

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SALESFORCE, INC.,
Petitioner

v.

IQX CORP.,
Patent Owner

Case IPR2026-00475
U.S. Patent No. 12,368,799

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 12,368,799**

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PETITIONER'S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 12,368,799 to Spindler <i>et al.</i> , issued July 22, 2025. (“the ’799 patent”)
1002	File History of U.S. Patent No. 12,368,799 (“’799 Patent File History”)
1003	Declaration of Bernard J. Jansen, Ph.D.
1004	<i>Curriculum Vitae</i> of Bernard J. Jansen, Ph.D.
1005	U.S. Patent Application Publication 2011/0178897 to Balasubramanian <i>et al.</i> (“Balasubramanian”)
1006	U.S. Patent Application Publication No. 2022/0006895 A1 to Spindler <i>et al.</i> (“Spindler”)
1007	U.S. Patent Application Publication No. 2015/0052061 A1 to Anderson <i>et al.</i> (“Anderson”)
1008	<i>Intentionally Left Blank</i>
1009	U.S. Patent No. 10,264,413 B1 to Bogineni <i>et al.</i> (“Bogineni”)
1010	U.S. Patent Application Publication No. 2017/0013295 A1 to Wertheimer <i>et al.</i> (“Wertheimer”)
1011	U.S. Patent No. 7,020,685 B1 to Chen <i>et al.</i> (“Chen”)
1012	U.S. Patent Application Publication No. 2016/0239867 A1 to Sinha <i>et al.</i> (“Sinha”)
1013	U.S. Patent No. 11,170,380 B1 to Long <i>et al.</i> (“Long”)
1014	International Patent Application Publication No. WO 2018/103039 to Wang <i>et al.</i> (“Wang”)
1015-1017	<i>Intentionally Left Blank</i>
1018	U.S. Patent No. 6,360,254 B1 to Linden <i>et al.</i> (“Linden”)

Exhibit No.	Description
1019-1020	<i>Intentionally Left Blank</i>
1021	File History of U.S. Application No. 18/896,197 (U.S. Patent No. 12,200,165)
1022	File History of U.S. Application No. 18/483,670 (U.S. Patent No. 12,126,752)
1023	<i>Intentionally Left Blank</i>
1024	“Best Computer Science Scientists 2026” - Data Sources for the 12th Edition of the Research.com Best Computer Science Scientists Ranking (Page 13), accessed at https://research.com/scientists-rankings/computer-science?page=13
1025	Jafarzadeh, H., Aurum, A., D’Ambra, J., Ghapanchi, A. “A Systematic Review on Search Engine Advertising,” <i>Pacific Asia Journal of the Association for Information Systems</i> , 7(3):1-32
1026	Ioannidis, John P.A. (2025), “August 2025 data-update for “Updated science-wide author databases of standardized citation indicators,” Elsevier Data Repository, V8, doi: 10.17632/btchxktzyw.8
1027-1030	<i>Intentionally Left Blank</i>
1031	<i>IQX Corp. v. Salesforce, Inc.</i> , Case No. 7-26-cv-00213 (W.D. Tex.), Document 1-6, filed May 28, 2026
1032	RCS Universal Profile Service Definition Document, GMS Association, Nov. 16, 2016
1033	<i>Intentionally Left Blank</i>
1034	U.S. Patent No. 8,417,269 to Lin (“Lin”)
1035-1036	<i>Intentionally Left Blank</i>

Exhibit No.	Description
1037	U.S. Patent Application Publication No. 2011/0078762 A1 to Bijlsma (“Bijlsma”)
1038	U.S. Patent Application Publication No. 2013/0254036 A1 to Trinh <i>et al.</i> (“Trinh”)
1039	U.S. Patent Application Publication No. 2015/0142906 A1 to Tolcher (“Tolcher”)
1040	U.S. Patent Application Publication No. 2005/0278231 A1 to Teeter (“Teeter”)
1041	U.S. Patent Application Publication No. 2014/0052562 A1 to Oliveira <i>et al.</i> (“Oliveira”)
1042	U.S. Patent Application Publication No. 2003/0101345 A1 to Nyberg (“Nyberg”)
1043	U.S. Patent Application Publication No. 2015/0373200 A1 to Zitnik <i>et al.</i> (“Zitnik”)
1044	U.S. Patent Application Publication No. 2007/0124399 A1 to Gillespie <i>et al.</i> (“Gillespie”)
1045	U.S. Patent Application Publication No. 2011/0314287 A1 to Escott <i>et al.</i> (“Escott”)

I. INTRODUCTION

Salesforce, Inc. (“Petitioner”) petitions for *inter partes* review, seeking cancellation of claims 1-30 of U.S. Patent No. 12,368,799 (“the ’799 patent”; EX1001), assigned to IQX Corp. (“Patent Owner”). The ’799 patent suffers from two fatal issues—(1) the ’799 patent’s priority application (Spindler) is prior art and renders obvious the challenged claims; and (2) even without breaking priority, the challenged claims recite well-known customized webpage generation techniques that are rendered obvious by Balasubramanian-Wertheimer-Chen. The Board should therefore institute IPR and cancel claims 1-30.

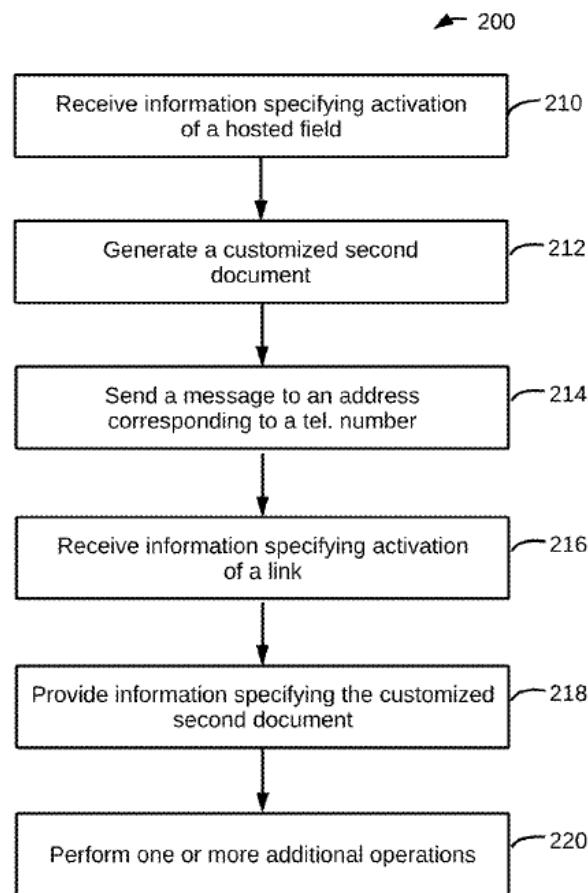
II. THE ’799 PATENT

A. Overview

The ’799 patent issued on July 22, 2025, from U.S. Patent Application No. 18/984,041 (“the ’041 application”). EX1001, (45), (21). The ’799 patent claims priority, through multiple Continuation and Continuation-in-part (CIP) applications to a provisional application filed on September 27, 2018. *Id.*, 1:7-17. As explained below, however, the challenged claims are correctly entitled to priority no earlier than its December 17, 2024, filing date. Section IV.F.1.

The ’799 patent relates to security and access control for mobile devices and describes “systems and methods for providing secure access and authentication when using mobile devices to access and/or purchase content.” *Id.*, 1:29-30, 1:60-62. More specifically, the ’799 patent describes a method for “dynamically

generating a customized document.” EX1001, 12:18-21, FIG. 2. The method receives information specifying activation of a hosted field, including a willingness to receive messages and a telephone number. *Id.*, 12:21-26. In response to receiving this information, the method generates a “customized second document” including information about transactions or upcoming events of interest to that user. *Id.*, 12:28-32.



EX1001, FIG. 2.

The system then sends a message, such as a Short Message Service (“SMS”) message, to the telephone number, the message including “a link to the customized second document.” EX1001, 12:39-43. If the user activates the link, the system

authenticates the device by “provid[ing] authentication information (such as an authentication cookie).” *Id.*, 12:57-59. *See also* EX1003, ¶¶72-76.

B. Prosecution History

During prosecution, the claims received a first action allowance. Yet, following applicant’s IDS filing, several claims were rejected over Long. EX1002, 147-157, 284-286. Applicant amended the independent claims solely to add “a hosted input field,” resulting in allowance. *Id.*, 16-18, 133-138.

