DKR owns all rights, title, and interest in the '678 patent.

25. DKR has not granted Shopify a license to the rights under the '678 patent.

26. In the background section, the '678 patent notes that "consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories." The patent further recognizes that, at the same time, "the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities." *See* '678 patent at col. 1, *ll*. 25-45.

27. The patent refers to this trend as the viral distribution of content with recommendations and referrals. *See id.* at col. 1, *ll*. 45-50.

28. The patent observed that at the time of the invention, viral distribution of content focused on the use of electronic mail and there was a need for "enhanced capabilities to distribute content in a more immediate and engaging manner."

29. The patent identified web widgets as a way to address the need but decried the limited functionality of current web widgets. *Id*. at col. 2, *ll*. 1-6.

30. For this reason, the patent noted that "there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." *Id*. at col. 2, *ll*. 7-17.

31. The claimed invention(s) of the '678 patent sought to solve problems with, and improve upon, existing web widgets. For example, the '678 patent states:

> Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

See '678 patent at col. 2, *ll*. 7-18.

32. Accordingly, the '678 patent describes, among other things, the creation, distribution, and use of an enhanced web widget to provide multimedia content over a computer network.

33. The '678 patent describes as one implementation, among other things, configuring the enhanced widget as an embeddable buy button to complete a commercial transaction in an e-commerce store.

34. The specification of the '678 patent and the invention(s) claimed in the patent detail and solve *inter alia* various technological problems inherent in the distribution of multimedia content over a computer communications network by creating an enhanced widget that (1) allowed

for buying items over the Internet, (2) could be transported, shared or embedded on essentially any social media platform, (3) allowed for retrieval of content, (4) contained a transaction processing component operative to execute and complete a commercial transaction in the embedded electronic commerce store pertaining to the multimedia content files, and (5) allowed merchants to track purchases as it generated a unique URL every time it was shared.

United States Patent No. 10,846,785

35. On November 24, 2020, the USPTO duly and legally issued United States Patent No. 10,846,785 ("the '785 patent") entitled "System and Method for Generating and Distributing Embeddable Buy Buttons" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

36. The '785 patent is presumed valid under 35 U.S.C. § 282.

37. DKR owns all rights, title, and interest in the '785 patent.

38. DKR has not granted Shopify a license to the rights under the '785 patent.

39. The '785 patent relates to, among other things, an embeddable buy button to complete a commercial transaction in an e-commerce store.

40. The invention(s) claimed in the '785 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

United States Patent No. 11,157,995

41. On October 26, 2021, the USPTO duly and legally issued United States Patent No. 11,157,995 ("the '995 patent") entitled "System and Method for Generating and Distributing Embeddable Electronic Commerce Stores" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodrigues, Quinton Richard Harris, and Benjamin Cook.

42. The '995 patent is presumed valid under 35 U.S.C. § 282.

43. DKR owns all rights, title, and interest in the '995 patent.

44. DKR has not granted Shopify a license to the rights under the '995 patent.

45. The '995 patent relates to, among other things, generating an embeddable electronic commerce store.

46. The invention(s) claimed in the '995 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

United States Patent No. 11,488,237

47. On November 1, 2022, the USPTO duly and legally issued United States Patent No. 11,488,237 ("the '237 patent") entitled "System and Method for Facilitating Social Shopping" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

48. The '237 patent is presumed valid under 35 U.S.C. § 282.

49. DKR owns all rights, title, and interest in the '237 patent.

50. DKR has not granted Shopify a license to the rights under the '237 patent.

51. The '237 patent relates to, among other things, a portable web widget for distribution of e-commerce content.

52. The invention(s) claimed in the '237 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

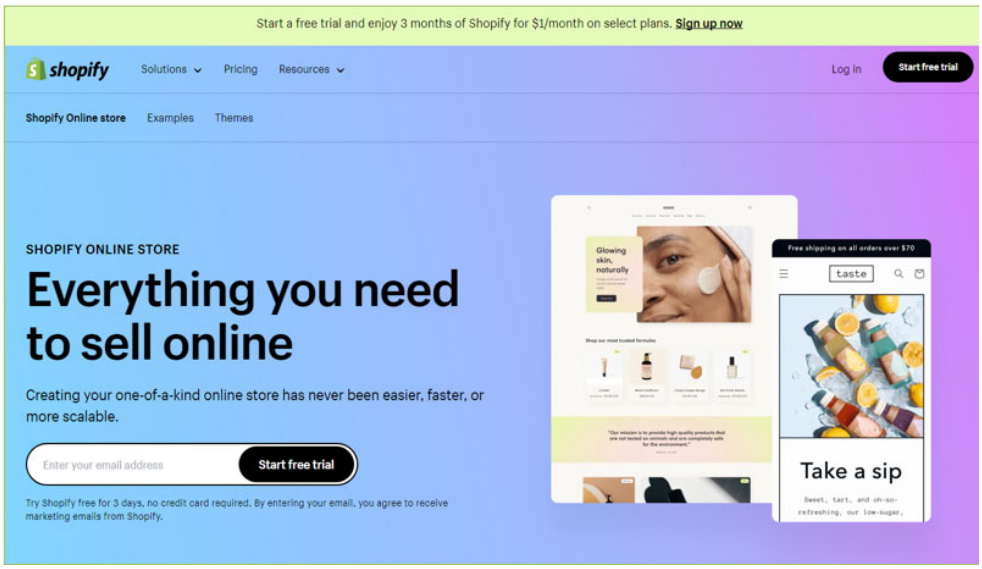
CLAIMS FOR RELIEF

Count I Infringement of United States Patent No. 11,455,678

53. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

54. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '678 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

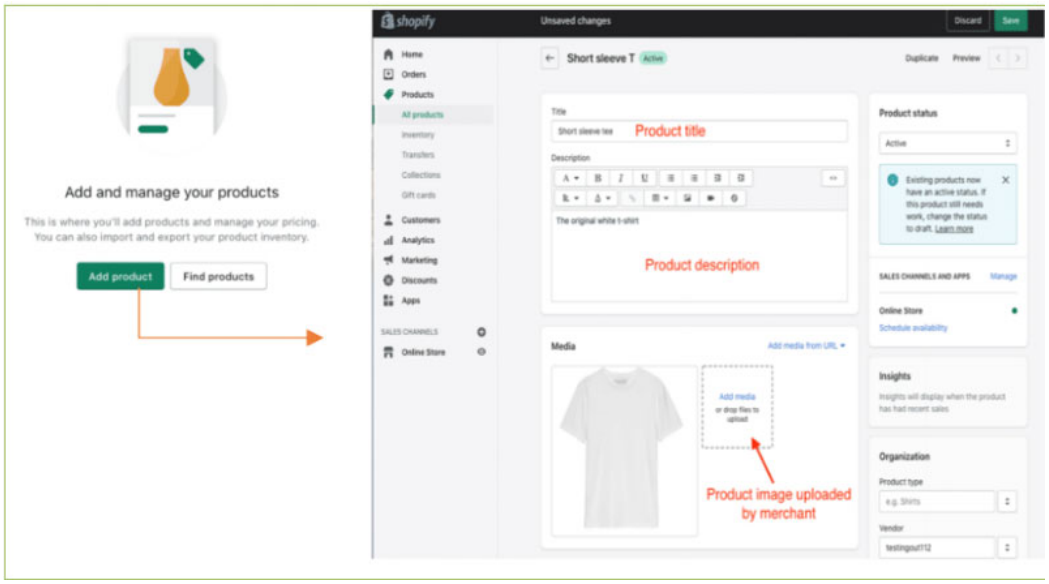
55. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for distributing multimedia content over a network comprising a server configured to control a transaction processing service.



See e.g., https://www.shopify.com/online.

56. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for distributing multimedia content over a network comprising a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata.

///



See e.g., adding images, descriptions and metadata for each product.

57. On information and belief, the Shopify e-commerce Products and Services employ and provide a system where the server is configured to receive the item from the storage resource.

Setting up your online store

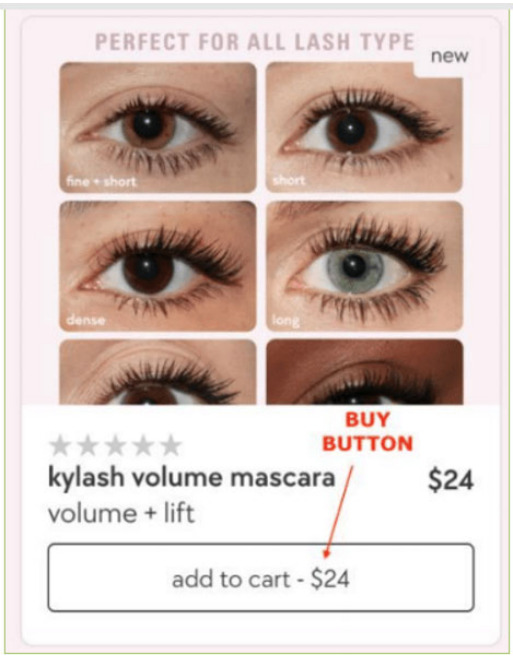
After you've set up Shopify, most of the work is done.

- Your online store will automatically use your Shopify settings for checkout and order fulfillment.
- Your products will automatically appear on your online store.
- Your online store is automatically assigned a unique `.myshopify.com` domain name, or website address. You domain name looks like `your-store-name.myshopify.com` and it's based on either the store name that you entered when you signed up or the domain name that was autogenerated if you did not enter a store name at that time. You can change your `.myshopify.com` domain name one time after you sign up for Shopify. Learn more about changing your `.myshopify.com` domain name.

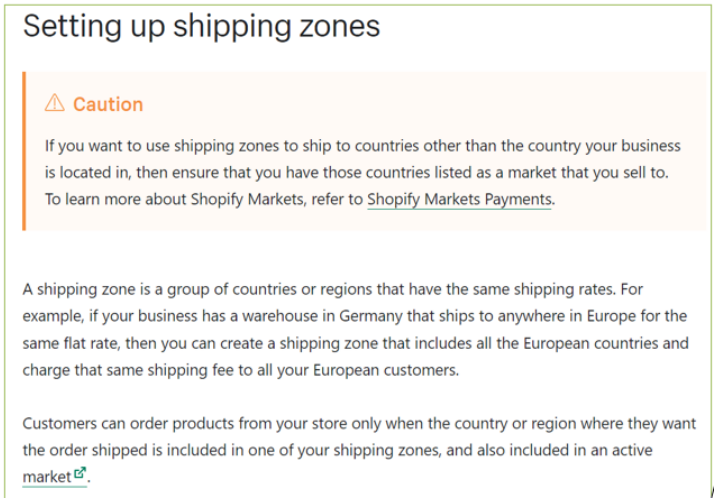
See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

58. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to execute a widget builder resource configured to generate a product listing, wherein the product

listing includes information associated with the item, a marketplace rule, and a clickable buy button.



See e.g., of Kylie Cosmetics, powered by Shopify, https://kyliecosmetics.com/.



See e.g., https://help.shopify.com/en/manual/shipping/setting-up-and-managing-your-shipping/setting-up-shipping-zones.

Discounts

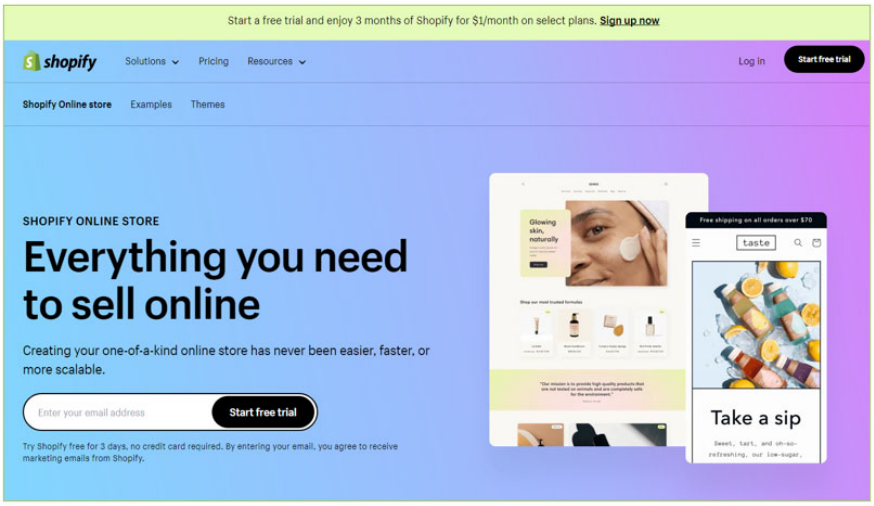
Offering discounts can be a marketing strategy that you use to drive sales in your Shopify store. To offer discounts, you can create discount codes, set up automatic discounts, or set sale prices for individual products.

You can create codes for a dollar value discount, a percentage discount, a buy X get Y discount, or a free shipping discount. Customers can enter discount codes online at checkout, or in person if you're using Shopify POS.

You can update and manage existing discounts from the **Discounts** page in Shopify. Before you update a discount, check if another staff member might also be making changes to the same discount.

See e.g., https://help.shopify.com/en/manual/discounts.

59. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on a marketplace rule.



See e.g., https://www.shopify.com/online.

Sales channels

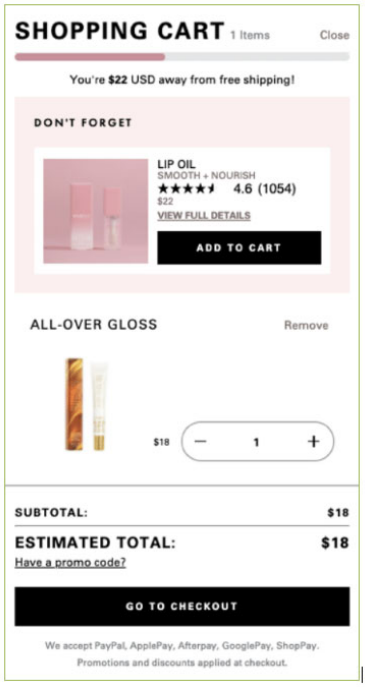
You can use Shopify to sell your products on different online **sales channels**. Sales channels represent the different platforms where you sell your products. By connecting each sales channel to Shopify, you can keep track of your products, orders, and customers in one place.

After you add a sales channel, it will be listed under **Sales Channels** in Shopify.

Facebook	Post and sell your products directly from the **Shop** tab on your store's Facebook page.
Instagram	Sell your products on Instagram by tagging them when they appear in your Instagram posts.

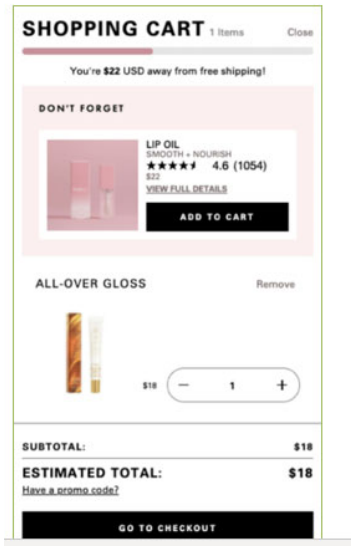
See e.g., https://help.shopify.com/en/manual/online-sales-channels.

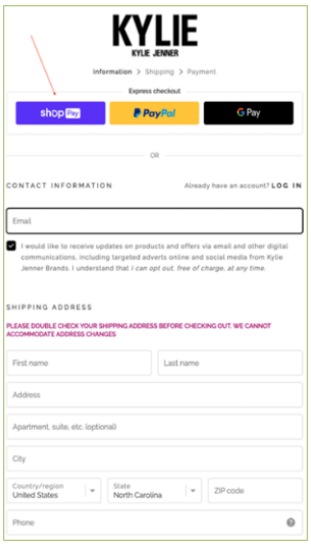
60. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to receive an indication that the clickable buy button has been selected by a remote computing device.



See, e.g., screenshots from Kylie Cosmetics' Instagram store, powered by Shopify.

61. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.





See e.g., screenshots from Kylie Cosmetics' Instagram store, where items are purchased through ShopPay, both of which are powered by Shopify.

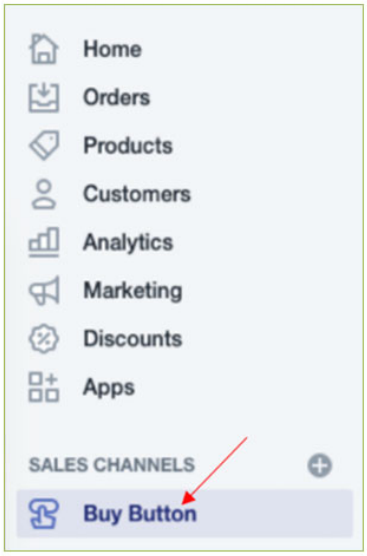
62. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

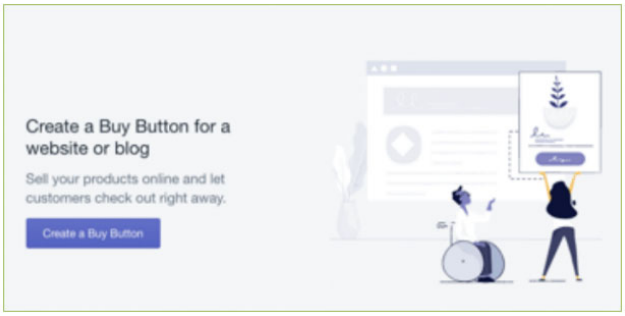
Count II – Infringement of United States Patent No. 10,846,785

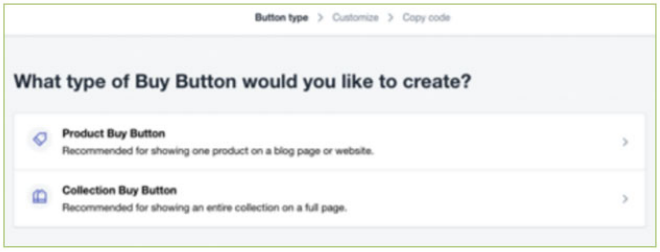
63. DKR realleges,and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

64. On information and belief, Shopify infringe (literally and/or under the doctrine of equivalents) at least claim 1 of the '785 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

65. On information and belief, the Shopify e-commerce Products and Services employ and provide a method for embedding a buy button for an electronic commerce store.

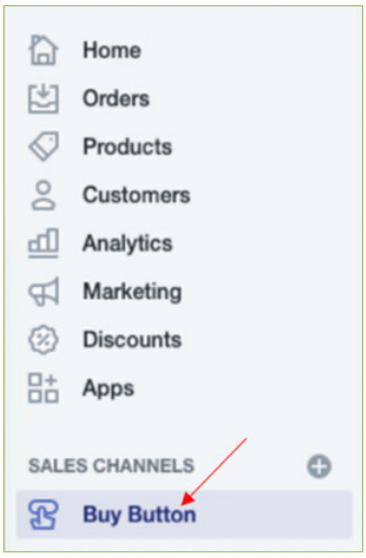


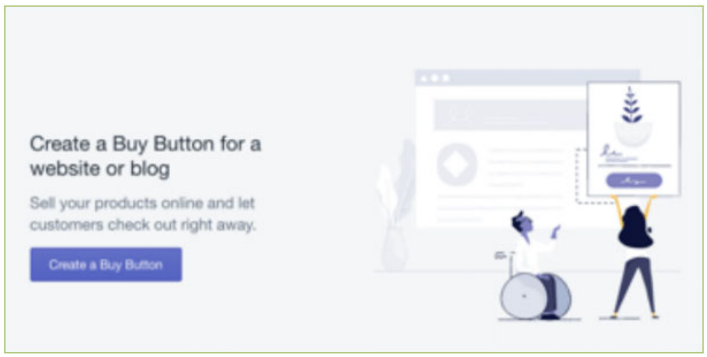


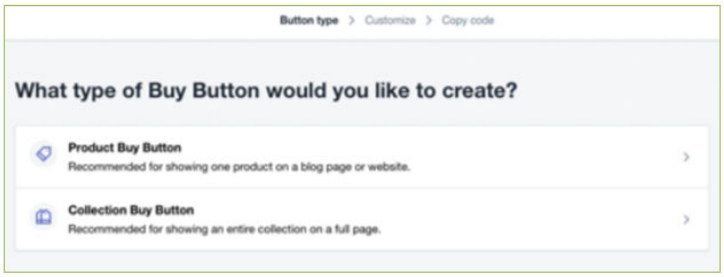


See e.g., https://www.shopify.com/buy-button.

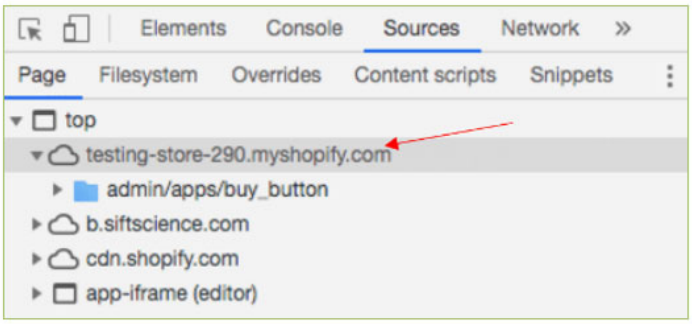
66. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that comprises receiving, by an embeddable buy button builder execution on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store.



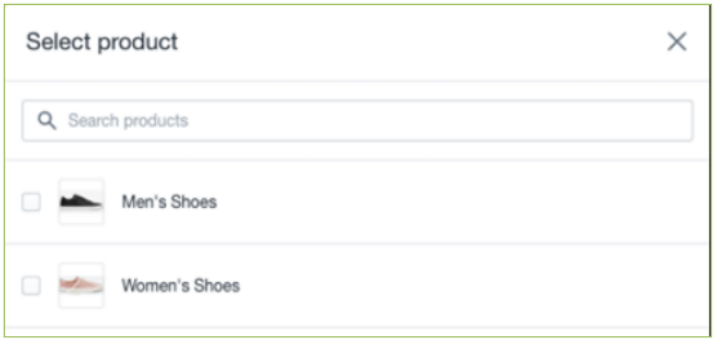




See e.g., https://www.shopify.com/buy-button.

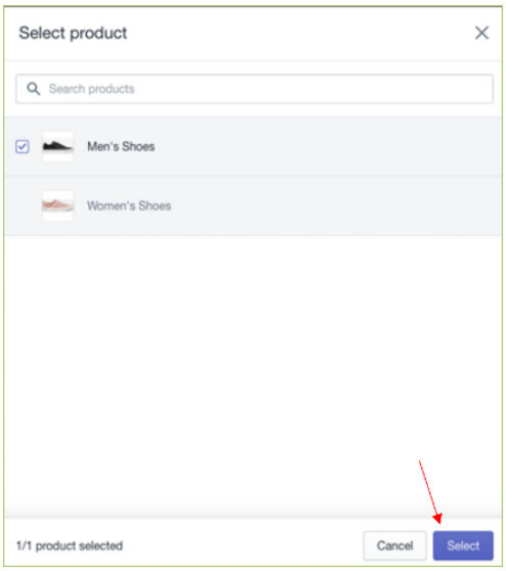


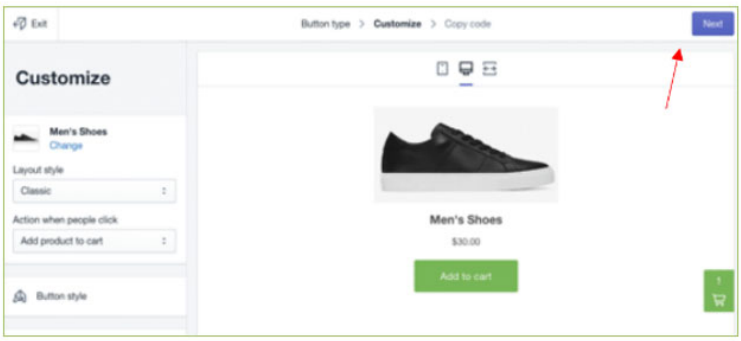
See e.g., server information from a source code inspector tool while accessing the Shopify Buy button builder.



See e.g., inventory selection of an item from the Shopify Product Buy Button.

67. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that generates, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink.







See e.g., dialog boxes from Shopify's Buy Button builder that are used to generate Buy Button embedded code.

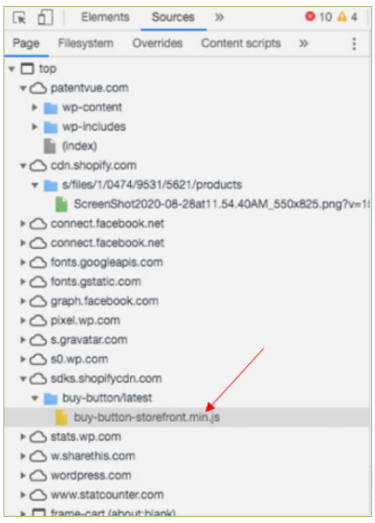
68. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that embeds, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider.

```
<script data-shopify-buy-ui>
   var scriptURL = 'https://sdks.shopifycdn.com/buy-
button/latest/buy-button-storefront.min.js';
    if (window.ShopifyBuy && window.ShopifyBuy.UI) {
      ShopifyBuyInit();
    } else {
      var script = document.createElement('script');
      script.async = true;
      script.src = scriptURL;
      (document.getElementsByTagName('head')[0] ||
document.getElementsByTagName('body')[0]).appendChild(script);
      script.onload = ShopifyBuyInit;
    }

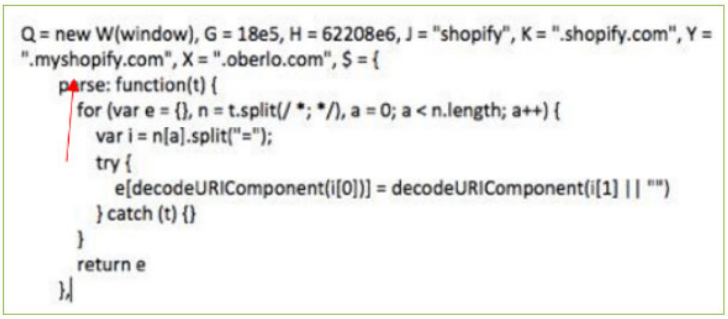
    function ShopifyBuyInit() {
      var client = ShopifyBuy.buildClient({
        domain: 'testing-store-290.myshopify.com',
        storefrontAccessToken: '0a1977566039b9a647b6db514f55b01d'
      });

      ShopifyBuy.UI.onReady(client).then(function (ui) {
        ui.createComponent('product', {
          id: 12345,
          options: {
            product: {
              buttonDestination: 'cart',
              contents: {
                description: true
              },
```

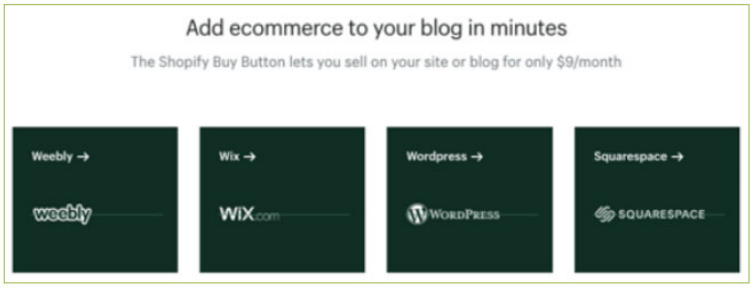
See e.g., source code from Shopify Buy Button in an externally hosted website.



See e.g., server information from a source code inspector tool while accessing the Shopify Buy button builder.

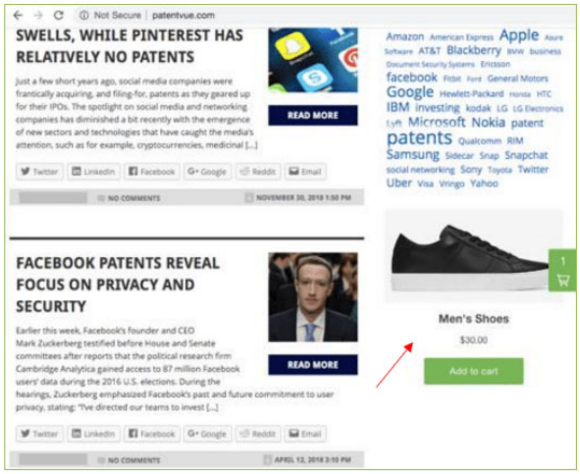


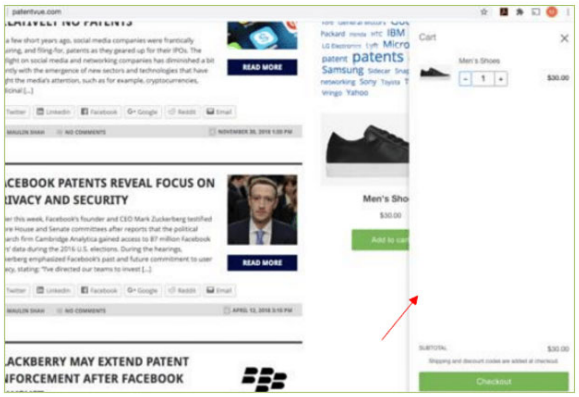
See e.g., the JavaScript file code showing the server associated with the origin domain.



See e.g., https://www.shopify.com/buy-button.

69. On information and belief, the Shopify e-commerce Products and Services employ and provide a method where the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.





See e.g., a Wordpress blog displaying the Shopify Buy Button, on a blog hosted by Wordpress.org.

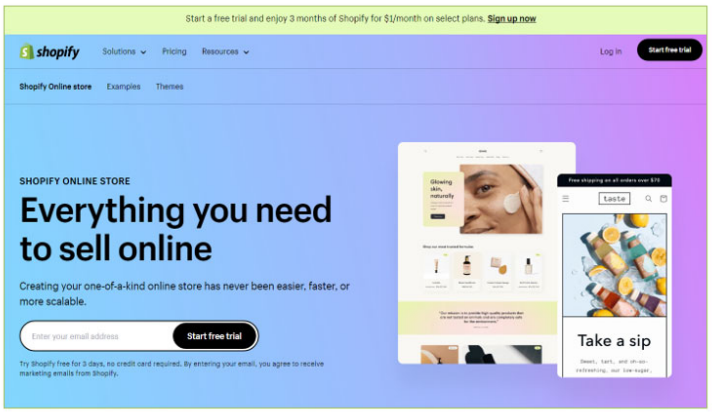
70. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

Count III – Infringement of United States Patent No. 11,157,995

71. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

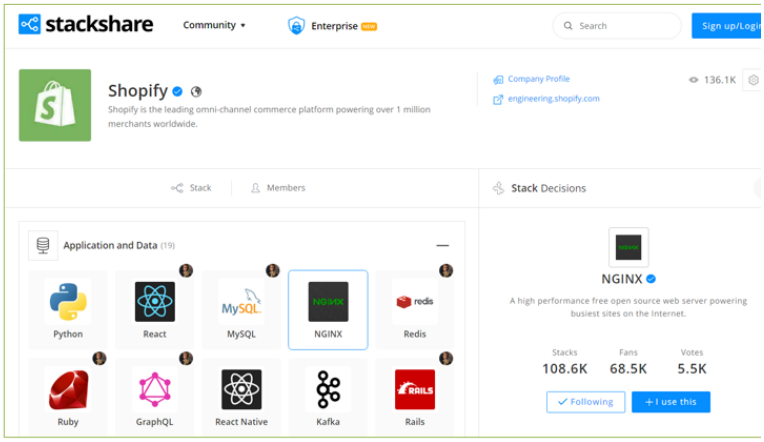
72. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '995 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

73. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of generating an electronic commerce store.



See e.g., https://www.shopify.com/online.

74. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of controlling a transaction processing service.

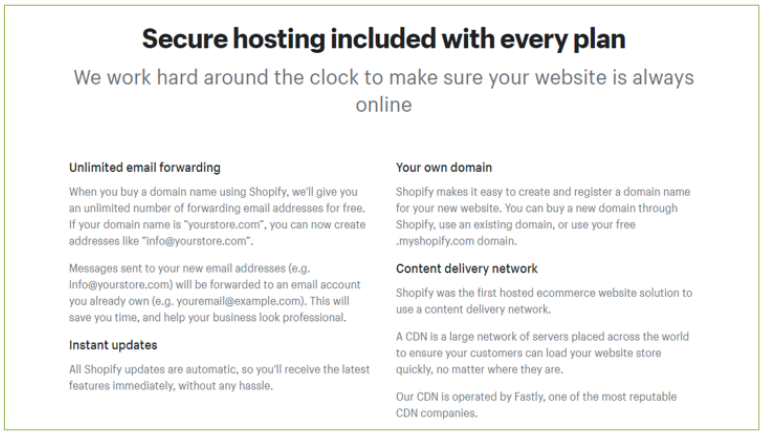


See e.g., https://stackshare.io/shopify/shopify, for Shopify's utilization of NGINX web servers.

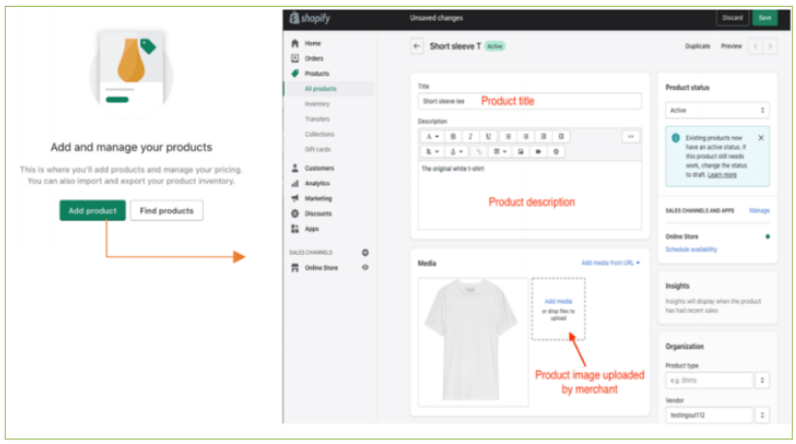


See e.g., https://shop.app/shop-pay.

75. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a storage resource communicatively coupled to the application server, the storage resource storing an image and metadata related to a product.

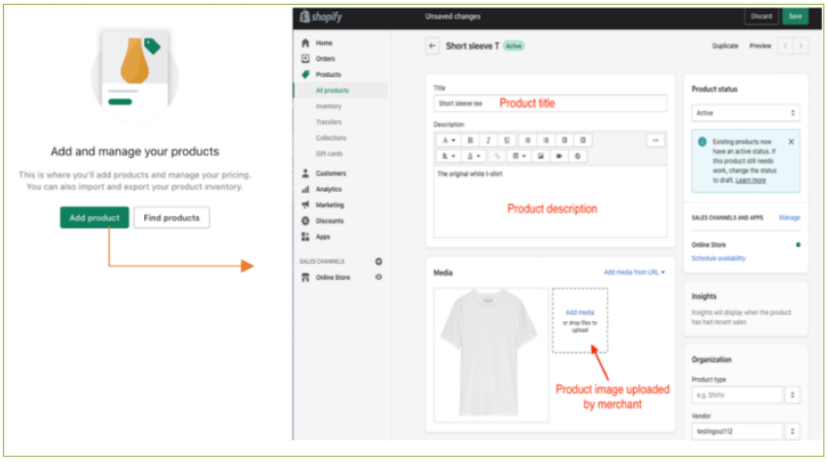


See e.g., https://www.shopify.com/website/hosting.

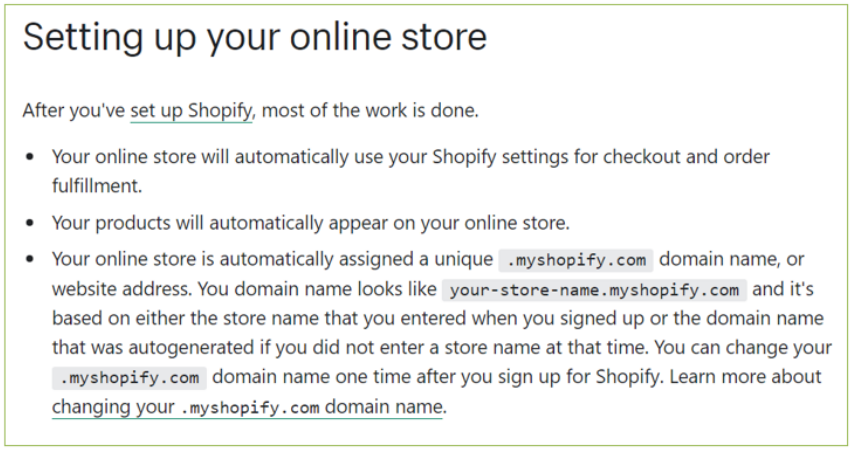


See e.g., adding images, descriptions, and metadata for each product.

76. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, the widget builder resource configured to receive the image and metadata from the storage resource.

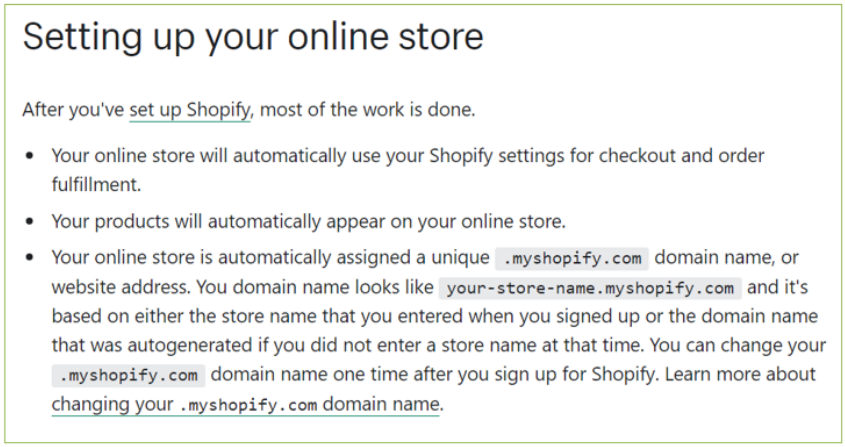


See e.g., adding images, descriptions, and metadata for each product.



See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

77. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, the widget builder resource configured to generate a product listing, wherein the product listing includes the image, the metadata and a clickable link, wherein the clickable link is a buy button and includes a preview of the product.

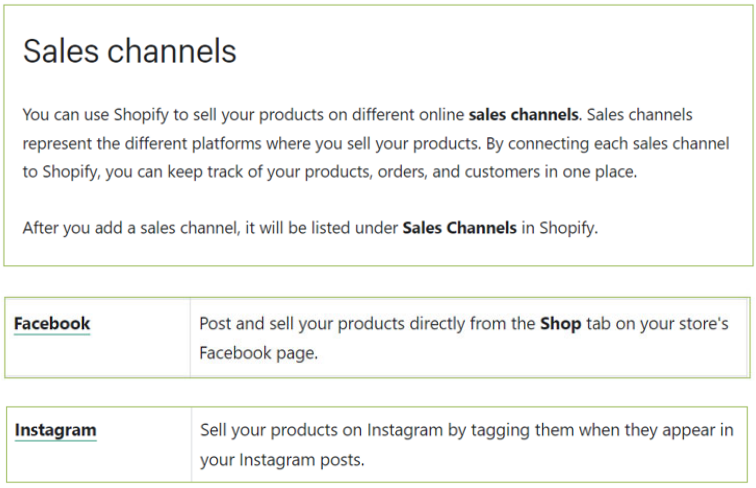


See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.



See e.g., https://kyliecosmetics.com/.

78. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, where the application server is configured to embed the product listing into a web site, and into a social media network.



Sales channels

You can use Shopify to sell your products on different online **sales channels**. Sales channels represent the different platforms where you sell your products. By connecting each sales channel to Shopify, you can keep track of your products, orders, and customers in one place.

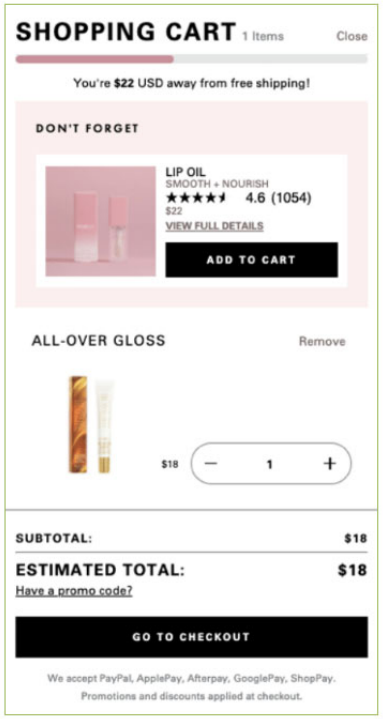
After you add a sales channel, it will be listed under **Sales Channels** in Shopify.

Facebook	Post and sell your products directly from the **Shop** tab on your store's Facebook page.
Instagram	Sell your products on Instagram by tagging them when they appear in your Instagram posts.

See e.g., https://help.shopify.com/en/manual/online-sales-channels.

79. On information and belief, the Shopify e-commerce Products and Services employ and provide a method wherein when the application

server receives an indication that the clickable link has been activated by a client device in Internet communication with the web site, the client device, wherein the transaction processing service process a payment transaction for a purchase of the product initiated from the checkout screen using the client device.





See e.g., screenshots from Kylie Cosmetics' Instagram store, powered by Shopify.

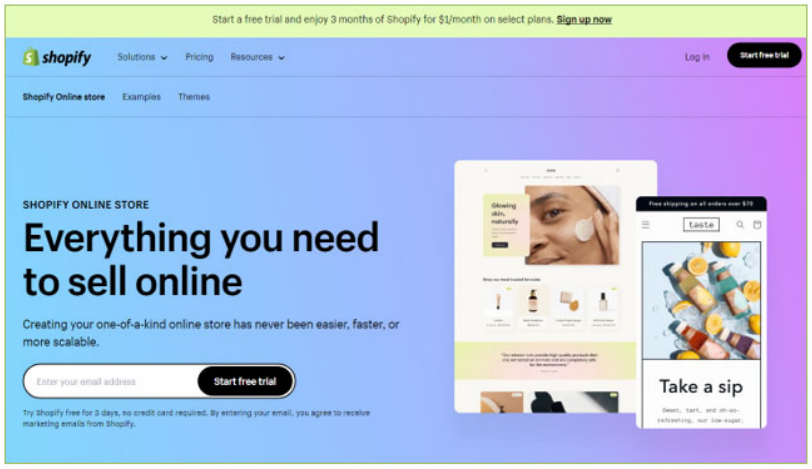
80. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

Count IV – Infringement of United States Patent No. 11,488,237

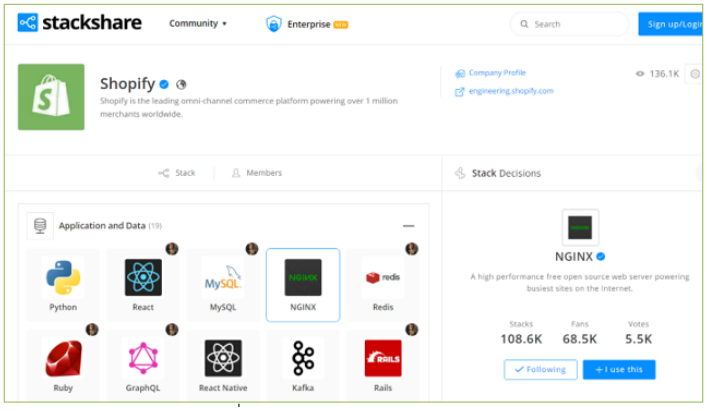
81. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

82. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '237 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

83. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for generating an electronic commerce store comprising an application server configured to control a transaction processing service.



See e.g., https://www.shopify.com/online.

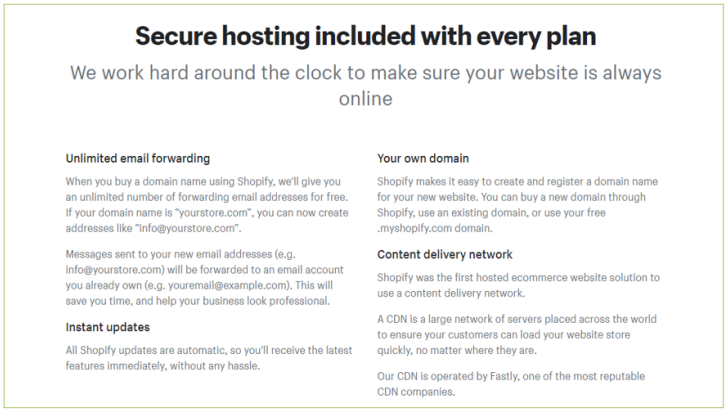


See e.g., https://stackshare.io/shopify/shopify/shopify, for Shopify's utilization of NGINX web servers.