C. Person of Ordinary Skill in the Art (“POSA”)

A POSA would have had a bachelor’s degree in Computer or Electrical Engineering, Computer Science, or equivalent discipline, and approximately two years’ experience in e-commerce, telecommunications, or computer networking. Additional education could substitute for professional experience, and significant work experience could substitute for formal education. EX1003, ¶36.

D. Claim Construction

Claims must be given their ordinary and customary meaning in light of the specification—“the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (*en banc*); 37 C.F.R. § 42.100(b). Petitioner submits that all claim terms should receive their plain and ordinary meaning in the context of the ’799 patent specification.

III. IDENTIFICATION OF THE CHALLENGE (37 C.F.R. § 42.104(B))

Petitioner requests IPR based on the grounds summarized below.

Ground	35 U.S.C. §	Claims	References
1A	103	1-6, 8-10, 12-16, 18-20, 22-25, 27-29	Balasubramanian, Wertheimer, Chen
1B	103	2-5, 7, 10, 13-15, 17, 23-26	Balasubramanian, Wertheimer, Chen, Bogineni
1C	103	11, 21, 30	Balasubramanian, Wertheimer, Chen, Sinha
2A	103	1, 5-6, 8-9, 12, 15- 16, 18-19, 22, 25, 27-28	Spindler, Long
2B	103	10, 20, 29	Spindler, Long, Anderson
2C	103	2-5, 7, 11, 13-15, 17, 21, 23-26, and 30	Spindler, Long, Wang, Bogineni

IV. OVERVIEW OF THE ASSERTED ART

A. Balasubramanian (EX1005)

Balasubramanian published July 21, 2011, and is prior art under 35 U.S.C. §§ 102(a)(1)-(a)(2).

Like the '799 patent, Balasubramanian is directed to “a system and method for facilitating electronic commerce over a network.” EX1005, Abstract.

Balasubramanian’s system includes a user device that facilitates conducting

financial transactions with merchant devices and a service provider over a network.

EX1005, ¶¶21-24, FIG. 1. For example, the user device allows “for viewing, searching, and/or purchasing items, products, and/or services over the network.”

EX1005, ¶24.

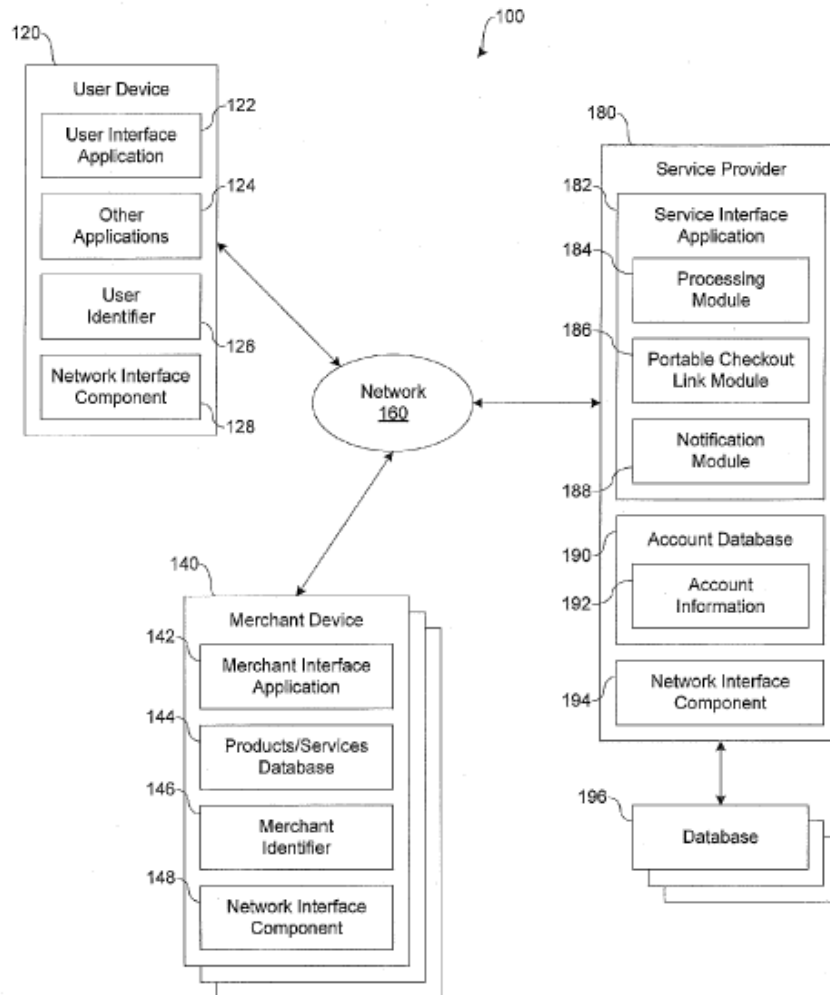


Fig. 1

EX1005, FIG. 1

When online shopping, users may place items in a virtual shopping cart, but “may withdraw from purchase or abandon the checkout prior to payment.”

EX1005, ¶6. When this occurs, the shopping cart may be deleted, resulting in lost revenue for the merchant and payment service provider. *Id.*

To solve this issue, Balasubramanian's service provider sends notifications to the user (by email, alert, text message, or voice message), that include selectable links (e.g., "portable checkout link[s]" ("PCLs")) to incomplete and/or abandoned transactions. EX1005, ¶¶9, 20, 42, 45-48, 55, 72-74, 84. Selecting a link returns the user to the abandoned or incomplete transaction, where it can then be completed. EX1005, ¶¶42, 45, 55, 74-76, 79. *See also* EX1003, ¶¶78-80.

B. Wertheimer (EX1010)

Wertheimer published January 12, 2017, and is prior art under 35 U.S.C. §§ 102(a)(1)-(a)(2).

Wertheimer describes "media distribution channels [that] evolved to include transmission by the Internet," including transmission to "mobile devices such as smartphones." EX1010, ¶6. Users may access content through a service provider's website, by "download[ing] an application," or may "simply go[] to a web-site or access[] an application" maintained by a content provider. *Id.*, ¶¶7, 10. Wertheimer further discloses a web-based registration process in which a user accesses a "'sign up' webpage" using "a web browser executing on the user device" and enters information in "input fields of that webpage." EX1010, ¶63. *See also* EX1003, ¶¶81-82.

C. Chen (EX1011)

Chen issued March 28, 2006, and is prior art under 35 U.S.C. §§ 102(a)(1)-(a)(2).

Chen is directed to enabling wireless devices, including devices without browsers, to access Internet based hypermedia content. EX1011, 1:11-16. Many Internet-connected devices can display “hypermedia content, such as web pages” that include content using “standard web protocols and mark-up languages,” e.g., “Hypertext Transport Protocol (HTTP)” and “Hypertext Markup Language (HTML).” *Id.*, 1:33-39. However, “many earlier-generation wireless devices are not equipped with microbrowsers,” limiting their ability to access such hypermedia content. *Id.*, 1:49-52.

To address this limitation, Chen enables wireless devices to receive remotely stored hypermedia content, including WML, HTML, Compact HTML (cHTML), Extensible Markup Language (XML), or HDML documents, from network servers. EX1011, 3:55-61. “The retrieved hypermedia information is provided to wireless device 100 in the form of SMS messages.” *Id.*, 3:61-62. *See also* EX1003, ¶¶83-84.

D. Bogineni (EX1009)

Bogineni was filed May 1, 2018, and issued April 16, 2019. Bogineni is prior art under 35 U.S.C. § 102(a)(2).

Bogineni evidences that Rich Communication Services (RCS) messaging was well known prior to the '799 patent. EX1009, 1:6-12. *See also* EX1003, ¶85.

E. Sinha (EX1012)

Sinha published August 18, 2016, and is prior art under 35 U.S.C. §§ 102(a)(1)-(a)(2).

Sinha discloses that online shoppers often “add items to an online shopping cart” and leave without completing the purchase, thereby “abandon[ing]” the cart.” EX1012, ¶1. Although “persistent online shopping cart[s]” allow customers to later access abandoned items, Sinha notes that reminder emails can “lead to brand irritation and potentially lost customers.” *Id.*, ¶¶2-4. To solve this issue, Sinha computes the likelihood that a customer will return, and when uncertainty exists, sends tailored advertising to the customer using “machine learning technique[s].” *Id.*, ¶¶18, 24, 51. *See also* EX1003, ¶¶86-87.

F. Spindler (EX1006)

1. Spindler is available as prior art to the '799 patent.

Spindler is the patent application publication of an earlier application in the '799 patent's priority chain. As explained below, however, the challenged claims are correctly entitled to priority no earlier than at least its **December 17, 2024**, filing date.