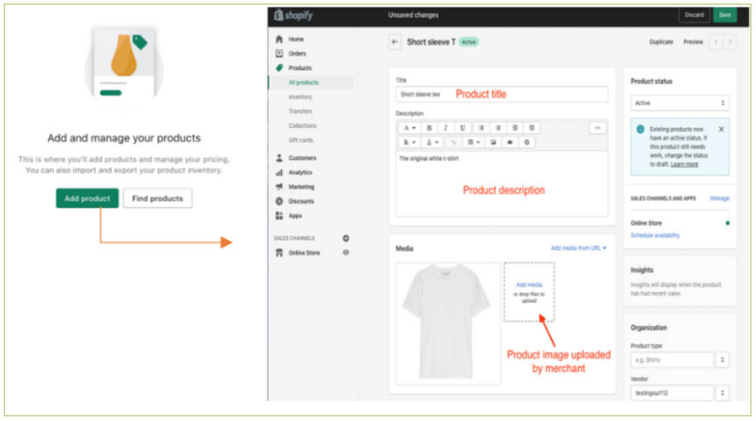


See e.g., https://shop.app/shop-pay.

84. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for generating an electronic commerce store comprising a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising, multimedia content associated with the product and metadata associated with the product.

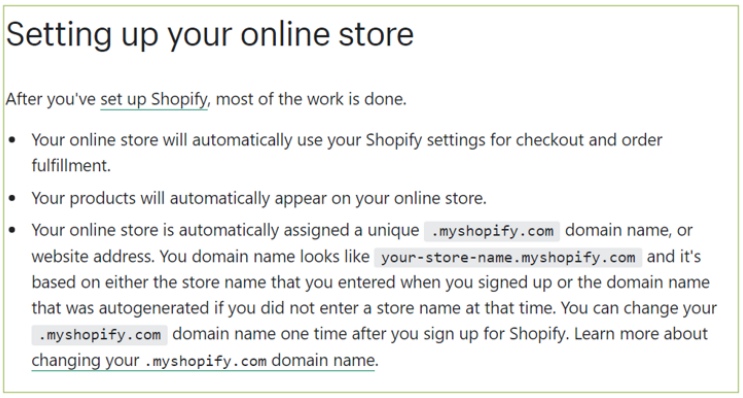


See e.g., https://www.shopify.com/website/hosting.



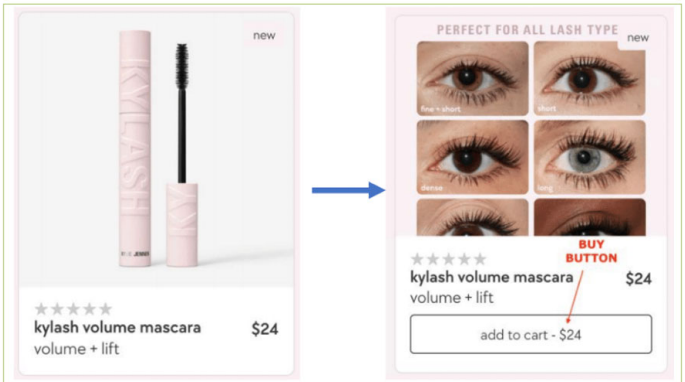
See e.g., adding images, descriptions and metadata for each product.

85. On information and belief, the Shopify e-commerce Products and Services employ and provide a system where the application server is configured to receive information from the storage resource.



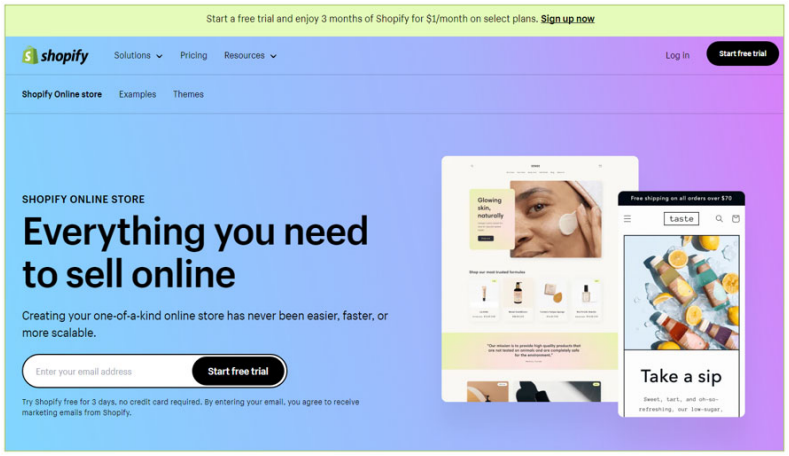
See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

86. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that executes a widget builder resource configured to generate a product listing, wherein the product listing includes a preview of the product based on the information from the storage resource, and a clickable link wherein the clickable link comprises a buy button.

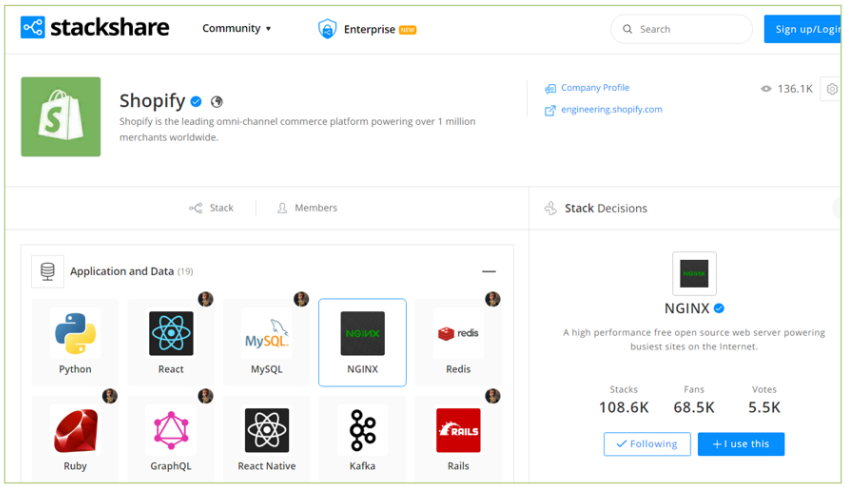


See e.g., screenshots from https://kyliecosmetics.com/en-us of a product listing including a preview, and a clickable link which comprises a buy button.

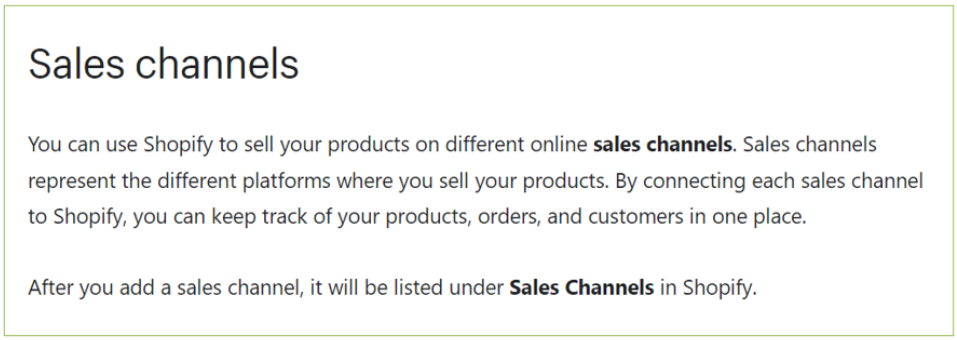
87. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application.



See e.g., https://www.shopify.com/online.



See e.g., https://stackshare.io/shopify/shopify, for Shopify's utilization of NGINX web servers.



Sales channels

You can use Shopify to sell your products on different online **sales channels**. Sales channels represent the different platforms where you sell your products. By connecting each sales channel to Shopify, you can keep track of your products, orders, and customers in one place.

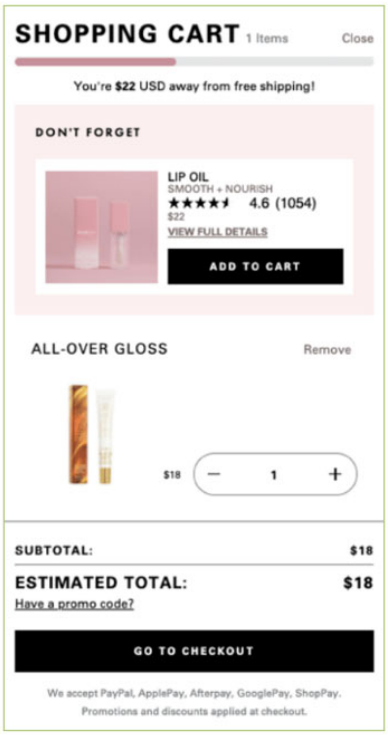
After you add a sales channel, it will be listed under **Sales Channels** in Shopify.

Facebook	Post and sell your products directly from the **Shop** tab on your store's Facebook page.

Instagram	Sell your products on Instagram by tagging them when they appear in your Instagram posts.

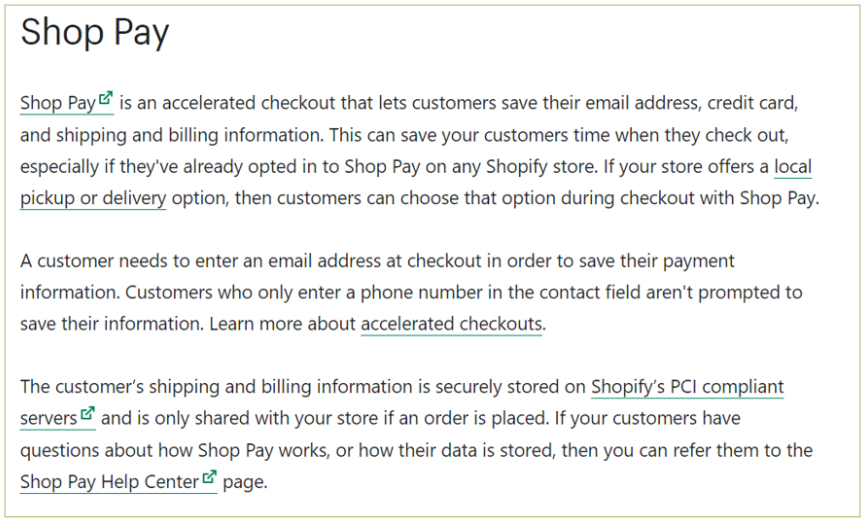
See e.g., https://help.shopify.com/en/manual/online-sales-channels.

88. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that receives an indication that the clickable link has been selected by a remote computing device.



See e.g., screenshots from Kylie Cosmetics' Instagram store powered by Shopify.

89. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that provides a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.



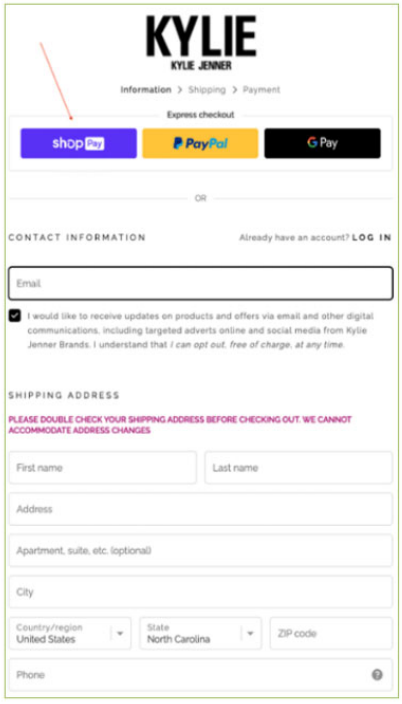
Shop Pay

Shop Pay is an accelerated checkout that lets customers save their email address, credit card, and shipping and billing information. This can save your customers time when they check out, especially if they've already opted in to Shop Pay on any Shopify store. If your store offers a local pickup or delivery option, then customers can choose that option during checkout with Shop Pay.

A customer needs to enter an email address at checkout in order to save their payment information. Customers who only enter a phone number in the contact field aren't prompted to save their information. Learn more about accelerated checkouts.

The customer's shipping and billing information is securely stored on Shopify's PCI compliant servers and is only shared with your store if an order is placed. If your customers have questions about how Shop Pay works, or how their data is stored, then you can refer them to the Shop Pay Help Center page.

See e.g., https://help.shopify.com/en/manual/payments/shop-pay.



See e.g., screenshots from Kylie Cosmetics' Instagram store, where items are purchased through ShopPay, both of which are powered by Shopify.

90. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

PRAYER FOR RELIEF

DKR respectfully requests this Court to enter judgment in DKR's favor and against Shopify as follows:

A. finding that Shopify has infringed one or more claims of the '785 patent under 35 U.S.C. § 271(a) and/or (b);

B. finding that Shopify has infringed one or more claims of the '995 patent under 35 U.S.C. § 271(a) and/or (b);

C. finding that Shopify has infringed one or more claims of the '678 patent under 35 U.S.C. § 271(a) and/or (b);

D. finding that Shopify has infringed one or more claims of the '237 patent under 35 U.S.C. § 271(a) and/or (b);

E. awarding DKR damages under 35 U.S.C. § 284, or otherwise permitted by law, including supplemental damages for any continued post-verdict infringement;

F. awarding DKR pre-judgment and post-judgment interest on the damages award and costs;

G. awarding cost of this action (including all disbursements) and attorney fees pursuant to 35 U.S.C. § 285, or as otherwise permitted by the law; and

H. awarding such other costs and further relief that the Court determines to be just and equitable.

JURY DEMANDED

Under Federal Rule of Civil Procedure 38(b), DKR hereby requests a trial by jury on all issues so triable.

Dated: August 22, 2023

PERKOWSKI LEGAL, PC

DAIGNAULT IYER LLP

By: /s/ Peter Perkowski
Peter E. Perkowski

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Attorneys for Defendant
SHOPIFY, INC.

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

DKR Consulting LLC,

Plaintiff,

v.

Shopify, Inc.

Defendant.

Case No. 2:23-cv-06904-HDV-JC

NOTICE OF MOTION AND MOTION TO DISMISS

Hearing Date: Feb. 22, 2024, at 10:00 a.m.
Courtroom: 5B
Judge: Hon. Hernán D. Vera

NOTICE OF MOTION AND MOTION TO DISMISS

TO THE HONORABLE COURT, ALL PARTIES, AND THEIR COUNSEL OF RECORD. PLEASE TAKE NOTICE THAT on February 22, 2024, at 10:00 A.M., or as soon thereafter as the matter may be heard, in the United States District Court, Central District of California, located at 255 E. Temple Street, Los Angeles, California 90012, Courtroom 5B, 5th Floor, before the Honorable Hernán D. Vera, Defendant Shopify Inc will move, and hereby do move, for an order dismissing Plaintiff DKR Consulting LLC's complaint for lack of personal jurisdiction under Federal Rule of Civil Procedure 12(b)(2) and failure to state a claim under Federal Rule of Civil Procedure 12(b)(6).

The parties conferred regarding the merits of Shopify Inc.'s motion to dismiss on December 22, 2023, and DKR Consulting LLC opposed the motion. The parties also agreed to waive the seven-day waiting requirement under Local Rule 7-3 so that Shopify can promptly file this motion. The parties expect to file a stipulation to modify the briefing schedule and hearing date to accommodate the upcoming holidays.

Dated: December 22, 2023

By: /s/ *Henry Nikogosyan*

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Attorneys for Defendant
SHOPIFY, INC.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served on all attorneys of record via the Court's EFC system on December 22, 2023.

By: /s/ *Henry Nikogosyan*

Henry Nikogosyan

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

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v.

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Defendant.

Case No. 2:23-cv-06904-HDV-JC

MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT SHOPIFY, INC.'S RULE 12(B)(6) MOTION TO DISMISS

Hearing Date: Feb. 22, 2024, at 10:00 a.m.
Courtroom: 5B
Judge: Hon. Hernán D. Vera

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Widget, THE AUTHORITATIVE DICTIONARY OF IEEE STANDARDS TERMS (7th ed. 2000) 9 n.4

I. INTRODUCTION

Defendant Shopify Inc. requests that this case be dismissed on two independent bases. ***First***, this case must be dismissed under Federal Rule of Civil Procedure 12(b)(2) because Shopify Inc. is not subject to personal jurisdiction. ***Second***, this case should be dismissed under Rule 12(b)(6) because the asserted patents' claims recite patent-ineligible subject matter under 35 U.S.C. § 101.

This is a patent infringement case in which Shopify Inc., a Canadian company, is accused of infringement based on offering its e-commerce web platform to customers worldwide. But as the Ninth Circuit has already determined, Shopify Inc. is not subject to personal jurisdiction in California federal courts with respect to such claims. *Briskin v. Shopify, Inc.*, 87 F.4th 404, 422-23 (9th Cir. 2023). The facts determinative in *Briskin* are likewise present here: Shopify Inc.'s platform "does not have a 'forum-specific focus'" and is "indifferent to the location of either the merchant or the end consumer." *Id*. Plaintiff has alleged no activities purposefully directed towards California and the complaint does not support jurisdiction.

In the alternative, the complaint should be dismissed under Rule 12(b)(6) because, on its face, it fails to state a claim on which relief could be granted. The four patents-in-suit (collectively, the "Buy Button Patents") claim software for displaying product information along with an option allowing consumers to order that product via a clickable button. Thus, the patent claims merely use computers to implement the long-standing business practice of combining a product offering with an order form—a practice that has been around for ages in, for example, magazine advertising (*see, e.g.*, example magazine advertisement from 1960s with order form). That the asserted patents describe embedding the product display and purchase form in social media rather than print media pages simply reflects the generic command to perform the method on the Internet. *See*, *e.g.*, *Bridge & Post, Inc. v. Verizon Commc'ns, Inc.*, 778 F. App'x 882, 893 (Fed. Cir. 2019) ("The ability to run a more efficient advertising campaign, even if novel, and even if aided by conventional computers, is an advance 'entirely in the realm of abstract ideas,' which we have repeatedly



held to be ineligible.").

Under U.S. Supreme Court precedent, confirmed by dozens of Federal Circuit decisions over the last decade, the computerization of a longstanding business practice, such as advertisements that include a product order form, is not eligible for patenting under 35 U.S.C. § 101 because it is an "abstract idea" combined with the instruction to do it "using a computer." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 212-13 (2014). Since *Alice*, hundreds of patent infringement cases have been dismissed under Rule 12(b)(6) for asserting patent claims that recite patent-ineligible subject matter. That same result is likewise warranted here.

II. THIS COURT LACKS PERSONAL JURISDICTION OVER SHOPIFY INC.

DKR's complaint must be dismissed under Federal Rule of Civil Procedure 12(b)(2) because DKR cannot establish a prima facie case of personal jurisdiction over Shopify Inc. in California. "[T]he plaintiff bears the burden of establishing that jurisdiction is proper." *Boschetto v. Hansing*, 539 F.3d 1011, 1015 (9th Cir. 2008); *see also Apple Inc. v. Zipit Wireless, Inc.*, 30 F.4th 1368, 1379 (Fed. Cir. 2022). "There are two forms of personal jurisdiction that a forum state may exercise over a nonresident defendant—general jurisdiction and specific jurisdiction." *Boschetto*, 539 F.3d at 1016. DKR has not met its burden to establish either general or specific jurisdiction.

A. There is No General Jurisdiction Over Shopify Inc. in California

"A court may assert general jurisdiction over foreign (sister-state or foreign-country) corporations to hear any and all claims against them when their affiliations with the State are so 'continuous and systematic' as to render them essentially at home in the forum State." *BNSF Ry. Co. v. Tyrrell*, 581 U.S. 402, 413 (2017) (cleaned up). "The 'paradigm' forums in which a corporate defendant is 'at home'" for the purposes of general jurisdiction "are the corporation's place of incorporation and its principal place of business." *Id*. Only in an "exceptional case" may "a corporate defendant's operations in another forum … be so substantial and of such a nature as to render the corporation at home in that State." *Id.* (cleaned up). "This is an exacting standard" that requires sufficient contacts to "approximate physical presence in the forum state." *Schwarzenegger v. Fred Martin Motor Co.*, 374 F.3d 797, 801–02 (9th Cir. 2004) (cleaned up); *Autogenomics, Inc. v. Oxford Gene Tech. Ltd.*, 566 F.3d 1012, 1018 (Fed. Cir. 2009).

The "paradigm" forums for Shopify Inc. are not in California. As DKR admits in its

complaint, "Shopify is a Canadian company with a principal address" in Ottawa, Ontario, Canada. Compl. ¶ 5; McIntomny Decl. ¶ 2. Shopify Inc. is thus at home in Canada, not California.

Nor has DKR pled any specific facts to show that Shopify Inc. has sufficient contacts in California to approximate physical presence. DKR makes the conclusory allegation that Shopify Inc. "has engaged in continuous and systematic activities in the State of California," "regularly conducts and solicits business," "engages in a persistent courses [sic] of conduct in this district," and "derives substantial revenue from the sale and distribution of goods and services provided to individuals and businesses in this district." Compl. ¶¶ 6, 10. But the Supreme Court has squarely "refused to 'approve the exercise of general jurisdiction in every State in which a corporation engages in a substantial, continuous, and systematic course of business.'" *HID Global Corp. v. Isonas, Inc.*, No. SA CV 14-0052-DOC-ANx, 2014 WL 10988340, at *3 (C.D. Cal. Apr. 21, 2014) (quoting *Daimler AG v. Bauman*, 571 U.S. 117, 138 (2014)); *see also Caddo Sys., Inc. v. Siemens Aktiengesellschaft*, No. 2022-1623, 2023 WL 6170340, at *2 (Fed. Cir. Sept. 22, 2023) (affirming motion to dismiss for lack of general personal jurisdiction over German company with allegedly patent-infringing website). Courts thus routinely reject general jurisdiction theories based on bare allegations, as present here, that the defendant conducts substantial business in California. *See, e.g.*, *HID Global Corp.*, 2014 WL 10988340, at *3 (no general jurisdiction); *Santana v. Amazon.com, Inc.*, No. CV 19-01949-AB-SSx, 2019 WL 13295793, at *3-4 (C.D. Cal. Nov. 5, 2019) (same); *Banks v. Am. Airlines*, No. 19-cv-04026-JSC, 2019 WL 5579479, at *3-4 (N.D. Cal. Oct. 29, 2019) (same).

The reality is that DKR cannot plead sufficient systematic contacts to approximate physical presence in California for Shopify Inc. Shopify Inc. is not registered to do business in California, does not have a registered agent for service of process in California, does not have a regular office in California, does not have employees in California, and does not market, target, or tailor its products specifically to California companies. McIntomny Decl. ¶ 3. Courts have found a lack of general jurisdiction based on similar facts. *See, e.g.*, *Best Odds Corp. v. iBus Media Ltd.*, 655 F. App'x 582, 583 (9th Cir. 2016) (unpublished disposition) (no general jurisdiction where company not licensed to do business nor had a registered agent in the forum); *Mehr v. Féderation Internationale de Football Ass'n*, 115 F. Supp. 3d 1035, 1054 (N.D. Cal. 2015) (similar); *Trustee of the Summers Family Tr. TA Neak Prods. Buff WA Pty, LTD. v. Nat'l*

Distrib. Warehouse, Inc., No. 2:20-cv-10741-CAS-Ex, 2021 WL2354507, at *5 (C.D. Cal. June 7, 2021) (similar in patent case).

In sum, DKR has failed to meet its burden to plead sufficient facts to show a prima facie basis for general jurisdiction over Shopify Inc. in California.

B. There is No Specific Jurisdiction Over Shopify Inc. in California

DKR likewise cannot establish specific jurisdiction over Shopify Inc. in California based on the allegations in the complaint.

To comport with due process, the non-resident must have "certain minimum contacts . . . such that the maintenance of the suit does not offend 'traditional notions of fair play and substantial justice.'" *International Shoe Co. v. Washington*, 326 U.S. 310, 316, (1945) (quoting *Milliken v. Meyer*, 311 U.S. 457, 463 (1940)). Due process for specific personal jurisdiction is met for claims sounding in tort, such as patent claims, when (1) "a defendant purposefully directs his activities at the forum state," (2) the claim "arises out of or relates to the defendant's forum-related activities," and (3) "the exercise of jurisdiction must comport with fair play and substantial justice." *Briskin*, 87 F.4th at 411-12 (cleaned up); *Celgard, LLC v. SK Innovation Co.*, 792 F.3d 1373, 1377-78 (Fed. Cir. 2015) (citing same elements). DKR bears the burden of establishing the first two elements of this specific jurisdiction analysis. *See Briskin*, 87 F.4th at 412 ("The plaintiff bears the burden on the first two prongs."); *Elecs. for Imaging, Inc. v. Coyle*, 340 F.3d 1344, 1350 (Fed. Cir. 2003) (same).

Here, DKR contends that this Court has specific jurisdiction over Shopify Inc. because Shopify Inc. has "committed and continues to commit acts of infringement in this judicial district." Compl. ¶ 9. This theory fails because DKR alleges that the infringement occurred on a *website* available in California, not in any physical store and, as the Ninth Circuit held recently in *Briskin*, making digital offerings available on a website accessible in California is insufficient to find specific jurisdiction over Shopify Inc. 87 F.4th at 422-23.

DKR alleges that Shopify Inc.'s e-commerce platform infringes its patents. *E.g.*, Compl. ¶¶ 55-61 (alleging that "Shopify e-commerce Products and Services" infringe patents). Shopify does provide an e-commerce platform through its website—www.shopify.com—that is generally available to the public worldwide. McIntomny Decl. ¶ 5. But this e-commerce platform provides only the back-end operations for setting up and running an online retail space.

Id. Merchants, instead of having to build their own websites, pay Shopify Inc. for access to its e-commerce platform as a business-to-business transaction. *Id.* Those merchants then use their own online stores to sell their own products to consumers that can be located anywhere in the world. *Id.*

To be clear, Shopify Inc. has no control over any merchant's decision to sell or not sell products in a particular geographic area. *Id.* And customers transact only with merchants by accessing their online storefront—that is, merchants' customers do not interact with Shopify Inc. or its website. *Id.* ¶ 6. Shopify Inc.'s involvement in the customer-to-merchant transaction consists of only providing back-end functionalities on the merchant's website. *Id.* ¶ 5. And Shopify Inc. processes customer data only in accordance with the documented instructions from merchants for the limited purpose of providing back-end functionalities. *Id.* ¶ 7.

Addressing virtually the same facts, the Ninth Circuit in *Briskin* held that California does not have specific jurisdiction over Shopify Inc. In *Briskin*, plaintiffs alleged that because Shopify Inc. offered its online storefront to a California merchant and then, based on that relationship allegedly obtained transaction information relating to that merchant's California customer, Shopify Inc. was subject to personal jurisdiction in California. 87 F.4th at 410 (detailing plaintiffs' allegations). But after examining Shopify Inc.'s business model and online offerings to merchants—the same as at issue here—the Ninth Circuit rejected plaintiffs' arguments. *Id.* at 422-23. It unequivocally held that "Shopify's web payment platform does not have a forum-specific focus"; "is indifferent to the location of either the merchant or the end consumer"; and "d[oes] not prioritize consumers in California or specifically cultivate them." *Id.* In sum, the Ninth Circuit held that California does not have specific jurisdiction over Shopify Inc. because it "operat[es] a broadly accessible web-based platform" that, while available in California, is not specifically tailored in any way to California. *Id.* at 423.

The same is true here. DKR alleges *no facts* showing that Shopify Inc.'s alleged infringement on its website is specific to California. Compl. ¶¶ 6-11. Indeed, DKR's allegations of infringement expressly relate to "Shopify e-commerce Products and Services in the United States" generally, not specific to California. Compl. ¶ 54. More specifically, DKR's allegations relate to the development and use of a "Buy Button" in Shopify Inc.'s worldwide e-commerce Products and Services. But DKR, a resident of North Carolina, makes no allegations regarding

the development or use of a Buy Button that relate to conduct in or concerning California.

DKR's hodgepodge of allegations about Shopify Inc.'s alleged substantial business in California does not change this analysis. DKR asserts that Shopify Inc. "owns, manages, and operates facilities in this State and this judicial district"; "enjoys substantial income from its operations and sales in this State and this judicial district"; "employs California residents in this State"; and "solicits business and markets products, systems and/or services in this State." Compl. ¶ 11.[1] Even if these allegations were true (they are not),[2] the Ninth Circuit considered and rejected similar, but far more specific, allegations in finding a lack of specific jurisdiction in *Briskin*:

Allegation in Complaint ¶ 11	Allegation in *Briskin*, 87 F.4th at 410
Shopify "owns, manages, and operates facilities in this State and this judicial district"	"Shopify, Inc. has at least one fulfillment center in California that stores goods from merchants and ships them to consumers, including those located in California."
Shopify "enjoys substantial income from its operations and sales in this State and this judicial district"	"[S]ome of the largest merchants on Shopify's platform are California-based companies"
Shopify "employs California residents in this State"	Shopify, Inc. subsidiary Shopify (USA) Inc. "has a quarter of its employees in California."
Shopify "solicits business and markets products, systems and/or services in this State."	"Shopify, Inc. opened a physical location in Los Angeles to expand its access to the California market and enhance relationships with Shopify's over 80,000 merchant-customers in the state"

Therefore, based on the Ninth Circuit's detailed opinion in *Briskin*, this Court should find California does not have specific jurisdiction over Shopify Inc. in this case. 87 F.4th at 424 (affirming dismissal of claims against Shopify Inc. for lack of personal jurisdiction).

III. DKR HAS FAILED TO STATE A CLAIM FOR PATENT INFRINGEMENT BECAUSE THE ASSERTED CLAIMS ARE INELIGIBLE UNDER 35 U.S.C. § 101

Even if Shopify Inc. were subject to personal jurisdiction (it is not), the case should still be dismissed under Rule 12(b)(6) because on their face, the Buy Button Patents' claims recite patent ineligible subject matter under 35 U.S.C. § 101. As the U.S. Supreme Court held in *Alice Corp. Pty. Ltd. V. CLS Bank Int'l*, 573 U.S. 208, 212-13 (2014), the computerization of a

[1] DKR asserts that Shopify Inc. markets the allegedly infringing products in California, but alleges no specific facts in support. Compl. ¶ 11. This Court cannot credit such threadbare allegations. *See, e.g.*, *Sky Billiards, Inc. v. Loong Star Inc.*, No. EDCV 14-00921-JGB-SPx, 2014 WL 12601022 (C.D. Cal. Sept. 4, 2014) ("Plaintiff's allegations regarding specific jurisdiction are threadbare and fail to meet the standard for personal jurisdiction.").

[2] For example, Shopify Inc. does not employ anyone in California. McIntomny Decl. ¶ 3.

longstanding business practice is not eligible for patenting under 35 U.S.C. § 101 because it is an "abstract idea" combined with the instruction to do it "using a computer," that does not include any inventive concept. *Alice Corp.*, 573 U.S. at 219.

The asserted patents fail both prongs of the well-established *Alice* two-step framework to determine patent ineligibility. *Id*. Under step one, the Buy Button Patents are directed to an abstract idea because they computerize the long-standing business practice of combining a product advertisement with an order form. And under step two, the patents do not claim any inventive concept because the patents' claims recite generic computer components used in their conventional manner to implement a well-known business practice on the Internet.

A. Facts Relevant to Patent Ineligibility Under 35 U.S.C. § 101

1. The Common Specification of the Buy Button Patents

The four patents-in-suit (collectively, the "Buy Button Patents") are titled "System and Method for Distributable E-Commerce Product Listings," "System and Method for Generating and Distributing Embeddable Buy Buttons," "System and Method for Generating and Distributing Embeddable Electronic Commerce Stores," and "System and Method for Facilitating Social Shopping." Because the patents originate from continuation applications of one another, they all share an identical written description and, thus, have a common specification. In other words, other than the claims, all four patents are essentially identical to one another. The Buy Button Patents' specification[3] confirms that the purported invention relies on conventional computer technologies used in their ordinary manner to embed ordering instructions in advertisements.

Figure 1A of the Buy Button Patents shows that the purported invention uses an ordinary "operating environment for a multimedia content distribution system," featuring various "client devices [] communicatively coupled to a network **102**," which "[i]n the illustrated embodiment … is the Internet." *Id*. at 3:31-50. The Buy Button Patents claim nothing inventive about this operating environment and simply claim the conventional function of "managing the use of resources in the multimedia content distribution system" and "to receive and respond to content related requests from consumer client devices **130**, **132**, **134**." *Id*. at 4:10-18.

[3] For simplicity, all patent specification citations in this brief are to the '678 patent. Each of the four asserted patents contains the identical content cited.

For example, the content distribution system uses generic "consumer client devices" such as "laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants." *Id*. at 3:35-41. Those client devices are connected via the internet ("network **102**") and a firewall server ("server **104**") to a central server ("application server **106**") that performs the conventional function of "a centralized compute processing and transaction management resource." *Id*. at 3:43-46. The central server then relies on additional generic servers ("email server **108**," "database server **110**," "file management server **114**") to retrieve data from a "cloud-based storage resource **124**" and to use that data in connection with a "transaction processing service **112**." *Id*. at 3:58-67. The cloud-based storage resource **124** and the transaction processing service **112** are common functionalities provided by third parties such as "the Amazon Web Services group … using Amazon's 'Simple Storage Service'" and "'Flexible Payments Service.'" *Id*. at 5:6-15; *see also id*. at 18:9-11 (explaining that "Authorize.Net, Google Checkout, Storm Pay, PayPal or other Internet service" can be used).

Merchants, which the patents call "content owners," use the content distribution system no differently than any other generic distribution system for advertisements—they use their personal client devices to "upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**." *Id.* at 4:22-29. The content distribution system uses these "compilations" to supply the content of "web widgets." *Id.*

Consumers interact with the web widgets in an ordinary, commonplace manner as well. They use "browsers executing on their client devices **130**, **132**, **134**" to activate web widgets by clicking on a "button or link" that the web widget displays. *Id*. at 5:32-34. These browsers are any generic browser such as "Internet Explorer, Firefox, Google Chrome, Safari, Opera" and do not require any specialized modifications or add-ons. *Id*. at 12:48-49. The specification explains that when a consumer goes online and "elects to purchase … by clicking on an embedded buy button" the web widget "redirects the consumer to the transaction processing service **112**." *Id*. at 5:40-47. Completion of the transaction involves a third-party service, as explained above, and ordinary payment methods like "credit card, debit card or bank account information." *Id*. at 5:48-49.

These disclosures in the specification make clear that the patents' claimed invention uses pre-existing technologies: a content distribution system, web widgets, browsers, online advertisements, and online transaction processing methods. The patents direct the ordinary use of these technologies to computerize the longstanding business practice of providing the method to order a product within an advertisement or offering.

2. Purported Improvement of the Buy Button Patents

The Buy Button Patents acknowledge that the computerization of advertisements and e-commerce was routine at the time of the alleged invention. They confirm that "[e]lectronic commerce on the Internet has become commonplace" and that "[t]here are many merchants offering goods and services via websites on the Internet." '678 patent at 1:25-27. They also confirm that businesses regularly use "social media marketing" to advertise. *Id*. at 1:37-42.

The Buy Button Patents further acknowledge that "web widgets" were a known methods for distributing content on the internet.[4] They state that a "current approach that is used to distribute applications of limited functionality involves 'web widgets'" and that a "web widget is portable software that can be installed and executed within a hypertext-markup-language web page." *Id.* at 1:61-64. These web widgets allow "users to turn personal content into dynamic web applications which can be shared on virtually any website." *Id*. at 1:67-2:2.

The alleged improvement of the Buy Button Patents is to embed in such web widgets a "buy button" next to product information. '678 patent at Abstract & cl. 1. The Buy Button Patents explain that "current web widgets are not used as self-contained electronic commerce platforms" and propose using web widgets "to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers." *Id.* at 2:8-9, 14-16. They further contemplate use of web widgets displaying ordering instructions to "exploit social media marketing trends" by initiating transactions "over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." *Id*. at 2:13-18.

[4] The Dictionary of Computer and Internet Terms defines a "widget" as "a small software application on a web page." *Widget*, DICTIONARY OF COMPUTER AND INTERNET TERMS (11th ed. 2012). The Authoritative Dictionary of IEEE Standard Terms defines "widget" as "a specific instance of a widget class, providing a control in the user interface, such as a menu, pushbutton, or text fields." *Widget*, THE AUTHORITATIVE DICTIONARY OF IEEE STANDARDS TERMS (7th ed. 2000).

3. The Representative Claims of the Buy Button Patents

In total, there are 74 claims across the Buy Button Patents, only four of which are featured in the complaint. Those four claims are representative of all claims of the Buy Button Patents, which means that any one of these representative claims can be used to determine patent eligibility under 35 U.S.C. § 101. *See Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (determining that eleven claims in a patent application were invalid after only analyzing two claims in detail); *Cyberfone Sys., LLC v. Cellco P'ship*, 885 F. Supp. 2d 710, 718-19 (D. Del. 2012) (invalidating all twenty-four claims of a patent after analyzing the first claim), *aff'd sub nom. Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988 (Fed. Cir. 2014). But even if the plaintiff contests that the four claims in its complaint are representative, this motion addresses why all of the asserted claims are ineligible.

Claim 1 of the '678 patent, which is featured in the complaint, is typical of the claims in the Buy Button Patents in reciting the patent-ineligible abstract idea of computerizing the inclusion of an order form in a product advertisement:

> **1.** A system for distributing multimedia content over a network, comprising:
>
> a server configured to control a transaction processing service; and
>
> a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,
>
> wherein the server is configured to:
>
> receive the item from the storage resource;
>
> execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;
>
> distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on the marketplace rule;
>
> receive an indication that the clickable buy button has been selected by a remote computing device; and
>
> provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

'678 patent, cl. 1. In other words, claim 1 of the '678 patent recites a computer server operating a "transaction processing service" over the Internet, where the server includes software that

creates an advertisement with a clickable "buy button," and where selection of the buy button results in the appearance of a "checkout screen" to process the customer's transaction.

Claim 1 of the '237 patent and claim 1 of the '995 patent (also featured in the complaint) are directed to the same concepts but recite slightly modified limitations that also direct the use of pre-existing technologies in their ordinary, conventional manner. '237 patent, cl. 1 (requires an "application server," omits the "marketplace rule" and "identifier"); '995 patent, cl. 1 (requires "image and metadata" for the product, a "clickable link" that "is a buy button and includes a preview of the product," and embedding into a "social media network").

Claim 1 of the '785 patent (also featured in the complaint) also claims the same abstract idea with slightly modified limitations such as renaming "widget builder resource" as an "embeddable buy button builder," requiring that the "electronic commerce store" and "web site" be operated by two different entities, and omitting some of the hardware limitations of the other patents. '785 patent, cl. 1. Again, these modifications require no more than the ordinary use of pre-existing technologies to embed ordering instructions in an advertisement.

4. Remaining Claims of the Buy Button Patents

The remaining independent claims of the Buy Button Patents claims do not have any meaningful differences from the claims above for purposes of a patent eligibility analysis under 35 U.S.C. § 101. For example, claim 9 of both the '678 patent and the '237 patent require that the product listing be distributed to a website "operated by the server" or to an application "not operated by the server." '678 patent, cl. 9; '237 patent, cl. 9. Similarly, claim 9 of the '995 patent recites embedding a product listing onto a website "not operated by the application server." '995 patent, cl. 9. Further, claims 15 of the '678 patent and '237 patent recite displaying a product listing on "a social media network." '678 patent, cl. 15; '237 patent, cl. 15. And Claim 11 of the '995 patent also modifies limitations to apply to a "social media network" as opposed to websites generally. '995 patent, cl. 11. Lastly, claim 7 of the '785 patent is directed to a system configured to implement claim 1 of the same patent (which is a method claim) and Claim 14 of the '785 patent recites that the "buy button includes a hyperlink" and requires the use of "software" by the server executing the buy button. '785 patent, cls. 7, 14. These are all minor differences that capture different ways conventional distribution systems could use web widgets under ordinary conditions.

The dependent claims[5] of the Buy Button Patents add trivial elements to the independent claims and do not change their focus. For example, seven dependent claims require that the metadata include generic information such as a "title" or "textual description." '678 patent, cls. 2, 10, 16; '237 patent, cls. 2, 10, 16; '995 patent, cl. 2. Six dependent claims require that the client device be an ordinary mobile device, such as a smartphone. '678 patent, cls. 3, 11, 17; '237, cls. 3, 11, 17. Three dependent claims provide details on what a typical "marketplace rule" would be. '678 patent, cl. 4, 12, 18. Thirteen dependent claims require the use of a share link or receipt of an indication when a share link is used. '678 patent, cls. 5, 6, 13, 14, 19, 20; '237 patent, cls. 5, 6, 13, 14, 19, 20; '995, cl. 8. And eight claims require that the buy button or widget be usable on different websites or on social media. '995 patent, cls. 3, 5, 9, 12; '785 patent, cls. 2, 10, 12, 15.

Again, there is nothing inventive about these additional limitations because they simply identify different ways a conventional distribution system would use web widgets with buy buttons when operated in a conventional, ordinary manner.

B. Legal Standard for Federal Rule 12(b)(6)

In order for DKR's complaint to survive a motion to dismiss, its factual allegations must "state a claim to relief that is plausible on its face." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007)). "[A]n invalid patent cannot be infringed." *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 644 (2015). Thus, DKR's complaint cannot state a claim for patent infringement if the patents are invalid for reciting ineligible subject-matter under 35 U.S.C. § 101. *See Secured Mail Sol'ns LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 909-10, 913 (Fed. Cir. 2017) (affirming dismissal of complaint due to patent ineligibility under § 101). The question of subject-matter eligibility, and therefore patent invalidity, is an issue of law that is appropriate and common for courts to decide on a motion to dismiss. *See Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1351 (Fed. Cir. 2014) (affirming dismissal of a patent suit under § 101); *Apollo Fin., LLC v. Cisco Sys., Inc.*, 190 F. Supp. 3d 939, 942 (C.D. Cal. 2016) ("Courts may address whether a

[5] A dependent claim "contain[s] a reference to a claim previously set forth and then specif[ies] a further limitation of the subject matter claimed," thus "incorporat[ing] by reference all the limitations of the claim to which it refers." 35 U.S.C. § 112(d).

patent is eligible under the Patent Act, pursuant to § 101, through a motion to dismiss.").

The Supreme Court recognizes that, under 35 U.S.C. § 101, "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 573 U.S. at 216 (citing *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 596 U.S. 576, 589 (2013)). This is because such concepts constitute the "basic tools of scientific and technological work" and "monopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012); *see also Bilski*, 561 U.S. at 602.

The Supreme Court has established a two-step framework for determining whether an invention claims a law of nature, natural phenomenon, or abstract idea and is thus ineligible for patenting. *Alice*, 573 U.S. at 217. First, courts "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If so, courts then "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id*. (quoting *Mayo*, 566 U.S. at 78-79 (2012)).

The Federal Circuit has repeatedly recognized that computerizing or digitizing a known business practice is a patent-ineligible abstract idea. *See*, *e.g.*, *Credit Acceptance Corp. v. Westlake Serv's,* 859 F.3d 1044, 1055 (Fed. Cir. 2017) (invalidating loan-processing automation patent because "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology."); *Ultramercial, Inc. v. Hulu LLC*, 772 F.3d 709, 712 (Fed. Cir. 2014) (claims directed to the abstract idea of using an advertisement as an exchange or currency were ineligible even though the claims were tied to a general purpose computer and invoked the Internet); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (claims were directed to the abstract idea of creating a contractual relationship despite reciting technological steps for creating the contract).

C. The Buy Button Patents Are Invalid Under 35 U.S.C. § 101

The Buy Button patents are invalid because they claim nothing more than computerizing the common business practice of including an order form alongside a product offering or advertisement. They claim patent ineligible subject matter under the two-step framework set forth in *Alice.* The Federal Circuit's holding in *Free Stream Media*, for example, shows why.

The asserted patent in *Free Stream Media* claimed a system that used television data to display targeted advertisements on a mobile phone. *Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1358 (Fed. Cir. 2021). As the court explained, the "asserted claims utilize three main components; (1) a network device (e.g., a smart TV); (2) a client device (e.g., a mobile device; and (3) a relevancy matching server." *Id.*

Under step one, the Federal Circuit held that the *Free Stream Media* claims do "nothing more than implement a computer to achieve the abstract idea of providing targeted advertising to the mobile device user." *Id.* at 1365. The court explained that the asserted claims (1) simply state that devices in a network generate targeted advertisements by "overcoming a mobile device's security sandbox" without explaining how to achieve such a result, and (2) "do not recite an improvement in computer functionality." *Id.* at 1363-64. The court further explained that even if the patents teach a new way for devices in a network to communicate, the asserted claims would still be invalid because that communication relies on "generic processes and machinery" that "merely improve the abstract idea of targeted advertising." *Id.* at 1365.