Because Spindler published **January 6, 2022**, more than one year before December 17, 2024, it is available as prior art to the '799 patent at least under 35 U.S.C. § 102(a)(1), and is not subject to the 35 U.S.C. § 102(b)(1) exception.

To claim an earlier filing date, each application in the priority chain must satisfy 35 U.S.C. § 112's written-description requirement. *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997). That is not the case here.

The '799 patent claims priority to a filing date of September 25, 2019, and even further to a provisional application filed September 27, 2018. EX1001, (63), (60). The '041 application was filed as a continuation of U.S. Application No. 18/896,197 ("the '197 application"). *Id.*, (63), 1:7-18. These applications share a common specification, including eighteen figures and related description. EX1002, 2-70, 424-518; EX1021, 155-172, 175-244.

However, the '197 application was (correctly) filed as a continuation-in-part ("CIP") of U.S. Pat. App. No. 18/483,670 ("the '670 application"), which included only *eight* figures and related descriptions. EX1022, 342-349, 368-397. The '197 CIP application added ten figures and approximately eighty paragraphs of disclosure.

Among other things, the claims of the '799 patent recite "*causing provision of the second document to the electronic address.*" This limitation, however, is unsupported by the '670 priority application. This is because this phrase explicitly

requires delivering the electronic document to the telephone number (the “electronic address”). Patent Owner’s own interpretation of this claim language confirms that Patent Owner believes the claimed “electronic address” is a “telephone number.” EX1031, element [12.4] (“the Salesforce System sends text messages to the electronic address (the user’s mobile number)”). However, nothing in the ’670 application describes sending the second document itself *to the user’s mobile number*.

Instead, the ’670 application discloses sending information allowing the customized second document to be “display[ed] on the electronic device,” e.g., by “a Web browser.” *Id.*, 373-375 (¶32, ¶36), 379 (¶51), 381 (¶62). Although this description may convey to a POSA the well-known concept of activating a link directing a web browser on the mobile device to a webpage, this description does *not* disclose or reasonably convey actually delivering the customized second document (e.g., a webpage) itself *to the electronic address* (e.g., the mobile number), which a POSA would understand could only be accomplished, for example, by sending the second document directly via text message. EX1003, ¶104. Rather, the ’670 application teaches sending a *link* to the electronic address, that when selected link causes a web browser to open the customized second document. No reading of the ’670 application, however broad, provides written

description support for “*causing provision of the second document to the electronic address.*”

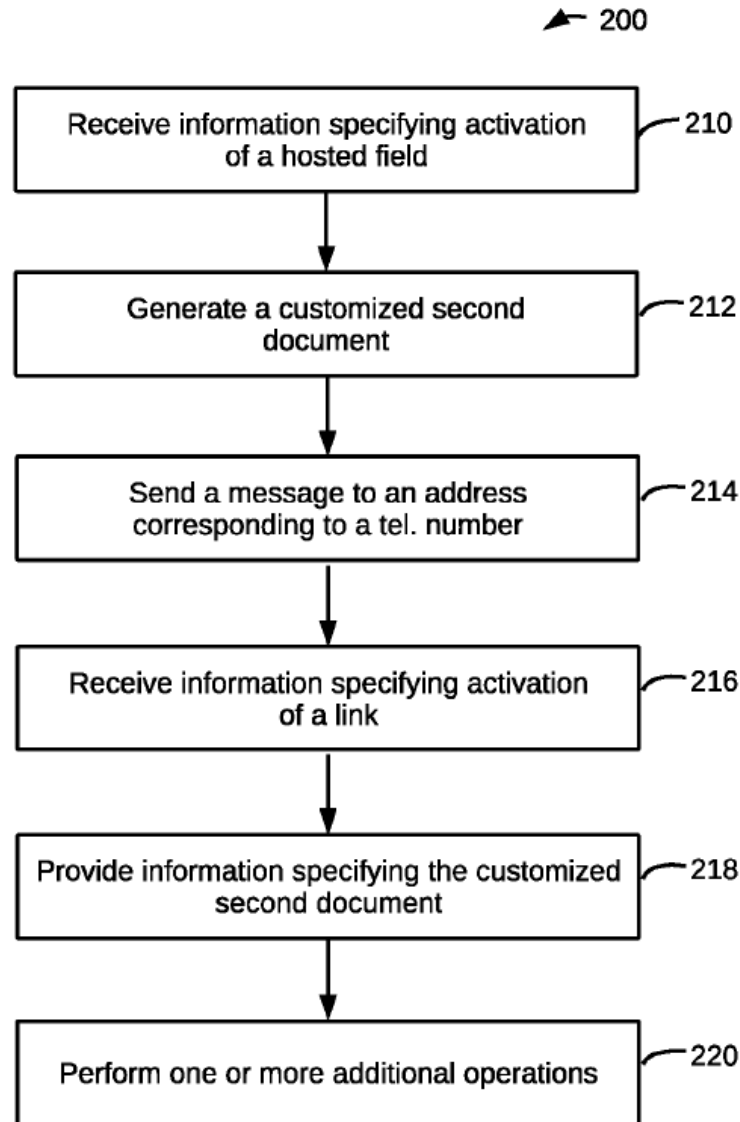
Any argument that the missing features would have been obvious over the ’670 application is irrelevant because written description requires disclosure, not obviousness. *Lockwood*, 107 F.3d at 1572 (“A description which renders obvious the invention for which an earlier filing date is sought is not sufficient.”).

An application is entitled to an earlier priority date *only* where the claimed subject matter is common to both applications. *Transco Products Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 557 (Fed. Cir. 1994). Because the pre-CIP ’670 application lacks any written description support at least for “*causing provision of the second document to the electronic address,*” the ’799 patent is not entitled to the September 25, 2019, priority date (or any earlier date in the priority chain). And, because this limitation first appeared in the ’041 application filed December 17, 2024, the ’799 patent is entitled to priority no earlier than that date. Spindler, published January 6, 2022, more than one year prior is available as prior art. EX1003, ¶¶100-105.

2. Overview

As a member of the same patent family, Spindler shares a similar specification to, and discloses many of the same concepts as, the ’799 patent. Indeed, Spindler discloses a computer system that includes one or more electronic

devices 110 connected via network 116 to hosting computer 114 and cloud-based computer 112, which performs method 200 (similar to the '799 patent) for dynamically generating a customized document, shown in Figure 2 below. *Id.*, ¶¶31, 48. *See also* EX1003, ¶¶88-92.



EX1006, FIG. 2.

G. Long (EX1013)

Long issued November 9, 2021, and is prior art under 35 U.S.C.

§§ 102(a)(1)-(a)(2) as of the December 17, 2024, priority date. Section IV.F.1.

Like the '799 patent, Long is directed to e-commerce on mobile devices, including messaging-based subscriptions and payments initiated from a mobile website or application. EX1013, 2:48-51.

Long discloses dynamic deeplinking that transitions users between interfaces on a mobile device. EX1013, 1:40-44. A promotional message containing a link may be presented through a mobile website, application, email, advertisement, or text message, and selecting the link opens a messaging application with a pre-populated message containing purchase or subscription information and a recipient telephone number. *Id.*, 3:1-9, 6:57-7:8. *See also* EX1003, ¶¶93-94.

H. Anderson (EX1007)

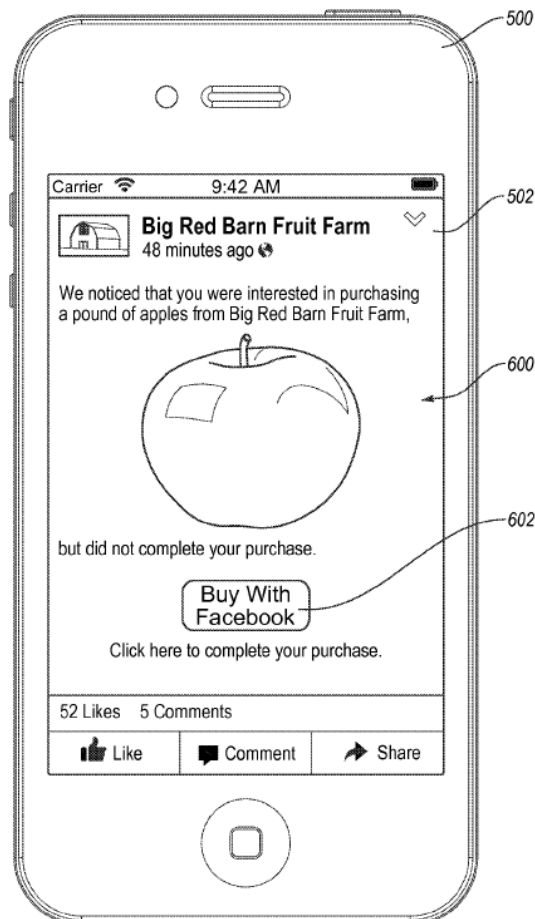
Anderson published February 19, 2015, and is prior art under 35 U.S.C.