The Federal Circuit then proceeded to step two of the analysis and found that the claims lacked an inventive concept. The court held that the asserted claims recited bypassing a client device's sandbox security by using the pre-existing idea of "working around the existing constraints of the conventional functioning of television and mobile devices" and implementing that known work-around with "the use of generic features, as well as routine functions." *Id.* at 1366. The court further noted that these ordinary, pre-existing functions were implemented on "generic computing components—e.g., 'servers'—arranged in a conventional manner." *Id.*

Free Stream Media thus shows that patent claims directed at computerizing a business practice such as targeted advertising (or, as in the instant case, embedding ordering instructions in advertisements) that also rely on pre-existing technologies used in their conventional manner are not patent eligible under § 101. According to this principle, all of DKR's asserted claims are patent ineligible under both prongs of the *Alice* two-step framework.

1. *Alice* Step One: The Asserted Claims Are Directed at an Abstract Idea

All claims of the Buy Button Patents are directed to the abstract idea of combining an order form with a product advertisement, and use computer technology simply to implement that idea. Claim 1 of the '678 patent, for example (set forth in full above), is a "system for

distributing multimedia content over a network" that comprises "a server configured to control a transaction processing service," "a storage resource communicatively coupled to the server and configured to store an item," where the server is configured to "receive the item from the storage resource," "generate a product listing, wherein the product listing includes … a clickable buy button," "distribute the product listing to a web site or a distributed application," "receive an indication that the clickable buy button has been selected," and "provide a checkout screen." '678 patent, cl. 1.

Claim 1 of the '678 patent is patent ineligible because, like the claims in *Free Stream Media*, stripping the claim of its standard computer components performing standard tasks leaves nothing more than an ordinary, abstract business practice—combining ordering instructions with an advertisement (i.e., a product listing with a buy button that leads to a checkout screen). This is an abstract idea. *In re Elbaum*, No. 2021-1719, 2021 WL 3923280, at *2 (Fed. Cir. Sept. 2, 2021) (rejecting claims to "a method of providing information and allowing customers to utilize that information to engage in a commercial transaction" as abstract); *cxLoyalty, Inc. v. Maritz Holdings Inc.*, 986 F.3d 1367, 1377 (Fed. Cir. 2021) ("transfers of information relating to a longstanding commercial practice" are abstract). That the patent recites performing this idea on a website, using traditional computing components, does not save the claim from abstraction. *See Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015) ("An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet.").

Claim 1 of the '237 patent is directed to the same abstract idea. The claim recites a "system for generating an electronic commerce store" that also requires "an application server configured to control a transaction processing services" and "a storage resource communicatively coupled to the application service." '237 patent, cl. 1. The claim, similar to claim 1 of the '678 patent, uses these generic computer components to "receive information from the storage resource," "generate a product listing wherein the product listing includes … a clickable link, wherein the clickable link comprises a buy button," "distribute the product listing to a web site or a distributed application," "receive an indication that the clickable link has been selected," and "provide a checkout screen." *Id*. These are all standard computer components

performing standard functions. When these generic technologies are disregarded, the claim recites the abstract idea of combining an order form with a product advertisement (i.e., a product listing with a clickable link that leads to a checkout screen for payment processing).

Claim 1 of the '995 patent is nearly identical to the representative claims in the '678 and '237 patents. It recites an "application server" and "storage resource" that "generate a product listing" with a "clickable link, wherein the clickable link is a buy button and includes a preview of the product" and directs purchasers to a "checkout screen." '995 patent, cl. 1. Again, the claim recites the abstract idea of an advertisement embedded with a purchasing means and does not claim any improvement to any underlying computer components or functions.

Lastly, claim 1 of the '785 patent is directed to the same abstract idea, with a superficial difference: it takes the form of a method claim instead of a system claim. It recites "receiving … a selection of an item … and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;" "generating … the embeddable buy button" which is "configured to display the representation of the item," and "embedding" the "buy button into a web site," "wherein the electronic commerce store is displayed within the web site … the electronic commerce store configured to facilitate payment processing related to a purchase of the item[.]" '785 patent cl. 1. Again, other than standard computing components performing standard tasks, the claim is directed to nothing more than the abstract idea of displaying a product advertisement that includes ordering information. The same analysis applies to each of the remaining Buy Button Patent claims.

In *Alice*, the Supreme Court was faced with similar claims, which also included multiple steps implemented on generic computer components. Despite the patent having claimed use of computer components such as "a 'data processing system' with a 'communications controller' and 'data storage unit,'" the Supreme Court found the patent to be directed to the abstract idea of intermediated settlement. *Alice*, 573 U.S. at 226. Following *Alice*, the Federal Circuit has routinely found patents to be directed to abstract ideas even when they recite technical limitations. *E.g.*, *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 768, 770 (Fed. Cir. 2019) (claims directed to the abstract idea of network control despite reciting technical limitations such as "a control device to control application of charge transfer" and "a transceiver"); *Solutran, Inc. v. Elavon, Inc.*, 931 F. 3d 1161, 1164 (Fed. Cir. 2019) (claims

directed to the abstract idea of crediting a merchant as early as possible while processing a check despite reciting a "data file," "MICR [magnetic ink character recognition] information," and a "digital image scanner"). Thus, the Buy Button Patents' recitation of purely conventional and generic computer components does not render them non-abstract.

That the Buy Button Patents are directed to an abstract idea is further shown by analogy to offline practices, for example, mail-order forms included within print advertisements. Magazine ads for particular products, which included a form that the recipient could fill out and mail in to purchase the depicted product(s), were a common marketing strategy in the 20th century. For example, below are two examples from 1963 of advertisements including mail order forms for Walt Disney Mickey Mouse Latex Toys and binoculars:[6]



2. *Alice* Step Two: The Asserted Claims Add No Inventive Concept

The Buy Button Patents also fail the second step of the *Alice* test. None of the remaining elements of the representative claims, alone or in combination, describe an improvement to technology that would transform the claimed abstract idea into a patent eligible invention. To the contrary, the Buy Button Patents make clear that the invention can be practiced entirely using well-known hardware, such as cloud servers, smartphones, PDAs,

[6] These demonstrative images of vintage advertisements with mail order forms are available online at https://www.etsy.com/listing/492977576/original-1963-walt-disney-mickey-mouse.

laptop and desktop computers, as well as via conventional software services such as Amazon's Flexible Payment Service, PayPal, Internet Explorer, Safari, Simple Storage Service, and Elastic Compute Cloud, and conventional digital file formats such as MP3, WMA, and FLAC. '678 patent at 3:36-43, 5:7-27, 10:46-49; 12:48-50. These conventional hardware and software elements embody the "server," "storage resource," "transaction processing service," "multimedia content," and "remote computing device" limitations of the claims. As explained in *Free Stream Media*, this kind of "use of generic features, as well as routine functions" cannot confer patent eligibility under § 101. 996 F.3d at 1366.

The Buy Button Patents also use ordinary hardware and software components in their everyday, conventional manner. A central server performs the conventional function of "a centralized compute processing and transaction management resource." '678 patent at 3:48-49. The "cloud storage resource" stores "all content files and related metadata." *Id*. at. 3:66-67. A "transaction processing service" such as PayPal or Amazon Payment Services provides "for the provision of credit card, debit card, or bank account information and completion of the purchase transaction." *Id*. at 5:47-50. The web widgets allow Internet users to access stored data and the transaction processing service by creating "various marketing resources … buy buttons, links and preview clips." *Id*. at 6:25-28. And client devices use their web browsers to access the Internet, and "clicking on a button, link or preview clip causes the activation of a web widget." *Id*. at 6:30-31. This was all a well-understood combination of pre-existing client-server technology used as an ordinary content distribution system. As in *Free Stream Media*, the Buy Button Patents' ordinary use of hardware and software cannot confer patent eligibility because the claims simply recite "generic computing components—e.g., 'servers'—arranged in a conventional manner." 996 F.3d at 1366.

The "widget builder resource" ('678 patent, cl. 1) and "embeddable buy button builder" ('775 patent, cl. 1) also do not constitute an inventive concept, as they are defined in purely functional terms. The patents do not suggest that programming web widgets or buy buttons to have the claimed functionality was a difficult software engineering problem, but even if it were, the claims do not recite a solution to this problem and therefore cannot rely on it for an inventive concept. *Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241-42 (Fed. Cir. 2016) (holding patents invalid under § 101 when they "do not claim a particular way of programming

or designing the software … but instead merely claim the resulting systems" even though "programming the software to perform various parts of the claimed systems' functionality was difficult," as "[t]he difficulty of the programming details for this functionality is immaterial because these details are not recited in the actual claims."); *Free Stream Media*, 996 F.3d at 1366 (an "embedded object" limitation does not provide an inventive concept).

Nor does the "marketplace rule" ('678 patent, cl. 1) qualify as an inventive concept, as it simply incorporates the concept of targeted advertising, which has consistently been held to be an abstract idea. *Free Stream Media*, 996 F.3d at 1362 (citing *Intellectual Ventures I LLC*, 792 F.3d at 1369 and *Bridge & Post, Inc.*, 778 F. App'x at 886). The specification makes this clear: "marketplace rules assigned by a content owner … can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, UK and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials." '678 patent at 11:47-52. The patents do not describe any unique or novel way of applying the marketplace rule and instead merely direct its use. Thus, the Buy Button Patents simply recite, for example, "display[]" of an e-commerce web widget "based on" these marketplace rule considerations (*id.*, cl. 1), e.g., by displaying goods available in certain countries to users only in those countries. This is nothing more than the abstract concept of targeted advertising. *Intellectual Ventures I LLC*, 792 F.3d at 1370.

The '995 and '237 patents' representative claims do not include any limitations that provide an inventive concept either. With the exception of the substitution of a "social media network" in the '995 patent for the "web site" in the '678 patent, and the requirement of "a preview" under the '237 patent in lieu of the "product listing" of the '678 patent, the limitations of these patents' independent claims are materially identical to limitations of the '678 patent addressed above for purposes of a patent eligibility analysis under § 101. Since both social media networks and product previews were conventional prior to the Buy Button Patents' priority date, neither of these limitations provides an inventive concept. And, as noted earlier, the '775 patent's representative claim recites essentially the same purported invention in method claim format, adding no improvement to any pre-existing technology or combinations thereof.

In sum, the representative claims also fail at *Alice* step two. The claim limitations recite generic technology used in a routine manner to implement the abstract idea.

3. Remaining Independent Claims Are Also Patent Ineligible

The Buy Button Patents include eight other independent claims: claims 9 and 15 of the '678 patent, claims 9 and 15 of the '237 patent, claims 6 and 11 of the '995 patent, and claims 7 and 14 of the '785 patent. These claims recite only minor variations on the four representative claims featured in the complaint because they simply identify other generic features and routine functions that the claimed distribution system and widget builder would perform.

The remaining independent claims rely on the same individual elements as the representative claims to recite the abstract idea of embedding ordering instructions in advertisements. The claims recite a "server," "storage resource," a "widget builder resource," a "product listing," distributing the web widget to a "web site" or on "social media," a "clickable buy button" or "link," and a "checkout screen" to process transactions. '678 patent, cls. 9, 15; '237 patent, cls. 9, 15; '995 patent, cls. 6, 11; '785 patent, cls. 7, 14. These computer components are used in their ordinary manner to display on the internet a "product listing" with a "buy button." And when these standard technologies are disregarded, the claims are left with nothing more than the abstract idea of combining ordering instructions with advertisements (a "buy button" in a "product listing" that leads to a "checkout screen").

The arrangement and implementation of the individual elements in the remaining independent claims also lack an inventive concept. The remaining independent claims have the same conventional arrangement of elements as the representative claims—a central server that retrieves data from a storage resource, a web widget builder that creates a widget, displaying the widget on the Internet, having a buy button or clickable link lead to a check out screen provided by a third-party transaction processing service. The claims do not recite any improvement on these technologies, nor do they require using these technologies in manner that is different than their ordinary, conventional use. There can be no inventive concept in such a routine arrangement and procedure involving commonly known components and uses thereof. *Free Stream Media*, 996 F.3d at 1366.

Lastly, the minor variations in the remaining independent claims do not add anything that would render the claims patent eligible under § 101. For example, claims 9 of the '678 patent and '237 patent require that the product listing is distributed to a website "operated by the server" or to an application "not operated by the server." '678 patent, cl. 9; '237 patent, cl. 9.

And claim 9 of the '995 patent similarly recites embedding a product listing onto a website "not operated by the application server." '995 patent, cl. 9. These are modifications meant to capture different ways the content distribution system can be arranged, all of which were well-known arrangements that make trivial changes to the operation of different servers in the system. Similarly, claim 7 of the '785 patent is a system claim version of claim 1 of the same patent (which is a method claim) and claim 14 of the '785 patent requires that the "Buy button includes a hyperlink" and requires the use of "software" by the server executing buy button. '785 patent, cls. 7, 14. These are more minor differences that use different claim formats and generic terms like "software" and "hyperlink" to identify additional parameters that are routinely used for web widgets.

The patent eligibility problems of the representative claims apply with equal force to the remaining independent claims in the Buy Button Patents. The relevant limitations use generic computer components used in a conventional manner to display advertisements with ordering instructions on the Internet. This kind of computerization of a long-standing advertising or marketing business practice is not patent eligible subject matter. *See Free Stream Media*, 996 F.3d at 1363-66.

4. The Dependent Claims Also Claim Nothing Inventive

The Buy Button Patents include 62 dependent claims. Each dependent claim can be categorized by the type of limitation recited—all of which add only "well-understood, routine, conventional activity" insufficient to confer patent eligibility. *Mayo*, 566 U.S. at 79.

For example, seven of these dependent claims specify the kind of metadata that the web widget would include. '678 patent, cls. 2, 10, 16; '237, cls. 2, 10, 16; '995 patent, cl. 2. And the required metadata is conventional information that web widgets normally use, such as a "title" and a "textual description." *Id*. DKR cannot reasonably contend that the use of titles and descriptions can somehow transform abstract independent claims into patentable inventions.

Six of the dependent claims also specify the client device in the content distribution system must be a "mobile device" or a "smartphone." '678 patent, cls. 3, 11, 17; '237, cls. 3, 11, 17. The specification confirms that these mobile client devices are just "personal digital assistants," "smart phones," and "non-phone enabled PDAs. '678 patent at 3:40-43. These are generic mobile devices that were routinely used in content distribution systems.

Three dependent claims provide details on what a typical "marketplace rule" would be. '678 patent, cls. 4, 12, 18. The specification explains that these limitations simply direct use of the pre-existing practice of, for example, distributing product listings only in geographic regions where the product is available. '678 patent at 11:47-52 ("marketplace rules assigned by a content owner … can include territorial rights and restrictions (e.g., album collection A only available for sale in Spain, UK and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials."). These limitations do not claim any improvement advertising to likely consumers—a well-accepted business practice that long predates the Buy Button Patents.

Thirteen dependent claims require the use of a share link or receipt of indication when a share link is used. '678 patent, cls. 5, 6, 13, 14, 19, 20; '237, cls. 5, 6, 13, 14, 19, 20; '995, cl. 8. The patents do not claim to have invented share links or to have improved any technology associated with share links. In fact, the patents admit that the use of share links was already a common means for "viral distribution" of content. '687 patent at 1:45-48 ("[T]he unique ability to share or 'virally distribute' content … now enables the Internet to be used as a highly social medium."). And the patents confirm that this common usage of share links included the distribution of web widgets. *Id*. at 1:61-62 ("One current approach that is used to distribute applications of limited functionality involves 'web widgets.'"); *see also Los Angeles Times v. Free Republic*, No. CV 98-7840-MMM-AJWx, 2000 WL 565200, at *9 (C.D. Cal. Apr. 4, 2000) ("Linking is familiar to most Internet users, even those who are new to the web.").

Six dependent claims identify the kind of information stored in the content distribution system or displayed in product listing. '237 patent, cls. 4, 12, 18; '785 patent, cls. 6, 11, 18. But again, the patents go no further than identifying the most generic, routine forms of information, specifically stating that the information would be an "image," "video," and "multimedia." *Id*. This is just standard data routinely used by content distributions systems.

Twelve dependent claims recite additional limitations regarding the checkout process or the transaction processing service, all of which just identify the different ways these steps are ordinarily practiced by conventional content distribution systems. '687 patent, cl. 7; '237 patent, cl. 7; '995 patent, cls. 4, 10, 14; '785 patent, cls. 3, 4, 8, 9, 13, 16, 17, 20. For example, some of these claims simply recite the redundant limitation that the transaction processing

service be in communication with the server ('687 patent, cl. 7) while other claims require that the third-party transaction processing service be proprietary ('237 patent, cl. 7; '995 patent, cls. 10, 14). Other claims recite conventional purchase methods: credit card, debit card, or bank account. '995 patent, cl. 4; '785 patent, cl. 20. And others simply recite variations of checkout screens that allows for transaction processing. '785 patent, cls. 3, 4, 13, 16, 17.

Again, the Buy Button Patents do not claim to have improved any features relating to checkout processes or transaction processing services, nor do they offer to use them in anything other than their ordinary, conventional manner. These dependent claims simply computerized versions of fundamental economic practices such as credit-card payments, which are abstract ideas ineligible for patent protection. *Bozeman Fin. LLC v. Fed. Reserve Bank of Atlanta*, 955 F.3d 971, 978 (Fed. Cir. 2020) ("'[F]undamental economic practice[s] long prevalent in our system of commerce' are examples of abstract ideas, which are ineligible subject matter.").

Eight dependent claims add limitations on how the product listing must appear on different websites or on social media. '995 patent, cls. 3, 5, 9, 12; '785 patent, cls. 2, 10, 12, 15. But again, these limitations merely identify standard, conventional content distribution practices of, for example, "distributing the product listing to a social media network" or being "configured to be embedded into different websites." '995 patent, cl. 5; '785 patent, cl. 2. And the patents admit that using different websites, including "social media marketing," to advertise was a common practice before the patents' priority date. '678 patent at 1:37-42. Again, these limitations recite conventional interactions with websites that content distribution systems were ordinarily compatible with and regularly used.

Lastly, the Buy Button Patents include six miscellaneous dependent claims that add only conventional limitations to the independent claims. These claims recite, for example, the use of multiple servers ('678 patent, cl. 8; '237 patent, cl. 8) or the servers being collecting analytics data ('995 patent, cl. 7). *See Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1344 (Fed. Cir. 2018) ("collecting, analyzing, and displaying that information, without more, is an abstract idea."). These claims also recite how a product listing would appear, adding generic requirements such as displaying "a title, a description, or a price" ('995 patent, cl. 13), or that the product listing must sell a "physical good or service" ('785 patent, cls. 5, 19).

None of these limitations constitute an inventive concept, either alone or in concert,

because they simply recite conventional variations of sending and displaying advertisements with ordering instructions on the Internet. *See Ultramercial*, 772 F.3d at 716; *buySAFE*, 765 F.3d at 1355 (receipt and transmission of data over computer network "is not even arguably inventive"); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011); *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1350 (Fed. Cir. 2021) ("Because sending data to a third-party as opposed to the merchant is itself an abstract idea, it cannot serve as an inventive concept.").

In sum, the dependent claims add only routine, well-known concepts achieved with conventional computer components. These claims, when considered in connection with their respective independent claims, fail to transform combining ordering instructions with online advertisements into patentable applications of an abstract idea.

5. The Complaint Does Not Plausibly Allege an Inventive Concept.

When patent owner plaintiffs recognize that they are asserting patents that are on their face invalid under 35 U.S.C. § 101, they often pad the complaint with allegations that the claims address "technological problems" and "solve" those problems. In the complaint in this case, plaintiff DKR does just that, alleging that the Buy Button Patents solve "various technological problems inherent in the distribution of multimedia content over a computer communications network[.]" Compl. ¶ 34. As the Federal Circuit's case law shows, such conclusory allegations of inventiveness in the complaint have no impact on the analysis. *E.g.*, *IBM Corp. v. Zillow Group, Inc.*, 50 F.4th 1371, 1379 (Fed. Cir. 2022) (affirming dismissal because "the district court need not accept a patent owner's conclusory allegations of inventiveness" and the complaint lacked "plausible and specific allegations that any aspect of the claims is inventive.").

Here, the allegations of inventiveness in DKR's complaint are wholly conclusory and not specific. The complaint does not identify any technological problems that the Buy Button Patents purportedly solve, but instead lists various alleged characteristics of the invention that may be useful. *Id.* The allegation that these features solve "various technological problems" is thus wholly conclusory and properly ignored under *Iqbal*, as no factual allegations specify what the purported "problems" were or how the purported inventions of the Buy Button Patents overcame the limitations of the prior art to address them. *See Boom! Payments, Inc. v. Stripe, Inc.*, 839 F. App'x 528, 533 (Fed. Cir. 2021) (affirming dismissal when the "amended complaint

repeatedly asserts that its claims are not routine or conventional but does not provide plausible factual allegations to support those assertions."). On the contrary, the five characteristics of the "invention(s)" that the complaint touts are simply a straightforward application of the abstract idea of presenting a product to a prospective buyer along with ordering information, using conventional characteristics of the Internet.

Moreover, DKR's conclusory allegation of solving "various technological problems" does not and could not militate against the conclusion under *Alice* step one that the patents are directed to an abstract idea. This is because *Alice* step one—whether the claims are directed to an abstract idea—is a pure question of law, and only the *Alice* step two inquiry—whether any of the limitations of the claims recite an inventive concept—includes subsidiary issues of fact regarding whether the purportedly inventive elements were in fact routine and conventional. *Cardionet, LLC v. Infobionic, Inc.*, 955 F.3d 1358, 1372 (Fed. Cir. 2020) ("*Alice* step one presents a legal question that can be answered based on the intrinsic evidence."); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Whether the claims are directed to a technical solution to a technological problem, rather than an abstract idea, is assessed as part of the *Alice* step one inquiry. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016) ("[T]he first step in the *Alice* inquiry … asks whether the focus of the claims is on the specific asserted improvement in computer capabilities … or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool.").

The existence of plausible factual allegations of inventiveness in a complaint can only be relevant to *Alice* step two, which involves underlying factual determinations about what is well-understood and conventional, but not about whether the patent constitutes a technical solution to a technological problem. DKR has not even purported to allege any facts relating to whether the limitations of the claims, outside of the core abstract idea, were well-understood, routine, and conventional. It is thus proper for this Court to decide the § 101 issue at this time, as factual development is unnecessary.

IV. CONCLUSION

For the foregoing reasons, this case should be dismissed for lack of personal jurisdiction and, alternatively, because the claims of the Buy Button Patents are directed to patent-ineligible subject matter under § 101.

Dated: December 22, 2023

By: /s/ *Henry Nikogosyan*

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CERTIFICATE OF COMPLIANCE

The undersigned counsel of record for Shopify Inc. certifies that this brief contains 25 pages, which complies with the 25 page limit set by court order dated August 30, 2023.

By: /s/ *Henry Nikogosyan*

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I hereby certify that a copy of the foregoing document was served on all attorneys of record via the Court's EFC system on December 22, 2023.

By: /s/ *Henry Nikogosyan*

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CENTRAL DISTRICT OF CALIFORNIA

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The following transaction was entered on 2/9/2024 at 12:25 PM PST and filed on 2/9/2024
Case Name: DKR Consulting, LLC v. Shopify, Inc.
Case Number: 2:23-cv-06904-HDV-JC
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Document Number: 34(No document attached)

Docket Text:
TEXT ONLY ENTRY (IN CHAMBERS) ORDER by Judge Hernan D. Vera: The Court reset Plaintiff's Motion for Leave to File First Amended Complaint [31] to 04/04/24 at 10:00 a.m. THERE IS NO PDF DOCUMENT ASSOCIATED WITH THIS ENTRY. (wm) TEXT ONLY ENTRY

2:23-cv-06904-HDV-JC Notice has been electronically mailed to:

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

DKR CONSULTING LLC, *Plaintiff*, v. SHOPIFY, INC., *Defendant*.	Case No. 2:23-cv-6904 **FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT** ***JURY TRIAL DEMANDED***

Plaintiff DKR Consulting, LLC ("DKR") files this Amended Complaint against Shopify, Inc. ("Shopify") for patent infringement of United States Patent No. 10,846,785, No. 11,157,995, No. 11,455,678, and No. 11,488,237 (collectively the "patents-in-suit") and alleges as follows:

JURISDICTION

1. This action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq*. This Court therefore has subject matter jurisdiction under 28 U.S.C. § 1331 (federal question) and § 1338(a) (patents).

THE PARTIES

2. Plaintiff DKR is a limited liability company organized under the laws of the State of North Carolina with its principal place of business at 1101 Granville Road, Charlotte, North Carolina.

3. Plaintiff's principal, Mr. David K. Robb ("Mr. Robb") was the CEO/Owner of DIY Media, Inc., which previously owned the patents-in-suit.

4. DIY Media, Inc. had a business relationship with the Defendant, which among other things included having DIY Media's Shoppost platform integrated with Shopify's platform for a period of time.

5. On information and belief, Defendant Shopify is a Canadian company with a principal address at 150 Elgin Street, 8th Floor, Ottawa, ON K2P 1L4, Canada.

PERSONAL JURISDICTION AND VENUE

6. On information and belief, Shopify is subject to this Court's personal jurisdiction, in accordance with due process and/or the California Long Arm Statute because, in part, Shopify has committed, and continues to commit, acts of infringement in the State of California, has conducted business in the State of California, and/or has engaged in continuous and systemic activities in the State of California.

7. On information and belief, Shopify makes, uses, offers to sell, or sells a variety of products and services that rely, utilize, and/or employ in whole or in part functionality relating to an e-commerce store including without limitation, Shopify's E-commerce app, products and services incorporating in whole or in part Shopify's Admin API,[1] products and services incorporating in whole or in part Shopify's Storefront API,[2] products and services incorporating in whole or in part

[1] *See e.g.*, https://shopify.dev/api/admin.
[2] *See e.g.*, https://shopify.dev/api/storefront.

Shopify's Partner API,[3] products and services incorporating in whole or in part Shopify's Payment Apps API,[4] products and services incorporating in whole or in part Shopify's Marketplaces API,[5] Shopify's Buy-Button,[6] Shop Pay,[7] among other Shopify products and service offerings that operate in a substantially similar manner to the above referenced examples (hereinafter referred to collectively and individually as the "Shopify e-commerce Products and Services".)

8. On information and belief, the accused Shopify e-commerce Products and Services infringe one or more claims of each of the patents-in suit.

9. This Court has personal jurisdiction over Shopify because it committed and continues to commit acts of infringement in this judicial district in violation of 35 U.S.C. § 271(a) and (b). In particular, on information and belief, Shopify has made, used, offered to sell and/or sold infringing products, services and/or systems in this judicial district, including the accused Shopify e-commerce Products and Services.

10. On information and belief, Shopify is subject to the Court's jurisdiction because it regularly conducts and solicits business, or otherwise engages in a persistent courses of conduct in this district, and/or derives substantial revenue from the sale and distribution of goods and services provided to individuals and businesses in this district.

11. On information and belief, Shopify provides instructions directed to customers in California regarding how to start a business in California incorporating Shopify e-commerce Products and Services in order to promote same. *See e.g.,* https://www.shopify.com/blog/how-to-start-a-business-in-california;

[3] *See e.g.*, https://shopify.dev/api/partner.
[4] *See e.g.*, https://shopify.dev/api/payments-apps.
[5] *See e.g.*, https://shopify.dev/api/marketplaces.
[6] *See e.g.*, https://www.shopify.com/buy-button.
[7] *See e.g.*, https://shop.app/shop-pay.

https://www.shopify.com/blog/how-to-start-an-llc-in-california; https://losangeles.shopify.com/gettingstartedwithshopifyapr27

12. On information and belief, in 2017 Shopify built a Kylie Cosmetics pop-up store in Los Angeles, California. *See e.g.,* https://www.shopify.com/blog/212483913-kylie-jenner-pop-up

13. On information and belief, in 2018 Shopify opened a brick and mortar store in Los Angeles, California to allow merchants to learn about Shopify e-commerce products and services. *See e.g.*, https://www.shopify.com/news/shopify-opens-its-first-brick-and-mortar-entrepreneur-space

14. Shopify works with an extensive number of merchants in California and upon information and belief Shopify operates thousands of stores in California for these merchants. Notably, as of February 2, 2024, there are 29,536 Shopify stores in Los Angeles, 6,920 Shopify stores in San Diego, and 5,484 Shopify stores in San Francisco, among thousands of others. *See e.g.*, https://storeleads.app/reports/shopify/US/region/California#cities

15. On information and belief, Shopify holds physical events in California, namely Los Angeles, to promote Shopify e-commerce Products and Services and to provide resources for merchants to grow their businesses on the Shopify platform. *See e.g.,* https://losangeles.shopify.com/supportweek2022; https://losangeles.shopify.com/attractmorecustomersla; https://losangeles.shopify.com/connectlamarketplace; https://losangeles.shopify.com/smallbizsocial; https://losangeles.shopify.com/connectlalaunch

16. Shopify advertises its relationships with California merchants including Kylie Cosmetics, Crate & Barrel, and Jungalow Co., LLC. (see screenshot below from Shopify's website)

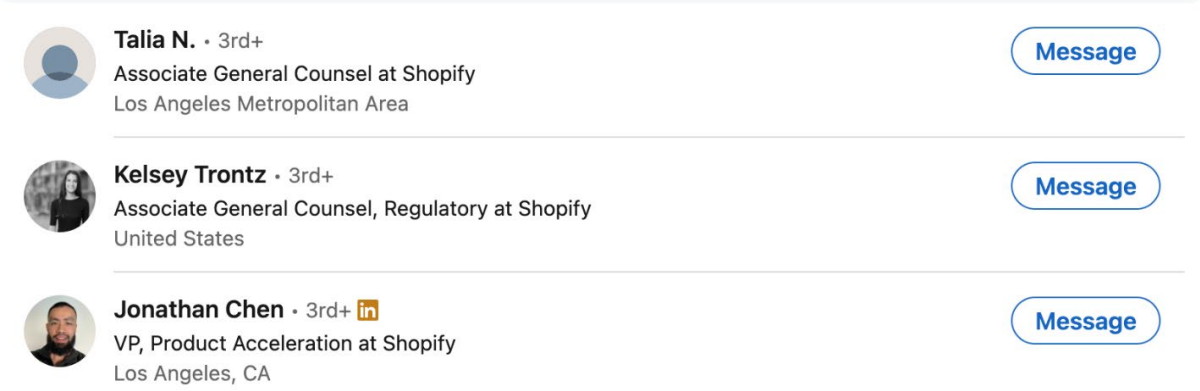


https://www.shopify.com/free-trial?term=shopify&adid=565872334073&campaignid=15436644439&branded_enterprise=1&BOID=brand&utm_medium=cpc&utm_source=google&gclid=Cj0KCQiAh8OtBhCQARIsAIkWb69IU0neIdggaZC6Pws_2LsljHfwFYKfwgI7YqnOFjiRU8MnPZwyGIMaAn1MEALw_wcB&cmadid=516586854;cmadvertiserid=10730501;cmcampaignid=26990768;cmplacementid=324494812;cmcreativeid=163722649;cmsiteid=5500011

17. This Court has personal jurisdiction over Shopify because, on information and belief, Shopify: (1) has committed acts of patent infringement in this judicial district, (2) has substantial, continuous, and systematic contacts with this State and this judicial district; (3) owns, manages, and operates facilities in this State and this judicial district; (4) enjoys substantial income from its operations and sales in this State and this judicial district; (5) employs California residents in this State, (6) specifically targets California merchants and(7) solicits business and markets products, systems and/or services in this State and judicial district

including, without limitation, the infringing Shopify e-commerce Products and Services.

18. Venue is also proper pursuant to 28 U.S.C. § 1391(b), (c)(3), or (d) and/or 28 U.S.C. § 1400(b) and the Federal Circuit's decision in *In re Monolithic Power Sys.*, 50 F.4th 157 (Fed. Cir. 2022), at least because, upon information and belief, Shopify has multiple employees based out of this district (see screenshot below of a search conducted on LinkedIn).



19. Venue is proper also because Shopify has transacted business in this district and has directly committed acts of patent infringement in this district, and because Shopify is a foreign corporation not residing in a United States judicial district, and, therefore, may be sued in any judicial district in accordance with 28 U.S.C. § 1391(c)(3).

SHOPIFY'S WILLFUL INFRINGEMENT

20. Before and/or during development of the infringing Shopify technologies, (a) Shopify was in possession of DIY Media's confidential technical information, which is the subject of the patents-in-suit and (b) on information and belief, Shopify had knowledge of DIY Media's pending patent applications and the asserted patents as they were issued.

21. Shopify obtained DIY Media's confidential technical information through meetings/discussions with DIY Media when the parties were discussing potential technical and business collaborations from around 2011 to 2015.

22. Meetings to discuss the ways to integrate Shopify with Shoppost were conducted starting in or around 2011.

23. The parties met at SxSW in Austin in 2013 to further discuss the potential relationship between the companies, as well as features for upcoming releases.

24. The patent applications that were filed at the time DIY Media and Shopify were having discussions, as well as their progeny, are the patents-in-suit.

25. A Shopify/Shoppost partnership began in March 2014, and this was Shopify's first integration partner within an e-Commerce platform ecosystem.

26. From July 9, 2014, to July 19, 2014, DIY Media's Shoppost app was promoted by Shopify and placed on the homepage of their app store.

27. In late 2016, Shopify created a feature that exactly mirrored the functionality of Shoppost, knowing that this was DIY Media's patented technology.

THE ASSERTED PATENTS

United States Patent No. 11,455,678

28. On September 27, 2022, the United States Patent and Trademark Office ("USPTO") duly and legally issued United States Patent No. 11,455,678 ("the '678 patent") entitled "System and Method for Distributable E-Commerce Product Listings" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

29. The '678 patent is presumed valid under 35 U.S.C. § 282.

30. DKR owns all rights, title, and interest in the '678 patent.

31. DKR has not granted Shopify a license to the rights under the '678 patent.

32. In the background section, the '678 patent notes that "consumers are using the Internet to purchase electronic content such as information products, music or to gain access to web sites that provide news or entertainment stories." The patent further recognizes that, at the same time, "the Internet is being used to engage in a wide variety of social networking between and among different individuals and online communities." *See* '678 patent at col. 1, *ll*. 25-45.

33. The patent refers to this trend as the viral distribution of content with recommendations and referrals. *See id.* at col. 1, *ll*. 45-50.

34. The patent observed that at the time of the invention, viral distribution of content focused on the use of electronic mail and there was a need for "enhanced capabilities to distribute content in a more immediate and engaging manner."

35. The patent identified web widgets as a way to address the need but decried the limited functionality of current web widgets. *Id*. at col. 2, *ll*. 1-6.

36. For this reason, the patent noted that "there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices." *Id*. at col. 2, *ll*. 7-17.

37. The claimed invention(s) of the '678 patent sought to solve problems with, and improve upon, existing web widgets. For example, the '678 patent states:

> Notwithstanding their useful role in these types of applications, current web widgets are not used as self-contained electronic commerce platforms. Yet, there is a significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet and over the rapidly growing number of mobile networks and associated mobile devices.

See '678 patent at col. 2, *ll*. 7-18.

38. Accordingly, the '678 patent describes, among other things, the creation, distribution, and use of an enhanced web widget to provide multimedia content over a computer network.

39. The '678 patent describes as one implementation, among other things, configuring the enhanced widget as an embeddable buy button to complete a commercial transaction in an e-commerce store.

40. The specification of the '678 patent and the invention(s) claimed in the patent detail and solve *inter alia* various technological problems inherent in the distribution of multimedia content over a computer communications network by creating an enhanced widget that (1) allowed for buying items over the Internet, (2) could be transported, shared or embedded on essentially any social media platform, (3) allowed for retrieval of content, (4) contained a transaction processing component operative to execute and complete a commercial transaction in the embedded electronic commerce store pertaining to the multimedia content files, and (5) allowed merchants to track purchases as it generated a unique URL every time it was shared.

United States Patent No. 10,846,785

41. On November 24, 2020, the USPTO duly and legally issued United States Patent No. 10,846,785 ("the '785 patent") entitled "System and Method for Generating and Distributing Embeddable Buy Buttons" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

42. The '785 patent is presumed valid under 35 U.S.C. § 282.

43. DKR owns all rights, title, and interest in the '785 patent.

44. DKR has not granted Shopify a license to the rights under the '785 patent.

45. The '785 patent relates to, among other things, an embeddable buy button to complete a commercial transaction in an e-commerce store.

46. The invention(s) claimed in the '785 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

United States Patent No. 11,157,995

47. On October 26, 2021, the USPTO duly and legally issued United States Patent No. 11,157,995 ("the '995 patent") entitled "System and Method for Generating and Distributing Embeddable Electronic Commerce Stores" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodrigues, Quinton Richard Harris, and Benjamin Cook.

48. The '995 patent is presumed valid under 35 U.S.C. § 282.

49. DKR owns all rights, title, and interest in the '995 patent.

50. DKR has not granted Shopify a license to the rights under the '995 patent.

51. The '995 patent relates to, among other things, generating an embeddable electronic commerce store.

52. The invention(s) claimed in the '995 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

United States Patent No. 11,488,237

53. On November 1, 2022, the USPTO duly and legally issued United States Patent No. 11,488,237 ("the '237 patent") entitled "System and Method for Facilitating Social Shopping" to inventors David Robb, Grant Neerings, Cameron Patterson, Joseph Rodriguez, Quinton Richard Harris, and Benjamin Cook.

54. The '237 patent is presumed valid under 35 U.S.C. § 282.

55. DKR owns all rights, title, and interest in the '237 patent.

56. DKR has not granted Shopify a license to the rights under the '237 patent.

57. The '237 patent relates to, among other things, a portable web widget for distribution of e-commerce content.

58. The invention(s) claimed in the '237 patent is a continuation of the '678 patent and solves the same technological challenges as the '678 patent.

THE ASSERTED CLAIMS IN THE PATENTS-IN-SUIT CLAIM PATENT ELIGIBLE SUBJECT MATTER

59. Dr. Keller has been retained on behalf of DKR Consulting, LLC to provide a declaration in connection with the instant litigation. *See* Declaration of Dr. Arthur Keller in Support of Plaintiff's First Amended Complaint for Patent Infringement (hereinafter "Keller Decl." attached as Exhibit 5). Dr. Keller has conducted a review of the Patents in Suit (U.S. Patent No. 11,455,678, U.S. Patent No. 10,846,785, United States Patent No. 11,157,995, and United States Patent No. 11,488,237) and provided opinion on the nature of the claimed inventions, the state of the prior art as of the effective filing date of each patent, any improvement to the prior art provided by the claimed inventions and disclosed in the patent specifications, and any benefits associated with the claimed inventions.

60. In D. Keller's opinion, the inventions recited in the asserted claims of the Patents-in-Suit disclose a specific means or method that solves a problem in an existing technological process, detail a specific technological solution to a specific technological problem, provide an unconventional technological solution to problems existing in the prior art, and provide improvements to the functionality of a network platform itself. Each asserted claim recites a new and useful combination that improves upon widget technology and e-commerce stores, for example, by enabling widgets to be compatible among varying HTML structures. This allows for changes to the widget itself or widget content to be made universally among all web sites rather than individually for each web site the widget is operating within.

61. In Dr. Kellers's view, the asserted claims of the Patents-in-Suit bring together numerous unconventional concepts and features and set forth a solution

that is necessarily rooted in computer technology. In one aspect, the specific computer technology covered by the claims in the Patents-in-Suit overcome problems specifically arising in the realm of widgets.

62. In Dr. Keller's opinion, the prior art state of widgets at the time of the priority date of the Patents-in-Suit comprised of "on-screen tools" that for example were, "used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily reposts, and flight information." '785 Patent Specification at 1:65-2:6. He further asserts that the widget technology disclosed by the claims in the Patents-in-Suit is a specific improvement to these widgets by making widgets, including those capable of processing transactions, universally compatible to all web sites, therefore, disclosing patent-eligible subject matter.

63. In addressing independent claim 1 of the '785 patent as an example of the patent eligibility of the claims in the Patent-in-Suit, Dr. Keller points to the Embedding Element ("embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider") and the Electronic Commerce Store Display Element ("wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider"). Dr. Keller states that the Embedding Element and the Electronic Commerce Store Display Element describe, "an unconventional embedding step where the buy button is operated on a separate server than that of the web site but is displayed within the web site to facilitate payment processing." He goes on to support this assertion by indicating that the widget's ability to operate within a variety of web sites, streamlining the ability of the widget developer to make universal changes across all web sites operating the widget presents a solution to problems, "pertaining to efficiency, security, privacy, usability, and reliability specifically arising in the

realm of internet widgets and claims a specific improvement in the network functionality rather than only claiming a desirable result or function."

64. According, to Dr. Keller the Embedding Element and Electronic Commerce Store Display Element detail, "unique features such as the ability to make a purchase from an e-commerce store directly from the web site." A consumer, therefore, no longer needs to independently navigate to a separate web site in order to make a purchase, but rather can be immediately prompted to submit payment information and, in some instances, instantly download electronic content.

65. According to Dr. Keller the Embedding Element and Electronic Commerce Store Display Element details, a specific and unconventional improvement in network capabilities because prior art widgets did not perform processing functions. Widgets at the time of the priority date of the Patents-in-Suit were limited to merely presenting the user with information (e.g. stock prices). In contrast, the claims in the Patents-in-Suit detail methods of embedding product listings and e-commerce stores that are capable of performing functions such as processing transactions.

66. According to Dr. Keller the Embedding Element and Electronic Commerce Store Display Element details, "a specific technological solution to a specific technological problem, as opposed to an abstract idea." As previously stated, the prior art at the time of the Patents-in-Suit comprised of widgets that needed to be individually compatible with each web site the widget was operating within. This meant that changes to function, structure, and content of the widgets needed to be changed in succession in order to tailor each widget to the host web site. The claims of the Patents-in-Suit indicate a method where the widget may be universally structured to operate within any web site and can be concurrently updated. The widget is capable of operating in this manner because the web servers operate, "as independent computing resources for use in receiving and responding to content related request from various client devices." '785 Patent Specification at

5:57-60. Dr. Keller emphasizes the importance of this feature and how it was not present in the prior art making widgets, "compatible with foreign HTML structures."

67. Based on Dr. Keller's opinion, Shopify's characterization of the Patents-in-Suit as mere computerization of a business practice fails to acknowledge how the claimed methods improve upon widget technology and optimize transaction processing to solve a unique technological problem. MTD p. 13. Therefore, the claims in the Patents-in-Suit recite elements that, in combination, were neither well-known, routine, or conventional at the time of filing do not reflect an abstract concept.