§§ 102(a)(1)-(a)(2).

Like the '799 patent, Anderson discloses “systems and methods of increasing the ease of making payments using e-commerce applications.” EX1007, ¶3. Anderson employs a “commerce application” accessed by a web browser or a “special-purpose client application.” *Id.*, ¶41. Anderson describes “a virtual shopping cart” containing “goods or services” selected for purchase by a user; the

user may complete the purchase by selecting “a user selectable element (e.g., button 510) operable by the user to ‘Check Out.’” *Id.*, ¶¶113-114.

If the transaction is not completed, Anderson’s network application sends the user a text message that “include[s] details of items in the cart that was abandoned” along with “a selectable buy option (such as [a] buy button 602 ...) that allows the user to complete the abandoned transaction.” *Id.*, ¶¶126-127, FIG. 6. *See also* EX1003, ¶¶95-96.



EX1007, FIG. 6.

I. Wang (EX1014)

Wang published June 14, 2018, and is prior art under at least 35 U.S.C. § 102(a)(1).

Wang describes an e-commerce message-distribution platform that uses machine learning to target message delivery, delivering “message[s] to the relevant target users” while “ensuring that the desired amount of message deliveries ... is achieved for the client.” EX1014, (54), ¶¶12-14. *See also* EX1003, ¶¶97-99.

V. GROUND 1A: BALASUBRAMANIAN-WERTHEIMER-CHEN RENDERS OBVIOUS CLAIMS 1-6, 8-10, 12-16, 18-20, 22-25, 27-29.

A. Motivation to Combine

A POSA would have been motivated to combine Balasubramanian, Wertheimer, and Chen to arrive at the techniques claimed by the '799 patent. EX1003, ¶¶106-115.

Balasubramanian and Wertheimer are in the same field of endeavor as each other and the '799 patent (e.g., facilitating electronic commerce over a network), and are thus analogous art. EX1003, ¶107; EX1001, 1:34-40; EX1005, ¶¶2, 8; EX1010, ¶¶6-7, 10, 63, 70.

Balasubramanian teaches a registration process where a user is prompted “to establish a user account for login with the service provider” and to provide personal and financial information, but does not specify details of the registration interface. EX1005, ¶26. Thus, a POSA would have looked to the prior art for

guidance as to specific these details. Wertheimer is such a reference. EX1003, ¶108.

Wertheimer teaches registration through a “sign up” webpage that includes input fields to enter information. EX1010, ¶¶63, 66. Like Balasubramanian, Wertheimer teaches this information may include a telephone number and a credit card number. *Id.* Thus, a POSA would have been motivated to use Wertheimer’s known registration technique (a “sign up” webpage with input fields) to implement Balasubramanian’s account creation process. EX1003, ¶109.

A POSA would have had a reasonable expectation of success in making this modification because both systems rely on conventional processors, memory, websites, and user-input interfaces. *Compare* EX1010, ¶¶62-63, 66, 127, *with* EX1005, ¶¶25, 33, 92-93. Implementing Wertheimer’s sign-up webpage in Balasubramanian therefore would not have been presented with any unreasonable technical challenges. EX1003, ¶110.

Furthermore, a POSA would further have been motivated to combine Chen with Balasubramanian-Wertheimer. Chen relates to a user performing Internet activities using a user device. EX1011, 1:11-16. Thus, Chen is in the same field of endeavor as Balasubramanian, Wertheimer, and the ’799 patent, and is analogous art. EX1003, ¶111.

Balasubramanian's user may "select items for purchase by clicking on a link for a specific item," but withdraw from purchase prior to payment. EX1005, ¶¶5-6. In that case, a service provider sends a notification that includes one or more "portable checkout link[s]" (PCLs) to the user reminding the user of the abandoned checkout. EX1005, ¶¶9, 20, 45, 55, 72. Balasubramanian allows users to access the shopping cart containing abandoned transactions by selecting a PCL. EX1005, ¶¶43, 55, 75. A POSA would have understood that this access is, e.g., via a web browser of the user device. EX1003, ¶112.

However, Chen explains many earlier-generation wireless devices are not equipped with web browsers and thus are restricted on accessing hypermedia content on the Internet. EX1011, 1:49-52. Because Balasubramanian's service provider may connect with various types of user devices including "generally known types of wired and/or wireless computing devices," a POSA would have understood that the service provider can also be configured to serve the earlier-generation wireless devices that lack web browsers as discussed in Chen. EX1005, ¶23; EX1011, 1:49-52; EX1003, ¶113. Furthermore, because SMS "does not require that the wireless device is active and within range when a message is sent" a POSA would have understood that SMS messages can serve user devices that have weak or temporarily lost connections. EX1011, 1:58-62; EX1003, ¶113. In Chen, user devices access a webpage (e.g., shopping cart) without using a web

browser or while having connection issues, by enabling a wireless device “to receive remotely stored hypermedia information, such as ... HTML documents..., from one or more network servers” as SMS messages. EX1011, 3:55-61. A POSA would have understood that Chen’s solution would have enabled Balasubramanian’s service provider to serve more types of user devices, especially those without a web browser and/or with bad connections, thereby benefiting both the user and the service provider. A POSA, therefore, would have been motivated to modify Balasubramanian’s service provider to send the HTML documents of the shopping cart to the user device via a text message. EX1003, ¶114.

A POSA would have had a reasonable expectation of success in making this modification because the modification would have involved only the routine application of a known processing and transmission technique. EX1003, ¶115. Chen’s technique relies on network servers transmitting documents through SMS, functionality readily supported by Balasubramanian’s service-provider architecture. *Compare* EX1011, 3:55-61, *with* EX1005, ¶¶9, 20, 48, 55, 72, 92. Implementing Chen’s SMS-delivery technique in Balasubramanian therefore would not have presented any unreasonable technical challenges. EX1003, ¶115.

B. Independent claim 1

1. [1.P]¹

Balasubramanian discloses the preamble. EX1003, ¶116. Balasubramanian discloses a “*system*”² including a user device, one or more merchant devices, and a service provider. EX1005, ¶21, FIG. 1.

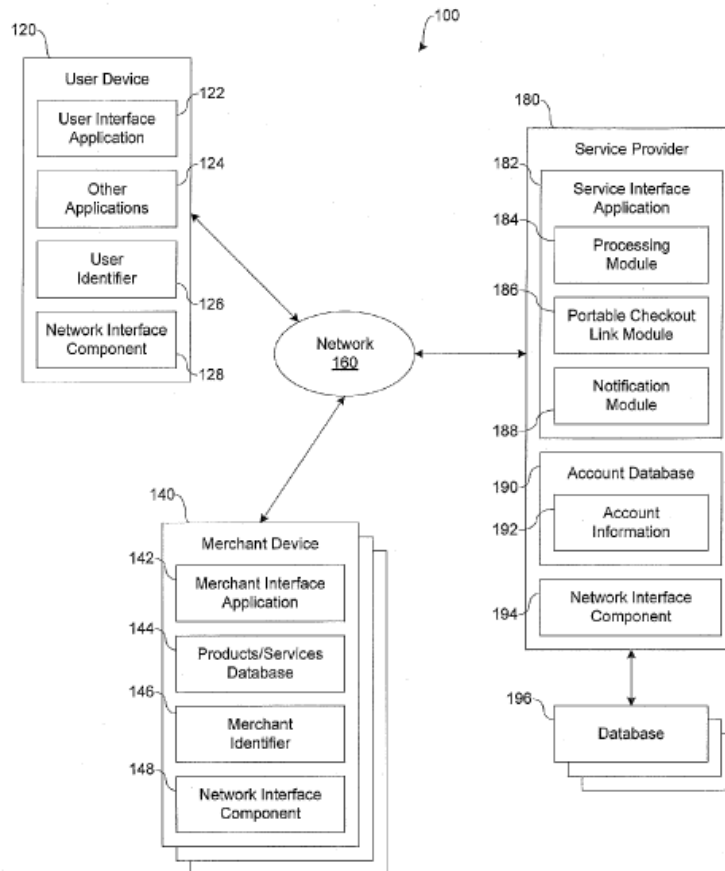


Fig. 1

EX1005, FIG. 1.

¹ See the Claim Appendix for a recitation of the claim language.

² Claim language is italicized throughout.