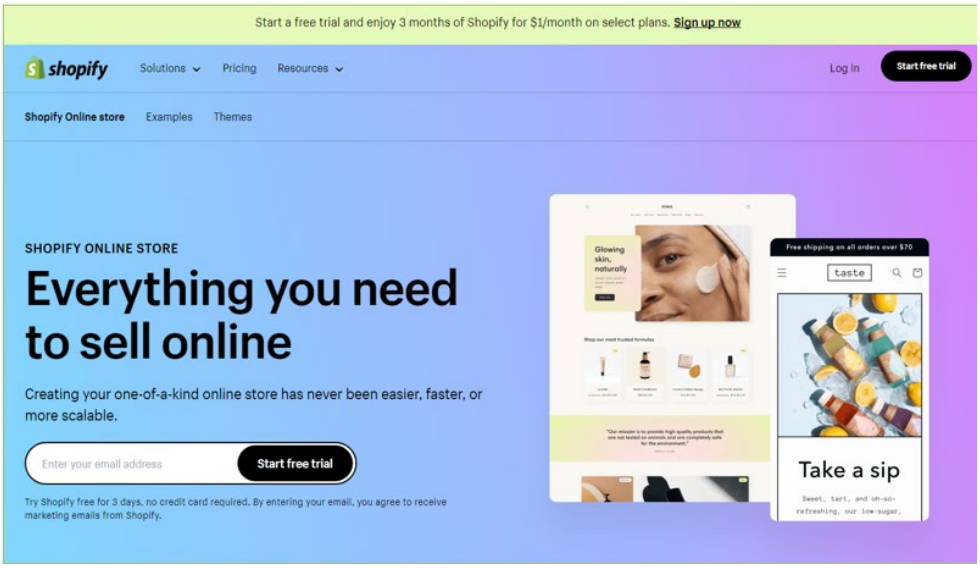
CLAIMS FOR RELIEF

Count I Infringement of United States Patent No. 11,455,678

68. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

69. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '678 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

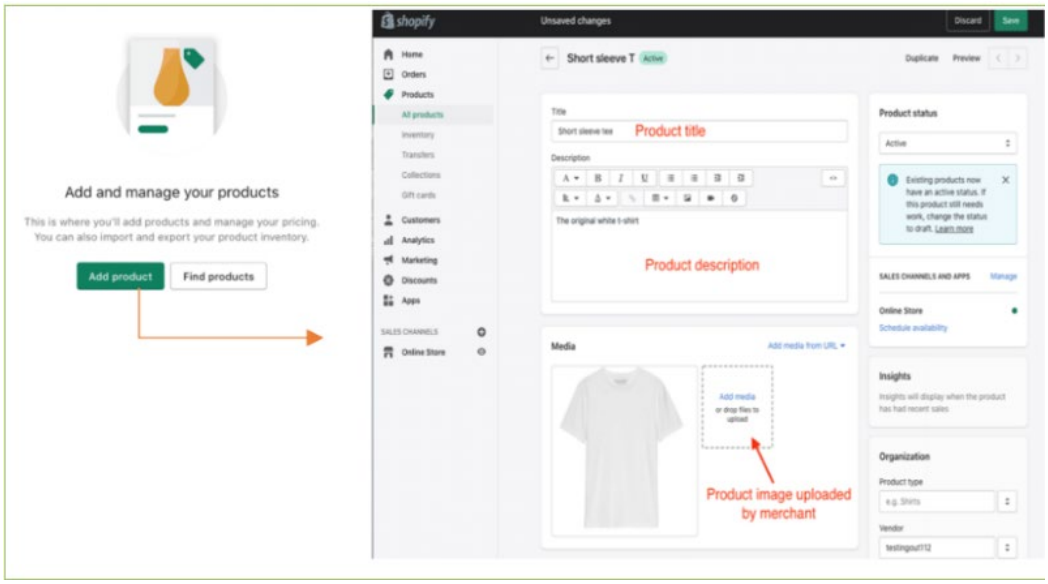
70. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for distributing multimedia content over a network comprising a server configured to control a transaction processing service.



See e.g., https://www.shopify.com/online.

71. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for distributing multimedia content over a network comprising a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata.

///



See e.g., adding images, descriptions and metadata for each product.

72. On information and belief, the Shopify e-commerce Products and Services employ and provide a system where the server is configured to receive the item from the storage resource.

Setting up your online store

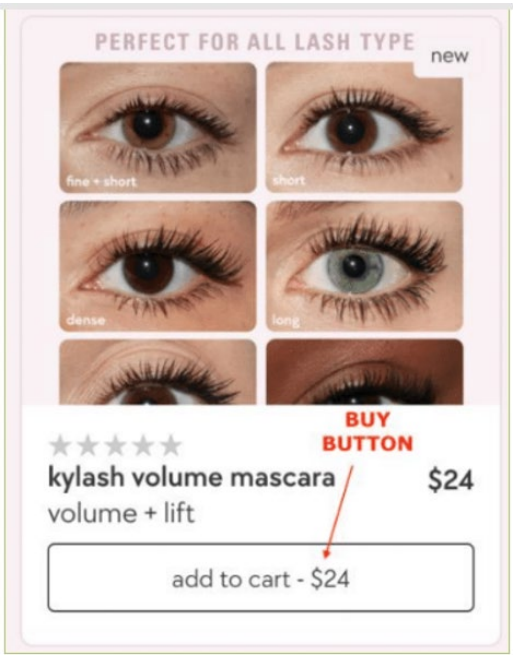
After you've set up Shopify, most of the work is done.

- Your online store will automatically use your Shopify settings for checkout and order fulfillment.
- Your products will automatically appear on your online store.
- Your online store is automatically assigned a unique `.myshopify.com` domain name, or website address. You domain name looks like `your-store-name.myshopify.com` and it's based on either the store name that you entered when you signed up or the domain name that was autogenerated if you did not enter a store name at that time. You can change your `.myshopify.com` domain name one time after you sign up for Shopify. Learn more about changing your `.myshopify.com` domain name.

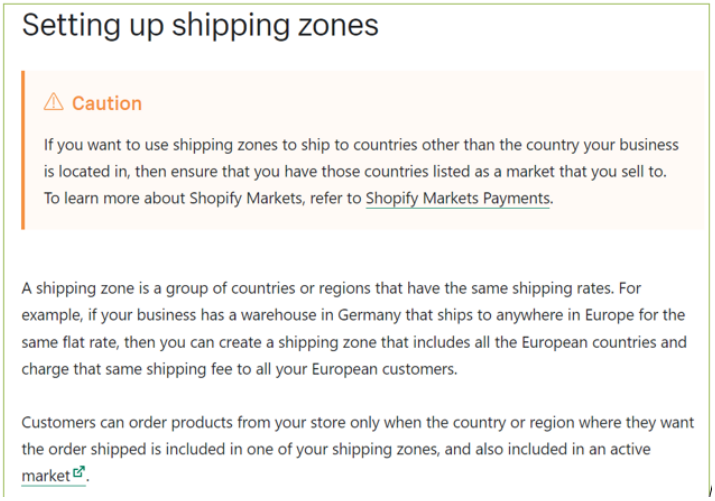
See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

73. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to execute a widget builder resource configured to generate a product listing, wherein the product listing includes

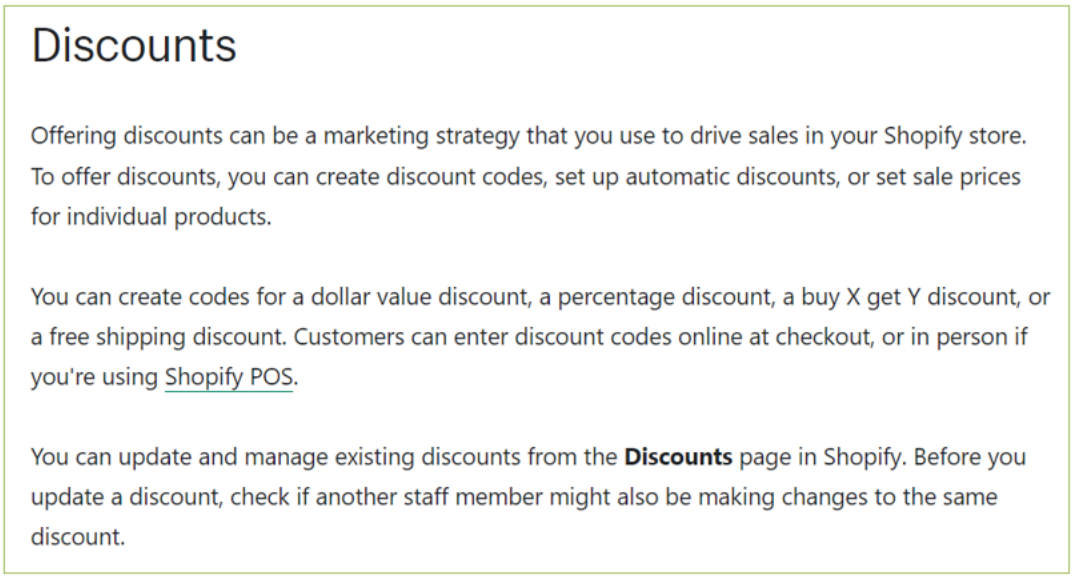
information associated with the item, a marketplace rule, and a clickable buy button.



See e.g., of Kylie Cosmetics, powered by Shopify, https://kyliecosmetics.com/.

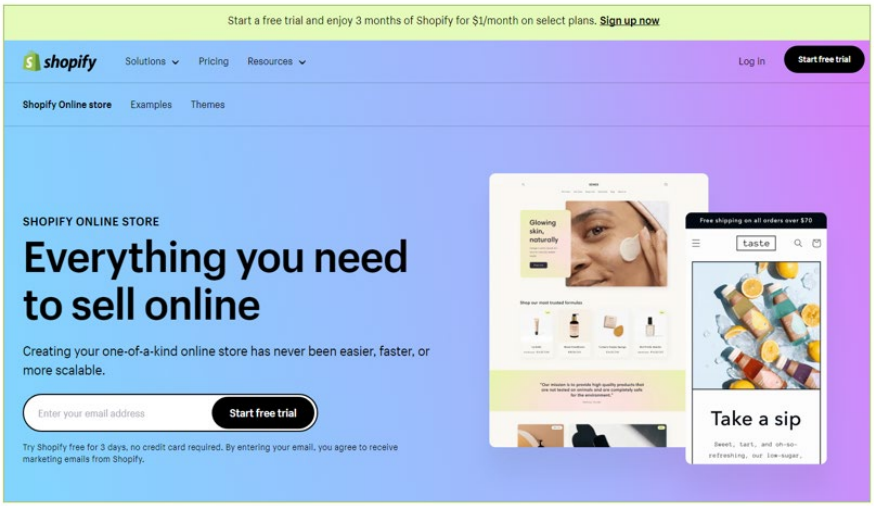


See e.g., https://help.shopify.com/en/manual/shipping/setting-up-and-managing-your-shipping/setting-up-shipping-zones.



See e.g., https://help.shopify.com/en/manual/discounts.

74. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on a marketplace rule.



See e.g., https://www.shopify.com/online.

Sales channels

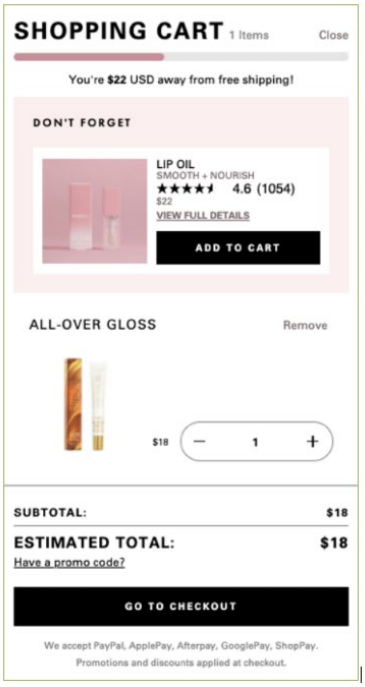
You can use Shopify to sell your products on different online **sales channels**. Sales channels represent the different platforms where you sell your products. By connecting each sales channel to Shopify, you can keep track of your products, orders, and customers in one place.

After you add a sales channel, it will be listed under **Sales Channels** in Shopify.

Facebook	Post and sell your products directly from the **Shop** tab on your store's Facebook page.
Instagram	Sell your products on Instagram by tagging them when they appear in your Instagram posts.

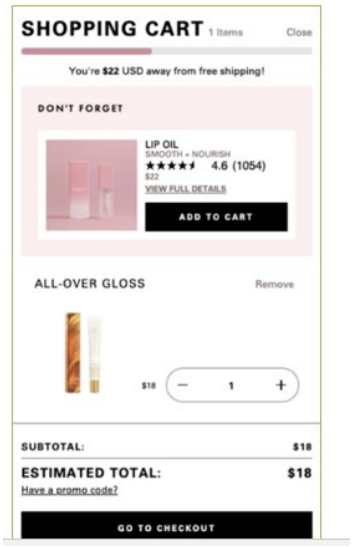
See e.g., https://help.shopify.com/en/manual/online-sales-channels.

75. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to receive an indication that the clickable buy button has been selected by a remote computing device.



See, *e.g.,* screenshots from Kylie Cosmetics' Instagram store, powered by Shopify.

76. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.





See e.g., screenshots from Kylie Cosmetics' Instagram store, where items are purchased through ShopPay, both of which are powered by Shopify.

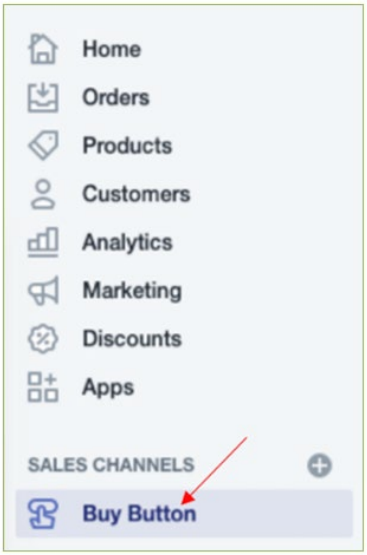
77. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

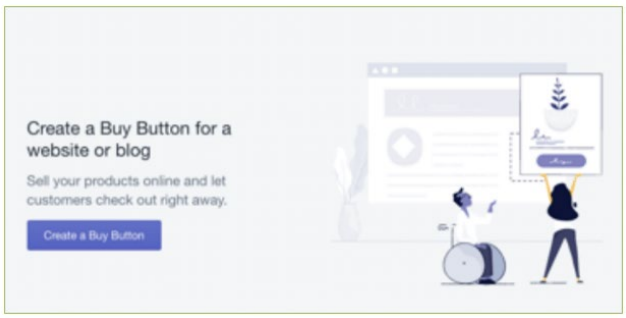
Count II – Infringement of United States Patent No. 10,846,785

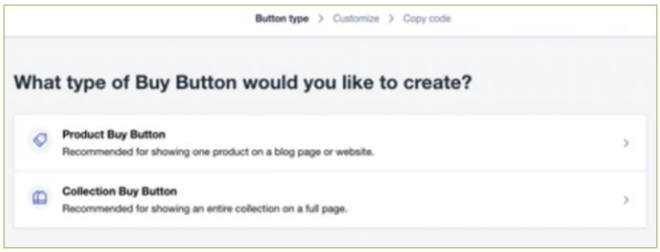
78. DKR realleges,and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

79. On information and belief, Shopify infringe (literally and/or under the doctrine of equivalents) at least claim 1 of the '785 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

80. On information and belief, the Shopify e-commerce Products and Services employ and provide a method for embedding a buy button for an electronic commerce store.

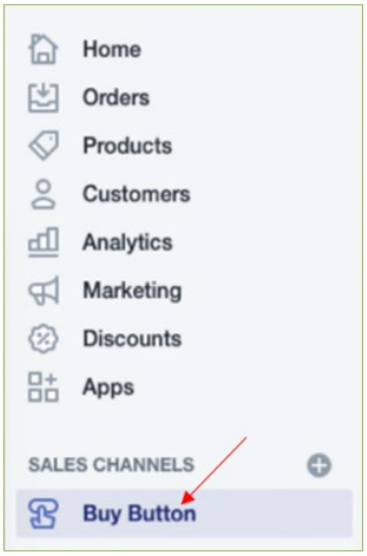


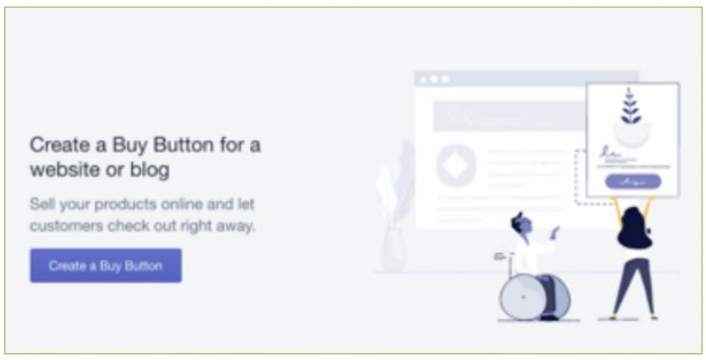


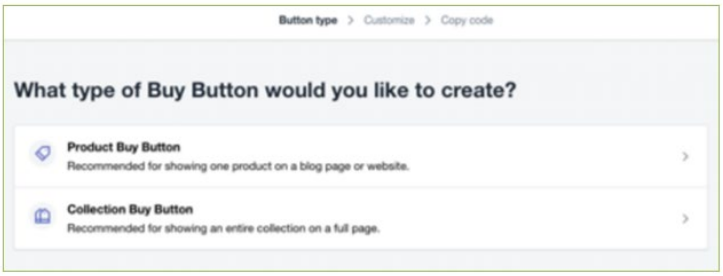


See e.g., https://www.shopify.com/buy-button.

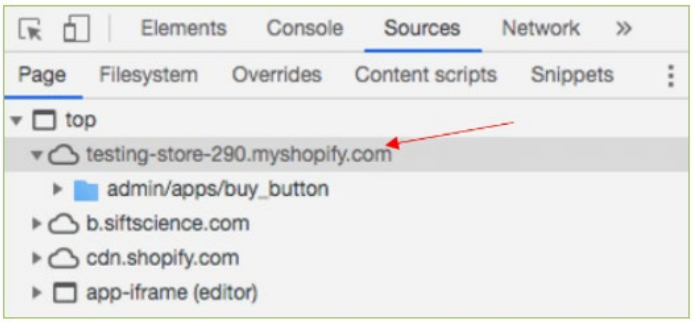
81. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that comprises receiving, by an embeddable buy button builder execution on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store.



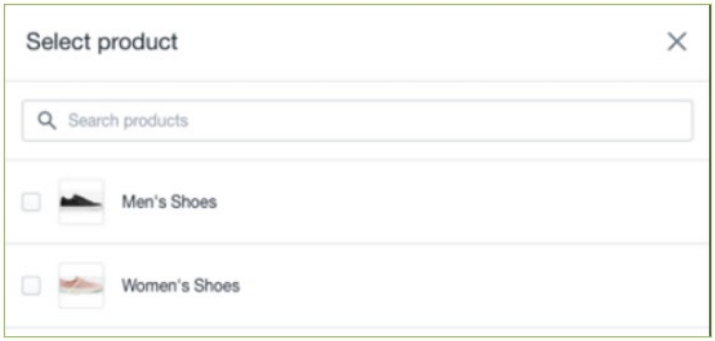




See e.g., https://www.shopify.com/buy-button.

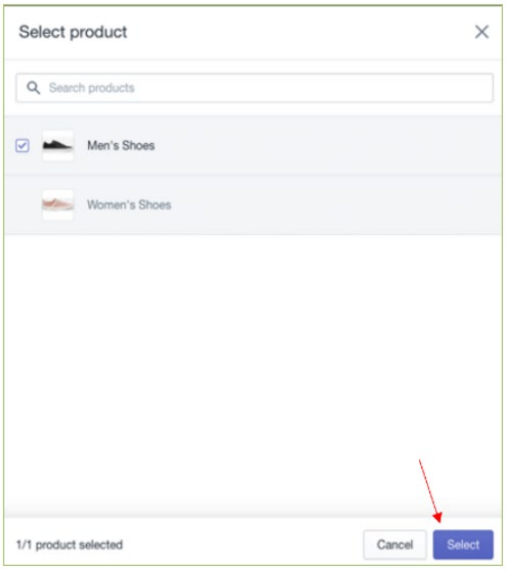


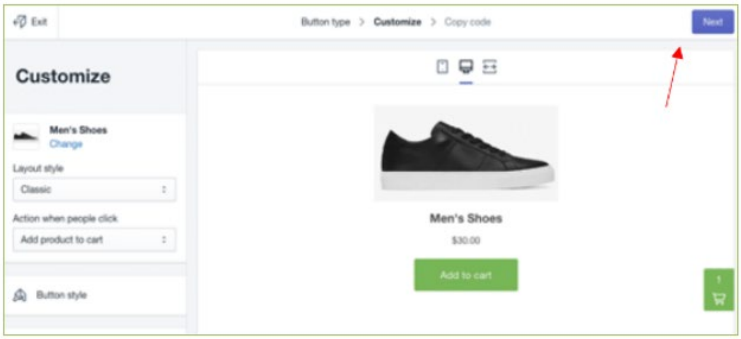
See e.g., server information from a source code inspector tool while accessing the Shopify Buy button builder.



See e.g., inventory selection of an item from the Shopify Product Buy Button.

82. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that generates, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink.







See e.g., dialog boxes from Shopify's Buy Button builder that are used to generate Buy Button embedded code.

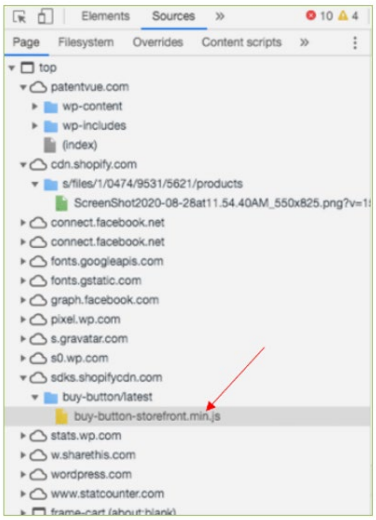
83. On information and belief, the Shopify e-commerce Products and Services employ and provide a method that embeds, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider.

```
<script data-shopify-buy-ui>
   var scriptURL = 'https://sdks.shopifycdn.com/buy-
button/latest/buy-button-storefront.min.js';
    if (window.ShopifyBuy && window.ShopifyBuy.UI) {
      ShopifyBuyInit();
    } else {
      var script = document.createElement('script');
      script.async = true;
      script.src = scriptURL;
      (document.getElementsByTagName('head')[0] ||
document.getElementsByTagName('body')[0]).appendChild(script);
      script.onload = ShopifyBuyInit;
    }

    function ShopifyBuyInit() {
      var client = ShopifyBuy.buildClient({
        domain: 'testing-store-290.myshopify.com',
        storefrontAccessToken: '0a1977566039b9a647b6db514f55b01d'
      });

      ShopifyBuy.UI.onReady(client).then(function (ui) {
        ui.createComponent('product', {
          id: 12345,
          options: {
            product: {
              buttonDestination: 'cart',
              contents: {
                description: true
              },
```

See e.g., source code from Shopify Buy Button in an externally hosted website.



See e.g., server information from a source code inspector tool while accessing the Shopify Buy button builder.

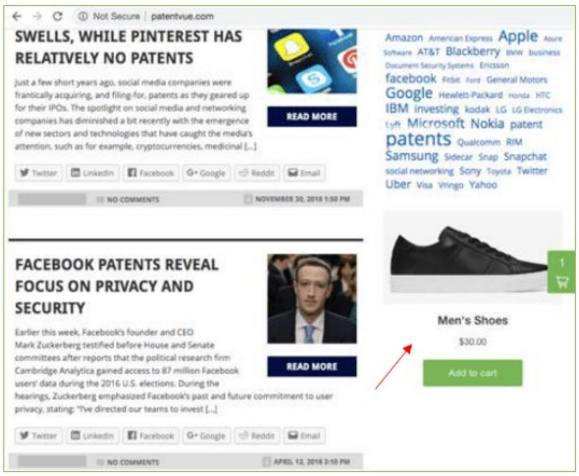
```
Q = new W(window), G = 18e5, H = 62208e6, J = "shopify", K = ".shopify.com", Y =
".myshopify.com", X = ".oberlo.com", $ = {
    parse: function(t) {
      for (var e = {}, n = t.split(/ *; */), a = 0; a < n.length; a++) {
        var i = n[a].split("=");
        try {
          e[decodeURIComponent(i[0])] = decodeURIComponent(i[1] || "")
        } catch (t) {}
      }
      return e
    },
```

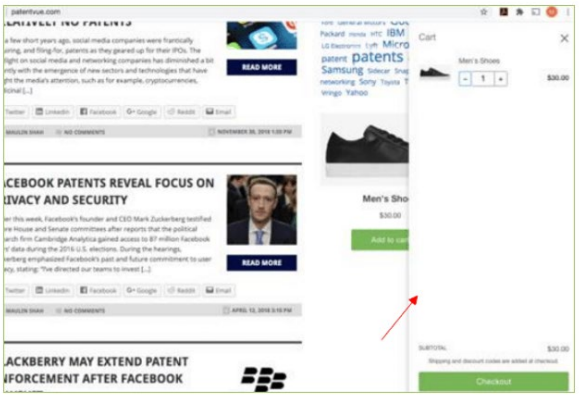
See e.g., the JavaScript file code showing the server associated with the origin domain.



See e.g., https://www.shopify.com/buy-button.

84. On information and belief, the Shopify e-commerce Products and Services employ and provide a method where the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.





See e.g., a Wordpress blog displaying the Shopify Buy Button, on a blog hosted by Wordpress.org.

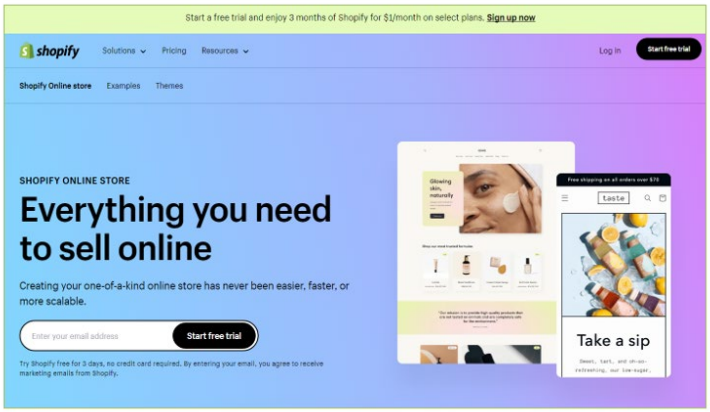
85. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

Count III – Infringement of United States Patent No. 11,157,995

86. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

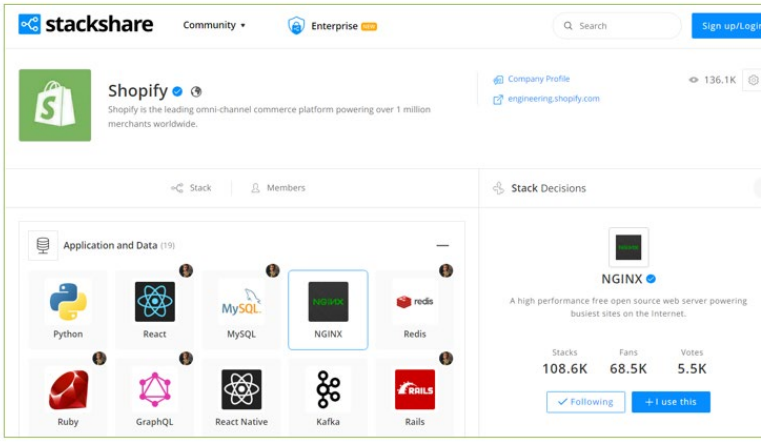
87. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '995 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

88. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of generating an electronic commerce store.



See e.g., https://www.shopify.com/online.

89. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of controlling a transaction processing service.



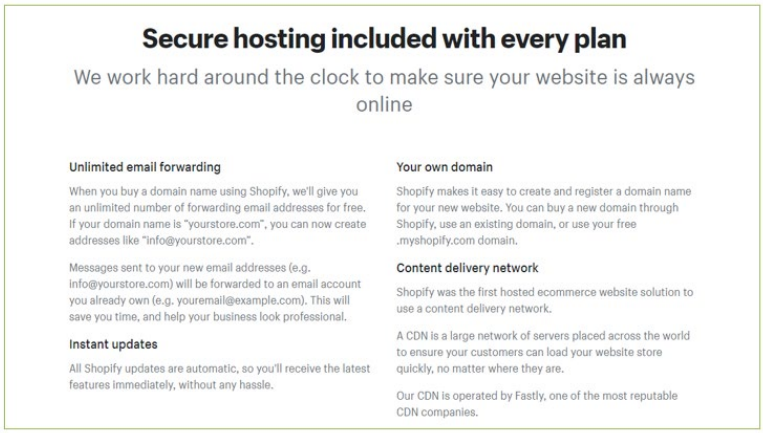
See e.g., https://stackshare.io/shopify/shopify, for Shopify's utilization of NGINX web servers.



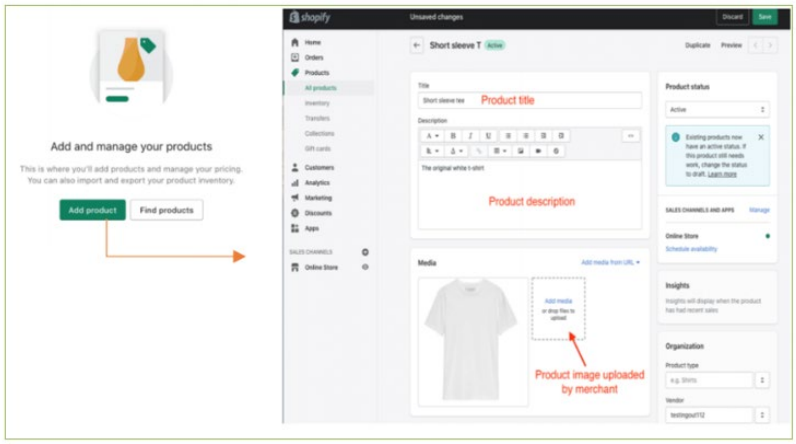
See e.g., https://shop.app/shop-pay.

90. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a storage resource communicatively

coupled to the application server, the storage resource storing an image and metadata related to a product.

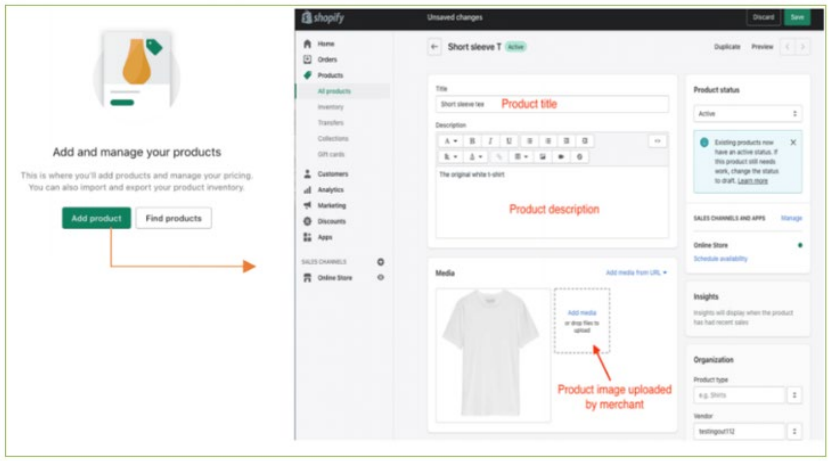


See e.g., https://www.shopify.com/website/hosting.

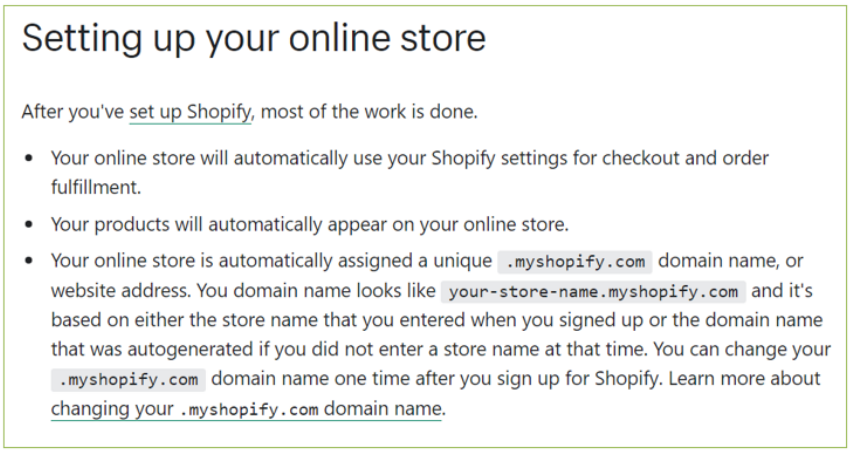


See e.g., adding images, descriptions, and metadata for each product.

91. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, the widget builder resource configured to receive the image and metadata from the storage resource.



See e.g., adding images, descriptions, and metadata for each product.



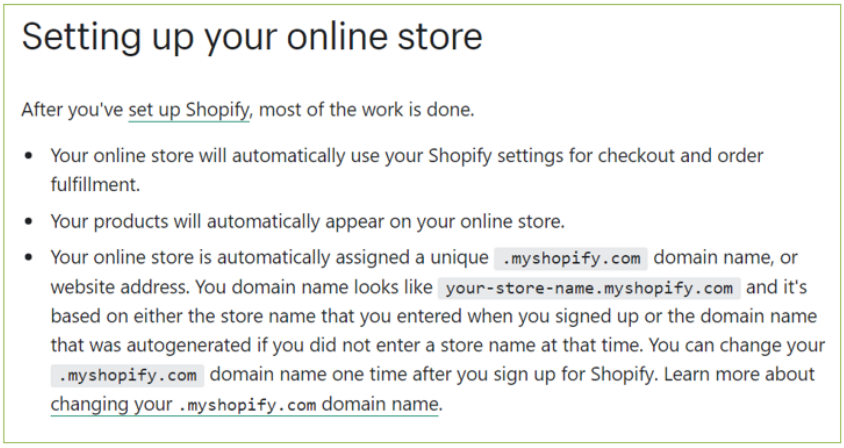
Setting up your online store

After you've set up Shopify, most of the work is done.

- Your online store will automatically use your Shopify settings for checkout and order fulfillment.
- Your products will automatically appear on your online store.
- Your online store is automatically assigned a unique `.myshopify.com` domain name, or website address. You domain name looks like `your-store-name.myshopify.com` and it's based on either the store name that you entered when you signed up or the domain name that was autogenerated if you did not enter a store name at that time. You can change your `.myshopify.com` domain name one time after you sign up for Shopify. Learn more about changing your `.myshopify.com` domain name.

See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

92. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, the widget builder resource configured to generate a product listing, wherein the product listing includes the image, the metadata and a clickable link, wherein the clickable link is a buy button and includes a preview of the product.

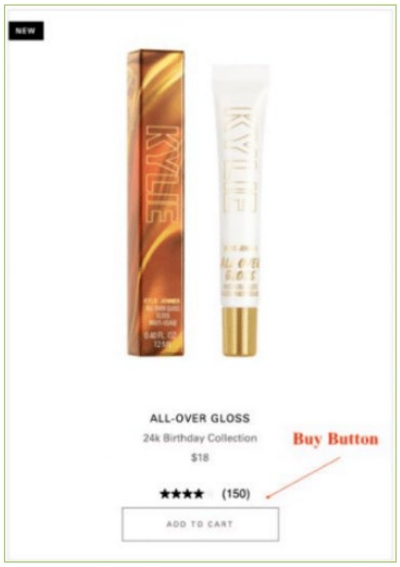


Setting up your online store

After you've set up Shopify, most of the work is done.

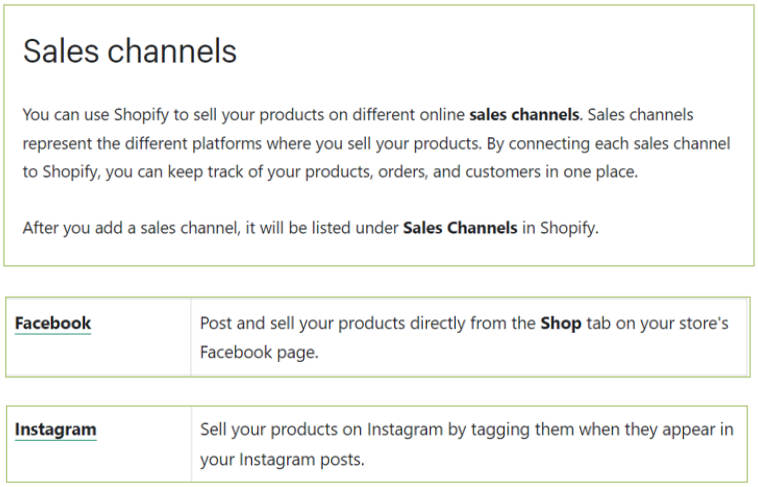
- Your online store will automatically use your Shopify settings for checkout and order fulfillment.
- Your products will automatically appear on your online store.
- Your online store is automatically assigned a unique `.myshopify.com` domain name, or website address. You domain name looks like `your-store-name.myshopify.com` and it's based on either the store name that you entered when you signed up or the domain name that was autogenerated if you did not enter a store name at that time. You can change your `.myshopify.com` domain name one time after you sign up for Shopify. Learn more about changing your `.myshopify.com` domain name.

See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.



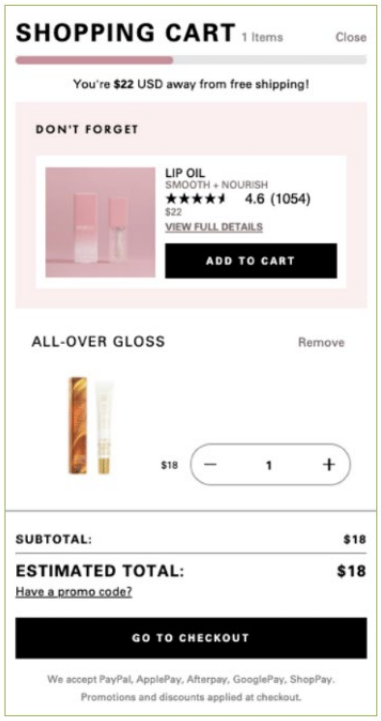
See e.g., https://kyliecosmetics.com/.

93. On information and belief, the Shopify e-commerce Products and Services employ and provide a method of a widget builder resource executing on the application server, where the application server is configured to embed the product listing into a web site, and into a social media network.



See e.g., https://help.shopify.com/en/manual/online-sales-channels.

94. On information and belief, the Shopify e-commerce Products and Services employ and provide a method wherein when the application server receives an indication that the clickable link has been activated by a client device in Internet communication with the web site, the client device, wherein the transaction processing service process a payment transaction for a purchase of the product initiated from the checkout screen using the client device.





See e.g., screenshots from Kylie Cosmetics' Instagram store, powered by Shopify.

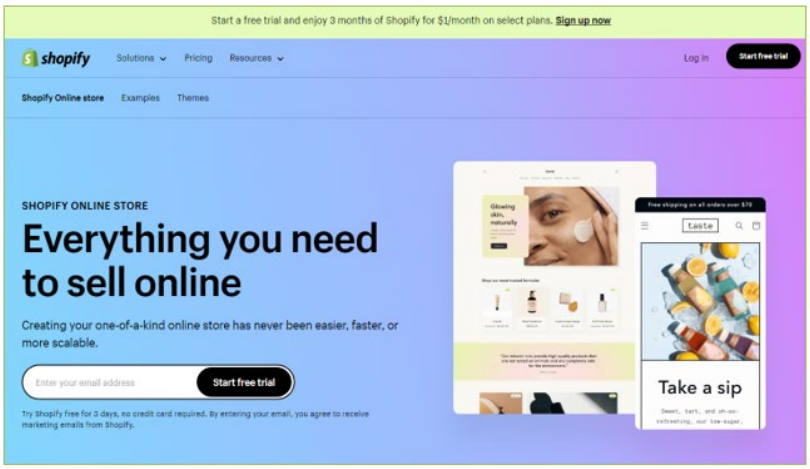
95. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

Count IV – Infringement of United States Patent No. 11,488,237

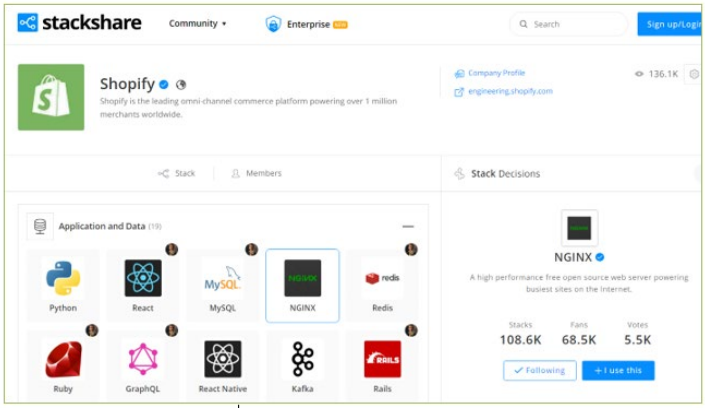
96. DKR realleges and incorporates by reference, as if fully set forth here, the allegations of the preceding paragraphs above.

97. On information and belief, Shopify infringes (literally and/or under the doctrine of equivalents) at least claim 1 of the '237 patent because it makes, uses, sells, imports and/or offers to sell the Shopify e-commerce Products and Services in the United States.

98. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for generating an electronic commerce store comprising an application server configured to control a transaction processing service.



See e.g., https://www.shopify.com/online.

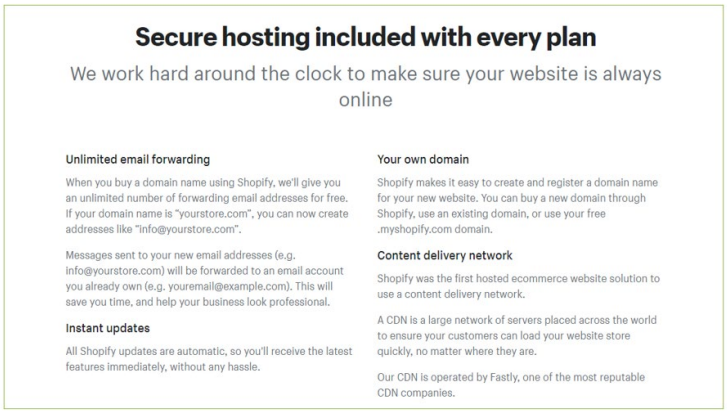


See e.g., https://stackshare.io/shopify/shopify/shopify, for Shopify's utilization of NGINX web servers.

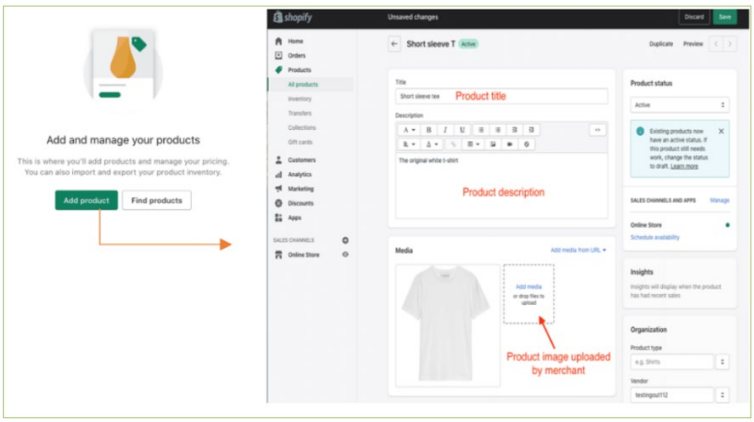


See e.g., https://shop.app/shop-pay.

99. On information and belief, the Shopify e-commerce Products and Services employ and provide a system for generating an electronic commerce store comprising a storage resource communicatively coupled to the application server, the storage resource storing information related to a product, the information comprising, multimedia content associated with the product and metadata associated with the product.

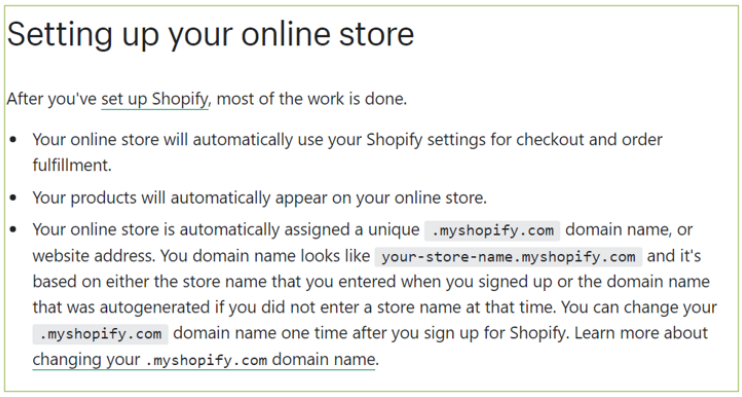


See e.g., https://www.shopify.com/website/hosting.



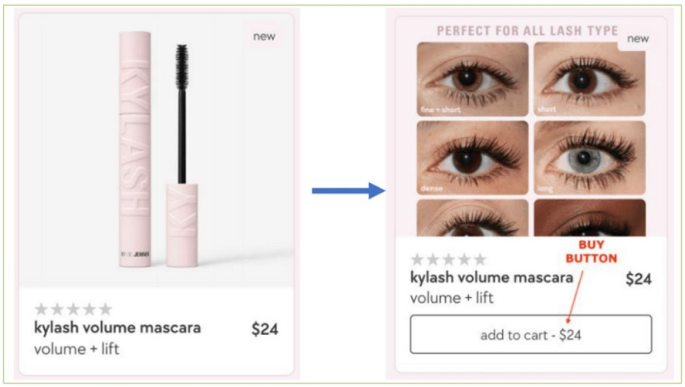
See e.g., adding images, descriptions and metadata for each product.

100. On information and belief, the Shopify e-commerce Products and Services employ and provide a system where the application server is configured to receive information from the storage resource.



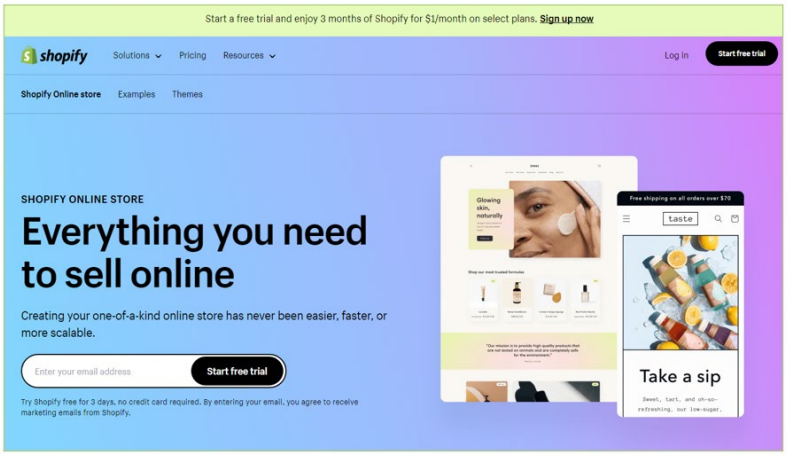
See e.g., https://help.shopify.com/en/manual/online-store/setting-up#customize-and-launch-your-online-store.

101. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that executes a widget builder resource configured to generate a product listing, wherein the product listing includes a preview of the product based on the information from the storage resource, and a clickable link wherein the clickable link comprises a buy button.

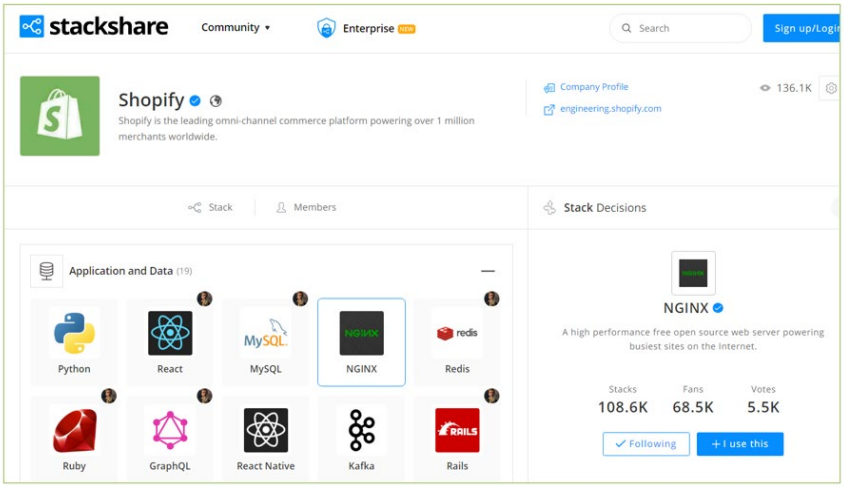


See e.g., screenshots from https://kyliecosmetics.com/en-us of a product listing including a preview, and a clickable link which comprises a buy button.

102. On information and belief, the Shopify e-commerce Products and Services employ and provide a system to distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application.



See e.g., https://www.shopify.com/online.



See e.g., https://stackshare.io/shopify/shopify, for Shopify's utilization of NGINX web servers.

Sales channels

You can use Shopify to sell your products on different online **sales channels**. Sales channels represent the different platforms where you sell your products. By connecting each sales channel to Shopify, you can keep track of your products, orders, and customers in one place.

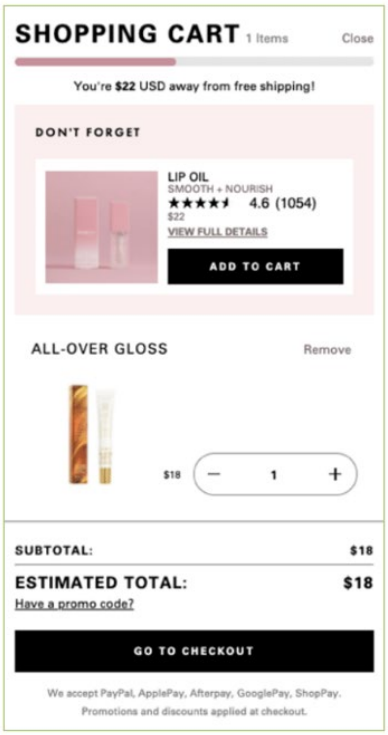
After you add a sales channel, it will be listed under **Sales Channels** in Shopify.

Facebook	Post and sell your products directly from the **Shop** tab on your store's Facebook page.

Instagram	Sell your products on Instagram by tagging them when they appear in your Instagram posts.

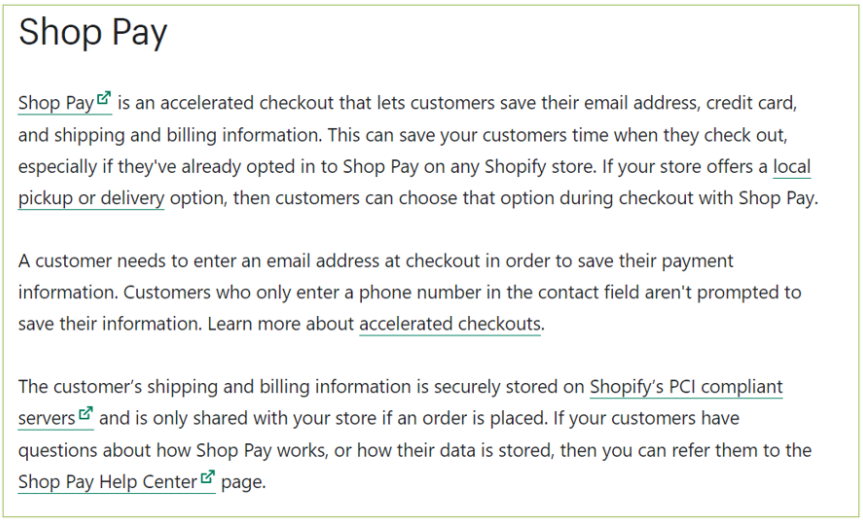
See e.g., https://help.shopify.com/en/manual/online-sales-channels.

103. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that receives an indication that the clickable link has been selected by a remote computing device.



See e.g., screenshots from Kylie Cosmetics' Instagram store powered by Shopify.

104. On information and belief, the Shopify e-commerce Products and Services employ and provide a system that provides a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device.



Shop Pay

Shop Pay is an accelerated checkout that lets customers save their email address, credit card, and shipping and billing information. This can save your customers time when they check out, especially if they've already opted in to Shop Pay on any Shopify store. If your store offers a local pickup or delivery option, then customers can choose that option during checkout with Shop Pay.

A customer needs to enter an email address at checkout in order to save their payment information. Customers who only enter a phone number in the contact field aren't prompted to save their information. Learn more about accelerated checkouts.

The customer's shipping and billing information is securely stored on Shopify's PCI compliant servers and is only shared with your store if an order is placed. If your customers have questions about how Shop Pay works, or how their data is stored, then you can refer them to the Shop Pay Help Center page.

See e.g., https://help.shopify.com/en/manual/payments/shop-pay.



See e.g., screenshots from Kylie Cosmetics' Instagram store, where items are purchased through ShopPay, both of which are powered by Shopify.

105. Shopify's direct infringement has damaged DKR and caused it to suffer and continue to suffer irreparable harm and damages.

PRAYER FOR RELIEF

DKR respectfully requests this Court to enter judgment in DKR's favor and against Shopify as follows:

A. finding that Shopify has infringed one or more claims of the '785 patent under 35 U.S.C. § 271(a) and/or (b);

B. finding that Shopify has infringed one or more claims of the '995 patent under 35 U.S.C. § 271(a) and/or (b);

C. finding that Shopify has infringed one or more claims of the '678 patent under 35 U.S.C. § 271(a) and/or (b);

D. finding that Shopify has infringed one or more claims of the '237 patent under 35 U.S.C. § 271(a) and/or (b);

E. awarding DKR damages under 35 U.S.C. § 284, or otherwise permitted by law, including supplemental damages for any continued post-verdict infringement;

F. awarding DKR pre-judgment and post-judgment interest on the damages award and costs;

G. awarding cost of this action (including all disbursements) and attorney fees pursuant to 35 U.S.C. § 285, or as otherwise permitted by the law; and

H. awarding such other costs and further relief that the Court determines to be just and equitable.

JURY DEMANDED

Under Federal Rule of Civil Procedure 38(b), DKR hereby requests a trial by jury on all issues so triable.

Dated: February 14, 2024

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

DKR Consulting LLC,

Plaintiff,

v.

Shopify, Inc.

Defendant.

Case No. 2:23-cv-06904-HDV-JC

NOTICE OF MOTION; DEFENDANT SHOPIFY, INC.'S RULE 12(B)(6) MOTION TO DISMISS AMENDED COMPLAINT

Hearing Date: April 11, 2024 at 10:00 a.m.
Courtroom: 5B
Judge: Hon. Hernán D. Vera

NOTICE OF MOTION AND MOTION TO DISMISS

TO THE HONORABLE COURT, ALL PARTIES, AND THEIR COUNSEL OF RECORD.

PLEASE TAKE NOTICE THAT on April 11, 2024 at 10:00 a.m., or as soon thereafter as the matter may be heard, in the United States District Court, Central District of California, located at 255 E. Temple Street, Los Angeles, California 90012, Courtroom 5B, 5th Floor, before the Honorable Hernán D. Vera, Defendant Shopify Inc. will move, and hereby does move, for an order dismissing Plaintiff DKR Consulting LLC's First Amended Complaint for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6).

This motion is made following a conference of counsel pursuant to Local Rule 7-3 which took place on February 29, 2024. Plaintiff informed Defendant that it disagreed with the substance of the motion and that it intended to oppose.

Dated: March 6, 2024

By: /s/ *Henry Nikogosyan*

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served on all attorneys of record via the Court's ECF system on March 6, 2024.

By: /s/ *Henry Nikogosyan*

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

DKR Consulting LLC,

Plaintiff,

v.

Shopify, Inc.

Defendant.

Case No. 2:23-cv-06904-HDV-JC

MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT SHOPIFY INC.'S RULE 12(b)(6) MOTION TO DISMISS AMENDED COMPLAINT

Hearing Date: April 11, 2024 at 10:00 a.m.
Courtroom: 5B
Judge: Hon. Hernán D. Vera

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I. INTRODUCTION

The concept of combining a product offering with an order form is a longstanding business practice that has been around for ages in, for example, magazine advertising (*see, e.g.*, example magazine advertisement from 1960s with order form).



With the development of the Internet, the practice of combining advertisements with order forms naturally moved to online platforms but maintained its essential character. Computers implemented the exact same idea and, thus, made it easier for consumers to directly purchase products displayed on the Internet. But while it is useful to have advertisements combined with order forms on the Internet, it is not eligible for patenting in the United States. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 212-13 (2014). This is because combining advertisements with order forms—an age-old business practice—is an "abstract idea." *See, e.g.*, *id*. at 226 (mediated settlement is an abstract idea); *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017) ("mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology").

The four patents asserted in this case (collectively, the "Buy Button Patents") claim no more than the abstract idea of using conventional computer technology such as servers and web widgets to combine advertisements with order forms. As the Federal Circuit has repeatedly recognized, this kind of computerization of a known business practice is not patentable. *See, e.g., Bridge & Post, Inc. v. Verizon Commc'ns, Inc.*, 778 F. App'x 882, 893 (Fed. Cir. 2019) ("The ability to run a more efficient advertising campaign, even if novel, and even if aided by conventional computers, is an advance 'entirely in the realm of abstract ideas,' which we have

repeatedly held to be ineligible.") (citation omitted).

Therefore, under *Alice* and the numerous Federal Circuit and district court cases finding similar patents invalid on their face, DKR's amended complaint should be dismissed pursuant to Rule 12(b)(6) under 35 U.S.C. § 101.

II. BACKGROUND

A. The Common Specification of the Buy Button Patents

The Buy Button Patents are titled "System and Method for Distributable E-Commerce Product Listings," "System and Method for Generating and Distributing Embeddable Buy Buttons," "System and Method for Generating and Distributing Embeddable Electronic Commerce Stores," and "System and Method for Facilitating Social Shopping." Because the patents originate from continuation applications of one another, they all share an identical written description.[1]

The specification of the Buy Button Patents confirms the purported invention relies on conventional computer technologies used in their ordinary manner to combine order forms with advertisements. Figure 1A of the patents shows that the purported invention uses an ordinary "operating environment for a multimedia content distribution system," featuring various "client devices … communicatively coupled to a network **102**," which "[i]n the illustrated embodiment … is the Internet." '678 patent, 3:31-50. The Buy Button Patents claim nothing inventive about this operating environment and simply claim the conventional function of "managing the use of resources in the multimedia content distribution system" and "to receive and respond to content related requests from consumer client devices **130**, **132**, **134**." *Id*., 4:13-21.

For example, the content distribution system implements the abstract idea of combining advertisements with order forms using conventional components of client-server systems. The Buy Button Patents use generic "consumer client devices" such as "laptop computers **130**, desktop computers **132** and various types of a mobile computing devices **134** such as personal digital assistants." *Id*., 3:35-41. Those client devices are connected via the internet ("network **102**") and a firewall server ("server **104**") to a central server ("application server **106**") that

[1] For simplicity, all patent written description citations in this brief are to the '678 patent.

performs the conventional function of "a centralized compute processing and transaction management resource." *Id*., 3:43-49. The central server then relies on additional generic servers ("email server **108**," "database server **110**," "file management server **114**") to retrieve data from a "cloud-based storage resource **124**" and to use that data in connection with a "transaction processing service **112**." *Id*., 3:58-67. The cloud-based storage resource **124** and the transaction processing service **112** are common functionalities provided by third parties such as "the Amazon Web Services group … using Amazon's 'Simple Storage Service'" and "'Flexible Payments Service.'" *Id*., 5:6-15; *see also id*., 18:8-12 (explaining that "Authorize.Net, Google Checkout, Storm Pay, PayPal or other Internet service" can be used).

Merchants, which the patents call "content owners," use the content distribution system no differently than any other generic distribution system for advertisements—they use their personal computer devices to "upload, register in a lookup table stored on the database server **110**, manage, package, price and create one or more compilations of stored and registered content for distribution to one or more consumer client devices **130**." *Id.*, 4:22-29. The content distribution system uses these "compilations" to supply the content of "web widgets." *Id.*[2]

Consumers interact with the web widgets in an ordinary, commonplace manner as well. They use "browsers executing on their client devices **130**, **132**, **134**" to activate web widgets by clicking on a "button or link" that the web widget displays. *Id*., 5:32-37. These browsers are any generic browser such as "Internet Explorer, Firefox, Google Chrome, Safari, Opera" and do not require any specialized modifications or add-ons. *Id*., 12:46-50. The specification explains that when a consumer goes online and "elects to purchase … by clicking on an embedded buy button" the web widget "redirects the consumer to the transaction processing service **112**." *Id*., 5:40-50. Completing the transaction involves a conventional third-party service, as explained above, and ordinary payment methods like "credit card, debit card or bank account information." *Id*., 5:48-49.

[2] The Dictionary of Computer and Internet Terms defines a "widget" as "a small software application on a web page." Lantier Decl, Ex. A at 3. The Authoritative Dictionary of IEEE Standard Terms defines "widget" as "[a] specific instance of a widget class, providing a control in the user interface, such as a menu, pushbutton, or text fields." Lantier Decl, Ex. B at 3.

These disclosures in the specification make clear that the patents' claimed invention uses pre-existing technologies: a client-server content distribution system, web widgets, browsers, online advertisements, and online transaction processing methods. The patents then do nothing more than direct the ordinary use of these conventional technologies to computerize the longstanding business practice of combining advertisements with a method to order the advertised product.

Indeed, the Buy Button Patents acknowledge that the computerization of advertisements was routine at the time of the alleged invention. '678 patent, 1:25-27 ("Electronic commerce on the Internet has become commonplace;" "There are many merchants offering goods and services via websites on the Internet."). The Buy Button Patents further acknowledge that "web widgets" were a known method for distributing content on the internet. *Id.*, 1:61-64 (a "current approach that is used to distribute applications of limited functionality involves 'web widgets,'" which are "portable software that can be installed and executed within a hypertext-markup-language web page."). The alleged improvement of the Buy Button Patents is to create web widgets that simply place a "buy button" next to product information and operate on a separate server in an ordinary content distribution system. *Id.*, 5:57; *see also id.*, Abstract, claim 1.

B. The Claims of the Buy Button Patents

In total, there are 74 claims across the Buy Button Patents, only four of which are featured in the body of the amended complaint. Those four claims are representative of all claims of the Buy Button Patents, which means that any one of these representative claims can be used to determine patent eligibility under 35 U.S.C. § 101. *See Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (determining that eleven claims in a patent application were invalid after only analyzing two claims in detail); *Cyberfone Sys., LLC v. Cellco P'ship*, 885 F. Supp. 2d 710, 718-19 (D. Del. 2012) (invalidating all twenty-four claims of a patent after analyzing the first claim), *aff'd sub nom. Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988 (Fed. Cir. 2014). But in case the plaintiff contests that the four claims in its amended complaint are representative, this motion addresses why each of the asserted claims is ineligible.

Claim 1 of the '678 patent, which is featured in the amended complaint, is typical of the

claims in the Buy Button Patents and recites the patent-ineligible abstract idea of computerizing the established process of including an order form in a product advertisement:

> **1.** A system for distributing multimedia content over a network, comprising:
>
> **[a]** a server configured to control a transaction processing service; and
>
> **[b]** a storage resource communicatively coupled to the server and configured to store an item, wherein the item comprises an identifier, multimedia content, and metadata,
>
> **[c]** wherein the server is configured to:
>
> **[c.1]** receive the item from the storage resource;
>
> **[c.2]** execute a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button;
>
> **[c.3]** distribute the product listing to a web site or a distributed application, wherein the product listing is configured to be displayed on the web site or the distributed application based on the marketplace rule;
>
> **[c.4]** receive an indication that the clickable buy button has been selected by a remote computing device; and
>
> **[c.5]** provide a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using the remote computing device.

'678 patent, claim 1. In other words, claim 1 of the '678 patent recites a computer server operating a **[a]** "transaction processing service" (i.e., a conventional payment service) over the Internet, where the server includes **[c.2]** software that creates an advertisement with a clickable "buy button" (i.e., conventional combination of a payment service in a web widget), and where **[c.5]** selection of the buy button results in the appearance of a "checkout screen" (i.e., computerization of a generic order form) to process the customer's transaction.

The representative claims of the '237 patent and the '995 patent also claim the same abstract idea performed using the same conventional computing components. Claim 1 of the '237 patent and claim 1 of the '995 patent (also featured in the amended complaint) are directed to the same concepts with slightly modified claims that also recite the use of pre-existing technologies in their ordinary, conventional manner. '237 patent, claim 1 (requires an "application server," omits the "marketplace rule" and "identifier"); '995 patent, claim 1

(requires "image and metadata" for the product, a "clickable link" that "is a buy button and includes a preview of the product," and embedding into a "social media network").

Claim 1 of the '785 patent (also featured in the amended complaint) also claims the same abstract idea with slightly modified limitations, such as renaming "widget builder resource" as an "embeddable buy button builder," requiring that the "electronic commerce store" and "web site" be operated by a "second server," and omitting some of the hardware limitations of the other patents. '785 patent, claim 1. But these modifications require no more than the ordinary use of pre-existing technologies (conventional content distribution system with multiple servers, generic web widgets, and ordinary incorporation of a third-party payment processing service) to embed ordering instructions in an advertisement.

C. Remaining Claims of the Buy Button Patents

The remaining independent claims of the Buy Button Patents do not have any meaningful differences from the claims above for purposes of a patent eligibility analysis under 35 U.S.C. § 101. For example, claim 9 of the '678 patent and claim 9 of the '237 patent both require that the product listing be distributed to a website "operated by the server" or to an application "not operated by the server." '678 patent, claim 9; *see also* '237 patent, claim 9. Similarly, claim 6 of the '995 patent recites embedding a product listing onto a website "not operated by the application server." '995 patent, claim 6. Further, claims 15 of the '678 patent and '237 patent recite displaying a product listing on "a social media network." '678 patent, claim 15; '237 patent, claim 15. And claim 11 of the '995 patent also modifies limitations to apply to a "social media network" as opposed to websites generally. '995 patent, claim 11. Lastly, claim 7 of the '785 patent recites the same purported invention of claim 1 (which is a method claim) but in system claim format and claim 14 of the '785 patent recites that the "buy button includes a hyperlink" and requires the use of "software" by the server executing the buy button. '785 patent, claims 7, 14. These are all minor differences that capture different ways conventional content distribution systems could use web widgets under ordinary conditions.

The 62 dependent claims[3] of the Buy Button Patents add trivial elements to the independent claims and, like the independent claims, merely computerize the longstanding business practice of combining advertisements with order forms. For example, seven dependent claims require servers to store generic information such as a "title" or "textual description." '678 patent, claims 2, 10, 16; '237 patent, claims 2, 10, 16; '995 patent, claim 2. Six dependent claims dependent claims identify the kind of information stored in the content distribution system or displayed in a product listing. '237 patent, claims 4, 12, 18; '785 patent, claims 6, 11, 18. Another six dependent claims require that the client device be an ordinary mobile device, such as a smartphone. '678 patent, claims 3, 11, 17; '237 patent, claims 3, 11, 17. Three dependent claims provide details on what a typical "marketplace rule" would be. '678 patent, claims 4, 12, 18. Thirteen dependent claims require the use of a share link or receipt of an indication when a share link is used. '678 patent, claims 5, 6, 13, 14, 19, 20; '237 patent, claims 5, 6, 13, 14, 19, 20; '995 patent, claim 8. Another thirteen dependent claims recite additional limitations regarding the checkout process or the transaction processing service, all of which just identify the different ways these steps are ordinarily practiced by conventional content distribution systems. '678 patent, claim 7; '237 patent, claim 7; '995 patent, claims 4, 10, 14; '785 patent, claims 3, 4, 8, 9, 13, 16, 17, 20. Eight dependent claims require that the buy button or widget be usable on different websites or on social media (achieved with the ordinary use of a separate server in a generic multi-server content distribution system). '995 patent, claims 3, 5, 9, 12; '785 patent, claims 2, 10, 12, 15. And, as described further below, six other miscellaneous dependent claims add only conventional limitations to the independent claims. '678 patent, claim 8; '237 patent, claim 8; '995 patent, claims 7, 13; '785 patent, claims 5, 19.

Again, there is nothing inventive about these additional limitations because they simply identify different ways a conventional distribution system would use web widgets with buy buttons when operated in a conventional, ordinary manner.

[3] A dependent claim "contain[s] a reference to a claim previously set forth and then specif[ies] a further limitation of the subject matter claimed," thus "incorporat[ing] by reference all the limitations of the claim to which it refers." 35 U.S.C. § 112(d).

III. LEGAL STANDARD

A. Motion to Dismiss Under Rule 12(b)(6)

In order for the amended complaint to survive a motion to dismiss, its factual allegations must "state a claim to relief that is plausible on its face." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007)). Since "an invalid patent cannot be infringed," (*Commil USA, LLC v. Cisco Systems, Inc.*, 575 U.S. 632, 644 (2015)), DKR's amended complaint does not state a claim for patent infringement because the patents are ineligible under Section 101 and thus invalid. *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 909-10, 913 (Fed. Cir. 2017) (affirming the grant of a Rule 12(b)(6) motion to dismiss for patent infringement because the patents-in-suit were ineligible under § 101).

It is appropriate for this Court to find that the patents are ineligible under Section 101 on a motion to dismiss, and courts commonly do so. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1351 (Fed. Cir. 2014) (affirming dismissal of a patent suit under § 101). Indeed, over the last 10 years (since the U.S. Supreme Court's decision in *Alice*), district courts have dismissed more than 250 patent infringement suits for invalidity under Section 101 in response to a Rule 12 motion.

B. Patent Ineligible Subject Matter under 35 U.S.C. § 101

The Supreme Court has recognized that "[l]aws of nature, natural phenomena, and abstract ideas are not patentable" under 35 U.S.C. § 101. *Alice*, 573 U.S. at 216 (citing *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). This is because such concepts constitute the "basic tools of scientific and technological work" and "monopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it." *Mayo Collaborative Servs. V. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012); *see also Bilski*, 561 U.S. at 602 ("The concepts covered by these exceptions are 'part of the storehouse of knowledge of all men … free to all men and reserved exclusively to none.'" (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948))). Longstanding business practices, such as combining advertisements with order forms, are "abstract ideas," and thus are not patentable. *See, e.g., cxLoyalty, Inc. v. Maritz Holdings*

Inc., 986 F.3d 1367, 1377 (Fed. Cir. 2021) ("transfers of information relating to a longstanding commercial practice" are abstract); *see also Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1365 (Fed. Cir. 2021) (patent claims that "merely improve the abstract idea of targeted advertising … are directed to an abstract idea").

The Supreme Court has established a two-step framework for determining whether an invention claims a law of nature, natural phenomenon, or abstract idea and is thus patent-ineligible. *Alice*, 573 U.S. at 217. First, courts "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id*. Second, if it is, courts then "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id*. (quoting *Mayo*, 566 U.S. at 78-79).

Since *Alice*, the U.S. Court of Appeals for the Federal Circuit has repeatedly recognized that computerizing or digitizing a known practice is a patent-ineligible abstract idea. *See*, *e.g.*, *Credit Acceptance Corp.*, 859 F.3d at 1055 (invalidating loan-processing automation patent because "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology"); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 712 (Fed. Cir. 2014) (claims directed to the abstract idea of using an advertisement as an exchange or currency were ineligible even though the claims recited a general purpose computer and the Internet); *buySAFE, Inc. v. Google. Inc.*, 765 F.3d 1350, 1354-55 (Fed. Cir. 2014) (claims directed to the abstract idea of creating a contractual relationship were ineligible despite the recitation of a computer that received and sent information over a network).

IV. ARGUMENT

The Buy Button Patents are invalid on their face because they claim patent ineligible subject matter under the two-step framework set forth in *Alice*. They claim nothing more than computerizing the common business practice of including an order form alongside a product offering or advertisement. The Federal Circuit's holding in *Free Stream Media*, for example, illustrates why. The asserted patent in *Free Stream Media* claimed a system that used television data to display targeted advertisements on a mobile phone. *Free Stream Media*, 996 F.3d at

1358. As the court explained, the "asserted claims utilize three main components: (1) a network device (e.g., a smart TV); (2) a client device (e.g., a mobile device); and (3) a relevancy matching server." *Id*.

Under step one of *Alice*, the Federal Circuit held that the *Free Stream Media* claims do "nothing more than implement a computer to achieve the abstract idea of providing targeted advertising to the mobile device user." *Id*. at 1365; *see also Chewy Inc. v. IBM Corp.*, No. 2022-1756, 2024 WL 925884, at *8-10 (Fed. Cir. Mar. 5, 2024) (claims directed to targeted advertising are abstract). The court explained that the asserted claims (1) simply state that devices in a network generate targeted advertisements by "overcoming a mobile device's security sandbox" without explaining how to achieve such a result, and (2) "do not recite an improvement in computer functionality." *Free Stream Media*, 996 F.3d at 1363-64. The court further explained that even if the patent teaches a new way for devices in a network to communicate, the asserted claims in *Free Stream Media* would still be invalid because that communication relies on "generic processes and machinery" that "merely improve the abstract idea of targeted advertising." *Id*. at 1365; *see also cxLoyalty, Inc.*, 986 F.3d at 1377 ("Because representative claim 1 is directed to transfers of information relating to a longstanding commercial practice, the claim is directed to an abstract idea.") (internal quotations omitted); *Chewy Inc.*, 2024 WL 925884, at *8 ("Even accepting that the claimed invention improves the specificity and relevancy of online advertisements, this 'is at most an improvement to the abstract concept of targeted advertising wherein a computer is merely used as a tool.'") (quoting *Customedia Techs., LLC v. Dish Network Corp*., 951 F.3d 1359, 1365 (Fed. Cir. 2020)).

The Federal Circuit in *Free Stream Media* then proceeded to *Alice* step two and found that none of the individual elements, alone or in their ordered combination transformed the *Free Stream Media* claims into a patent-eligible application of an abstract idea. The court held that the asserted claims recited bypassing a client device's sandbox security by using the pre-existing idea of "working around the existing constraints of the conventional functioning of television and mobile devices" and implementing that known work-around with "the use of generic features, as well as routine functions." *Free Stream Media*, 996 F.3d at 1366. The

court further noted that these ordinary, pre-existing functions were implemented on "generic computing components—e.g., 'servers'—arranged in a conventional manner." *Id.*; *see also Chewy Inc.*, 2024 WL 925884, at *9 ("Using a generic database to store the information used in correlating advertisements with search results is not an inventive concept.").

Free Stream Media thus shows that patent claims directed at computerizing a business practice such as targeted advertising (or, as in the instant case, embedding ordering instructions in advertisements) implemented with conventional technology used in its ordinary manner are not patentable under § 101. The same analysis compels the same result in this case.

A. *Alice* Step One: The Buy Button Patents' Claims Are Directed at an Abstract Idea

All claims of the Buy Button Patents are directed to the abstract idea of combining an order form with a product advertisement, and merely use conventional computer technology to implement that idea. When these generic technologies are disregarded, as they should be under the *Alice* test, the claim recites the longstanding business practice of combining an order form with a product advertisement (i.e., a product listing with a clickable link that leads to a checkout screen). This is an abstract idea. *In re Elbaum*, No. 2021-1719, 2021 WL 3923280, at *2 (Fed. Cir. Sept. 2, 2021) (rejecting as abstract claims directed to "a method of providing information and allowing customers to utilize that information to engage in a commercial transaction"); *see also cxLoyalty, Inc.*, 986 F.3d at 1377 ("transfers of information relating to a longstanding commercial practice" are abstract).

Claim 1 of the '678 patent, for example (set forth in full above), is a "system for distributing multimedia content over a network" (i.e., generic content distribution system) that comprises **[a]** "a server configured to control a transaction processing service" (i.e., generic server), **[b]** "a storage resource communicatively coupled to the server and configured to store an item" (i.e., generic data storage) where the server is configured to **[c.1]** "receive the item from the storage resource" (i.e., ordinary network connectivity via Internet), **[c.2]** "generate a product listing, wherein the product listing includes … a clickable buy button" (i.e., generic web widget with a link to a payment processor), **[c.3]** "distribute the product listing to a web site or a distributed application" (i.e., routine integration of web widgets on websites), **[c.4]** "receive an

indication that the clickable buy button has been selected" and **[c.5]** "provide a checkout screen" (i.e., computerized order form). '678 patent, claim 1. **In layman's terms, this is simply the use of computers and the Internet to generate a product advertisement that includes an order form.**

Claim 1 of the '237 patent is directed to the same abstract idea. The claim recites a "system for generating an electronic commerce store" that also requires "an application server configured to control a transaction processing services" and "a storage resource communicatively coupled to the application service." '237 patent, claim 1. The claim, similar to claim 1 of the '678 patent, uses these generic computer components to "receive the information from the storage resource," "generate a product listing, wherein the product listing includes … a clickable link, wherein the clickable link comprises a buy button," "distribute the product listing to a web site or a distributed application," "receive an indication that the clickable link has been selected," and "provide a checkout screen." *Id*. These are all standard computer components performing standard functions.

Claim 1 of the '995 patent is nearly identical to the representative claims in the '678 and '237 patents. It recites an "application server" and "storage resource" that "generate a product listing" with a "clickable link, wherein the clickable link is a buy button and includes a preview of the product" and directs purchasers to a "checkout screen." '995 patent, claim 1. Again, the claim recites the abstract idea of an advertisement embedded with a purchasing means and does not claim any improvement to any underlying computer components or functions.

Lastly, claim 1 of the '785 patent is directed to the same abstract idea, with a superficial difference: it takes the form of a method claim instead of a system claim. It also recites an "electronic commerce store" and a "website" that operate on "a second server not operated by the buy button provider." '785 patent, claim 1. But these limitations simply require that a generic multi-server content distribution system have a separate server dedicated to operating a buy button. This is merely a common-sense, conventional implementation of content distribution systems. *See Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) ("conventional computer components, such as a database and processors,

operating in a conventional manner … do not confer patent eligibility"). Again, other than standard computing components performing generic tasks, the claim is directed to nothing more than the abstract idea of combining a product advertisement with an order form. And requiring that a website and an electronic commerce store be operated on a separate server is simply a routine implementation of a multi-server content distribution system where different functions are executed on different servers. Thus, claim 1 of the '785 patent recites another generic instantiation (use of multiple servers for multiple distinct functions) of a content distribution system for web widgets with buy buttons.

The representative claims of the Buy Button Patents are directed to an abstract idea because, like the claims in *Free Stream Media*, stripping the claims of their standard computer components performing standard tasks leaves nothing more than an ordinary, abstract business practice—combining ordering instructions with an advertisement (i.e., a product listing with a buy button that leads to a checkout screen). This is an abstract idea. *In re Elbaum*, 2021 WL 3923280, at *2 (rejecting as abstract claims directed to "a method of providing information and allowing customers to utilize that information to engage in a commercial transaction"); *see also cxLoyalty, Inc.*, 986 F.3d at 1377 ("transfers of information relating to a longstanding commercial practice" are abstract).

That the asserted patents recite performing this idea on a website, using traditional computing components, does not save the claim from abstraction. *See Intell. Ventures I LLC*, 792 F.3d at 1366 ("An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet."). And, far from being an advance in technology, pre-Computer Age examples of combining an order form with a product advertisement are legion. For example, mail-order forms were routinely included within print advertisements. Magazine ads for particular products, which included a form that the recipient could fill out and mail in to purchase the depicted product(s), were a common marketing strategy in the 20th century. For example, below are two examples from 1963 of advertisements including mail order forms for Walt Disney Mickey Mouse Latex Toys and binoculars:





Lantier Decl, Ex. C at 1. Other than the use of generic computer components, the idea claimed by the Buy Button Patents is no different than these advertisements with included order forms.

In *Alice* itself, the Supreme Court was similarly faced with claims that included multiple steps implemented on generic computer components to implement an abstract idea: intermediated settlement (i.e., the use of a third-party as a go-between for two parties to a contract). Despite the fact that the patent claimed use of computer components such as "a 'data processing system' with a 'communications controller' and 'data storage unit,'" the Supreme Court found the patent to be directed to the abstract idea of intermediated settlement. *Alice*, 573 U.S. at 221, 226. Following *Alice*, the Federal Circuit has routinely found patents to be directed to abstract ideas even when they recite technical limitations. *E.g.*, *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 768, 770 (Fed. Cir. 2019) (claims directed to the abstract idea of network control despite reciting technical limitations such as "a control device to control application of charge transfer" and "a transceiver"); *Solutran, Inc. v. Elavon, Inc.*, 931 F. 3d 1161, 1164, 1166 (Fed. Cir. 2019) (claims directed to the abstract idea of crediting a merchant as early as possible while processing a check despite reciting a "data file," "MICR [magnetic ink character recognition] information," and a "digital image scanner"). Thus, the Buy Button Patents' recitation of purely conventional and generic computer components does not render them non-abstract.

Therefore, the claims of the Buy Button Patents fail at *Alice* step one.

B. *Alice* Step Two: The Buy Button Patents' Claims Add No Inventive Concept

The Buy Button Patents also fail the second step of the *Alice* test. None of the elements

of the representative claims, alone or in combination, describe an improvement to technology that would transform the claimed abstract idea into a patent eligible invention.

To the contrary, the Buy Button Patents use well-known conventional hardware and software to implement the abstract idea. As explained in *Free Stream Media*, this kind of "use of generic features, as well as routine functions" cannot confer patent eligibility under § 101. *Free Stream Media*, 996 F.3d at 1366; *see also Credit Acceptance Corp*., 859 F.3d at 1056 ("[t]he use and arrangement of conventional and generic computer components recited in the claims—such as a database, user terminal, and server—do not transform the claim, as a whole, into 'significantly more' than a claim to the abstract idea itself.").

As detailed above, Buy Button Patents make clear that ordinary hardware and software components are used in their everyday, conventional manner to practice the invention. They recite a conventional implementation of a central server that retrieves data from a storage resource. *See* '678 patent, 3:48-49 (central server performs the conventional function of "a centralized compute processing and transaction management resource."), 3:66-4:1 ("cloud-based storage resource" stores "all content files and related metadata."). And, as noted earlier, the '785 patent's representative claim's generic use of separate servers to operate separate functionalities, such as web widgets, in a multi-server system is a generic implementation of a content distribution system and does not make any improvement to pre-existing technology or combinations thereof. *See Customedia Techs.*, 951 F.3d at 1366 ("However, the invocation of 'already-available computers that are not themselves plausibly asserted to be an advance … amounts to a recitation of what is well-understood, routine, and conventional." (citing *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018)).

The other components recited in the Buy Button Patents likewise entirely consist of well-known and conventional hardware, such as cloud servers, smartphones, PDAs, laptop and desktop computers, as well as via conventional software services such as Amazon's Flexible Payment Service, PayPal, Internet Explorer, Safari, Simple Storage Service, and Elastic Compute Cloud, and conventional digital file formats such as MP3, WMA, and FLAC. '678 patent, 3:36-43, 5:6-28, 10:44-49; 12:46-50. And the Buy Button Patents confirm that the

"transaction processing service" operates in a generic manner by using a service such as PayPal or Amazon Payment Services "for the provision of credit card, debit card, or bank account information and completion of the purchase transaction." *Id*., 5:47-50.

The Buy Button Patents also confirm that neither the web widget nor the buy button or clickable link which leads to a check out screen provided by a third-party transaction processing service describe an improvement to technology that would transform the claimed abstract idea into a patent eligible invention. The web widgets allow Internet users to access stored data and the transaction processing service by creating "various marketing resources … buy buttons, links and preview clips." *Id*., 6:25-28. And client devices use their web browsers to access the Internet, and "clicking on a button, link or preview clip causes the activation of a web widget." *Id*., 6:30-31. This was all a well-understood combination of pre-existing client-server technology used as an ordinary content distribution system. As in *Free Stream Media*, the Buy Button Patents' ordinary use of hardware and software cannot confer patent eligibility because the claims simply recite "generic computing components—e.g., 'servers'—arranged in a conventional manner." *Free Stream Media*, 996 F.3d at 1366.

Moreover, the "widget builder resource" ('678 patent, claim 1) and "embeddable buy button builder" ('785 patent, claim 1) are defined in purely functional terms and thus rely on the same generic computer components. *See* '678 patent, 6:25-26 ("The widget builder resource component 204 is used to create … new web widgets, buy buttons, links and preview clips."). The patents do not suggest that programming web widgets or buy buttons to have the claimed functionality (even when operating on a separate server) was a difficult software engineering problem, but even if it were, the claims do not recite a solution to this problem and therefore cannot rely on it for an inventive concept. *Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241-42 (Fed. Cir. 2016) (holding patents invalid under § 101 when they "do not claim a particular way of programming or designing the software … but instead merely claim the resulting systems" and "[t]he difficulty of the programming details for this functionality is immaterial because these details are not recited in the actual claims."); *Free Stream Media*, 996 F.3d at 1366 (an "embedded object" limitation does not provide an inventive concept).

Similarly, the '995 and '237 patents' representative claims cover different conventional iterations of web widgets with clickable buy buttons. For example, the '995 patent uses a "social media network" instead of a web site, and the '237 patent uses a buy button that also provides "a preview" of the product. Both social media networks and product previews were conventional prior to the Buy Button Patents' priority date; neither of these limitations provides an inventive concept. *See, e.g.*, '995 patent, 1:42 (discussing "social media marketing" as prior art).

Finally, the "marketplace rule" ('678 patent, claim 1) likewise does not describe an improvement to technology that would transform the claimed abstract idea into a patent eligible invention. The Buy Button Patents do not describe any unique or novel way of applying the marketplace rule and instead merely claim using it. They simply recite, for example, "display[]" of goods available in certain countries to users only in those countries. This is nothing more than the abstract concept of targeted advertising. *Intell. Ventures I LLC*, 792 F.3d at 1370; *see also Free Stream Media*, 996 F.3d at 1362. The specification makes clear that the marketplace rule simply directs targeting consumers based on, for example, "territorial rights and restrictions (e.g., album collection A only available for sale in Spain, UK and France, but not in Italy, Germany, etc.), gross pricing terms, volume pricing discounts, and the starting and ending dates of sales or other product specials." '678 patent, 11:47-52.

In sum, the representative claims also fail at *Alice* step two.

C. The Remaining Independent Claims Are Also Patent Ineligible

The Buy Button Patents include eight other independent claims: claims 9 and 15 of the '678 patent, claims 9 and 15 of the '237 patent, claims 6 and 11 of the '995 patent, and claims 7 and 14 of the '785 patent. The patent eligibility problems of the representative claims apply with equal force to the remaining independent claims in the Buy Button Patents. The limitations of the remaining independent claims use generic computer components used in a conventional manner to display advertisements with ordering instructions on the Internet. This kind of computerization of a long-standing advertising or marketing business practice is not patent eligible subject matter. *See Free Stream Media*, 996 F.3d at 1363-66.

The remaining independent claims rely on the same individual elements as the representative claims to recite the abstract idea of embedding ordering instructions in advertisements. The claims recite a "server," "storage resource," a "widget builder resource," a "product listing," distributing the web widget to a "web site" or on "social media," a "clickable buy button" or "link," and a "checkout screen" to process transactions. '678 patent, claims 9, 15; '237 patent, claims 9, 15; '995 patent, claims 6, 11; '785 patent, claims 7, 14. These computer components are used in their ordinary manner to display on the internet a "product listing" with a "buy button." And when these standard technologies are disregarded, the claims are left with nothing more than the abstract idea of combining ordering instructions with advertisements (a "buy button" in a "product listing" that leads to a "checkout screen").

The arrangement and implementation of the individual elements in the remaining independent claims also lack an inventive concept. The remaining independent claims have the same conventional arrangement of elements as the representative claims—a central server that retrieves data from a storage resource, a web widget builder that creates a widget, displaying the widget on the Internet, and having a buy button or clickable link lead to a check out screen provided by a third-party transaction processing service. The claims do not recite any improvement on these technologies, nor do they require using these technologies in a manner that is different from their ordinary, conventional use. There can be no inventive concept in such a routine arrangement and procedure involving commonly known components and uses thereof. *Free Stream Media*, 996 F.3d at 1366; *see also Credit Acceptance Corp.*, 859 F.3d at 1056 ("conventional and generic computer components … do not transform the claim, as a whole, into 'significantly more' than a claim to the abstract idea itself.").

Lastly, the minor variations in the remaining independent claims do not add anything that would render the claims patent eligible under § 101. For example, claims 9 of the '678 patent and '237 patent require that the product listing is distributed to a website "operated by the server" or to an application "not operated by the server." '678 patent, claim 9; *see also* '237 patent, claim 9. And claim 6 of the '995 patent similarly recites embedding a product listing onto a website "not operated by the application server." '995 patent, claim 6. These are

modifications meant to capture different conventional implementations of a content distribution system, including the generic and obvious use of a multi-server system that uses separate servers to operate different functionalities (such as web widgets). These are all trivial changes that involved no technological challenges and, even if they did, the Buy Button Patents do not provide any solutions on how to implement multi-server systems. Similarly, claim 7 of the '785 patent is a system claim version of representative claim 1 of the same patent (which is a method claim) and claim 14 of the '785 patent adds the conventional and obvious limitations that the "Buy button includes a hyperlink" and requires the use of "software" by the server executing buy button—features that are necessary for a functioning buy button. '785 patent, claim 7, 14. These limitations merely use generic terms like "software" and "hyperlink" to identify additional parameters that are routinely used for web widgets.

In sum, the remaining independent claims do not survive *Alice* step two because they use generic technology in a conventional manner to implement the claimed abstract idea.

D. None of the Dependent Claims Describe Any Inventive Concept

The Buy Button Patents include 62 dependent claims. Each dependent claim can be categorized by the type of limitation recited—all of which add only "well-understood, routine, conventional activity" insufficient to confer patent eligibility. *Mayo*, 566 U.S. at 79.