2. [1.A]

Balasubramanian discloses element [1.A]. EX1003, ¶117.

Balasubramanian's user device, one or more merchant devices, and the service provider are implemented as a computer system. EX1005, ¶92, FIG. 4. The computer system includes a processor. EX1005, ¶93.

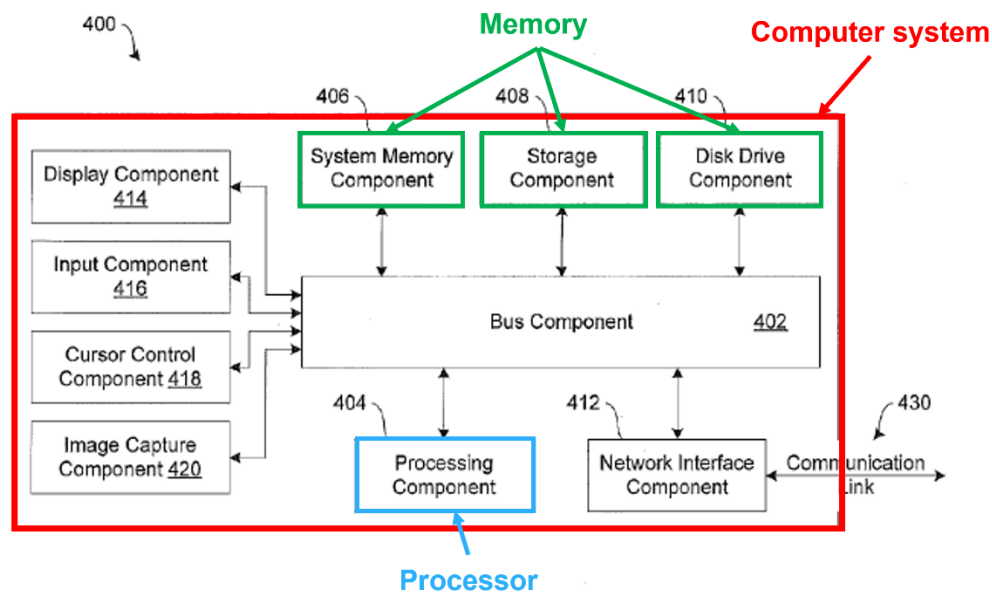


Fig. 4

EX1005, FIG. 4 (annotated).

3. [1.B]

Balasubramanian discloses element [1.B]. EX1003, ¶¶118-119.

Balasubramanian's computer system includes “*memory*.” EX1005, ¶93, FIG.

4. Balasubramanian's computer system “**performs specific operations** by processor 404 executing ... **instructions** contained in system memory component.” EX1005, ¶94 (emphasis added).

4. [1.C]

Balasubramanian-Wertheimer-Chen teaches element [1.C]. EX1003, ¶¶120-121.

Balasubramanian teaches a registration process where a user is prompted “to establish a user account for login with the service provider.” EX1005, ¶26.

Balasubramanian does not include details, but Wertheimer explains that registration may be performed through a sign-up webpage (“*a first document*”) hosted by a server, with user information entered into input fields (“*a hosted input field*”). EX1010, ¶63. Thus, a POSA would have found it obvious for Balasubramanian’s service provider to provide a sign-up webpage when prompting account creation. EX1003, ¶121. Balasubramanian further teaches that users may provide personal and financial information when establishing an account. EX1005, ¶26. Thus, it would have been obvious that the sign-up webpage includes input fields (“*hosted input field*”) for entering that information. EX1003, ¶121. The service provider is a “*third party*” because it processes transactions between a user device and merchant devices. EX1005, ¶40. Because the sign-up webpage is used to establish an account with the service provider, the sign-up webpage (“*first document*”) is *associated with* the service provider (“*third party*”). EX1005, ¶26.

5. [1.D.1]

Balasubramanian-Wertheimer-Chen teaches element [1.D.1]. EX1003, ¶¶122-123.

In Balasubramanian, the personal and financial information (“*information*”), such as the user identifier 126, is passed from the user device to the service provider (“*receiving*”). EX1005, ¶26. The ’799 patent discloses user activations of the hosted field through various user-interface devices. EX1001, 13:34-38. Thus, a POSA would have understood that the user activates the “*hosted input field*” by interacting with it, e.g., by selecting it using a mouse, a touchpad, or a touch sensitive display, and entering information using a keyboard. *Id.*; EX1003, ¶123. In Balasubramanian, the receipt of the personal and financial information from the user device indicates that the user selected the input fields (“*hosted input field*”) and entered the information into those fields in the sign-up webpage (“*first document*”). Thus, the personal and financial information indicate activation of the input fields (“*indicating activation of the hosted input field in the first document*”). EX1003, ¶123.

6. [1.D.2]

Balasubramanian-Wertheimer-Chen teaches element [1.D.2]. EX1003, ¶¶124-126.

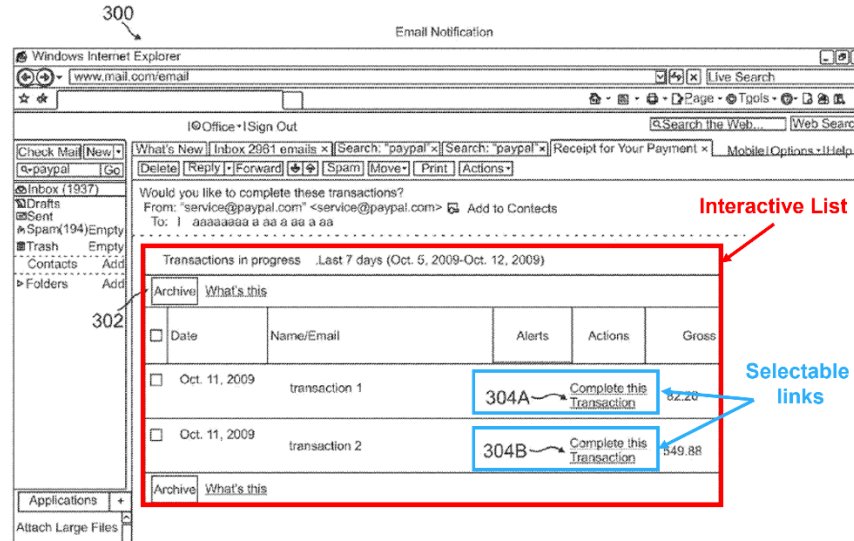
Examples of the personal information (“*information*”) include name and phone number (“*electronic address*”). EX1005, ¶¶26, 28, 65. Balasubramanian’s user device (“*electronic device*”) can be a wireless cellular phone. EX1005, ¶¶21-23. Thus, a POSA would have understood that the phone number (“*electronic address*”) is *associated with* the user device (“*electronic device*”) as a function of the wireless cellular phone. EX1003, ¶125.

Furthermore, the ’799 patent explains “the computer may receive information (operation 210) specifying activation of a hosted field in a document associated with a third party or client, where the information specifies a willingness to receive one or more messages from the computer and specifies a telephone number.” EX1001, 12:21-26. Thus, the *information* itself serves as *an indication of a willingness to receive one or more messages. Id.*; EX1003, ¶126. As discussed above, the personal and financial information (“*information*”), which includes the user’s name and phone number, is passed from the user device to the service provider so that the service provider can verify the user. EX1005, ¶¶26, 28, 58, 65. A POSA would have understood that the provided name and phone number indicate the user’s willingness to receive messages at that number because it identifies the user to the service provider and provides means to send messages later. EX1003, ¶126. Indeed, Balasubramanian’s service provider sends a reminder notification to the user via text message. EX1005, ¶¶9, 20, 48, 55, 72.

7. [1.E]

Balasubramanian teaches element [1.E]. EX1003, ¶¶127-130.

Balasubramanian teaches “*a second document.*” Balasubramanian’s service provider sends notifications regarding prior incomplete or abandoned online purchase transactions via email, text message, or other means. EX1005, ¶¶9, 20, 47, 55, 63, 72. The notification includes an interactive list of selectable links (*i.e.*, PCLs) to online shopping carts associated with those transactions. EX1005, ¶¶42, 55, 73-74, 84. Figure 3A illustrates an exemplary email notification. EX1005, ¶73, FIG. 3A. A POSA would have understood that notifications sent by other means, including text messages, would likewise include the interactive list of selectable links. EX1003, ¶128. The PCLs allow users to review and request processing of incomplete and/or abandoned transactions, and direct users to specific (“*customized to the user*”) shopping carts that may be frozen, saved, and/or accessed through a URL link. EX1005, ¶¶42, 55-56, 74. A POSA would have understood that the shopping cart, accessed using a URL link, is a “*second document.*” EX1003, ¶128.