For example, seven of these dependent claims specify the kind of conventional information that the web widget includes, such as a "title" and a "textual description." '678 patent, claims 2, 10, 16; '237 patent, claims 2, 10, 16; '995 patent, claim 2. DKR cannot reasonably contend that the use of titles and descriptions can somehow transform abstract independent claims into patentable inventions.

Six of the dependent claims also specify that the client device in the content distribution system must be a "mobile device" or a "smartphone." '678 patent, claims 3, 11, 17; '237 patent, claims 3, 11, 17. The specification confirms that these mobile client devices are just "personal digital assistants," "smart phones," and "non-phone enabled PDAs. '678 patent, 3:40-43. These are generic mobile devices that were routinely used in content distribution systems.

Three dependent claims provide details on what a typical "marketplace rule" would be.

'678 patent, claims 4, 12, 18. As explained above, the specification explains that these limitations simply direct using targeting advertising (e.g., distributing product listings only in geographic regions where the product is available). '678 patent, 11:47-52. Critically, the Buy Button Patents do not claim to have made any improvement on advertising to likely consumers.

Thirteen dependent claims require the use of a share link or receipt of an indication when a share link is used. '678 patent, claims 5, 6, 13, 14, 19, 20; '237 patent, claims 5, 6, 13, 14, 19, 20; '995 patent, claim 8. The patents do not claim to have invented share links or to have improved any technology associated with share links. In fact, the patents admit that the use of share links was already a common means for "viral distribution" of content. '678 patent, 1:45-48 ("[This] unique ability to share or 'virally distribute' content … now enables the Internet to be used as a highly social medium."). And the patents confirm that this common usage of share links included the distribution of web widgets. *Id.*, 1:61-62 ("One current approach that is used to distribute applications of limited functionality involves 'web widgets.'"); *see also L.A. Times v. Free Republic*, No. 98-cv-07840-MMM-AJWx, 2000 WL 565200, at *9 (C.D. Cal. Apr. 4, 2000) ("Linking is familiar to most Internet users, even those who are new to the web.").

Six dependent claims identify the kind of information stored in the content distribution system or displayed in a product listing. '237 patent, claims 4, 12, 18; '785 patent, claims 6, 11, 18. But again, the patents go no further than identifying the most generic, routine forms of information, specifically stating that the information would be an "image," "video," and "multimedia." '237 patent, claims 4, 12, 18; '785 patent, claims 6, 11, 18. This is just standard data routinely used by content distributions systems.

Thirteen dependent claims recite additional limitations regarding the checkout process or the transaction processing service, all of which just identify the different ways these steps are ordinarily practiced by conventional content distribution systems. '678 patent, claim 7; '237 patent, claim 7; '995 patent, claims 4, 10, 14; '785 patent, claims 3, 4, 8, 9, 13, 16, 17, 20. For example, some of these claims simply recite redundant limitations, such as that the transaction processing service be in communication with the server ('678 patent, claim 7) or that the buy

button provider is configured to execute the electronic store ('785 patent, claim 9). Other claims merely require that the third-party transaction processing service be proprietary without providing any other details or requirements ('237 patent, claim 7; '995 patent, claim 10, 14). Other claims recite conventional purchase methods: credit card, debit card, or bank account. '995 patent, claim 4; '785 patent, claim 20. And others simply recite variations of checkout screens that allows for transaction processing. '785 patent, claims 3, 4, 13, 16, 17.

Again, the Buy Button Patents do not claim to have improved any features relating to checkout processes or transaction processing services, nor do they offer to use them in anything other than their ordinary, conventional manner. These thirteen dependent claims are simply computerized versions of fundamental economic practices, such as credit-card payments, which are ineligible for patent protection. *Bozeman Fin. LLC v. Fed. Reserve Bank of Atlanta*, 955 F.3d 971, 978 (Fed. Cir. 2020) ("'[F]undamental economic practice[s] long prevalent in our system of commerce' are examples of abstract ideas, which are ineligible subject matter.").

Eight dependent claims add limitations requiring product listings to appear on different websites or on social media. '995 patent, claims 3, 5, 9, 12; '785 patent, claims 2, 10, 12, 15. But again, these limitations merely identify standard, conventional content distribution practices of, for example, "distributing the product listing to a social media network" or being "configured to be embedded into different web sites." '995 patent, claim 5; '785 patent, claim 2. And the patents admit that using different websites, including "social media marketing," to advertise was a common practice before the patents' priority date. '678 patent, 1:37-42. Again, these limitations recite conventional interactions with websites that content distribution systems were ordinarily compatible with and regularly used.

Lastly, the Buy Button Patents include six miscellaneous dependent claims that add only conventional limitations to the independent claims. These claims recite, for example, the use of multiple servers ('678 patent, claim 8; '237 patent, claim 8) which, as explained above, is a conventional use of multi-server content distribution systems, or the servers collecting analytics data ('995 patent, claim 7). *See Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1344 (Fed. Cir. 2018) ("collecting, analyzing, and displaying that information, without more, is an abstract

idea."). These claims also recite how a product listing would appear, adding generic requirements such as displaying "a title, a description, or a price" ('995 patent, claim 13), or that the product listing must sell a "physical good or service" ('785 patent, claims 5, 19).

None of these limitations constitute an inventive concept, either alone or in concert, because they simply recite the conventional use of a multi-server content distribution system with generic variations of advertisements with ordering instructions on the Internet. *See Ultramercial*, 772 F.3d at 716; *buySAFE*, 765 F.3d at 1355 (receipt and transmission of data over computer network "is not even arguably inventive"); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011); *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1350 (Fed. Cir. 2021) ("Because sending data to a third-party as opposed to the merchant is itself an abstract idea, it cannot serve as an inventive concept.").

In sum, the dependent claims add only routine concepts achieved with conventional technology and, therefore, fail to recite patentable applications of the claimed abstract idea.

V. THE AMENDED COMPLAINT DOES NOT PLAUSIBLY ALLEGE AN INVENTIVE CONCEPT

DKR's conclusory allegations of inventiveness in the amended complaint and the expert declaration it seeks to incorporate do not defeat this motion to dismiss for four reasons.

First, the Court should disregard the expert declaration entirely because it is not a "written instrument" and thus not properly part of the complaint. *See, e.g.*, *Stuart v. Cadbury Adams USA, LLC*, No. 09-cv-06295-AHM-CW, 2010 WL 1407303, at *4 (C.D. Cal. Apr. 5, 2010) *aff'd*, 458 F. App'x 689 (9th Cir. 2011) ("the expert report is not a 'written instrument' that can be incorporated into a pleading"); *Marble Voip Partners LLC v. Zoom Video Commc'n, Inc.*, No. 22-cv-2247-JAR-ADM, 2023 WL 3055323, at *3-4 (D. Kan. Apr. 24, 2023) (holding in a patent case that "[expert] Declaration attached to the FAC … is not a 'written instrument' under Fed. R. Civ. P. 10(c)."); *In re Herbalife, Ltd. Sec. Litig.*, No. 14-cv-2850-DSF-JCG, 2015 WL 12734014, at *1 (C.D. Cal. July 28, 2015) (granting motion to dismiss and striking expert reports that "appear to have been generated for purposes of prosecuting this litigation" because they "do not constitute 'written instrument[s]' under Rule 10(c)"); *see also* Fed. R. Civ. P. 10(c) (only "written instruments" may be incorporated into pleadings).

Second, even if the Court considers the declaration or the paragraphs of the amended complaint incorporating them (*see* First Amended Complaint ("FAC") ¶¶ 59-67) they have no relevance to the Rule 12 analysis because they are statements of expert opinion, not allegations of ***fact***. *See Koehler v. Litehouse, Inc.*, No. 12-cv-04055-SI, 2012 WL 6217635, at *3 (N.D. Cal. Dec. 13, 2012) (granting motion to strike paragraphs in complaint discussing an expert and assertion including "Dr. Carson opined" and "Dr. Carson also stated," and acknowledging that the quotes from the expert report relayed expert opinion but "makes no statements of fact"); *Iqbal*, 556 U.S. at 678 ("the tenet that a court must accept as true all of the allegations contained in a complaint is inapplicable to legal conclusions").

The amended complaint pleads, for example, that Dr. Keller "provided opinion" on the claimed improvement of the asserted patents. FAC ¶ 59. DKR then summarizes in a conclusory manner the various opinions of Dr. Keller. FAC ¶¶ 60-66. DKR then concludes that, "[b]ased on Dr. Keller's opinion, Shopify's characterization of the Patents-in-Suit as mere computerization of a business practice fails …" FAC ¶ 67. These are all allegations of Dr. Keller's "***opinion***" (emphasis added)—not allegations of fact—and, therefore, need not be taken as true for purposes of Rule 12(b)(6). Indeed, courts have repeatedly recognized that allegations summarizing expert opinion do not provide a basis for withstanding a Rule 12(b)(6) motion to dismiss. *Yuan v. Facebook, Inc.*, No. 18-cv-01725-EJD, 2021 WL 4503105, at *3 (N.D. Cal. Sept. 30, 2021) ("the Court will not consider Dr. Cain's opinions as set forth in paragraphs 722 through 724 of the [Third Amended Complaint ("TAC")] and any other portions of the TAC that rely on those opinions"); *In re Ashworth, Inc. Sec. Litig.*, No. 99-cv-0121-L-JFS, 2001 WL 37119391, at *3-4 (S.D. Cal. Dec. 3, 2001) (striking paragraphs of complaint that discuss attached expert declarations).

Third, even if the Court were to consider the declaration itself or the amended complaint's discussions of Dr. Keller's allegations in paragraphs 59-67—which it should not—their conclusory allegations of inventiveness do not change the analysis. For purposes of dismissal based on 35 U.S.C. § 101, allegations in the complaint or an expert declaration cannot be used to contradict the patent itself. *Athena Diagnostics, Inc. v. Mayo Collaborative Servs.,*

LLC, 915 F.3d 743, 756 (Fed. Cir. 2019) ("Because Athena's expert declaration made allegations inconsistent with the '820 patent, the district court was not obligated to accept them as true."); *Tenaha Licensing LLC v. Tigerconnect, Inc.*, No. 19-cv-1400-LPS-SRF, 2020 WL 30426, at *9 (D. Del. Jan. 2, 2020) ("Thus any extrinsic evidence supporting Plaintiff's arguments (such as an expert declaration) would be contrary to the intrinsic evidence, and thus need not be accepted as true."); *see also Chewy Inc.*, 2024 WL 925884, at *9 (even if expert's statements are true, there is no inventive concept); *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306,1317 (Fed. Cir. 2019) (incorrect that "any allegation about inventiveness, wholly divorced from the claims or the specification, defeats a motion to dismiss."); *IBM Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1379 (Fed. Cir. 2022) ("district court need not accept a patent owner's conclusory allegations of inventiveness"). As detailed above, the Buy Button Patents specifically state that the invention is wholly implemented using conventional computer technology.

Contrary to Dr. Keller's opinions (FAC ¶¶ 60-66; Dkt. 36-5 ¶¶ 25-52), the Buy Button Patents do not state or suggest that the patents describe a new technology enabling widgets with processing features that directly allow purchases, widgets that operate on a separate server, clickable links, compatibility with HTML structures or all websites. Rather, the Buy Button Patents expressly state that the alleged invention can be implemented using pre-existing technology in its ordinary manner to embed buy buttons on websites. *See above supra* § IV.B; *see also* §§ IV.C.-D. The patents simply direct the use of this ordinary technology to perform the conventional function of embedding web widgets on websites, which the patents concede were already used as "portable software that can be installed and executed within a hypertext-markup-language web page." '678 patent, 1:61-64 ("One current approach that is used to distribute applications of limited functionality involves 'web widgets.'"), 1:67-2:2 (web widgets allow "users to turn personal content into dynamic web applications which can be shared on virtually any website"); *see also id.*, 18:9-13 (using "any one of Authorize.net, Google Check-out, Storm Pay, PayPal, or other Internet service for transaction processing."); *see also Chewy Inc.*, 2024 WL 925884, at *9 ("While [plaintiff] argues the claimed repository is specialized,

this is not supported by the [asserted] patent. Instead, the patent broadly refers to an 'information repository' with no further details. … The claimed use of a conventional repository for storing advertisements and associated search results in a well-known way is insufficient to transform the abstract idea into patent-eligible subject matter.").

Fourth, in addition to improperly relying upon Dr. Keller's opinions, the amended complaint also makes conclusory non-specific allegations that the claims address "technological problems" and "solve" those problems. *See* FAC ¶ 40 (alleging that the Buy Button Patents solve "various technological problems inherent in the distribution of multimedia content over a computer communications network[.]"); *see also* ¶¶ 46, 52, 58. These allegations do not identify any technological problems that the Buy Button Patents purportedly solve, but instead merely list various alleged characteristics of the invention that may be useful. *Id.* ¶ 40. The allegation that these features solve "various technological problems" is thus wholly conclusory and properly ignored under *Iqbal*, as no factual allegations specify what the purported "problems" were or how the purported inventions of the Buy Button Patents overcame the limitations of the prior art to address them. *See IBM Corp.*, 50 F.4th at 1379 (affirming dismissal because "the district court need not accept a patent owner's conclusory allegations of inventiveness" and the complaint lacked "plausible and specific allegations that any aspect of the claims is inventive."); *Boom! Payments, Inc. v. Stripe, Inc.*, 839 F. App'x 528, 533 (Fed. Cir. 2021) (affirming dismissal when the "amended complaint repeatedly asserts that its claims are not routine or conventional but does not provide plausible factual allegations to support those assertions"). On the contrary, the five characteristics of the "invention(s)" that the amended complaint touts are simply a straightforward application of the abstract idea of presenting a product to a prospective buyer along with ordering information, using conventional Internet technology.

VI. CONCLUSION

For the foregoing reasons, this case should be dismissed because the claims of the Buy Button Patents are directed to patent-ineligible subject matter under § 101.

Dated: March 6, 2024

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CERTIFICATE OF COMPLIANCE

The undersigned counsel of record for Shopify Inc. certifies that this brief contains 25 pages, which complies with the 25 page limit set by court order dated August 30, 2023.

By: /s/ *Henry Nikogosyan*

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served on all attorneys of record via the Court's EFC system on March 6, 2024.

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

DKR CONSULTING LLC,

Plaintiff,

v.

SHOPIFY, INC.,

Defendant.

Case No. 2:23-cv-6904 HDV (JCx)

Hon. Hernán D. Vera

PLAINTIFF'S MEMORANDUM OF POINTS AND AUTHORITIES IN OPPOSITION TO DEFENDANT SHOPIFY INC.'S RULE 12(b)(6) MOTION TO DISMISS AMENDED COMPLAINT

Date: May 10, 2024
Time: 10:00 am
Place: 5B, 1st Street

Trial Date: *None set*

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MEMORANDUM OF POINTS AND AUTHORITIES

I. BACKGROUND

The DKR patent inventors created a dual-purpose electronic system "for the distribution of multimedia content and the consummation of transactions between content owners, content distributors, and consumers." '785 Patent, 1:17-21. The inventors identified web widgets as the way to achieve their goals, but the state of the art for web widgets at the time of invention was such that the widgets were incapable of carrying out the needed functions. In fact, the specification notes:

> The most commonly used web widgets are discrete applications of limited functionality that allow users to turn personal content into dynamic web applications which can be shared on virtually any website . . . they are currently used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information . . . [but] current web widgets are not used as self-contained electronic commerce platforms.

'785 Patent, 1:65-2:10.

The DKR inventors, therefore, had to improve upon and enhance web widgets to implement their invention. To that end, the patent specification acknowledges the "significant and rapidly growing need for web widgets with enhanced capabilities that will enable content owners to more effectively use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with [] customers from web widgets." *Id.* at 2:9-18. Thus, the claimed inventions are directed to a web widget having enhanced capabilities and its implementation for various uses. *Id.* at 2:50-51 (updating content inventories using the widgets); 2:58-61 (distributing musical song or musical album using the widgets); 3:1-2 (transaction processing using the widgets); 3:4-5 (viral distribution of content using the widgets). More specifically, DKR's inventions improve: (i) the way an enhanced widget is built ("widget builder"); (ii) the way this widget is then embedded into a website or social media site ("embedding element"), and (iii) the way this widget is used to make online purchases ("store display element"). *Id.* at 6:4-15.

A. The widget builder

The DKR Patents describe a novel multi-purpose and dynamic widget builder for building an enhanced widget. *See generally* '785 Patent, Fig. 3; 7:65 – 8:25. This widget builder "is used to create an inventory of 'web widgets' 316, buy buttons 310, buy links 312 and preview clips 314…[and] the web widget inventory 316 includes services for creating web widgets for packages of marketable multimedia content." *Id*. at 7:66 - 8:5. The "buy buttons 310 are generated by content owners using the widget builder resource component 300…" *Id*. at 8:40-44. The specification describes how "content included in the[] distribution feeds [that] can be accessed and used by content owners to create new content compilations for association with web widgets using a widget builder resource component executed on the application server 106." *Id*. at 4:60-66. "The widget builder resource component 300 is also used to create a merchandising widget 308 to promote a content owner's physical goods and related materials." *Id*. at 8:7-11.

The widget builder's technical capabilities are explicitly recited in several claims. Claim 1 of the '995 Patent provides, among other things:

> a widget builder resource executing on the application server, the widget builder resource configured to:
> receive the image and metadata from the storage resource; and
>
> generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and
>
> wherein the application server is configured to embed the product listing into a web site and into a social media network . . .

'995 Patent, 18:49-59. Additionally, claim 1 of the '678 Patent notes that the "widget builder resource [is] configured to generate a product listing, wherein the product listing includes: (i) information associated with the item, (ii) a marketplace rule, and (iii) a clickable buy button." '678 Patent, 18:53-55. And claim 1 of the '237 Patent claims recites "a widget builder resource configured to generate a product listing, wherein the product listing includes: (i) a preview of the product based on the information from the storage resource and (ii) a clickable link, wherein the clickable link comprises a buy button." '237 Patent, 18:50-54.

B. The embedding element

In addition to developing an enhanced widget, DKR also created a novel way to deploy and distribute this widget. As of the priority date of the patents, widgets needed to be tailored and configured to operate within the HTML structure of a given website to function properly. *Id*. at 1:66-67; 2:3-4; Dkt. 36-5 ¶ 26 ("A need exists for a universally compatible web widget that operates in a way [] so that changes may be concurrently made to the web widget or the content of the widget concurrently across all web sites."). In other words, a widget creator would need to configure a widget to operate within the HTML structure of a specific website (such as Facebook) but then re-configure such widget to be compatible and perform tasks within another website's HTML structure (such as CNN). Any changes to the web widget or to web widget content had to be made in succession to ensure that all changes were compatible with the hosting websites.

DKR, however, changed this paradigm. The inventors recognized that the compatibility problem is eliminated if widgets are created and executed on a server (i.e., the widget server) distinct and separate from the server hosting the website (i.e., the website server). Claim 1 of the '785 patent recites this specific configuration:

> A method for embedding a buy button for an electronic commerce store comprising:
>
> receiving, by an embeddable buy button builder executing on a first server operated by a buy button provider, a selection of an item from an item inventory and a representation of the item, wherein the item is to be listed for sale on the electronic commerce store;
>
> generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and
>
> embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,
>
> wherein the electronic commerce store is displayed within the web site upon selection of the hyperlink, the electronic commerce store configured to facilitate payment processing related to a purchase of the item, and wherein the electronic commerce store is operated by the buy button provider.

'785 Patent, 18:44-55.

This technical and structural change the DKR inventors conceived conferred several advantages. The patent notes that by having a widget operate on its own server, "a consumer can opt to preview the content which has been packaged with the web widget, share the web widget with third parties, or elect to purchase the multimedia content packaged with the web widget" from within the website itself. *Id*. at 5:40-43. In other words, this novel approach provides a key enhancement in the form of universal compatibility—i.e., platform independence for web widgets. After DKR's invention, widgets are no longer dependent on the HTML structure of a given website because the web widget operates on its own HTTP platform and is merely displayed on a separate server. *See* '785 Patent, claim 1.

Additionally, this configuration change allows widget creators to quickly and efficiently apply universal changes to widgets and distribute them in a viral manner. The patents note, "[t]he buy links are [independent] Hypertext Transfer Protocol (HTTP) links that are created by content owners for widespread, viral distribution on the Internet, on mobile communications network or on other networks that enable consumers to click on such links to activate web widgets associated with these links that promote their multimedia content files and related merchandise." *Id*. at 8:50-56. At the time of invention, DKR was aware that "[c]urrent methods for achieving viral distribution of content focus on the use of electronic mail. However, a significant opportunity and need exists for enhanced capabilities to distribute content in a more immediate and engaging manner." *Id*. at 1:58-60. So, DKR's invention comprises of a new widget that "can be distributed over the Internet or other network…to a website where interested parties can activate or further distribute it to third parties on a network." *Id*. at 12:39-43. And once the distributed web widget is "activated from a link, buy button or preview clip, it can be further distributed in a 'viral' fashion to other online communities, websites, forums, etc." *Id*. at 7:23-26.

DKR's claimed approach to the web widget is nothing like a magazine mail order form that Shopify argues is analogous to the patented technology.

C. The store display element

The claimed widget technology also enables the use of these widgets for various applications including initiating and completing an e-commerce transaction. At the time the DKR

patent applications were filed, a customer making a purchase had to navigate (either manually or automatically) to a separate e-commerce platform (i.e., website) to complete the transaction. Dkt. 36-5 ¶ 36 ("[t]ypically, a customer would have to independently navigate to an e-commerce platform to make a purchase."). In other words, merchants displayed clickable advertisement widgets within host websites, but consumers would be re-routed to another website or window to complete the purchase. *Id*.

The DKR Patents changed this approach by enabling a consumer to use the widget to view and complete a purchase on the host website without being re-routed. And this ability to complete the purchase without being re-routed enables instantaneous access to the product—such as downloadable multimedia content. Dkt. 36-5 ¶ 28 ("the claims . . . cover methods and systems for embedding product listings and e-commerce stores in a web site such that a potential customer may instantly purchase downloadable content by processing purchase transactions through a web widget.").

The patents detail how, "once a purchase transaction has been completed, the multimedia content will be downloaded through the web widget to a consumer's client device 130, 132, 134, as shown at step 820, and the process then ends, as shown at step 822." '785 Patent, 14:4-8. More specifically, "[u]pon receipt of a content download request from a web widget, the content downloader 412 initiates and controls the process of retrieving the packaged content compilations associated with and promoted through the web widget from the cloud-based storage resource 124 or other storage in the multimedia content distribution system 200, and it also controls the process of downloading the retrieved content compilations to a client device 130, 132, 134. *Id*. at 9:39-47. This novel technical enhancement to web widgets enables "one-stop shop" e-commerce that allows a consumer to conduct a complete transaction quickly and without being re-routed to another platform (i.e., website). *Id*. at 7:23-26.

The claims of the patents capture this improvement by, among other things, reciting that the display element is used for "provid[ing] a checkout screen to the remote computing device, wherein the transaction processing service is configured to process a payment for a purchase of a product associated with the product listing, the purchase initiated from the checkout screen using

the remote computing device." '678 Patent, 18:62-67; '237 Patent, 18:63-65 ("... configured to process a payment for a purchase of the product initiated from the checkout screen using the remote computing device."). "[T]he application server provides a checkout screen to the client device, wherein the transaction processing service processes a payment transaction for a purchase of the product initiated from the checkout screen using the client device." '995 Patent, 18:62-68.

The technical enhancements identified above were not pre-existing "off-the-shelf" technologies, as Shopify claims. Dkt. 37-1 at 4 ("disclosures in the specification make clear that the patents' claimed invention uses pre-existing technologies…"); *id*. at 17 (arguing the embedding element is merely a "common-sense, conventional implementation of content distribution systems."). Rather, as the patents note, notwithstanding widgets' useful role in discrete "types of applications, current web widgets [were] not used as self-contained electronic commerce platforms. '785 Patent, 2:7-9. Widgets were used to "display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information." *Id*. at 2:4-6. The DKR Patent inventors had to create *new* technology to build, deploy, and use widgets because there were no "pre-existing technologies" that satisfied their needs. As a result, the inventions described in the DKR Patents could not (as Shopify contends) be implemented using "off the shelf" software – the software had to be specially developed by DKR.

II. LEGAL STANDARD

"In patent cases, regional circuit precedent governs procedural issues of law." *Vision Works IP Corp. v. Nissan N. Am., Inc.*, 2022 WL 6785766, at *4 (S.D. Cal. Oct. 11, 2022) (citation omitted). "In the Ninth Circuit, a motion to dismiss pursuant to Rule 12(b)(6) tests the legal sufficiency of the claims asserted in the complaint. The court must accept all factual allegations pleaded in the complaint as true and must construe them and draw all reasonable inferences in favor of the nonmoving party." *Id*., at *4-5 (citation omitted). "In asserting an invalidity defense, an alleged infringer must contend with the first paragraph of § 282, which provides that '[a] patent shall be presumed valid.'" *Microsoft Corp v. i4i Ltd. P'ship*, 564 U.S. 91, 97 (2011). "Any fact . . . that is pertinent to the invalidity conclusion must be proven by clear and

convincing evidence." *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019). "Additionally, in applying [Section] 101 jurisprudence at the pleading stage, the Court construes the patent claims in a manner most favorable to Plaintiff." *MoviePass, Inc. v. Sinemia, Inc.*, 2019 U.S. Dist. LEXIS 130876, at *16 (C.D. Cal. Apr. 5, 2019).

III. ARGUMENT

A. DKR's use of an expert declaration to provide factual context is proper.

The Central District of California has affirmatively held that "there exists 'no inflexible rule' governing the sort of 'written instruments' that may be attached to a pleading." *In re Mannkind Sec. Actions*, 835 F. Supp. 2d 797, 820-21 (C.D. Cal. 2011). "[T]he Ninth Circuit ha[s] held that 'affidavits and declarations . . . are not allowed as pleading exhibits *unless* they form the basis of the complaint.'" *Id.* (citing *U.S. v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003) (emphasis added)). "Other district courts . . . [have] denied motions to strike where the expert reports were not essential to the Court's decision and were used 'merely to buttress' the plaintiff's contentions." *In re Herbalife, Ltd. Sec. Litig.*, 2015 U.S. Dist. LEXIS 186970, at *2 (C.D. Cal. Jul. 28, 2015). Further, "even if an exhibit is stricken from a pleading because it does not constitute a 'written instrument' under Fed. R. Civ. P. 10(c), factual allegations in the pleading that correspond to the exhibit are not." *Rutherford v. USA Gas*, 2020 U.S. LEXIS 153746, at *7 (C.D. Cal. Mar. 31, 2020); *see also In re Herbalife*, 2015 U.S. Dist. LEXIS 186970, at *1 ("This ruling does not extend to any factual allegations in the SAC that were derived from the expert reports.")).

Dr. Arthur Keller's declaration should be admitted as a written instrument under Fed. R. Civ. P. 10(c) because it provides factual context regarding the state of the prior art at the time of the DKR Patents. Though the patent specification details the state of web widgets at the time of the invention, Dr. Keller's declaration buttresses those assertions. In other words, Dr. Keller—a person of ordinary skill in the art—simply provides factual context regarding the state of the prior art at the time of the DKR Patents.[1]

[1] Dkt. 36-5 ¶¶ 26, 28, 40, 49 ("[w]eb widgets typically operate within a web site such that each web widget must be specifically configured to function within the HTML structure of said

The underlying technical enhancements to web widgets that the DKR Patents introduced do not rise or fall with Dr. Keller's factual assertions; instead, the factual context he provides is informative insight regarding the state of the prior art *supported* by the patent claims and specification.[2] Thus, even if Dr. Keller's declaration were stricken, factual allegations in the pleadings that correspond to the declaration survive.[3]

B. Four claims identified in the Complaint are not representative of all seventy-four claims across the DKR Patents.

In an effort to trivialize DKR's inventions—inventions that Shopify itself deliberately copied as alleged in paragraphs 69, 79, 87, and 97 of the Amended Complaint—Shopify argues, without any support, that claim 1 of each asserted patent is representative of all seventy-four claims in the asserted patents. But in making that argument, Shopify runs afoul of well-established case law, including Federal Circuit precedent.

As a preliminary matter, "[c]ourts…have [] found that it is inefficient to attempt to resolve § 101 motions at such an early stage where the parties do not agree (as is the case here) that the claims are representative." *Onstream Media Corp. v. Webcast Plus, LLC*, No. 6:23-cv-385-DAE, Dkt. 33, at *1 (W.D. Tex. Feb. 7, 2024). A representativeness inquiry must be "directly tethered to the claim language." *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1168 (Fed. Cir. 2019).

website"); ("[e]lectronic content was typically distributed via electronic mail at the time of the Priority Date of the Patents-in-Suit"); ("[t]ypically, a customer would have to independently navigate to an e-commerce platform to make a purchase"); ("[p]rior to technology covered by the Embedding Element and Electronic Commerce Store Display Element, a content distributor was required to specifically change each web widget on each platform the web widget was operating within in order to perform these tasks"); ("[u]nlike traditional systems where a product listing would be unable to directly lead the customer to the purchase of a product, the invention . . .").

[2] Dkt. 36-5 ¶ 38 ("The '785 Patent describes how, the 'most commonly used web widgets are discrete application of limited functionality that allow users to turn personal content into dynamic web applications . . . [t]he Embedding Element and Electronic Commerce Store Display Element are not limited in functionality like traditional web widgets.").

[3] Dkt. 36 ¶¶ 62, 64, 65 ("the prior art state of widgets at the time of the priority date of the Patents-in-Suit comprised of 'on-screen tools' that for example were, 'used to display on-screen clocks, event countdowns, auction-tickers, stock market tickers, daily reposts, and flight information'"); ("A consumer, therefore, no longer needs to independently navigate to a separate web site in order to make a purchase . . ."); ("Widgets at the time of the priority date of the Patents-in-Suit were limited to merely presenting the user with information."); ("the prior art at the time of the Patents-in-Suit comprised of widgets that needed to be individually compatible with each web site the widget was operating within").

"Courts must thus avoid 'overgeneralizing claims' in a manner that might avoid pertinent distinctions between the claims simply because—at a high level of abstraction—there are some similarities between the allegedly representative claim and the remaining claims." *PPS Data, LLC v. Jack Henry & Assocs.*, 2019 WL 4745122, at *1031 (E.D. Tex. Sept. 6, 2019) (quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016)). Moreover, in *Diogenes Limited v. DraftKings, Inc.*, the court cautioned that "one could not use one claim as a cudgel to eliminate 27 asserted claims across seven patents in the absence of any real substantive arguments in support." C.A. No. 21-1695-MN-CJB, Dkt. 46 at 9-10 (D. Del. July 18, 2022). The court noted, "[a]lthough Defendant asserts that any differen[ce] between claim 1 and those various claims are "minor" and "immaterial," . . . it has given the Court almost no argument or way to meaningfully analyze whether those statements are truly correct . . . [w]hat was plain was that Defendant was straining to cram in argument about a huge smorgasbord of claims that could not responsibly be argued in just one motion like this." *Id.*; *Nat'l Prods. v. Arkon Res., Inc.*, 2019 U.S. Dist. LEXIS 42199, at *13 (C.D. Cal. Jan. 9, 2019) (finding that engaging in a "kitchen sink" approach to a motion for summary judgment is "largely unhelpful and unpersuasive").

Shopify resorts to overgeneralizing DKR's claims and fails to provide any meaningful analysis on how the four claims identified in DKR's Amended Complaint are representative of the seventy-four claims across four patents. Shopify focuses its analysis on Claim 1 of the '678 Patent and merely spends a few sentences reciting supposed "minor differences" between this claim and the remaining independent and dependent claims across the four asserted patents. Dkt. 37-1, at 7, 9, 10-12, 16, 17, 20- 26, 29 ("These are all minor differences that capture different ways conventional content distribution systems could use web widgets under ordinary conditions.").

Shopify's conclusory characterization of the different aspects of the DKR Patent claims as "minor differences" is wholly inaccurate and, as noted in *Diogenes*, ultimately not meaningful in determining whether such statement is truly correct. For example, Shopify's brief completely ignores claims in the '237 Patent related to viral distribution of the widget and the ability to conduct an e-commerce transaction within a social media network (rather than a website), which

set forth specific technological improvements. Dependent claim 6 of the '237 patent requires, "wherein when the application server receives an indication that the share link has been selected activated by the remote computing device, the application server distribut[ing] the product listing to a social media network," designed to "enable content owners to more effectively use viral distribution of multimedia content and to exploit social media trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers." '237 Patent, 19:8-12; 2:10-16. Shopify fails to meaningfully analyze patent ineligibility of this claim, and many others, and their differences from other alleged "representative claims."

Moreover, claim 1 of each of the DKR Patents cannot serve as representative because the terms used across the claims differ—both among claim 1 of each patent and the remaining claims—and are open to more than one construction. For example, claim 1 and claim 17 of the '237 Patent may require construction of "transaction processing service" separately from "facilitate payment processing" in claim 1 of the '785 Patent. '237 Patent at 18:45; '785 Patent at 18:58-59. The '785 Patent may require construction of "wherein the web site is executed by a second server not operated by the buy button provider," whereas the '678 patent may separately require construction of "storage resource communicatively coupled to the server." '785 Patent at 18:53-55; '678 Patent at 18:46. The DKR Patents have yet to be construed by any court. Thus, it is premature to order that claim 1 of each patent is representative of all seventy-four claims of these patents. *See e.g.*, *Luminati Networks Ltd. v. Teso LT, UAB*, 2020 WL 6803256, at *3 (E.D. Tex. July 15, 2020) (denying a motion to dismiss on the basis that the § 101 analysis would benefit from claim construction). "[L]ike many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination. For this reason, it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a [Section] 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." *MoviePass*, 2019 U.S. Dist. LEXIS 130876, at *16.

Shopify's reliance on *Bilski v. Kappos*, 561 U.S. 593 (2010), and *CyberFone Sys., LLC v. CNN Interactive Group, Inc.*, 558 Fed. Appx. 988 (Fed. Cir. 2014), to argue representativeness in this case is not convincing. In *Bilski*, the court analyzed only two claims because "[t]he remaining claims explain[ed] how claims 1 and 4 can be applied" using "familiar statistical approaches to determine the inputs to use in claim 4's equation." *Bilski*, 561 U.S. at 598. The claims built upon one another: "[t]he concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea." *Id*. at 612. That is certainly not the case in DKR's patents. Similarly, in *CyberFone*, the Federal Circuit specifically noted that "in the district court, Cyberfone did not preserve arguments concerning claim 18 (except to the extent that the same arguments apply to claim 1). In its summary judgement brief, Cyberfone described claim 1 as 'the exemplary claim in the complaints,' and only mentioned claim 18 in a footnote. In the footnote, Cyberfone made no substantive arguments that would differentiate claim 18 from claim 1." *CyberFone Sys.*, 558 Fed. Appx. at 992 n.2. Here, the seventy-four claims across the DKR Patents do not build upon one another; instead, they introduce independent novel enhancement to web widgets. And DKR does not define claim 1 of each patent as the exemplary claim for all seventy-four claims. *Bilski* and *CyberFone*, therefore, are not applicable here.

Accordingly, Shopify fails to make a prima facie showing that claim 1 of each asserted patent is representative of all seventy-four claims in the asserted patents and, for this reason alone, its motion should be denied.

C. The DKR claims are directed to patent eligible subject matter.

As is well known, the Supreme Court has established a two-step framework to determine whether a patent is drawn to patent-eligible subject matter. First, a reviewing court must determine whether the claims at issue are "directed to" a patent-ineligible idea that is anchored in an abstract idea or natural phenomenon. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). If so, courts then "consider the elements of each claim both individually as 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id*. (quoting *Mayo Collaborative Servs. v. Prometheus Labs. Inc.*, 566 U.S. 66, 78-79 (2012)).

The "'directed to' inquiry" at step one "applies a stage-one filter to claims, considered in light of the specification, based on whether their character as a whole is directed to excluded subject matter." *Enfish*, 822 F.3d at 1335 (quotation omitted). If a court concludes that a claim is directed to an abstract idea, it proceeds to the second step of deciding whether the claim's elements include an "inventive concept sufficient to transform the abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (quotation omitted). Step two looks at whether the claims recite features that are more than conventional steps articulated at a high level of generality. *Id.* at 222. "The second step of the Alice test is satisfied when the claim limitations involve more than performance of well understood, routine, and conventional activities previously known to the industry." *Berkheimer v. HP Inc*., 881 F.3d 1360, 1367 (Fed. Cir. 2018) (quotation omitted). To save a patent at step two, an inventive concept must be evident in the claims as opposed to merely being described in the specification. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

1. *Alice* Step 1: The DKR claims are not directed to an abstract idea.

In cases involving software, step one often "turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies [as] an abstract idea for which computers are invoked merely as a tool." *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1306–07 (Fed. Cir. 2020) (citing *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364 (Fed. Cir. 2020)). "We have routinely held software claims patent eligible under Alice step one when they are directed to improvements to the functionality of a computer or network platform itself." *Id*. at 1307 (collecting cases).

Here, the DKR Patent claims are not directed to an abstract concept; instead, they are directed to improvements in computer capabilities—specifically, they are directed to enhancements in web widget technology and the use of these enhanced widgets to carry out various functionalities that were not possible before the DKR Patents.[4] As noted above, the DKR

[4] In response to a § 101 rejection during prosecution of a similar patent (Systems and methods for e-commerce checkout with delay loading of checkout options, Patent No. 11,853,981), Shopify itself argued that the claims were "directed to providing an improved user interface, and include elements of transmitting requests, via a network, to a remote third-party server in order to cause

Patents claim at least three separate improvement to computer capabilities: (i) the way an enhanced widget is built (i.e., widget builder); (ii) the way this widget is then embedded into a website or social media site (i.e., embedding element); and (iii) the way this widget is used to make online purchases (i.e., store display element). And any one of these technological improvements render the patent claims eligible for patent protection.

For example, as related to the embedding element, claim 1 of the '785 Patent recites, among other things, the concept of having the enhanced widget (referred to as an "embeddable buy button") execute on a separate server from the web site into which the buy button is embedded. Specifically, claim 1 recites,

> generating, by the first server, the embeddable buy button, wherein the embeddable buy button is configured to display the representation of the item, and a hyperlink; and
>
> > embedding, by the buy button provider, the embeddable buy button into a web site, wherein the web site is executed by a second server not operated by the buy button provider,

'785 Patent, 18:48-56 (emphasis added). Likewise, claim 7 of the '785 Patent recites,

> a first server operated by a buy button provider;
>
> a database communicatively coupled to the first server, . .
>
> an embeddable buy button builder executed by the first server . . . wherein the embeddable buy button is configured to be embedded into a web site by the buy button provider . . .; and
>
> a second server configured to execute the web site, wherein the buy button provider controls operation of the embeddable buy button of the web site, and wherein the buy button provider controls operation of the electronic commerce store on the web site upon selection of the hyperlink.

'785 Patent, 19:12-31.

This concept of having the enhanced widget executing on a separate server from the website is a patent eligible (and novel) solution. Designing and deploying the embeddable buy button is an improvement to the functionality of a computer or a network platform because, among other things, it provides for a widget having universal compatibility.

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the user interface to populate an options category using checkout options received in response to the requests. A method of providing an improved user interface, using specific technical steps, is not an abstract idea." Ex. 1, at 12-13.

Before the priority date of the DKR Patents, each widget had to be tailored and configured to operate within the HTML structure of a given website. Dkt. 36-5, ¶ 26 ("[w]eb widgets typically operate within a web site such that each web widget must be specifically configured to function within the HTML structure of said website."). In other words, a widget creator would need to configure a widget to operate within the HTML structure of the Facebook website but re-configure such widget to be compatible, and perform tasks, within the CNN website HTML structure. Any changes to the web widget or to the content of the web widget had to be made in succession to ensure that all changes were compatible with the hosting websites. *Id*.

This issue, however, is solved by having the web widget execute on a separate server from the website. This approach ensures that the widget is not dependent on the HTML structure of a given website; the web widget operates on its own HTTP platform and is merely displayed on a separate server. Therefore, the embedding element allows widget creators to apply changes to widgets universally across hosting websites and virally distribute them as necessary.

This is a technological solution that improves the capabilities of a computer and/or its function. It is not, as Shopify claims, an application of a well-known abstract idea invoked on a computer. For this reason alone, the claims of the DKR Patents should be deemed as being directed to patent eligible subject matter.

Another technological improvement that improves a computer's capability is the widget builder. The DKR patents recite a widget builder operating on its own server to create and embed the widgets. Claim 1 of the '995 Patent recites,

> a widget builder resource executing on the application server, the widget builder resource configured to:
>
> receive the image and metadata from the storage resource; and
>
> generate a product listing, wherein the product listing includes the image, the metadata, and a clickable link, wherein the clickable link is a buy button and includes a preview of the product, and
>
> wherein the application server is configured to embed the product listing into a web site and into a social media network . . .

'995 Patent, 18:49-59.

The widget builder works in collaboration with the embedding element to solve the need for widget creators to manually adapt, update, or change widgets within and across websites. Dkt. 36-5 ¶ 40 ("Prior to technology covered by the Embedding Element and Electronic Commerce Store Display Element, a content distributor was required to specifically change each web widget on each platform the web widget was operating within in order to perform these tasks.").

Likewise, DKR's invention of using these widgets for various applications including initiating and completing an e-commerce transaction (i.e., the store display element) is also a technologically inventive step. More specifically, as noted above, using web widgets to enable "one-stop shop" e-commerce that allows a consumer to conduct a complete transaction quickly and without being re-routed to another platform (i.e., website) is certainly an improvement to the capabilities of a computer or a network platform. *Id*. at 7:23-26

Shopify's attempt to analogize DKR's (and ultimately Shopify's own) technology to a magazine order form is a gross simplification of the invention and, as noted by this court in *Blackberry Ltd. v. Facebook, Inc.*, "are largely hindsight driven." 487 F. Supp. 3d 870, 902 (C.D. Cal. 2019) (finding that the technology did not have "a true pre-computer analogue"); *see also Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018) ("It is not enough, however, to merely trace the invention to some real-world analogy.").

Shopify's theory that the DKR Patents claim nothing more than the abstract concept of a magazine advertisement with an order form would require that virtually all modes of e-commerce fail *Alice* step 1. All e-commerce transactions are necessarily a bi-product of placing an advertisement for a product with the option to purchase the product (i.e., order form).[5] But the Federal Circuit has cautioned against such over-generalization. *Enfish*, 822 F.3d at 1336 ("[D]escribing the claims at such a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule."). Here, Shopify's overly

[5] In response to a § 101 rejection during prosecution of a similar patent (Methods and systems for electronic commerce order management, Patent No. 11,853,981), Shopify itself argued that "[w]hile the present system and method may be used in commercial contexts to manage [e-commerce] orders, it is not itself directed to the abstract ideas of fundamental economic principles or practices." Ex. 2, at 12.

simplistic analogy ignores—i.e., is untethered to—the language of the claims and should be given no weight.

If Shopify reviewed the claims, it would see that the DKR Patents do not merely implement the concept of commerce on the internet; the claimed invention enhances the technical capabilities of web widget technology—a technology that *cannot* have a pre-computer analogue—and use this enhanced widget to improve many applications including e-commerce. And since widgets are rooted in computer and internet technology, the inquiry should begin with the state of widget technology on the priority date of the DKR Patents and the claim language, and not (as Shopify does) with magazine advertisements.[6] The DKR Patents independently enhance the concept of commerce; introduce the ability to embed commerce (i.e., product listings and buy buttons) within a social media network—a function that, by nature, could not exist prior to the internet, and solve a problem of viral distribution of multimedia that cannot have a "brick-and-mortar" equivalent. *See DDR Holdings v. Hotels.com, L.P.,* 773 F.3d 1245, 1257 (Fed. Cir. 2014) (holding that the brick and mortar "store within a store" concept "did not have to account for the ephemeral nature of an Internet 'location' or the near-instantaneous transport between these locations made possible by standing Internet communication protocols").

Additionally, Shopify's two primary cases—*Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355 (Fed. Cir. 2001), and *In re Elbaum*, 2021 WL 3923280 (Fed. Cir. 2021)—are also inapposite.