EX1005, FIG. 3A (annotated).

Furthermore, Balasubramanian’s shopping cart (“*second document*”) can include an incomplete checkout; product information such as SKUs, quantities, and prices; and information regarding inventory availability and price updates.

EX1005, ¶¶42-43. For example, the user may be alerted that an item is about to run out of stock, has a price reduction, or has a discount or coupon. EX1005, ¶47. A POSA would have understood that, because the user previously added the item to the shopping cart, such stock, pricing, and discount events are “*one or more events of interest for a user.*” EX1003, ¶129. Accordingly, the shopping cart information corresponds to the “*information about one or more events of interest for a user.*” Further, because the service provider sends the notification via text message to the phone number provided by the user, the user is associated with the phone number (“*associated with the electronic address*”). *Id.*

When the user selects the PCL, the user can access and complete a previously abandoned or incomplete purchase transaction. EX1005, ¶¶42, 55, 75. A POSA would have understood that Balasubramanian's service provider therefore "generate[s]" the shopping cart ("*second document*") for access through the PCL upon receipt of the notification. EX1003, ¶130.

8. [1.F]

Balasubramanian teaches element [1.F]. EX1003, ¶¶131-132.

Balasubramanian's service provider sends a notification ("*sending a message*") via a text message ("*to the electronic address*") that includes PCLs ("*a link to the second document*") "enabl[ing] the user to access" the shopping cart ("*the second document*"). EX1005, ¶¶9, 20, 45, 47, 55, 63, 72, 74. Further, after accessing the shopping cart, the user can complete a previously incomplete or abandoned checkout ("*execute one or more transactions*") associated with the abandoned transaction ("*associated with the one or more events*"). EX1005, ¶¶45, 75-76.

9. [1.G.1]

Balasubramanian-Wertheimer-Chen teaches element [1.G.1]. EX1003, ¶¶133-136.

When Balasubramanian's user selects a PCL in the notification ("*activation of the link*"), the user may review and request processing the one or more

incomplete and/or abandoned transactions. EX1005, ¶55. Clicking on the PCL also regenerates the shopping cart similar to its original state, with additional information. EX1005, ¶¶43, 75. A POSA would have understood that the user accesses the shopping cart via the user device, e.g., via a web browser. EX1005, ¶25; EX1003, ¶134. Thus, “*in response to*” determining the user clicks on the PCL, Balasubramanian’s service provider enables access to the shopping cart (“*second document*”).

However, Balasubramanian does not expressly disclose transmitting the shopping cart (“*second document*”) to the user device by transmitting the shopping cart itself in a text message. Rather, Balasubramanian discloses transmitting a notification containing a PCL that allows the user to access the shopping cart. EX1003, ¶134. Chen, however, discloses transmitting the shopping cart itself, such as an HTML document, to the user device. As discussed above (Section V.A), a POSA would have been motivated to modify Balasubramanian’s service provider to send the shopping cart (“*causing provision of the second document*”) to the user device via a text message (“*to the electronic address*”). EX1003, ¶135. Thus, in response to determining that the user clicks the PCL (“*in response to determining activation of the link has occurred*”), a POSA would have been motivated to send the shopping cart itself to the user device via a text message, either in addition to or instead of requiring access through a web browser, thereby accommodating a

wider range of user devices and preserving access when connectivity is unstable or unavailable. EX1003, ¶135. A POSA would have had a reasonable expectation of success because Balasubramanian already sends notifications via text message and therefore could similarly transmit the shopping cart. EX1005, ¶¶9, 20, 48, 55, 72; EX1003, ¶135. Because the shopping cart is transmitted as an HTML document, a POSA would have understood it retains the same interactive functionality as the corresponding webpage. EX1003, ¶135.

Balasubramanian's user device may include a web browser, and may be implemented using any suitable "hardware and/or software configured for wired and/or wireless communication." EX1005, ¶¶23, 25. The service provider may be provided by service entities, such as PayPal and eBay, and thus serves a wide variety of user devices. EX1005, ¶40. A POSA would have understood that those devices may or may not include web browsers. EX1003, ¶136. However, Balasubramanian does not disclose the service provider determining whether a particular user device includes a web browser, and a POSA would have understood that a service provider cannot readily make that determination for each connecting device. *Id.* Accordingly, a POSA would have been motivated to send shopping-cart text messages even to devices that may have web browsers to ensure user access to the shopping cart. *Id.*

10. [1.G.2]

Balasubramanian teaches element [1.G.2]. EX1003, ¶¶137-138.

Balasubramanian's service provider sends a notification containing PCLs that direct the user to the shopping cart ("*the second document*"). EX1005, ¶¶9, 20, 45, 47, 55, 63, 72, 74. After accessing the shopping cart, the user can complete a checkout ("*facilitate completion of a given transaction in the one or more transactions*"). EX1005, ¶¶45, 48, 76. In Balasubramanian-Wertheimer-Chen, the service provider transcodes the shopping cart content into SMS format and transmits the transcoded content to the user device as an SMS message. EX1011, 3:28-40; EX1003, ¶138. A POSA would have understood that the transmitted shopping cart would retain the content and functionality of the shopping cart on the website, including its interactive features, thereby enabling the user to complete a checkout in a similar way ("*facilitate completion of a given transaction in the one or more transactions*"). EX1003, ¶138.

C. Claim 2

Balasubramanian teaches claim 2. EX1003, ¶¶139-143.

Balasubramanian's service provider sends a notification to the user device as a text message ("*the message ... provided to the electronic address*"), but Balasubramanian does not explicitly explain a specific type of text message to be used to send the notification. EX1005, ¶¶9, 20, 48, 55. Nonetheless, as Dr. Jansen

explains, a POSA would have understood that it was well known at the time of filing of the '799 patent that a “text message” may include, for example, “Rich Communication Services” (“RCS”), a well-known successor to SMS text messaging. EX1003, ¶140. Thus, a POSA would have understood Balasubramanian’s text message (“*the message*”) renders obvious using “*an RCS message*,” which was a well-known type of text message (“*the message comprises [an RCS] message*”). *Id.* Additionally, a POSA would have known that there were only a finite number of text message protocols in widespread use at the time of the '799 patent—RCS being one of them. Therefore, a POSA would have also found it obvious to try the RCS protocol to implement RCS messages in Balasubramanian’s system. *Id.*

Furthermore, Balasubramanian teaches “*a determined classification of the user*.” The '799 patent explains that the classification options include three tiers, in the second of which the user has selected one or more actions but has not completed a transaction. EX1001, 42: 12-27. In Balasubramanian, the user may “select items to purchase by clicking on a link for a specific item,” but withdraw from purchase prior to payment. EX1005, ¶¶5-6. A POSA would have understood that such a user would be classified in the second tier in the '799 patent’s definition. EX1003, ¶141. For the user that abandoned the checkout,

Balasubramanian's service provider sends a reminder notification to the user.

EX1005, ¶¶9, 20, 45, 55, 72.

In addition, once the user completes the purchase transaction, the service provider stores information related to the completed purchase transaction and changes the status from incomplete to complete. EX1005, ¶¶10, 79. A POSA would have understood that the service provider would not send the notification to this user (at least for the same purchase transaction) because it is now completed. EX1003, ¶142. Such a user is classified in the first tier of the '799 patent's three tiers. *Id.*; EX1001, 42:12-19. Thus, the service provider selectively sends the notification (“*the message*”) to the user who has selected items but abandoned the checkout (“*based at least in part on a determined classification of the user*”).

The service provider sends the notification “*according to a schedule.*” In Balasubramanian, when the user abandons a purchase transaction, the service provider notifies the user via periodic (“*according to a schedule*”) message alerts, including text messages. EX1005, ¶9. Furthermore, the service provider sends a notification to the user when an item in the shopping cart is about to run out of stock (“*according to a schedule*”). EX1005, ¶47. Thus, a POSA would have understood that the service provider sends the notification “*according to a schedule,*” which can be periodic or responsive. EX1005, ¶¶20, 47; EX1003, ¶143. The “*schedule*” is generated based on the determination that the user previously

selected items and abandoned the transaction (“*generated based at least in part on a determined classification of the user*”) because the notification is sent to remind the user of the abandoned transaction. EX1005, ¶¶9, 20; EX1003, ¶143.

D. Claim 3

Balasubramanian teaches claim 3. EX1003, ¶¶144-146.

Balasubramanian teaches “*the classification of the user comprises criteria.*”

The ’799 patent explains the “*criteria*” “may be based on user behavior” or “a level of engagement with particular content.” EX1001, 41:15-19. For users who abandoned checkout, Balasubramanian’s service provider sends a reminder notification to the user. EX1005, ¶¶9, 20, 45, 55, 72. A POSA would have understood that the service provider selectively sends a notification based on the user’s behavior of abandoning the checkout and the level of engagement (e.g., selecting but not purchasing) with the select content (“*criteria*”). EX1003, ¶145.

The user’s behavior of abandoning the checkout and the level of engagement with the selected content (“*criteria*”) is performed on a shopping cart (“*corresponding to ... a website*”). EX1005, ¶¶33, 63; EX1003, ¶146. The shopping cart is associated with the phone number because the user may receive a PCL shared by another user that leads to a shopping cart that includes items of the other user (“*a website*”) via text message (“*associated with the electronic address*”). EX1005, ¶48; EX1003, ¶146.

E. Claim 4

Balasubramanian teaches claim 4. EX1003, ¶¶147-150.

In Balasubramanian, when shopping at a website, a user selects items to purchase by clicking on a link for a specific item but may withdraw from purchase prior to payment. EX1005, ¶¶5-6. A POSA would have understood that, for such users, “*the classification of the user indicates*” that the user has “*has selected a link ... but has not completed a transaction*” and the service provider selectively sends the notification to such a user (i.e., the user is a “*message recipient*”). EX1003, ¶148; EX1005, ¶¶5-6, 9, 20, 47, 55, 63, 72, 74; Section V.C. This indication is sufficient to inform all three indications b/c they are mutually exclusive alternatives. EX1003, ¶148.

A POSA would have understood that the website link, which the user clicks on to select items, is “*a link provided by the system*” because the website is provided by the merchant and the service provider, which are included in Balasubramanian’s system. EX1005, ¶¶5-6, 21, 25, 33; Section V.B.1; EX1003, ¶149. Further, a POSA would have understood that the website link is provided to the user device (which may be a wireless cellular phone) because the user accesses the website using the user interface application of the user device. EX1005, ¶25; EX1003, ¶150. The user device is associated with the phone number and thus the

link is provided to the phone number of the user device (“*the electronic address*”).

EX1005, ¶23; EX1003, ¶150.

F. Claim 5

Balasubramanian-Wertheimer-Chen teaches claim 5. EX1003, ¶¶151-153.

Balasubramanian renders obvious “*the message comprises [an RCS] message.*” Section V.C. Balasubramanian further teaches “*requesting and receiving authorization data.*” When Balasubramanian’s service provider “determines that the user selected at least one incomplete transaction to process,” the service provider prompts the user to login from the user device (“*requesting ... authorization data*”). EX1005, ¶78. The service provider then “receive[s] user information, such as identity information, from the user via the user device” (“*receiving authorization data corresponding to an identity of the user*”) and uses the user information to verify the user. *Id.*; EX1003, ¶152.

Furthermore, a POSA would have found it obvious that Balasubramanian’s service provider, as modified in view of Chen, sends the shopping cart, such as HTML documents of the shopping cart, to the user device (“*causing provision of the second document to the electronic address*”). Section V.B.9. As Dr. Jansen explains, a POSA would have understood that since the service provider sends the shopping cart to the user device as documents, such as HTML documents, the recipient of the documents can access the shopping cart without a website

verification process, such as a login process, which would otherwise be required when the shopping cart is hosted on a website. EX1003, ¶153. In such a case, Chen explains a verification of the user is required before sending the shopping cart to the user device. EX1011, 6:34-37. Thus, a POSA would have found it obvious that the service provider requests and receives the user information (“*requesting and receiving authorization data corresponding to an identity of the user*”) to verify the user before sending the documents of the shopping cart to the user device (“*before causing provision of the second document to the electronic address*”). EX1003, ¶153.

G. Claim 6

Balasubramanian teaches claim 6. EX1003, ¶¶154-156.

Balasubramanian’s notification can be a text message, but Balasubramanian does not explicitly explain a specific type of text message used to send the notification. EX1005, ¶¶9, 20, 48, 55. Nonetheless, as Dr. Jansen explains, a POSA would have known that it was well known at the time of filing of the ’799 patent that a “text message” may include “*an Enhanced Messaging Service (EMS) message,*” a well-known successor to SMS text messaging. EX1003, ¶155; EX1034, 1:13-25 (“EMS messages are typically an extension of SMS messages.”). Thus, a POSA would have understood Balasubramanian’s text message (“*the message*”) renders obvious, “*an Enhanced Messaging Service (EMS) message.*”

EX1003, ¶155. Additionally, a POSA would have known that there were only a finite number of text message protocols in widespread use at the time of the '799 patent—EMS being one of them—and a POSA would have found it obvious to try the EMS protocol to implement Balasubramanian's messages. EX1003, ¶156.

H. Claim 8

Balasubramanian teaches claim 8. EX1003, ¶¶157-158.

Balasubramanian's PCL is the "*link*." Section V.B.8. The PCL can be shared with other people ("*users other than the user*"), such as a supervisor or co-worker for reviewing the shopping cart before the completion of the purchase transaction ("*allow users other than the user to access the second document to browse the second document*"), e.g., to approve or pre-approve selected items before completing the purchase transactions. EX1005, ¶50. A POSA would have understood that the supervisor can view/approve the selected items, but that executing the purchase transaction is done by the user after approval ("*prohibiting execution of the one or more transactions through the link for the users other than the user*"). EX1003, ¶158.

I. Claim 9

Balasubramanian teaches claim 9. EX1003, ¶¶159-160.

Balasubramanian's PCL is the "*link*." Section V.B.8. Balasubramanian's PCL is a unique URL with a token. EX1005, ¶44 ("a unique URL with a token

(i.e., PCL)”). Although this disclosure is in the context of a PCL generated when the user checks out from a merchant, a POSA would have understood that this definition also applies when the service provider generates a PCL to send in a user notification. EX1003, ¶160. A POSA would have understood that a URL with a token provides secure access to online resources without needing to enter a username, a password, or other authentication information. *Id.*; EX1018, Abstract. Therefore, it would have been obvious that the PCLs in the notification also include a URL with a token, so that malicious access can be avoided. EX1003, ¶160. Because a URL with a token provides an additional security measurement that would not be available with just a URL, the PCL “*is further configured with a security layer to provide augmented access.*” *Id.* Because the URL with a token included in the PCL is unique, it is “*configured ... to the user.*” *Id.*

J. Claim 10

Balasubramanian teaches claim 10. EX1003, ¶¶161-162.

Balasubramanian’s PCL is the “*link.*” Section V.B.8. Balasubramanian’s PCL corresponds to the user’s previously incomplete or abandoned transactions. EX1005, ¶¶45, 75-76. The ’799 patent explains “a user journey” “may include a series of steps or interactions that the user (e.g., subscriber) takes while shopping online.” EX1001, 35:18-21. Thus, Balasubramanian’s user actions of viewing and searching for items, products and services and creating the shopping cart are an

“*online user journey*.” EX1005, ¶24; EX1003, ¶162. Furthermore,

Balasubramanian’s PCL enables the user to “*resume an online user journey*,” such as the user’s prior actions of viewing and searching for items, products, and services, and creating the shopping cart, from “where the user previously left-off, withdrew, abandoned, or failed to complete the checkout” (“*given transaction*”).

EX1005, ¶¶45, 55, 75; EX1003, ¶162.

K. Independent claim 12

1. [12.P]

Balasubramanian discloses the preamble. EX1003, ¶163. Balasubramanian’s “service provider,” implemented as a computer system, “provide[s] processing for network-based transactions including online information and/or financial transactions on behalf of the user.” EX1005, ¶40. Balasubramanian’s service provider 180 performs methods described with respect to Figures 2A-2C. EX1005, ¶¶62-86; EX1003, ¶163.

2. [12.A]-[12.E.2]

Claim elements [12.A]-[12.E.2] correspond to claim elements [1.C]-[1.G.2], respectively. Balasubramanian-Wertheimer-Chen discloses or renders obvious these elements for the reasons explained regarding claim 1. Section V.B; EX1003, ¶164.

L. Claims 13-16, 18-20

Balasubramanian-Wertheimer-Chen discloses or renders obvious these claims for the same reasons as respectively explained for claims 2-3, 5-6, 8-10.

Sections V.C-V.D, V.F-V.G, VH-V.J; EX1003, ¶165.

M. Independent Claim 22

1. [22.P]

Balasubramanian discloses the preamble. EX1003, ¶¶167-168.