Shopify's reliance on *Free Stream Media* is misplaced. The Federal Circuit's decision hinged on the fact that "the asserted claims d[id] not at all describe how that result [was] achieved." *Free Stream Media*, 996 F.3d at 1363-64. "The claimed invention simply s[ought] to undo [limited security access to a mobile device] by 'working around the existing constraints of the conventional functioning of [] mobile devices.' However, such a 'work around' or 'bypassing' of a [mobile] device's sandbox [did] nothing more than describe the abstract idea of providing

[6] Instead of beginning with what the claims recite, what the specification describes and the state of the art at the time of the invention, Shopify comes up with a purported abstract idea of magazine advertisements and then attempts to retrofit that idea to the claims. That is an improper hindsight-driven approach.

targeted content to a client device." *Id*., at 1366. Simply stating "work around" or "bypassing" a device's security system (i.e., sandbox) was not enough to define the metes and bounds of any new functionality. *Id*.

Here, DKR's Patents specifically recite the requisite "how." For example, claims directed to the deployment of a widget—such as claim 7 of the '785 Patent—recite how the widget is created and deployed. Claim 1 of the '678 Patent specifically recites how a checkout process (i.e., transaction processing service) is embedded and initiated in a widget. And claim 6 of the '995 Patent recites the how the widget builder utilizes data to create a distributable e-commerce widget.

Reliance on *Elbaum* is equally misplaced. The Federal Circuit decided that utilizing "generic computer functions" to "provid[e] information and allow[] customers to utilize that information to engage in a commercial transaction" was abstract. *Elbaum*, 2021 WL 3923280, at *2. Here, the DKR Patents use non-generic computer functions (i.e., display element, embedding element, widget builder) to enhance the capability of pre-existing widget technology that may be used to conduct an e-commerce transaction within a widget or virally distribute product listings across social media networks. The DKR patents solve internet-centric problems that go far beyond simply allowing customers to use information to engage in a commercial transaction.

For at least these reasons, the DKR Patents' claims are not directed to an abstract idea under *Alice* Step 1.

2. *Alice* Step 2: The DKR claims recite a sufficient inventive concept to ensure patent eligibility.

According to the Federal Circuit's decision in *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1290 (Fed. Cir. 2016), the relevant analysis for *Alice* step two centers on unconventionality of the claimed functionalities or features of a claim. Specifically, the Federal Circuit in *Amdocs* observed that "we have found eligibility when somewhat facially-similar claims . . . recite a sufficient inventive concept under step two—particularly when the claims solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner." *Id*. at 1300. In other words, unconventionality is based on an

invention's advancement over the prior art in a way such that the unconventionality solves the prior art's problem. This approach is consistent with the Supreme Court in *Alice* that cautions that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 221.

Here, even if DKR's patents were directed to an abstract idea (which they are not), the Federal Circuit's *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) decision is dispositive of the issue in DKR's favor.

In *DDR*, the Federal Circuit upheld the patent eligibility of patents having similar features to the DKR Patents. The asserted patents claimed:

> [U]pon the click of an advertisement for a third-party product displayed on a host's website, the visitor is no longer transported to the third party's website. Instead, the patent claims call[ed] for an 'outsource provider' having a web server which directs the visitor to an automatically-generated hybrid web page that combines visual 'look and feel' elements from the host website and product information from the third-party merchant's website related to the clicked advertisement. In this way, rather than instantly losing visitors to the third-party's website, the host website can instead send its visitors to a web page on the outsource provider's server that 1) incorporates 'look and feel' elements from the host website, and 2) provides visitors with the opportunity to purchase products from the third-party merchant without actually entering that merchant's website.

Id. at 1257-58.

The Federal Circuit held the claimed solution amounted to an inventive concept for "resolving the particular Internet-centric problem, rendering the claims patent-eligible." *Id*. "In particular, the '399 patent's claims address[ed] the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after 'clicking' on an advertisement and activating a hyperlink." *Id*. at 1257. "The claims at issue [] specif[ied] how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." *Id*.

Similar to DDR's claimed technology, DKR's widget technology implements an unconventional technological solution for creation of a widget, viral distribution of multimedia content and the ability to conduct an e-commerce transaction within a widget.

First, like in *DDR*, the display element solves the problem of being instantly transported away from a host website after clicking a hyperlink. Dkt. 36-5 ¶ 36 ("Typically, a customer would have to independently navigate to an e-commerce platform to make a purchase. This requirement may dissuade customers from navigating away from the website, and therefore prevent them from making a purchase."). Likewise, the display element solves the technology-based problem of incorporating an e-commerce platform within a widget—a technology that was not otherwise available in the prior art. Dkt. 36-5 ¶ 28 ("Electronic content was typically distributed via electronic mail at the time of the Priority Date . . . a need exists for a direct and instant distribution method . . . the claims in the Asserted Patents cover methods and systems for embedding product listings and e-commerce stores in a web site such that a potential customer may instantly purchase downloadable content by processing purchase transactions through a web widget."). More specifically, as noted above, using web widgets to enable "one-stop shop" e-commerce that allows a consumer to conduct a complete transaction quickly and without being re-routed to another platform (i.e., website) is certainly an improvement to the capabilities of a computer or a network platform. '785 Patent at 7:23-26. Online widget "one-stop shop" e-commerce was not technologically available in the prior art.

The embedding element in the '785 Patent specifies how interactions with the internet are manipulated to reach a desired result[7]—creating widgets on a first server independent of the host on a second server. Before the priority date of the DKR Patents, each widget had to be tailored and configured to operate within the HTML structure of a given website. Dkt. 36-5 ¶ 26 ("[w]eb widgets typically operate within a web site such that each web widget must be specifically configured to function within the HTML structure of said website."). The unconventional (and novel) use of separate servers enables widgets to be placed within host websites regardless of HTML structure, and otherwise enables widget creators (using the widget builder) to universally

[7] In response to a § 101 rejection during prosecution of a similar patent (Methods and systems for electronic commerce order management, Patent No. 11,640,629), Shopify itself argued that "[t]he combination of additional elements in the claim (wherein the order sharing configuration indication indicates that sharing privileges for the order are associated with a **second user** based on an order sharing configuration, and wherein the order sharing configuration comprises a data structure for electronic sharing of the order with the **second user**) integrates the exception into a practical application." Ex. 3, at 12.

place and update such widgets. Dkt. 36-5 ¶ 40 ("[p]rior to technology covered by the Embedding Element and Electronic Commerce Store Display Element, a content distributor was required to specifically change each web widget on each platform the web widget was operating within in order to perform these tasks.").

The widget builder is another unconventional technological improvement over the prior art. The widget builder incorporates the embedding element and store display element to communicatively couple, "a web widget so that the selection or clicking on a button, link, or preview clip causes the activation of a web widget. '785 Patent, 6:29-31; Dkt. 36-5 ¶ 40. The DKR patents recite a widget builder operating on its own server (i.e., the widget server) and independent of the host server to create and embed the widgets. A widget builder resource component 300 was designed to host inventories (full catalog widget 302, single release widget 304, single song widget 306, and merchandising widget 308), operated on an independent server coupled with the widget, to create buy buttons 310, buy links 312, and preview clips 314. '785 Patent at Fig. 3. The widget builder works in collaboration with the embedding element to solve the need for widget creators to manually adapt, update, or change widgets within and across websites. Dkt. 36-5 ¶ 40 ("Prior to technology covered by the Embedding Element and Electronic Commerce Store Display Element, a content distributor was required to specifically change each web widget on each platform the web widget was operating within in order to perform these tasks.").

The Federal Circuit further held in *DDR* that while the "store within a store" concept may have been well-known by the relevant timeframe, "that practice did not have to account for the ephemeral nature of an Internet 'location' or the near-instantaneous transport between these locations made possible by standing Internet communication protocols, which introduces a problem that does not arise in the 'brick and mortar' context." *Id*. Here, the "magazine advertisement order form," while well-known by the relevant time frame, did not have to account for the ephemeral nature of an internet location and the instantaneous transport between locations made possible by standing Internet protocols. And further, unlike the "brick and mortar" (i.e., physical reality) magazine order form, the DKR Patents enable the consumer to conduct a

completed e-commerce transaction with the ability to instantaneously access/download the multimedia content—further demonstrating that this technology cannot have a "pre-computer analogue." *Data Engine Techs.*, 906 F.3d at 1011. Such a solution is only available due to the "near-instantaneous" nature of web widget and internet capability.

Shopify's reliance on *Free Stream Media*'s *Alice* step two is misplaced because, as Shopify points out, "the claims [there] simply recite[d] that the abstract idea will be implemented using conventional components and functions generic to the technology." *Free Stream Media*, 996 F.3d at 1363-64. The display element, embedding element, and widget builder introduce *non-conventional* functionality operating in a *non-generic arrangement* to solve a specific problem. *See DDR Holdings*, 773 F.3d at 1257 ("an inventive concept can be found in non-conventional and non-generic arrangement of known, conventional pieces.").[8]

For at least these reasons, the DKR Patents disclose, at a minimum, an unconventional solution to the prior art's problem and, for this reason, passes *Alice* Step 2.

IV. CONCLUSION

The DKR Patents are not abstract, and otherwise introduce sufficient inventive concept as to not fail for patent-ineligibility. DKR respectfully requests this Court to deny Shopify's Motion to Dismiss the First Amended Complaint.

Dated: April 4, 2024

PERKOWSKI LEGAL, PC

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[8] In response to a § 101 rejection during prosecution of a similar patent (Methods and systems for electronic commerce order management, Patent No. 11,630,629), Shopify itself argued that "[i]ndependent claim [] relates to an improved method for processing e-commerce orders that improves collaboration and improves security and confidentiality. The claim, therefore, recites a combination of elements that improve computer technology. Specifically, the additional elements recite a specific improvement over the prior art by improving security and confidentiality of collaborative orders." Ex. 2 at 13.

CERTIFICATION UNDER L.R. 11-6.2

The undersigned, counsel of record for Plaintiff DKR Consulting, LLC, certifies that this brief complies with Section IX.C of this Court's Civil Standing Order, which requires briefs to be no more than 25 pages.

Date: April 4, 2024

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

DKR Consulting LLC,

Plaintiff,

v.

Shopify, Inc.

Defendant.

Case No. 2:23-cv-06904-HDV-JC

REPLY IN SUPPORT OF DEFENDANT SHOPIFY, INC.'S RULE 12(B)(6) MOTION TO DISMISS AMENDED COMPLAINT

Hearing Date: May 9, 2024 at 10:00 a.m.
Courtroom: 5B
Judge: Hon. Hernán D. Vera

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Shopify established in its Memorandum in Support of its Motion to Dismiss (Dkt. 37-1 ("Br.")) that all claims of the Buy Button Patents are invalid on their face under 35 U.S.C. § 101 because they are directed to performing the abstract idea of combining a product advertisement with an order form, and the limitations of the claims fail to recite any technological improvement to the workings of a computer. In its Opposition, DKR does not dispute that the longstanding business practice of using advertisements with order forms is an unpatentable abstract idea. Rather, the only argument DKR makes on the merits is that the asserted claims should survive Shopify's motion because they provide three alleged improvements to "web widgets": the use of a widget builder, an embedding element, and a display element. Dkt. 40 ("Opp.") at 1. DKR also makes two procedural arguments, both of which fail and would not impact the outcome of this motion regardless. *Id.* at 7-11.

None of DKR's arguments have merit. At *Alice* Step One, DKR's arguments fail because the "focus of the claims" is not the widget builder, embedding element, or display element—each of those things, to the extent it is claimed at all, is only a single claim limitation. But at *Alice* Step One, the ***only*** question is whether the overall "focus" of the claims is the computerization of an abstract idea or not. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014) ("First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts."). In the Buy Button Patents, the indisputable ***focus*** of the claims is computerization of the fundamental business practice of combining a product advertisement with an order form (i.e., the use of a "buy button").

At *Alice* Step Two, DKR's arguments fail because the use of a widget builder, an embedding element, and a display element are not new or unconventional computer technology, as the Buy Button Patents themselves concede. Far from contending that there is something novel or inventive about the types of computer servers claimed, the use of multiple servers to execute programs, or the use of the Internet to enable online purchasing, the Buy Button Patents themselves indicate that wholly ***conventional*** computing technologies is used to implement the abstract idea. It is "not enough … to merely improve a fundamental practice or abstract process by invoking a computer merely as a tool." *Customedia Techs., LLC v. Dish Network Corp.*, 951

F.3d 1359, 1364 (Fed. Cir. 2020).

DKR's procedural arguments that Shopify relies on representative claims and that the Court should rely upon DKR's expert declaration instead of the patents are likewise misguided. Shopify expressly did not rely on representative patent claims. *See* Br. at 4. And, even if it had, DKR fails to explain how any claim of the Buy Button Patents survives *Alice* Step One or *Alice* Step Two. Likewise, DKR's arguments that its expert declaration should be considered are both unavailing and irrelevant. DKR does not dispute that an expert declaration cannot contradict the patent itself, as the declaration does. And DKR has not identified a single case in this district or from the Ninth or Federal Circuits in which an expert declaration purely stating opinion and devoid of factual allegations was incorporated into pleadings. But even if that were the law, DKR fails to identify a single statement of its expert that would change the § 101 analysis.

As detailed below, each of DKR's arguments fails. Shopify's motion should be granted.

I. ARGUMENT

As Shopify explained in its Opening Brief, the claims of the Buy Button Patents merely computerize the longstanding business practice of combining advertisements with order forms. The claims describe using conventional computer technology long predating the patents, such as web widgets and client-server systems, to create advertisements on the Internet with a clickable buy button. The Buy Button Patents' computerization of a known advertising practice is the hallmark of an abstract idea. *See*, *e.g.*, *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017) (invalidating loan-processing automation patent because "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology"); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 712 (Fed. Cir. 2014) (claims directed at advertisements used as exchanges or currency were ineligible despite reciting a general purpose computer and the Internet). DKR's counter arguments on the merits do not withstand scrutiny as the claims as a whole are focused on an abstract idea and present neither a technological improvement nor an inventive concept.

A. At *Alice* Step One, The "Focus" of the Buy Button Patent Claims is an Unpatentable Abstract Idea.

At *Alice* Step One, the analysis does not focus on individual limitations (subparts) of the

patent's claims. Rather, the only question at *Alice* Step One is whether the patent's claims are "directed to" an abstract idea. *Alice*, 573 U.S. at 220. In other words, "[t]he inquiry at this first stage looks at the 'focus' of the claims, and their 'character as a whole.'" *In re Rosenberg*, 813 F. App'x 594, 596 (Fed. Cir. 2020) (internal citation omitted).

DKR's claims, as a whole, are directed to a computerized technique for combining an order form (buy button) with a product advertisement. Br. at 11. In opposition, DKR seeks to characterize the claims as "directed to enhancements in web widget technology" and "improvements in computer capabilities." Opp. at 12. Specifically, DKR points to three aspects of the patents' claims: (1) a widget builder, (2) embedding widgets into websites or social media, and (3) widgets including a display element. *Id*. at 12-13. But even a passing review of the claims themselves shows that none of these things is the "focus" of the claims as a whole. Rather, to the extent claimed at all, these are only individual claim limitations that describe the technology used to carry out the abstract idea (combining a product advertisement with an order form) that is the overall focus of the claims as a whole. Thus, DKR's argument at *Alice* Step One fails because it confuses *Alice* Step One (which examines the "focus" of the claims "as a whole") with *Alice* Step Two (which examines individual limitations of the claims to determine whether any recites an "inventive concept" that transforms the abstract idea into patent eligible subject matter).[1]

Indeed, the Buy Button Patents repeatedly make clear that the claims are directed to facilitating customer purchases, not a widget builder, embedding element, or display element. For example, the patents explain that the purpose of the claims is to "use viral distribution of multimedia content and to exploit social media marketing trends to engage in purchase transactions and other forms of electronic commerce directly with current and prospective customers from web widgets over the Internet." '785 Patent, 2:12-17.[2] In other words, the Buy Button Patents' focus is advertisements on the Internet that allow direct purchase transactions

[1] DKR's arguments about the individual limitations also fail because the claims recite only resulting capabilities. *See Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016) (claims abstract where they "do not claim a particular way of programming or designing the software … but instead merely claim the resulting systems").

[2] Shopify's motion cited to the '678 patent, explaining that all asserted patents share a common specification. Br. at 2. Because DKR's Opposition cites primarily to the '785 patent, Shopify cites to the '785 patent in this brief.

(i.e., the computerization of advertisements with order forms).

Critically, none of the Buy Button Patents' claims state in their preambles that they are directed to improving a widget builder, a multi-server embedder, or a display element for applications. DKR simply plucked these elements from claim limitations (of which there are dozens) and has wholly disregarded the overall focus of the claims. In fact, the claim limitations that DKR now alleges to be the focus of their Buy Button Patents (improvements to a widget builder, embedding element, or display element) are expressly directed to incorporating a buy button in an advertisement on the Internet. *See, e.g.*, '785 patent, claim 1 at Preamble (stating claim is directed to a "method for embedding a buy button for an electronic commerce store"); *see also* '785 patent, claims 7, 14; '995 patent, claims 1, 9, 14; '678 patent, claims 1, 9, 15; '237 patent, claims 1, 9, 15.

DKR attempts to distinguish *Free Stream Media Corp. v. Alphonso Inc.* by arguing that the Buy Button Patents' claims "recite the requisite 'how'" the inventive improvements are achieved because it explains how widgets are "created and deployed."[3] Opp. at 16-17. But DKR is conflating a claim that simply directs the use of generic computer components (patent ineligible) with one that describes how to implement new and improved technology. The court in *Free Stream Media* invalidated claims allowing communication devices to overcome a security barrier because they similarly did not describe how to achieve a claimed improvement. 996 F.3d 1355, 1363-64 (Fed. Cir. 2021). Here too, the claims do not explain "how" to make a web widget, a computer server, or a display element. They simply refer to these conventional technologies as tools to implement the abstract idea.[4] *See Customedia Techs*, 951 F.3d at 1365

[3] DKR's references to Shopify's arguments during prosecution of Patent Nos. 11,853,981 and 11,640,629 is immaterial. The Patent Examiner rejected Shopify's argument raised during prosecution of the '981 patent. Moreover, Shopify amended the claims to include specific improvements to address the examiner's concerns. And, unlike the Buy Button Patents, Shopify's arguments in the '629 patent prosecution concerned amendments that did not broadly cover basic ideas, such as using generic computer components to computerize a known practice.

[4] DKR's criticism of *Elbaum* (Opp. at 17) is likewise inapposite. Like *Elbaum*, the claims here recite generic actions, like "'storing, receiving, analyzing, and processing data'" but fail to provide "any technological details for" DKR's alleged improvements. *In re Elbaum*, No. 2021-1719, 2021 WL 3923280, at *2 (Fed. Cir. Sept. 2, 2021). DKR is thus incorrect that Shopify's arguments "require that virtually all modes of e-commerce fail *Alice* step one." Opp. at 15. Likewise, contrary to DKR's allegations (Opp. at 16), nothing in the claims is unique to the problems of social media marketing. The Buy Button Patents' claims fail because they are devoid of any details regarding how to program or otherwise solve technological problems and merely claim the resulting systems.

(claims invalid when computer components "merely used as a tool" to implement abstract idea).

B. Under *Alice* Step Two, The Claims Of The Buy Button Patents Do Not Add An Inventive Concept

Alice Step Two requires courts to look at the individual claim limitations alone, and as an ordered combination, to determine whether any of those limitations recites an "inventive concept." *Alice*, 573 U.S. at 217. In other words, claims will fail at *Alice* Step Two unless they recite some **specific improvement to computing technology itself**, rather than the use of conventional technology to carry out the abstract idea. *Customedia Techs.*, 951 F.3d at 1366 ("[T]he invocation of 'already-available computers that are not themselves plausibly asserted to be an advance … amounts to a recitation of what is well-understood, routine, and conventional."). The use of existing computer technology to carry out an abstract idea—even if this is the first time computers have been used to perform that abstract idea—is not an "inventive concept." *See, e.g.*, *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) ("We have repeatedly held that such invocations of computers and networks that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea") (quotations omitted); *Bridge & Post, Inc. v. Verizon Commc'ns, Inc.*, 778 F. App'x 882, 893 (Fed. Cir. 2019) (explaining at *Alice* Step Two that "a more efficient advertising campaign, even if novel … is an advance 'entirely in the realm of abstract ideas.'"); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (explaining at *Alice* Step Two that "a claim for a *new* abstract idea is still an abstract idea"). As Shopify demonstrated in its brief, the Buy Button Patents fail to describe any improvement to computer technology that would transform the claimed abstract idea into a patent eligible invention. Br. at 14-17, 19-22.

The only arguments DKR raises at *Alice* Step Two are the use of a widget builder, embedding element, and display element. Opp. at 19-21. But none of these, alone or in combination, is described in the Buy Button Patents as a new or improved computer technology. Rather, the Buy Button Patents themselves ***expressly confirm*** that only ***conventional computer technology*** is used to carry out the claimed invention of combining a product advertisement

with an order form.[5]

First, DKR argues that the "embedding element" allows the widget to be executed on a separate server from the website into which it is embedded to "universally place and update such widgets," and that this alleged improvement amounts to an inventive application. Opp. at 19-20. But this argument finds no support in the Buy Button Patents' claims or the specification. The claims do not recite how to make the widget compatible with multiple types of websites, nor even require that it be so. And nothing in the specification asserts ***in any way*** that the use of two servers enables compatibility with multiple websites. DKR's only support for this argument is expert ***opinion***. But expert opinion "does not transform a claim reciting only an abstract concept into a patent-eligible system or method." *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013). And expert opinions that contradict the patent, like that on which DKR relies, must be disregarded. Br. at 23-25. Because the patents do not purport to solve any technological problem associated with the use of multiple servers, their use cannot be a technological improvement.

Second, DKR argues that the use of a widget builder is another "technological improvement" to computer capabilities. Opp. at 20. But the Buy Button Patents do not claim to have invented widget builders, nor do they provide—much less recite in the patents' claims—any instruction on ***how*** to create widget builders that improve upon known widget builders. *See generally* '785 Patent. To the contrary, the claims recite only the ***functions*** of the widget builder, such as "receiv[ing] the image and metadata from the storage resource" and "generat[ing] a product listing" with certain information. *See* Opp. at 2, 14 (quoting '995 patent, claim 1). Such functional claiming is the hallmark of subject matter ineligibility at *Alice* Step Two. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (claim simply recites the use of generic features of cellular telephones, such as a

[5] DKR attempts to distinguish the technology claimed in the patents from abstract, invalid claims that have "pre-computer analogue[s]" by arguing that "unlike the 'brick and mortar' (i.e., physical reality) magazine order form, the DKR Patents enable the consumer to conduct a *completed* e-commerce transaction with the ability to instantaneously access/download the multimedia content." Opp. at 20-21. But DKR cites nothing to support this, and for good reason—the claims simply do not include any limitation directed to "the ability to instantaneously download the multimedia content."

storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea.").

Third, DKR argues that the "store display element" was an improvement to web widgets because it created a "one-stop shop … that allows a consumer to conduct a complete transaction quickly and without being re-routed to another platform." Opp. at 19. But "one-stop shop" is just the idea of buying from an advertisement with an order form, i.e., a restatement of the abstract idea. *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1318 (Fed. Cir. 2021) (holding claims fail at *Alice* Step Two when "the purported improvements … just restate the abstract ideas"). Likewise, the "display element" DKR claims is just known widget technology used in a conventional manner to combine buy buttons with advertisement displays on the Internet. Indeed, the Buy Button Patents expressly concede that web widgets already had a display element for applications such as "clocks, event countdowns, auction-tickers, stock market tickers, daily weather reports and flight arrival information." '785 Patent, 2:5-6. These applications are simply replaced with another generic application—a "transaction processing service" such as "PayPal" or "Amazon Flexible Payment Service" "for the provision of credit card, debit card, or bank account information and completion of the purchase transaction." *Id*., 5:47-50, 17:64-65, 18:11. Thus, the Buy Button Patents confirm that the store display element is known web widgets technology and do not present a technological improvement.

DKR also argues that *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) is "dispositive" because the *DDR* patents had "similar features" to the Buy Button Patents. Opp. at 18. That is completely wrong. In *DDR*, the claims themselves "specif[ied] ***how*** interactions with the Internet are manipulated to yield a desired result" and improved on conventional technology. *DDR,* 773 F.3d at 1257-58 (emphasis added) (cautioning that "not all claims purporting to address Internet-centric challenges are eligible for patent"). In that case, the patents recited "a specific way to automate the creation of a composite web page by an 'outsource provider' that incorporates elements from multiple sources in order to solve a problem faced by websites on the Internet." *Id.* at 1259. Here, by contrast, the claims do not recite any specific "way" to make a web widget builder, use separate servers to place web

widgets in host websites, or display widget applications that process transactions. Instead, they use a generic widget builder, embedding element, and display element to implement the abstract idea of combining a product advertisement with a buy button, **never explaining *how*** these elements are implemented from a computer science or engineering standpoint. DKR's arguments therefore fail for the same reason there was no inventive concept in *Free Stream Media*: the Buy Button Patents provide an alleged solution that uses "generic features, as well as routine functions, to implement the underlying idea." *Free Stream Media*, 996 F.3d at 1366.

C. DKR's Expert Declaration Does Not Make the Buy Button Patents Valid

All but conceding that the Buy Button Patents are invalid on their face, DKR's opposition begins by asking the Court to spare the patents based on arguments included in the declaration of their paid expert. Opp. at 7. DKR's argument fails because (1) Dr. Keller's statements do not change the subject matter eligibility analysis and (2) such an expert declaration cannot be incorporated into the pleadings.

First, DKR does not dispute that allegations in the complaint or an expert declaration cannot be used to contradict the patent itself. Br. at 23-24. Yet, the declaration repeatedly does just that. For example, it alleges the asserted claims are patentable due to an "unconventional embedding step" where the "buy button is operated on a separate server than that of the website." Dkt. 36-5 at 9. But the Buy Button Patents contradict this *ex post facto* attorney/ expert argument because they provide no explanation at all as to how to perform "embedding." *See supra* at 6; Br. at 15-16, 18-19. For example, '785 patent claim 1 merely recites generating a buy button on a first server and embedding it on a website hosted on a second server. '785 patent, claim 1. Thus, even if the Court accepts the expert's declaration (it should not), it cannot change the patentability analysis as his statements are inconsistent with the patents.

Second, as explained in Shopify's motion, Dr. Keller's declaration is not a "written instrument" under Rule 10(c) and thus should be disregarded. Br. at 22. The cases DKR cites confirm that the declaration cannot be incorporated into the pleadings. In both *Rutherford* and *In re Herbalife*, this Court ***declined*** to consider the expert reports attached to the complaint. *Rutherford v. USA Gas*, No. 19-cv-01448-JAK-FFM, 2020 WL 13925954, at *3 (C.D. Cal.

Mar. 31, 2020) (also striking paragraphs in complaint relying upon the attached report because "a report prepared by an expert … which proffers evidentiary support for the factual allegations … does not form the basis of the claim in the case in an accepted manner."); *In re Herbalife, Ltd. Sec. Litig.*, No. 14-cv-2850-DSF-JCG, 2015 WL 12734014, at *1 (C.D. Cal. July 28, 2015) (declarations did not contain any factual allegations that "form the basis of the [Second Amended Complaint] but rather appear to have been generated for purposes of prosecuting this litigation" and thus are not "'written instrument[s]' under Rule 10(c).").

And, unlike in *In re MannKind Securities Actions*, Dr. Keller's declaration does not provide specific ***factual*** allegations. *In re MannKind Sec. Actions*, 835 F. Supp.2d 797, 821 (C.D. Cal. 2011) (considering, in a securities fraud class action, an expert declaration because it included specific factual allegations regarding existing FDA practices). Instead, the declaration contains 15 pages of ***opinion*** on the patent eligibility of the Buy Button Patents' claims. Br. at 23. Dr. Keller does not allege any specific facts about prior art systems or methods, or include any other statements of fact.[6] *See* Dkt. 36-5 at 5-6. These legal statements (and allegations in the amended complaint incorporating those statements) do not, and cannot, constitute a factual basis for DKR's amended complaint because they provide no facts at all. *Rutherford*, 2020 WL 13925954, at *3 (striking allegations in complaint because they recite opinions).[7]

D. DKR's Argument That Claims Featured in the Amended Complaint Are Not Representative Is Without Merit

Finally, DKR argues that Shopify's motion fails to address each of the Buy Button Patents' 74 claims and should consequently be denied on that basis. Opp. at 9-10. DKR is wrong. Shopify's Opening Brief specifically addresses and explains the ineligibility of all 74 claims individually, including each and every unique limitation recited in every claim. *See* Br. at 17-22. For example, while DKR misleadingly asserts that Shopify did not address claims 6 and 17 of the '237 patent, Shopify did so specifically. Br. at 20-21. Thus, DKR's statements

[6] Moreover, the state of the prior art is used to assess novelty and non-obviousness; not whether an idea is abstract. *See Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1169 (Fed. Cir. 2019) ("an abstract idea by itself in a claim—even if the idea is novel and non-obvious—is not enough to save it from ineligibility"). Any alleged novelty does not change that the claims are directed to the abstract idea of computerization of advertisements with order forms.

[7] DKR does not dispute that amended complaint paragraphs 59-67 make conclusory non-specific allegations—that the claims address and "solve" "technological problems"—that should be ignored under *Iqbal*. Br. at 25.

that "Shopify resorts to overgeneralizing DKR's claims" and that Shopify "completely ignores" certain claims are facially wrong. Opp. at 9. In contrast, DKR has failed to show that any of the 74 claims survive the ineligibility analysis required under *Alice*. *See supra* 2-8.

Moreover, even if Shopify did rely on representative claims (it did not) doing so would be consistent with U.S. Supreme Court and Federal Circuit law. Br. at 4-6; *see also Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1359-60 (Fed. Cir. 2017) (affirming dismissal of all asserted claims as patent ineligible based on representative claims).[8]

DKR is also incorrect that claim 1 of each Buy Button Patent could not serve as representative without the Court first conducting claim construction. Opp. at 10. DKR does not propose any specific claim constructions for the terms it identifies, such as "transaction processing service." Courts have repeatedly found that a generic request to perform claim construction like DKR's is insufficient to overcome a motion to dismiss. *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1360 (Fed. Cir. 2023) ("patentee must do more than invoke a generic need for claim construction … to avoid grant of a motion to dismiss under § 101."); *see also Cleveland Clinic Found.*, 859 F.3d at 1360 ("[W]e have repeatedly affirmed § 101 rejections at the motion to dismiss stage, before claim construction."). Because DKR does not identify any claim construction that would change the *Alice* analysis, it carries no weight.

And, in any event, the Buy Button Patents themselves demonstrate that the terms DKR identifies do not confer patentability, but instead describe well-known conventional computing technology. *See, e.g.*, '785 Patent at 18:12-21 (describing "transaction processing service" as a "means used to complete a commercial transaction (i.e., external service such as Authorized.Net, etc. or an internal proprietary service.")).

II. CONCLUSION

For the foregoing reasons, this case should be dismissed.

[8] DKR is incorrect that *Bilski* and *CyberFone* are inapplicable. As in *Bilski*, the dependent claims add only trivial, conventional elements to the already conventional components claimed in the independent claims. Br. at 7; *Bilski v. Kappos*, 561 U.S. 593, 612, (2010) ("adding token postsolution components did not make the concept patentable"). And just like in *CyberFone*, DKR does not make any substantive arguments that differentiate the dependent from the independent claims; indeed, DKR discusses only one dependent claim in its opposition. Opp. at 9-10; *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 992 (Fed. Cir. 2014).

Dated: April 25, 2024

By: /s/ *Gregory H. Lantier*

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CERTIFICATE OF COMPLIANCE

The undersigned counsel of record for Shopify Inc. certifies that this brief contains 10 pages, which complies with the 10 page limit set by court order dated August 30, 2023.

By: /s/ *Gregory H. Lantier*

Gregory H. Lantier

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served on all attorneys of record via the Court's ECF system on April 25, 2024.

By: /s/ *Gregory H. Lantier*

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION

DKR CONSULTING, LLC., Plaintiff, vs. SHOPIFY, INC., Defendant.	Case No. LA CV 23-06904-HDV-JC Los Angeles, California Thursday, May 9, 2024 (11:21 a.m. to 11:50 a.m.) (1:31 p.m. to 2:31 p.m.)

TRANSCRIPT OF MOTION TO DISMISS AMENDED COMPLAINT
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UNITED STATES DISTRICT JUDGE

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Los Angeles, California; Thursday, May 9, 2024 11:21 a.m.

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(Call to Order)

THE CLERK: Calling Item 3, CV-23-6904, DKR Consulting, LLC versus Shopify, Inc.

Counsel, please state your appearances.

MR. PERKOWSKI: Good morning, your Honor. Peter Perkowski for the Plaintiff. With me is Chandran Iyer, who will be arguing.

THE COURT: Good morning.

MR. IYER: Good morning, your Honor.

MR. LANTIER: Good morning, your Honor. Greg Lantier on behalf of the Defendant Shopify.

THE COURT: Good morning. Give me a second just to get organized with the case here.

All right. Section 101. All right. Let me -- I'm not going to give any thoughts like I have on the others because I only do that when I feel like I am informed enough to be helpful at an early stage, and I've read everything, but I'm not -- I don't consider myself informed enough to have even a tentative on this. So, I'm going to need to be guided by you. So, I'm going to need to be guided by you.

So, I'll give you the -- my microphone is not up. Thank you.

I'll let you present, Counsel.

MR. LANTIER: Thank you, your Honor. And, please, if you do have questions as I present, I'm sure you'll -- you'll ask them.

Your Honor, again, Greg Lantier on behalf of Shopify.

This is a patent infringement case that involves four patents that were all issued from the same original patent application, and we're here today on our motion to dismiss DKR's amended complaint. The basis for that motion is that the patent claims recite subject matter that is ineligible for patenting under U.S. Supreme Court precedent when interpreting what is eligible for patenting under 35 U.S.C. Section 101.

And, your Honor, I -- I do have some slides. If they're not helpful, I'll take them down --

THE COURT: No.

MR. LANTIER: -- immediately.

THE COURT: Yes. I -- I was more familiar with the last case. So, I didn't need a PowerPoint, but here I'm happy to see what -- what you present.

MR. LANTIER: Yes, your Honor.

So, here on slide two -- and I have a hard copy to leave with your Honor or to give to you now if you'd like. These are just some example cases that are -- are in our briefs in which e-commerce patents like these have been held

ineligible for patenting at the United States Court of Appeals for the Federal Circuit, which is, of course, the Circuit Court of Appeals to which all patent infringement cases go.

And this is just a partial list, your Honor, of the cases in which these types of patents have been found to be ineligible at the pleadings stage. In fact, when considered by the Court's, the majority of eCommerce patents are found to be ineligible subject matter. There are dozens from the Federal Circuit and hundreds from the U.S. District Courts in the 10 years since the United States Supreme Court issued the decision in Alice that we talk about in the papers.

And, your Honor, if we turn to slide three here, these are prototypical invalid eCommerce type patents under that Supreme Court and Federal Circuit precedent. They fall squarely within the large body of cases informing -- enforcing the Supreme Court's two-step process under Alice. And -- and you can see why, your Honor. The Supreme Court has been clear that excluded from patent protection are mathematical equations, laws of nature, and abstract ideas.

And it has been equally clear in Alice and other cases that abstract ideas include longstanding business practices, things that were done in the commercial space long before the computer age.

The fundamental holding of Alice, along with Bilski and -- and Mayo and -- and other Supreme Court cases that were issued around the same time about 13 to 10 years ago is that taking a -- an abstract idea that would not be patentable if you described it pre-Internet age doesn't become patentable just because you describe the performance of that abstract idea over the Internet or using computers. In almost all cases, those patents are going to be ineligible subject matter because, of course, we now perform everything using computers and the Internet, and we can't give out 20-year monopolies to people for taking a -- a practice that predates the Internet and then just moving it over and saying, Look, I can use computers and the Internet to perform that.

THE COURT: But doesn't that depend on what level of generality to slice it, right? I mean, if -- if on your slide here "buy song", if they can say -- and I think that's part of their argument, that before the came along, you had to tailor all the codes specifically to each website and it couldn't be done and it wasn't easy and you couldn't mass produce this and you couldn't do it on a phone, and now you can. And if they created the code and the process to do all that, your point legally is that that's not good enough because it's similar enough to an order form from a magazine that -- I mean but then how is Shopify all that different?

I mean, like, you know, I'm sure you have tons of patents, but having a commerce, right, store goes back thousands of years, and I'm sure you guys have lots of patents, and you've defended many of them. So, is that really your point, that just because it's like a tear-off order form that there's no way to patent the concept of an efficient way to get a customer to an order form?

MR. LANTIER: There's no way to patent the concept of putting an order form on the Internet. You could -- you very much could patent, for example, the -- the computer functionality that allows you to create a buy button, for example. If the patents here said, But nobody knows how to allow people to purchase products on the Internet and we've figured out a way that you can create software that will allow you to hit a button and it will allow you to order on the Internet, you could patent that. That would be -- that would be an advance. But the patents here, your Honor, specifically say that you can implement all of this just using Amazon or PayPal. So, this buy button, you can just use preexisting -- the patents talk about it. This is at column five, lines 5 to 20, for example, your Honor -- that you can do this just using Amazon out in -- and elsewhere it talks about using PayPal. And that's what you can't do, your Honor. You can't say, I am entitled to a monopoly on the concept of this business practice implemented using

ordinary computer technology that I didn't invent myself, and that -- that's the basis for our argument, your Honor.

THE COURT: To refer to -- your Honor, you mentioned, well, they said this was very hard to do and -- and they talk about, well, there's this HTML issue that their expert raises. That's not in the patents. They don't say it's in the patents. That's based on an expert declaration that they submitted, your Honor. And the courts have been clear that on a judgment on the pleadings -- excuse me -- a motion to dismiss on the pleadings, you can't alter the facts by submitting an expert declaration, your Honor. You look at the patent itself.

So, your Honor, I -- I don't know if it's helpful to go through the two-step Alice step. I know both parties discussed it at length in their -- in their briefs, but it -- it's a two-part test. At the first stage, you look to the claim as a whole to the -- to see, well, what is this claim directed to, what's the focus of the claim, sort of what's the overall point here.

And if you deem that the overall point is to use computers or the Internet to perform a business practice, then you look to the individual claims alone as an ordered combination to say, Well, yeah, but did they -- did they figure out a way to do this that fundamentally changes the way that computers or the Internet operates.

So, in Alice, step one, your Honor, the claims here are clearly directed to the abstract idea of combining an order form with a product advertisement. We can -- we can talk through any claim that your Honor would like us to speak through. I have claim one of the '785 patent which both parties discussed up here on slide seven. The -- the first portion of a patent claim is called the preamble, and that's what I have highlighted here. It's just sort of an overall description of what the claim pertains to. And here you can see very clearly it's a method for embedding a buy button for an e-commerce store and then comprising.

And if we then look, your Honor, at the remaining steps, they are just functionally describing how you would over the internet insert a buy button into an e-commerce store. So, how would you include an order form in a product advertisement, and it just talks about first you'd have to select what item am I -- the first limitation, the receiving limitation.

Well, I've got to select what item I'm trying to sell here. Then I have to embed the buy button into -- into the advertisement. That's the second -- the second and third limitations, and then the third says:

> "Wherein the electronic commerce store is displayed within the website upon the selection of the hyperlink."

Right. So, your Honor, clearly, they're not -- they didn't patent the hyperlink. The hyperlink's been around for 30 years, and it's just saying we're going to have a hyperlink in there that will allow the customer to purchase the -- the item.

That claim is clearly directed to the idea of embedding this buy button. The buy button is nothing other than the Internet version of that mail-in order form that we talked about earlier.

Now, in Alice, step two, your Honor, we -- we -- we'll move to whether there's an in inventive concept, and I should note that it's exceedingly rare for an e-commerce patent to pass Alice step two. In fact, there's only one case that the Plaintiff cites in its brief where there's an e-commerce patent that passed at Alice step two even arguably, and that's the DDR Holdings case, which I'll talk about in a minute.

In the vast vast majority of cases, e-commerce patents don't pace Alice step two because all they're doing is describing the how to use existing technology in order to carry out the abstract idea. This case --

THE COURT: But wait. But let me stop you, and this reflects my ignorance of it, but I'm going to ask it anyway. But then why the issue? What's -- what's going on that requires the Court, which is not an expert, to then

undo it when patent examiners get provided all this and say, yes, it qualifies?

MR. LANTIER: Your Honor, there are -- there are less cynical and more cynical answers to your questions, but the -- the fact is that hundreds of -- well, hundreds of patents have been invalidated since Alice by the courts that were issued by the U.S. Patent Office. The patent examiners do a good job. There are cases where they don't get it correct. The Patent Office is in the business of issuing patents, and, unfortunately, these get issued. I agree with you that it would be better if they weren't. But just statistically speaking, your Honor, if we look at what's happened in the Article 3 courts since Alice, it's clear that there are hundreds of situations in which the patent examiner got it wrong and -- and that should not have issued the patents.

To be fair to those examiners, the law changed back in -- the law changed back in the sort of 2010 to 2014 time frame. They're doing the best job they can, but a lot of them were working in art units where these types of patents had been coming out for many years prior to the Alice decision, and they continued to come out afterwards.

THE COURT: So, in Alice step two, you're saying that it's not -- it's not a innovative, creative improvement that adds new functionality that didn't exist before that

solves a problem through a technological innovation that couldn't be solved before essentially, right?

MR. LANTIER: That, your Honor, is probably more of a description of Alice step one. If somebody said nobody could figure out how to sell a product over the Internet and -- and we figured out here's how you can connect a -- a transaction processing service to the Internet because nobody could -- nobody could do that before, then the claims would be directed to solving that technological problem, right.

Alice step two is really about looking at the individual claim limitations and saying, Is there something really unusual here about the way that that concept is being implemented on computers or -- or over the Internet? And if we take the example of DDR Holdings, which is the one case that was cited by the Plaintiff at -- for Alice step two that's an e-commerce case, there was -- there were limitations that specifically described creating a type of web page that never existed before the patent, according to the -- the -- the patent itself. And that was what they called a hybrid or composite web page that nobody had thought of before and so that the Court said, well, that could be patentable because there's -- your patent itself is saying that this doesn't -- this doesn't preexist out there in the world of -- of Internet technology.

Here we have the exact opposite, your Honor. We have patents that are telling us expressly, You can use preexisting Amazon technology to perform the idea we're talking about here. All you need to do is hyperlink in a link to Amazon or to PayPal, and if you do that on your product advertisement, that will be performing our invention.

So, that's why at Alice step two, it's very rare for these e-commerce type patents to survive because of Alice step two. Most of them by design are talking about using preexisting Internet technology to carry out the business practice, and that's the case with these patents here.

And, your Honor, how do we -- how do we know that? Well, you need to take a look at the patents or, more specifically, take a look at the information about the patents that's raised by the Plaintiff in the briefing and see if there anything in this patent where they're saying this -- this technology never existed on the Internet before, not did anybody embed a buy button in a -- in an advertisement before. That's the abstract idea. That's not the question. The question is is there anywhere in the patent where it says, Before us, nobody could have figured out technologically to do this, and we're explaining that here in this patent. There's no such teachings in these

patents, and -- and all of the portions of the patents that were cited to your Honor by the Plaintiff, I'm sure you'll read carefully, they do not say that in any way. They -- they talk about what type of content to include in the widget, but they don't talk about, if you want to be able to do this, here's how you have to alter the computer, here's how you have to alter the Internet in order to do it.

THE COURT: And is that required? I mean, I -- are you saying that the -- if the patent language had included what actual source code that could show how it would be done, then -- then it would be specific, but, what, this is too general?

MR. LANTIER: No, your Honor, it's not -- it doesn't come down to whether it's source code or not. You could include source code and still have it be an abstract -- an unpatentable abstract idea. For example, if they've copied an Amazon source code into the patent, it wouldn't change the outcome here. But what you would look for in the patent claims themselves -- it has to be in the claims -- is a description of here's how you have to modify a preexisting technology in order to do something you couldn't do before. It's not just here's how you can use preexisting technology in order to perform the abstract idea of -- of carrying -- of embedding and ordering capability into a product advertisement.

And, your Honor, as I said, here the patents expressly say you can use Amazon for this. You can use PayPal for this. Obviously, DKR is -- is not able to get a patent on the use of Amazon or the use of PayPal.

There are four arguments that DKR raises in response to our motion, your Honor. I've handled a number of these motions before in various courts. And, as I said, there have been hundreds. All of the arguments that DKR raises are arguments that have been raised by patent owners before and have been rejected.

First, they try to analogize these patents to the patents in DDR Holdings. Every patent owner in e-commerce cases where the patents are challenged on the basis of subject matter eligibility says, Our claims are just like the claims in DDR Holdings, because that's the one e-commerce case where the Federal Circuit found that the -- the claims were eligible.

And in the nine and a half years since the Federal Circuit issued the decision in DDR Holdings, to my knowledge, it's never found any other e-commerce claims to be analogous to those claims. And the reason for that is what I said before, your Honor. In DDR, we had claims that created a new type of web page that just never existed before the patents, according to the patents. Here, again, we're using Amazon. We're using PayPal to do it. We're not

talking about creating something that didn't exist.

The second thing that is said, your Honor, is that we oversimplified the claims or that we relied on representative claims, and they say that that was improper. That's just flatly wrong, your Honor. If you -- at page four of our opening brief, we were express that we were not relying on representative claims, and pages 6 to 7 and 17 to 21 of our opening brief, as well as portions of our reply brief deal with all of the claims that are part of these four patents.

The third thing --

THE COURT: Wait. Explain that to me more.

MR. LANTIER: Sure.

THE COURT: I -- I don't pretend to understand how -- how these issues relating to representative claims work.

MR. LANTIER: Yes, your Honor. I apologize for blowing through that. It's an arcane aspect of -- of patents.

So, in a -- in a patent, the majority of the text is describing through figures and -- and prose, this is what we think we came up with and -- and explaining how it relates to how one could implement it, et cetera. And then at the very end of the patent, there is a numbered list of individual sentences, and each one of those sentences is a patent claim, and each one of those claims you can think of

as sort of like a deed to property. In that sentence, they describe, Here is what our invention is, and the only question in the patent case is were you really the first one -- you know, is that -- is what you described eligible for patenting? Are you really the first one who came up with it? Is -- is that obvious, and then is it infringed by the -- the patent -- the -- the accused infringer.

And, so, here, if you aggregate the claims that are in all four patents -- there are 74 of them -- the vast vast majority of them are what are called independent claims, which means they -- they're just freestanding. They're a freestanding sentence that doesn't reference any other claim. Excuse me. I said that backwards. The vast vast majority are dependent claims, which means that they are derivative claims, that they -- they depend from an independent claim, and all they do is add maybe one other thing to that claim as compared to what the independent claim itself says. They're a handful of what we call independent claims, and those are the ones I was talking about before where they stand on their own and it's a freestanding sentence that doesn't reference any other claim in the patents.

THE COURT: So, your point is -- is -- is what, that you don't need to go through all the 78 because they're derivative? You don't have to analyze each of them one by

one on this motion to -- for a finding that the patents themselves are ineligible?

MR. LANTIER: No. That's the opposite of what we're saying, your Honor. What we're saying is --

THE COURT: I should stop trying to --

MR. LANTIER: -- yes, it --

THE COURT: -- summarize it.

MR. LANTIER: So, that's what they're accusing us of doing, and that's not what we did. As I said, we -- we looked at every single claim. We have addressed each of the claims. Now, of course, it's a 25-page brief. So, we have done it in a way that -- that is consolidated, but we looked at every claim and tried to find one that from the perspective of Alice, would be treated differently or had some issue that we would -- we would need to address separately. And, after addressing all those claims in our motion as we did, every single one of them is subject to the same -- the same point on Alice, which is that it's directed to an abstract idea, and there's nothing in the claim at Alice step two that would be unconventional computer technology.

THE COURT: Okay.

MR. LANTIER: So, we -- we did not rely on representative claims. What we did was the amended complaint -- now, remember, the amended complaint is the

complaint they filed after we moved to dismiss the first complaint. So, it was attempted as sort of a stop gap, try and -- try and put some things in there to avoid the outcome here of invalidity, but that amended complaint still only lists four claims, one from each patent in it. And, so, we -- we did primarily focus on those, but we addressed every single one of the 74 claims, and that's what I'm saying here. You can see that in our brief at page 4, 6 to 7, 17 to 21.

THE COURT: Okay.

MR. LANTIER: The -- the third argument, your Honor, that they raise is they just say, Well, you can't do this before you do claim construction. And claim construction is the process in which the Court will look at the patent claims, and if the parties dispute the meaning of any word or phrase in any one of those claims, it will interpret that phrase or those words because the Supreme Court in a decision called Markman v. Westview Instruments, Inc. in 1995. So, we can't give that to the jury. Courts need to interpret the patent claims.

Now, if they had raised a particular claim limitation and said, We think this claim limitation requires, and then they laid out something specific, then there might be -- there might be an argument if -- if that would affect the Alice analysis that your Honor should

perform claim construction before you decide this, but that's not what they did. They -- they just said, We think you need to do claim construction. And they said there may be some terms here that need to be constructed. And the -- the Federal Circuit has been crystal clear about this. We have the Trinity Info Me-dia v. Covalent case here cited on the slide. It's in our briefs. And they've said you have to do more than just invoke a generic need for claim construction to avoid dismissal under Section 101.

And then, your Honor, the final thing that DKR argues is, Well, forget about the patents. We've included in our complaint allegations that there's unconventional things here. We've submitted an expert declaration where the expert offers opinions that certain things were unconventional. And, your Honor, this is not the first time this has happened. It's not uncommon for Plaintiffs to include in the complaint allegations where they basically are just taking the words out of Alice and saying "not it" to those -- those words. And it -- it's less common, but it's been done before, as we can see here, for a Plaintiff to submit an expert declaration in the hopes of changing what is really in the pleadings, which is the patents themselves and what the patents say. And the Federal Circuit, again, very clear on this, you can't overcome a motion to dismiss a patent case filed on the basis of

Section 101 just by including allegations in your complaint or a -- a declaration from an expert that seeks to say things about the patents that aren't in the patents themselves.

Your Honor, for a case where the Federal Circuit said that clearly about expert declarations, I'd refer you to the Athena Diagnostics case at 915 F.3d 743. That's on slide 14 also in our briefing there. And for the proposition -- for an example -- this happens all the time, but there's a good example of the Federal Circuit rejecting allegations made in an amended complaint to overcome a motion to dismiss in the Trinity Info Me-dia case that's cited in our briefing as well. That's -- that's actually a case that came out of -- of the Central District here, your Honor, and was decided last year by the Federal Circuit. And there at page 1365, the Federal Circuit very clearly says you don't -- you don't pay attention to allegations that are made in a complaint that are not consistent with what the patent itself says. You can't change the patents by just making allegations in your complaint to overcome a motion to dismiss.

So, your Honor, I know I ran long there. I was trying to answer your questions and be quick.

THE COURT: No. I appreciate it. I think this is a -- a good time to stop. I will obviously want everyone to

come back. So, we'll come back at 1:30. I'll hear from DKR, and then I'll give Shopify a brief chance to have the last word on this.

MR. LANTIER: Thank you very much, your Honor.

THE COURT: All right. Thank you, everyone. We'll be back at 1:30.

(Proceedings recessed to reconvene.)

AFTERNOON SESSION

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THE CLERK: Recalling Civil 23-6904, DKR Consulting versus Shopify.

Counsel, would you please state your appearances for the record.

MR. IYER: Chandran Iyer for Plaintiff DKR.

MR. PERKOWSKI: Peter Perkowski for Plaintiff DKR.

MR. LANTIER: Greg Lantier for Defendant Shopify.

THE COURT: All right. Why don't you give your appearance, as well.

MS. HERRIOT: Liv Herriot for Defendant Shopify.

MR. NIKOGOSYAN: Henry Nikogosyan for Defendant Shopify.

THE COURT: All right. Very good. Good afternoon, everyone. We're back on the record in this case. We started with oral argument in the morning, and we heard from from Mr. Lantier. So, let me invite -- I believe -- you said it was Mr. Iyer who was going to argue for Plaintiff?

MR. IYER: Yes. Yes, your Honor. Thank you.

THE COURT: Okay, great.

MR. IYER: All right. Good afternoon, your Honor. Shopify's argument is, we believe, just premised on over generalizing DKR's invention and -- and selectively picking

and choosing the claim elements in the DKR patents to make its point. And Shopify argues that we, DKR, don't focus on the entirety of the claim, but it's actually them that doesn't focus on the entirety of the claim and, instead, they pick and choose specific elements to try to make their point.

The -- ultimately, DKR's invention is nothing like a magazine order form. You know, that's akin to saying that a horse-drawn carriage is similar to a car because it gets you from one place to another. You know, viewed at a -- you know, obviously a car is a lot more complex, a lot more efficient, and a lot more engineering goes into it, and that's exactly the case here. The distance between a horse-drawn carriage and a car is really what exists between a magazine order form and DKR's invention.

You know, DKR spent millions of dollars inventing this technology, and it's a technology that's led to tremendous efficiency in -- you know, in -- in various sort of arts in computer science, both from an engineering perspective and also from a merchant perspective and a customer perspective when it's implemented in an e-commerce platform. And this is engineering -- as we alleged in the complaint, this is engineering that DKR shared with Shopify starting back in 2011 and that Shopify misappropriated, and that's why, you know, we're here today.

So, while at 100,000 foot, you know, DKR's inventions may seem like a mail order, you know, order form, in reality, they're not because what's relevant is what's in the claims of the patent and what's disclosed in the specification and the drawings of the patent, and I'll go through some of those as an example to show you that -- that this is a lot more complex, and they do achieve a lot of efficiency that we believe Shopify and other e-commerce platforms use.

THE COURT: Okay. Before you do that, I want you to go through that. It will be helpful for me, but on the practical side, so, is it literally the case that every business pays you licensing fees for these buy buttons? I mean, they're everywhere. I've seen them everywhere. Is that -- is that really the -- the case or are you saying that the way that you guys do it is different and they've stolen the exact method that you do it, although there's 100 other ways to -- to do it? What's -- what's the state applied, because this is -- this is everywhere. So --

MR. IYER: Yeah.

THE COURT: -- do you own that entire market?

MR. IYER: No, your Honor. I mean, the only thing we own is obviously what's in the claims, and all we know today is in our initial analysis -- now, obviously fact discovery hasn't started in the case. So, we don't know

exactly how Shopify implements its platform. But, based on what's publically available, you know, we -- and our history with Shopify in terms of what we disclosed to them back in 2011 to 2015 time frame, we had good faith basis to believe that this is how Shopify implements its platform, which is by using the inventions that's specifically claimed in our patents. Now, I don't know whether other e-commerce platforms do it the same way, you know, but -- but for now it's just all we know is about Shopify.

THE COURT: Okay. So, the -- well, all right. I'm getting outside of what this motion is about. Why don't I let you continue then.

MR. IYER: Right. And -- and, I mean, your Honor raises a good point, right. Regardless of whether Shopify infringes or doesn't infringe, right -- we believe they infringe, and they say they don't infringe -- I think it's reasonable to say that the field of technology that's disclosed in the DKR patent is similar to what Shopify uses to generate its revenue on a yearly basis, and --

THE COURT: Well, has other patents or are you saying that they rely entirely on your patents?

MR. IYER: No. I'm sure there are other -- they have other technologies within their ecosystem that don't read on our patent, right. I mean, the -- our -- our allegations are very narrow, which is the ability for -- for

a user -- or for a merchant on a Shopify platform for example, to go create an -- create a sale or a product listing and then be able to -- to provide it in a viral fashion to others so that it can be then used to make purchases from Twitter or from Instagram or from Facebook, from wherever it may be. And before -- you know, I know -- I know we're kind of deviating from -- from this motion, but before DKR and Shopify had their meeting, Shopify really had no way to -- to propagate its sales or its content to social media sites in a very effective way. As you can imagine, there are millions or tens of thousands or hundreds of thousands of products in a Shopify platform. If they had to write code for each one, for each different platform so that it can be shown on Instagram and Twitter and -- and Facebook, I mean, that's just -- I mean, that's not a task that can be really done, and it's DKR's inventions that allow someone like Shopify to -- to create one script and then have it disseminated all across the different social media platforms so that it can then draw on the users to make the purchases.

THE COURT: Okay. All right.

MR. IYER: All right. So -- so, to characterize, as Mr. Lantier did, as a buy button patent or an e-commerce patent is not entirely accurate because there are -- there is disclosure in the patents about what other uses you can

have, and I just mentioned one, which is you can use these widgets that DKR developed to virally spread information about a product or anything else, you know, any other -- anything else that you want to sort of virally distribute. You can see previews. The patents talk about how you can see previews of products, you know, and then the merchant has the ability to in realtime make changes to sales, geographic location where it's offered, you know, what's referred to as marketplace rules. That's -- you know, so -- so, the merchant can do that from the back end without really affecting the consumer's experience, and -- and these are all part and parcel of what's taught in the patents and -- and what the innovation really is. So, to characterize it as just a, Oh, you just develop a buy button, stick it on a page and -- and do it is -- is unfair, and it's just overly simplistic.

And, you know, and I'm certain, you know, even though Shopify in its brief says our invention, DKR's invention, is nothing more than a magazine order form, I'm sure their own counsel would not say that Shopify also is only a mail order form company. I mean, they are -- they are one of the largest e-commerce companies in the world, and they're very sophisticated, and it's a very complex ecosystem that they have and that they manage, and -- and it's -- you know, and that's what -- that's what DKR's

patents are about. I mean, it's how to sort of develop these widgets, how to deploy these widgets, and then how to use these widgets in order to make purchases in a very seamless way.

And, so, in our patent -- in our briefs, that's what we tried to point out to the Court. We said there are really three inventions here. One is what we call the widget builder, which is a whole new way of building widgets. So, the patents talk about widgets as just being informational at the time of the invention. They provide information about, you know, flight information, stock information. It was just information. It was not a interactive component.

And DKR's invention figured out how to make it an interactive component so that you can -- you can watch videos on it. You can interact with it in different ways. And then they figured out, Well, now that we've created this widget, well, how do we deploy it, right? And that's referred to as the embedding element in our -- in our brief. And a very simple solution, you know, in a simple way is to use two separate servers so that -- so that the widget is independent. It's universal, and it's independent of the Web server and the HTML code that runs on that Web server for a specific website.

And the third way, the third innovation is what we

refer to as a store display element which is how do you make a purchase using that widget? And in Shopify's presentation, they said, Well, it's just all, you know, just Amazon and PayPal, but that's not entirely 'accurate. Yes, we didn't -- DKR didn't invent Amazon or PayPal transactional service. But what they did figure out is how to pay for things through the widget. So, yes, you could, you know -- and I'm sure your Honor's seen this where you make a purchase, you click on buy now, you get rerouted to some third party website, and then, you know, who knows what happens, whether the customers come back, don't come back to the website. And I think that's something that website owners were concerned with. So, DKR's invention solves that problem by allowing Amazon payments to happen right within a widget, and that's something that's certainly innovative.

THE COURT: But isn't one of their arguments that that's not really the main aspect of the patent, that that's in -- in one sort of ancillary claim or an illustration, that that's not really the heart of the patent?

MR. IYER: Right. I mean, I -- I think -- and I don't want to speak for Mr. Lantier, but -- but I think he -- he did focus on the -- the purchasing element as -- as one that renders these patents just patent ineligible, and -- and it is in most claims of DKR that aspect of how to make a purchase through the widget -- and that's important.

It's -- it's not just through some third party. It's through the widget. It is there in a lot of claims, but that's not the only thing that's there in a lot of claims because the claims also talk about, Well, how do you build the widget? And then there are some other claims that talk about, Well, how do you deploy this widget after it's built? And then the last step of this invention in the claim is, Well, then how do you use the widget to make the purchase?

You know, and Mr. Lantier -- and I don't want to misquote him, but he said something during his presentation. He said something like, Well, you know, one can certainly patent computer functionality that allows you to create a buy button. You can't create -- you can't patent the buy button, but you can patent computer functionality that allows you to create a buy button, and that's exactly what DKR has done. And I believe Mr. Lantier also said we could say that before -- if we can say that before us no one figured out how to technologically do this, that's patentable. Well, that's exactly what DKR did. The patents talk about how no one could figure out how to enhance these widgets, then how to use the widgets in a way that it's -- that it's universal so that it doesn't have to be changed with if it's on Facebook versus Twitter, and then it figured out how to take payment from within the widget so that a customer didn't have to leave the host website, so that they

can continue shopping on it even after making the purchase through the widget. And these are all technological inventions that are described in the patents and in the figures and then ultimately also claimed, you know, in these different patents.

So, I can talk -- so, with respect to step one, so, to beat this motion to dismiss, DKR needs to prevail on either step one or step two. So, with respect to step one, the Federal Circuit has said that when -- that in cases involving software, the analysis turns on whether the claims focus on specific asserted improvements in computer capabilities. This is from the Uniloc decision that we cited in our brief. And that Uniloc decision further said that:

> "We have routinely held software claims patent eligible under Alice step one when they are directed to improvements to the functionality of a computer or network platform itself."

So, if DKR can show that the claims are directed to an improvement to the functionality of a computer or network platform, then it should prevail even under step one, meaning it's not directed to an abstract idea and, instead, the claims are directed to something that's patent eligible.

THE COURT: But how does the Court analyze that first clause that you said in cases involving software? Is this a case really involving software or --

MR. IYER: This is definitely a software case because -- because if you look at the figures, for example, there's algorithms on how to create this widget. There is discussion in this specification about how to deploy these widgets to make it universal, which is specifically using -- using the application server to run the widget, which is separate from -- which is separate from a Web server that runs a website.

And I can -- and I can -- for example, if I can cite a specific quote from the patent itself, if you look at the '785 patent, your Honor, which is Exhibit 1 to our complaint --

THE COURT: Wait. Let me -- let me follow along. I'm going to pull it up.

(Pause.)

THE COURT: Exhibit 1 from the complaint?

MR. IYER: Correct. And this is the '785 patent.

THE COURT: Okay.

MR. IYER: And if you go to -- if you go past the drawings and you go to the specification, the actual written text and if you go to column five -- so, up top, there's the column numbers. So, if you go to column five and then in

the middle of the page, there are line numbers, and if you look at line 55 --

THE COURT: Okay.

MR. IYER: -- it says:

"Figure 1b is an alternative embodiment of the operating environment of the multimedia content distribution system."

So, first of all, the patent itself doesn't refer to, you know, itself as a buy button or e-commerce. It looks at itself as a -- as a multimedia content distribution system. Then it says:

"In this operating environment, one or more Web servers have been added as independent computing resources for use in receiving and responding to content-related requests from client devices."

So, it's -- it's saying that, Well, there are these Web servers, and these Web servers are running independent from the application server that runs and manages and creates the Web widgets.

And then the patent continues. It says:

"This embodiment is computationally more efficient and enables the application server 106 to be dedicated

to the operation of a content management system and the control of processes on the other servers used in this operating environment."

So, right off the bat, I mean, that in and of itself should end the inquiry with respect to step one, that this approach of basically separating out the application server that runs the Web widgets from the actual Web server that hosts the website, there are -- in its own words, there are efficiencies to be realized, and making a computer system or a computer network more efficient is certainly an improvement that -- that courts have looked at for purposes of step one. And for step one, as -- as I mentioned, you know, and as the Federal Circuit said in the Uniloc decision it turns on whether the claims focus on specific asserted improvements in computer capabilities. And having a computer be more efficient is certainly an improvement in computer capabilities.

So, that in and of itself should end this inquiry and lead to a finding that these patents survive even step one.

And this approach of -- of, you know, what we referred to as the store display elements on how purchases are actually made through the widget, it's not as -- as Mr. Lantier said, as I mentioned, just going to Amazon and

PayPal and paying for it. It's the ability for -- for a website owner to keep that consumer on its website and complete the transaction through its website, which is through the widget.

So, that -- so, that's step one, your Honor. And, you know, and the one thing that was missing from Mr. Lantier's presentation, he focused on -- on the store display elements. He focused on, Well, how do you make a purchase? You use Amazon, PayPal. But you didn't hear him discuss about this widget builder, about the embedding element. You know, and these are all technologically driven improvements that do improve the functioning of a computer.

Now, if we have to go to step two, which I said, as I mentioned, we shouldn't have to go to step two because of the part I just read, but if we have to go to step two, the Federal Circuit has said -- and, by the way, I mean, you go to step two if the Court finds that the claims are abstract, but then you look at step two to see whether it adds something more to that abstract idea to then make it patent eligible.

So, the Federal Circuit in Amdocs v. Openet Telecom, a case that we cited in our brief, said that:

> "When claims solve a technology-based problem, even with conventional generic components but combined in an

unconventional manner, the patents present an inventive concept that is eligible under step two."

So, you can take things that have been known, but if you arrange them in an unconventional way to solve a problem, that passes muster under step two. And, so, in other words, you can look at unconventionality as being based on an invention's advancement over prior art in a way such that the unconventionality solves the problems that existed from prior art technology, and that's exactly what DKR's invention does.

The embedding element, having the widget that's enhanced with capabilities of showing video previews, allowing a purchase to be made through the widget, being able to distribute it virally, these were things that didn't exist in the prior art, and that's what the patent says. And, so, taking known components and, as shown, for example, if you look at -- if you look at figure three, your Honor, of the -- of the '785 patent --

THE COURT: Is that the same one, Exhibit 1?

MR. IYER: Yes. Figure three is what's referred to as a widget builder resource component, and this is how -- this is their disclosure, and there is accompanying description in the patent about how this is put together. But this is how they build the widget, they -- the enhanced

widget that's disclosed in the patent.

THE COURT: I have to say it doesn't really tell me much here other than the categories.

MR. IYER: Right. So -- so, then, if you look at the specification which starts at the bottom of column seven and runs into top of column nine, it's a description of that figure and what each component is and how it's all put together.

And similarly, figure eight, if you go to figure eight, that's another illustration of how these Web widgets are created. And then the discussion on figure eight is, for example, on column 12, starting at line 15 onwards.

THE COURT: Well, one thing I'm surprised at from Mr. Lantier's presentation -- and I'll give him a chance to expound on this in -- in a few minutes -- but is that courts seem to go through all of this on a preliminary pleading motion and decide all this without expert reports and -- and more. But if I take what he's saying as true -- and I'm sure it is, although we'll check it as well, but virtually every court that looks at e-commerce patents is disqualifying these at a pleadings stage? Is that right? And, if so, then what distinguishes yours?

MR. IYER: Yeah. So, that -- that's -- that's a good question. Yeah, and -- and Mr. Lantier is correct that, you know, a lot of e-commerce patents do get struck at

this initial stage, but what's important are to look at the claims of the patent.

So, a lot of the e-commerce patents that get stricken, if you look at -- if you look at -- if you look at the claims of those patents, they're overly general. They're written almost as like a functional language, and it's extremely broad, and that's why they get stricken.

But if you look at DKR's -- and then -- and then the -- in those patents, the accompanying specification, don't really have a lot of detail on how to carry -- carry forth or how to carry out the claimed inventions.

But in DKR's patents, there's a lot of detail that -- that's in the claims, that's in the specification, and that's in the drawings. So, that's why, you know, these patents should survive and should -- you know, and should be looked at separately. I mean, as we cited in our brief, I mean, Shopify has its own e-commerce patents, and there's no rule per se that all e-commerce patents have to -- have to be stricken under 101.

And the one thing I do want to go back to is just note that these are not -- I mean, the implementation of some of these, some of DKR's inventions are in the e-commerce space, but the patents talk about a wider applicability. For example, this viral distribution or seeing preview, I mean, that's not really an e-commerce

component. That's a -- that's a functionality that is -- you know, that can be used in other -- other technology fields as well.

THE COURT: Explain that. When you say "viral distribution", what do you mean? I mean, I understand the concept of something going viral, but usually that is user generated when things get passed along. What about this technology makes it viral?

MR. IYER: Right. The way DKR developed its enhanced widget was for the express purpose -- and it talks about it in the specification -- for the express purpose of allowing some product promotion or some -- you know, some informational -- you know, whatever information they want to get out. They want to be able to disseminate it to -- to others through different websites --

THE COURT: So, that it can --

MR. IYER: -- and especially social media sites.

THE COURT: -- it can be included in a Tweet? Are you saying that because it can be included in a post or --

MR. IYER: Correct, right, through a post or in a blog or whatever it may be. But it used to be, before DKR's invention, if you wanted to -- if you were a merchant and you wanted to advertise green shoes, size -- you know, a sale on shoes on Twitter, you would have to write script for it and put it on Twitter. And then if you wanted to do it

on Instagram, you'd have to write script that conforms with their HTML base, and then you would have to put it on Instagram.

So, if you can imagine these -- these online merchants that have hundreds, thousands -- hundreds of thousands of products, I mean, that's just not practical, that -- that develop code for each different product for each different platform. And the way DKR solves it is to have a Web widget that you only have to write once, and you put it -- let it live in a server separate from the Web server for Twitter or Instagram, and then, you know, just make a call to it and -- and that's how you achieve -- at a high level, that's how you achieve sort of universality, so that you don't have to keep writing different scripts for different websites.

So, when I say -- so, when I say viral, that's what I mean, that -- that because these -- these widgets are universal, they can be consumed either on Twitter or Instagram or Facebook or on a blog or wherever it may be because they reside outside of the HTML script of -- of a website.

THE COURT: So, in terms of the law, though, is there no other case you would point me to -- I'll go back over the briefs again, but Mr. Lantier asserts that it's only this DDR case where the Federal Circuit --

MR. IYER: Sure.

THE COURT: -- found that -- that e-commerce technology could be patented?

MR. IYER: Right. So -- right. So, we rely on DDR because the claims in -- I mean, DDR and DKR, I mean, the claims are fairly, you know, like the same level of detail, and they're fairly similar in terms of -- of purchasing. I mean, the whole point of -- of DDR was that the Federal Circuit found that having a user not leave a website, a host website to make a purchase was really valuable and it was a technological innovation.

Now, there was a third party website that was kind of created and -- and that's where you made the purchase in -- in DDR, but that's not that dissimilar from sort of the widgets that we disclose. You know, so go on a third party website, you're using the widget to make a purchase. And, so, the reason we relied on DDR is because -- because it's -- it's on all fours with respect to -- to our -- to our patents.

(Pause.)

MR. IYER: Right. And the key quote, for example, in our -- from -- from DKR -- or, I'm sorry -- from DDR is the Federal Circuit said:

"Claims address -- the claims in DDR address the problem of retaining

website visitors that if adherent to the routine conventional functioning of Internet hyperlink protocol, would be instantly transported away from host website after clicking on an advertisement and activating a hyperlink."

Right. And -- and DDR figured out in their own way how to -- how to avoid -- how to solve that problem, right. And their solution was create this -- this sort of pseudo website where you can make the purchases. That way you don't have to leave the host website.

DKR's solution was, well, you just use the widget. We'll -- we'll develop a new widget. Just use the widget, and you can make the purchase, and you don't have to leave the host website.

So, while -- so, while DDR is the only case we cite, that's because it's still good law, and -- and it's on all fours with respect to -- to our patents. Yeah, and I think just a comparison, for example, just a comparison of the DDR claims and the DKR claims I think will show, your Honor, that sort of the level of detail that the Federal Circuit in DDR found to be enough to survive a 101 motion, that's present in the DKR patents as well.

I -- I know -- I know there was an issue that was

raised about claim construction. So, let me just -- just briefly address that. Our briefs do specifically identify a few terms that, you know, may need to get construed before this motion is decided. So, it's not proper to say we didn't identify any terms, but certainly, those may not be the only terms because usually in patent cases, it's the defendants that propose a whole host of terms to get construed in an effort to either narrow the -- narrow the scope of the claims or broaden it.

And, yeah, I mean, I think those are all the points I wanted to make at this time, your Honor.

THE COURT: Well, what -- what about this issue about whether something is representative or not?

MR. IYER: Right. So, yeah. So, there are 74 claims in -- in -- in DKR's patents, and they each have unique functionalities, and, as we set forth in our brief, for them to cover 74 claims or to represent that they looked at 74 claims, all the claim terms in those 74 claims and said, Oh, claim one of each of these patents, which is an independent claim, is representative of all the claims including dependent claims that add additional limitations to the independent claims, I mean, we -- we just think that's -- I mean, there's just no way you can do that in -- in 25 pages, and they haven't -- they haven't done it, and we -- we explained that in the brief. But -- but it's just

not possible to -- to cover 74 claims in -- in a few pages.

THE COURT: All right. Thank you, Mr. Iyer. Let me --

MR. IYER: Thank you, your Honor.

THE COURT: -- hear from Mr. Lantier, give him a chance to rebut, and we'll wrap it up.

MR. LANTIER: Thank you, your Honor. Maybe I'll just start at the -- the back end there with the comment that it's not possible to brief 74 claims in 25 pages. I -- I'd refer your Honor to the Secured Mail Solutions v. Universal Wilde case out of this District. That's a case I litigated here and in the Federal Circuit seven -- several years ago where there were 243 claims across seven patents that were found to be invalid on the basis of Section 101, and the Federal Circuit affirmed that -- that decision from Judge Carter in that case.

Your Honor, the -- when -- when you go back and you read the cases on motions to dismiss under Section 101, you will find that uniformly, the Courts, whether it be the Federal Circuit or the Supreme Court or the District Courts say you need to look at what's in the claims, and if the claims are drafted at a level at which they don't explain how to make a technological improvement to computers or the Internet, then those claims are invalid whether or not you

could find some portion of the patent specification that you could argue discloses something that might be patent eligible. And the reason for that is that the claims themselves, nothing else is going to govern the trial over whether there's infringement and whether the -- the claims are valid or not.

And, so, your Honor, I thought it was interesting that during the -- the discussion with opposing counsel, there was no discussion of the specifics of the claims of these patents. He did point you to -- and make some statements about what's in the patents, and -- and I did want to point to those and just clarify a couple of things for your Honor. In the '785 patent -- and I'll do this very quickly -- one place that your Honor was pointed to was column five starting at line 55 in the '785 patent.

THE COURT: Okay.

MR. LANTIER: And you'll remember it refers to Figure 1b, and it says it's an alternative embodiment of the operating environment of the multimedia content distribution system, and then it goes on there and it says it's a more efficient way to do it.

And I just wanted to explain some of the -- the patentees that's in here, your Honor. When we talk about an embodiment in the specification, it typically is referring to one way in which you could perform the claimed invention.

And, so, here, when we're at column five, line 55, and it says it's an alternative embodiment, it means it's an alternative to other embodiments that also perform the claimed invention. So, it's not the only way to do it. It's just one different way to do it.

And, typically -- and, so, that's an alternative to Figure 1a is -- is what it's talking about there, your Honor, where it doesn't do this in this particular way, and it says that essentially the way you do it in Figure 1b is more efficient in some ways compared to doing it in 1a in that way. But I -- I think it's important that in neither of those places does it describe this language here that was focused on by opposing counsel as being what the invention is. It's just a description of two different environments, meaning two different ways that networks are -- are known to have been set up that you can perform these activities.

So, I didn't want your Honor to not understand what that word "embodiment" and "alternate embodiment" means in patents because I think that's important for understanding that portion of the specification. But in any event, it's --

THE COURT: Well, what --

MR. LANTIER: -- not what's in the claims.

THE COURT: I could -- I could have asked Mr. Iyer this, but since you raised it now, so Figure 1b is supposed

to be this alternative embodiment.

MR. LANTIER: Yes, your Honor.

THE COURT: This is kind of some -- it's not a flowchart but essentially a diagram of --

MR. LANTIER: Of the Internet.

THE COURT: -- of a -- of a computer infrastructure. And what -- what does it purport to show in your view, and why is it generic?

MR. LANTIER: So, I think, your Honor, Figure 1a and Figure 1b are both just depictions of the way the Internet can be set up. And, so, this is a -- this is a patent that talks about transmitting things over the Internet, and you can see that there are different arrangements of servers or computers, depending on whether you're looking at Figure 1a or 1b.

THE COURT: So, rather than having like 1a with 106 where it's more centralized around one -- where everyone has to kind of communicate with that -- well, that's still -- 106 is -- they're all still going to 106.

MR. LANTIER: They are all still going to 106, your Honor. What -- what you can see is that they're -- I don't know if you've heard the term "distributed environment". These are both distributed environments. They're just distributed in different ways. And, you know, of course, the patent doesn't purport to have invented a new

way of networking or ranging computers. It just doesn't. It talks about how are we going to use Web widgets here to sell product.

And -- and, so, the -- one of the things to understand here, your Honor, is the -- if your Honor turns to column two of the patent, there's a -- there's a section starting about at line 20 that says "Brief description of the drawings."

THE COURT: Column two, line 20 you said?

MR. LANTIER: Is the -- is the header for that. It says "Brief description of the drawings."

THE COURT: Okay.

MR. LANTIER: And you can see then there's just a list of the different figures --

THE COURT: Yeah.

MR. LANTIER: -- and what they describe.

THE COURT: So, the difference is that the functionality is distributed a little bit differently with some of it done on the front end versus done on the back end. And your point is that even if that -- that does improve functionality, that that's not enough?

MR. LANTIER: No, your Honor. The -- the point is -- and this is common in -- in many patents -- that Figures 1a and 1b as they're described here are just an illustration of the type of environment we're talking about here. This

-- these figures, they're not described, and -- and you'll see that there are other figures as you go down that -- that talk about describing the widgets and -- and things like that. But this is just laying the -- the foundation of what space are we talking about here. Okay. We're talking about networks that operate over the Internet. As you can see, it says it's a -- an environment for a multimedia content distribution system, and if we break that down, multimedia, what does that mean? It means it could be audio. It could be video. It could be text. Content distribution system, what's that? Well, it's a system that allows you to distribute content. That's -- that is a description of the Internet, right. The Internet is a content distribution system.

Figures 1a and 1b are just showing two different arrangements that predate the patents that exist out on the Internet and ways that you can arrange things. They don't purport -- and when your Honor reads the patents and you search for somewhere where it says, We invented Figure 1a or 1b or this is part of the invention, you're not going to find it. It's just -- it's just talking about what are the different ways that the Internet is sometimes set up, and people know about that already.

Does that make sense?

THE COURT: That helps, but I'm still struggling

with what -- what level of generality or what -- how much detail is needed to -- for something to be inventive?

MR. LANTIER: I think, your Honor, the way to look at that is not to say does it have -- does the claim have to be 50 words or does it have to be 100 words. Obviously, that's not the -- the standard, but you do need to look at the claims, and you need to look at the claims and say is there anything in this claim that describes technologically how to do something that computers were not able to do before. And when you look at the claims of these patents, your Honor, you're not going to -- to find that. And I know that that seems daunting, but I thought I could explain how you might do that.

During the -- the argument, we heard from counsel for DKR that DKR's invention is to draft one script and then have it propagate across all platforms. That's what he said the invention is. If your Honor can find a claim that describes how to technologically draft one script or says this script will propagate across multiple platforms, then I would suggest that your Honor carefully look at that claim, but you're not going to find that in any of the claims in the DKR patents.

He said, you know, it tells you how to make an interactive component of a -- a Web widget. Again, look for a claim that says here's how you can make an interactive

component of a Web widget, not a claim that says here's what it will do, because the -- the cases are very clear, your Honor, that just describing a function is not something that is patentable. It has to describe the nuts and bolts of how you do it.

Again, he said, well -- and they describe how to deploy this. If you can find a claim that -- that describes a manner in which technologically you embed a buy button into a Web widget, not a claim that just says embedded by a button in a Web widget, because that's just the function, but one that says, Here's how you can do it. Here's the way that you can make this happen, then you should look at that carefully, but you're not going to find that in the claims. It's not in the claims. All of these claims just state the function of here is what the Web widget will do or you embed the Web widget into the website. It doesn't describe how to do it, and that is the very essence of the cases finding that these types of patents are ineligible at step one.

THE COURT: But is -- but is that common for -- for valid patents? Are you saying that all the code is in there? I thought I heard you say that sometimes there's code but mostly there's not. So, how else would you describe how to do it except by attaching pages and pages of code that presumably would be all proprietary and confidential and --

MR. LANTIER: It's not the code, your Honor, but you would -- you would, for example, have a limitation that would say -- let's take their example, and let's say -- and I disagree with this, and I'll show you sort of the -- what I think the issue is, but let's say that we accept as a premise that Web widgets in 2010 were incapable of -- of being used to sell -- or to have a hyperlink in them. Like they just -- nobody could figure out how to do it. The claims would say you must -- or you should take a Web widget and alter it in the following ways in order to make it capable of including a hyperlink or you'll have to take your hyperlink, and here's how you change your hyperlink. You don't have to include the code, but you have to describe specifically how it's done so that it can be embedded in a Web widget.

But here all we have is take a hyperlink and embed it in a Web widget. It's completely functional. There's no description of technologically in the claims how. Do you have to change existing Web widgets or have you -- from a technical perspective or how do you have to change hyperlinks from a technical perspective to make this work.

And I think if we look at the very first page of DKR's opposition brief, there's a good illustration of sort of the disconnect here between what you heard from DKR's counsel and what the patents are saying. Your Honor, this

is Document 40 if you're able to pull that up, and it's just on page one.

THE COURT: Document 40?

MR. LANTIER: Yes, your Honor.

(Pause.)

THE COURT: Okay. I'm there.

MR. LANTIER: So, your Honor, you'll see that the -- the statement -- this is the second sentence of the brief. They say:

> "The inventor's identified Web widgets is the way to achieve their goals, but the state of the art for Web widgets at the time of the invention was such that widgets were incapable of carrying out the needed functions."

Incapable, all right. So, that means that from a technology perspective, the technology did not exist for this to be done.

But if we look at the block quote from the patent that they use, and just the very last line of it, you can see that that's not what the patents are saying at all. What the patent says is, But current Web widgets are not used as self-contained electronic commerce platforms, not that they're incapable of being used that way. It's just that as a factual matter, they're not being used that way.

And, so, they -- they've gotten -- they've obtained patents on using the Web widgets to -- to have the order form or the buy -- the buy functionality right in there, but they -- they're not making that possible. The patents don't even say that Web widgets were incapable of this or that people couldn't figure out how to make Web widgets act in this way. They'd just say that people weren't doing it, and that's exactly the issue in -- in Alice and the other cases. In Alice, what you had -- and Alice was decided on the pleadings, your Honor. It's a Supreme Court case, and what you had was a -- a claim -- it was fairly detailed -- that was talking about intermediated settlement, so the idea that if you and I are in a transaction and we don't trust each other very much, we might want to have a third party sit in the middle so that you can hand over the -- the deed and I can hand over the money and neither one of us bolts out of the room with the other one's stuff.

And the -- the Court said, you know, maybe nobody's used a computer to do this before, but it's still a fundamental business practice, this type of thing of having escrow or having somebody sit in the middle and protect both sides is a longstanding business practice, and the fact that you put it on computers or used computers even to make it more efficient -- maybe it's cheaper. Maybe it's faster. That -- you can't get a patent on that. We're not going to

allow people to monopolize the use of these business practices just because they claim doing it on a computer or using the Internet.

And, so, just two points, your Honor, two or three brief final points. The other case that was mentioned to your Honor was Amdocs v. Openet. That's a case I -- I did for Amdocs both at the Federal Circuit and at trial. Your Honor, I encourage you to look -- at what those patents were about. They weren't e-commerce patents. Those were patents that were about how you arrange elements on the Internet that fundamental -- or the Federal Circuit found fundamentally changed the way that the Internet was structured. And, so, you know, I think those are a good example of the types of claims that you can get that are in the software space or in the Internet space where, yes, this is different. This is something that is technologically different from the way that technology previously worked.

I think the Uniloc case that was mentioned is another great example, your Honor. That -- that was not an e-commerce case. That was a case where the -- the claims were directed to improving the speed of data transmission. And, yes, if you improve the speed of data transmission, you can get a patent on that. That -- that's a -- if you've changed technology such that where the latency used to be two microseconds, now it's one microsecond, and -- and

that's because you made a technological change to the way that -- that maybe the -- the code is operating to do the transmission, then that -- that's a different story. But they're really not analogous.

Here the only case that anybody's pointed to is that DDR Holdings case, your Honor. And, as I said, that was a very different case where a new type of web page was being created.

Two final points. I think on -- on DDR Holdings, the point was made, Well, the -- the fundamental holding of the Federal Circuit according to counsel and DDR Holdings was that keeping the customer on the website as opposed to having them link to some other website was a change, and it was something new in the technology, and they said, And our patents do that too because we keep you on the Web widget when we -- when we do this first. I -- I don't think the claims -- any of the claims say you've got to stay in the Web widget.

Second, your Honor, if you look at the -- the patents themselves and the figures, you'll see that their figures show you go onto the Amazon page. But the more important thing is -- so, I just don't think it's factually accurate. But the more important thing, your Honor, is the DDR Holdings patents were from 1999. These patents are from 2010.

So, the idea that, well, something that was an invention in 1999 must still be an invention in 2010, your Honor, I think it tells you a little bit about the types of arguments that we're getting here.

And the final point is just on the -- on the claim construction issue. I didn't say, your Honor, that they didn't identify terms. As I said, they did identify terms and said maybe we'll need to construe these terms. What they didn't do is identify any claim construction, that is, say to your Honor, We think this term means the following, and because it means the following, that's why these patents are subject matter eligible. And this -- the Federal Circuit has said you have to be specific and say, I think the term means this, and then say that that impacts subject matter eligibility in order to have it impact the motion to dismiss analysis.

THE COURT: All right. Thank you.

MR. LANTIER: Thank you, your Honor.

THE COURT: Thank you, Counsel.

MR. IYER: May I just make one point, your Honor?

THE COURT: Very briefly.

MR. IYER: I think I just wanted to address the one point that counsel made about, you know, the claims don't teach you how to deploy the invention. And if you look at, for example, the '785 patent, your Honor, claim --

claim one, for example, which is column 18 --

THE COURT: Just a second.

MR. IYER: Sure.

THE COURT: Let me go back to it. This was Exhibit 1 to the complaint, right?

MR. IYER: Correct.

(Pause.)

THE COURT: Okay. Where should I go?

MR. IYER: If you go to claim one, which is on column 18.

THE COURT: Okay. I'm there.

MR. IYER: Yeah. So, if you look at the third element, the embedding, that begins "embedding", right, that's -- that's an example of how the claim specifically teaches someone on how to deploy. It says:

"Embedding by the buy button provide the embeddable buy button into a website wherein the website is executed by a second server not operated by a buy button provider."

Meaning the buy button provider is different and runs the application server that manages the widgets than the Web server that runs the website. So, that's an example of how it's -- how it's deployed in a specific architecture. And -- and I just wanted to clear up just one additional

point that counsel made and I think you were asking about, Figure 1a and 1b.

THE COURT: Okay. Briefly.

MR. IYER: Everything to the left of what's shown is network, which, you know, where 106 is in the middle or 106 is to the left-hand side, but everything left of network is actually what's needed to build this widget, and if you look at -- so, it's not just generic computer architecture. It's the architecture that is needed in order to build the widget that is able to show previews and that's able to have transactions sort of attached to it. And all of this description, your Honor, is shown starting column three when it talks about Figure 1a and 1b. It talks about what this application server does and how it communicates with these different pieces to gather different pieces of information so that it can then build the widget.

THE COURT: All right.

MR. IYER: So, it's not just generic architecture.

THE COURT: All right.

MR. IYER: Thank you.

THE COURT: Thank you, Counsel, for the -- the very good briefs, and we will consider this submitted. This is not one that we're going to get out in one or two days, but we'll move as promptly as we can. But I appreciate all the -- the extensive argument.

MR. LANTIER: Thank you, your Honor. I just wanted to confirm that would it be helpful to -- to talk about the -- the claim that he just pointed to, only because this is the first time he's pointed to any claim during this argument?

THE COURT: No. I think -- I think I'll have to read it, and I've heard enough on that, but -- but I appreciate it.

MR. LANTIER: Understood.

THE COURT: All right.

MR. IYER: Your Honor, could I -- just a logistical question. So, I assume we don't have to start discovery or anything like that until we receive your Honor's decision on this?

THE COURT: Well, I -- I'm not saying that I'm going to take months and months. So, if there's anything that's already teed up, I'm not -- I'm not staying everything while this gets done. So, just -- but I was just signaling that you shouldn't expect this in your in box tomorrow. It will take some time.

MR. IYER: Okay. Thank you, your Honor.

THE COURT: All right. Thank you and have a good day.

(Proceedings adjourned.)

I certify that the foregoing is a correct transcript from the electronic sound recording of the proceedings in the above-entitled matter.

/s/Jordan Keilty
Transcriber

5/14/2024
Date

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Dated: October 29, 2024

/s/ Ronald M. Daignault
Ronald M. Daignault

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I certify that I electronically filed the foregoing document using the Court's CM/ECF filing system on October 29, 2024, which will send notifications to all counsel registered to receive electronic notices.

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/s/ Ronald M. Daignault
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