Balasubramanian's "computer system 400 performs specific operations by processor 404 executing one or more sequences of one or more instructions contained in system memory component 406." EX1005, ¶94. "Such instructions may be read into system memory component 406 from another computer readable medium, such as static storage component 408 or disk drive component 410." *Id.* A POSA would have understood that at least Balasubramanian's static storage component is a "*non-transitory computer-readable storage medium.*" EX1003, ¶168.

2. [22.A]–[22.E.2]

Claim elements [22.A]–[22.E.2] correspond to claim elements [1.C]–[1.G.2], respectively. Balasubramanian-Wertheimer-Chen discloses or renders obvious these elements for the reasons explained regarding claim 1. Section V.B; EX1003, ¶169.

N. Claims 23-25, 27-29

Balasubramanian-Wertheimer-Chen discloses or renders obvious these claims for the same reasons as respectively explained for claims 2-3, 5, 8-10.

Sections V.C-V.D, V.F, V.H-V.J. EX1003, ¶170.

VI. GROUND 1B: BALASUBRAMANIAN-WERTHEIMER-CHEN -BOGINENI RENDERS OBVIOUS CLAIMS 2-5, 7, 10, 13-15, 17, 23-26.

A. Motivation to Combine

Several dependent claims recite RCS messages. As explained above, such RCS messages are rendered obvious by Balasubramanian. Sections V.C-V.F. To the extent Patent Owner argues that Balasubramanian does not teach or suggest an RCS message, Bogineni expressly discloses RCS messaging. A POSA would have been motivated to modify Balasubramanian-Wertheimer-Chen in view of Bogineni to include RCS messages. EX1003, ¶¶171-174.

To start, Bogineni and Balasubramanian are in the same field of mobile device communication, and are thus analogous art to each other and the '799 patent. *Compare* EX1009, 1:6-7, 1:47-2:22, *with* EX1001, Abstract, 5:42-44; EX1005, ¶¶21-24, 29, 31; EX1003, ¶172.

Balasubramanian's service provider sends notifications to user devices, including text messages, but does not specify the underlying messaging protocol. EX1005, ¶¶9, 20-21, 48, 55; EX1003, ¶173. Thus, a POSA would have looked to known messaging technologies, including the well-known technique for sending

text messages to mobile devices (like Balasubramanian's user device) via RCS messages, as taught by Bogineni. EX1003, ¶173. Bogineni teaches that RCS provides text messaging similar to SMS while offering additional functionality unavailable in SMS. EX1009, 1:7-12. A POSA would have been motivated to transmit Balasubramanian's notification as an RCS message instead of a text message to obtain those known advantages. EX1003, ¶173.

Furthermore, a POSA would have had a reasonable expectation of success in combining Balasubramanian with Bogineni. EX1003, ¶174. Bogineni teaches that RCS messaging may be implemented using Internet protocol (IP) multimedia subsystem (IMS)-based or non-IMS architectures, including hypertext transfer protocol (HTTP) communications and device application programming interfaces (APIs). EX1009, 1:47-2:4. Balasubramanian's system includes mobile devices, computer systems, and communication networks capable of supporting those conventional technologies. EX1005, ¶¶21-22, 92; EX1003, ¶174. A POSA would have understood that Balasubramanian's network would support the IMS and, therefore, support IMS-based RCS messaging. EX1003, ¶174. Because Balasubramanian's network can be the Internet, the network also supports HTTP communications, which enables non-IMS RCS messaging. *Id.* Because Balasubramanian's user device, merchant devices, and service provider can be implemented as computer systems, a POSA would have understood they are

readily available to install APIs and thus support non-IMS RCS messaging via the APIs. *Id.*; EX1005, ¶92. A POSA would therefore not have experienced any unreasonable technical hurdles in implementing these modifications. EX1003, ¶174.

The combination would merely amount to combining prior art elements according to known methods to yield the predictable (yet improved) result of sending text message having the additional functionality available with RCS messages. EX1009, 1:9-12; EX1003, ¶174.

B. Claim 2

Balasubramanian-Wertheimer-Chen-Bogineni teaches claim 2. EX1003, ¶¶175-177.

In Balasubramanian-Wertheimer-Chen-Bogineni, Balasubramanian's notification ("*the message*") is transmitted as "[*an RCS*] *message*" instead of or in addition to the text message, in order to provide the additional functionality that RCS messages provide. EX1003, ¶176; Section VI.A. In addition, similar to the text message, Balasubramanian's service provider sends the notification to the user device via the phone number provided by the user ("*provided to the electronic address*"). EX1005, ¶¶9, 20, 26, 48, 55, 72; EX1003, ¶176.

Furthermore, Balasubramanian teaches the remaining limitations of claim 2. Section V.C.

C. Claims 3, 4

Balasubramanian-Wertheimer-Chen-Bogineni teaches claims 3 and 4 as discussed in Ground 1A. Sections V.D-V.E. EX1003, ¶¶178-179.

D. Claim 5

Balasubramanian-Wertheimer-Chen-Bogineni teaches “*the message comprises [an RCS] message.*” Section VI.B. Balasubramanian teaches the remaining limitations of claim 5. Section V.F. *See also* EX1003, ¶¶180-181.

E. Claim 7

Balasubramanian-Wertheimer-Chen-Bogineni renders obvious claim 7. EX1003, ¶¶182-184.

Balasubramanian’s notification (“*the message*”) can be transmitted as “[*an RCS] message,*” as taught by Bogineni. Section VI.B. Bogineni further teaches various APIs for using the RCS message service including “a send read report API for sending a read report for an RCS message” and “a receive read report for receiving a read report for an RCS message.” EX1009, 4:4-16. Bogineni’s “send read report” and “receive read report” for RCS messages are the claimed “*send and receive indicators provided in a user interface of a mobile computing device.*” EX1003, ¶183. In Balasubramanian, the user device includes applications that interface with APIs and each other “for improved efficiency and convenience” of the user device. EX1005, ¶27. Thus, a POSA would have understood that the transmitted and received “read report[s]” supported by the APIs are provided to the

user interface application of the user device via the applications 124 (“*provided in a user interface of a mobile computing device*”). EX1003, ¶183. The user device is associated with the phone number (“*a mobile computing device associated with the electronic address*”). *Id.*; EX1005, ¶¶21-23; Section V.B.6.

As Dr. Jansen explains, a POSA would have understood that Bogineni’s RCS message shows real-time typing status between the sender and the receiver (“*indicators depicting real time typing*”), because this is part of the RCS standard. EX1003, ¶184. In particular, the RCS standard “RCS Universal Profile Service Definition Document, Version 1.0,” published November 16, 2016, mandates, as standard elements, the use of indicators that inform a user of “*real time typing*.” EX1032. For example, standard element US5-7 explains “[a]s a user, I want to see when the other party is currently writing a message,” and standard element R5-7-1 instructs that “[t]he other party shall be able to see an ‘is typing’ notification whenever the creator of a message is typing.” EX1032, 47. Because the RCS Universal Profile Definition mandates these functions, a POSA would have understood that they would be included in the RCS functionality of Bogineni. EX1003, ¶184.

F. Claims 13-15, 17, 23-26

Balasubramanian-Wertheimer-Chen-Bogineni discloses or renders obvious these claims for the same reasons as respectively explained for claims 2-3, 5, 7. Sections VI.B-VI.E. EX1003, ¶185.

VII. GROUND 1C: BALASUBRAMANIAN-WERTHEIMER-CHEN -SINHA RENDERS OBVIOUS CLAIMS 11, 21, 30.

A. Motivation to Combine

Claims 11, 21, and 30 recite “*prior engagement characteristics [that] are determined using machine learning,*” which are explicitly discussed by Sinha. A POSA would have been motivated to modify Balasubramanian-Werthheimer-Chen in view of Sinha to include this element. EX1003, ¶¶186-189.

To start, Sinha and Balasubramanian are in the same field of online shopping on websites, and are thus analogous art to each other and to the ’799 patent. *Compare* EX1012, ¶29, 37, *with* EX1001, 1:36-56, 8:52-9:24, 29:16-29, 35:4-14; EX1005, ¶¶6-7, 56, 63; EX1003, ¶187.

Balasubramanian addresses the issue of abandoned online shopping carts by sending notifications encouraging users to complete the abandoned transaction. EX1005, ¶¶5-6, 9, 20, 45, 55, 72. Sinha recognizes that customers may compare shopping carts at different online stores before deciding where to purchase. EX1012, ¶3. Thus, each online store wants to be the one that the customer eventually chooses. *Id.* To improve conversion, Sinha calculates a “likelihood”

whether a customer will return to an abandoned cart, and when uncertainty exists, delivers tailored advertising content to the customer to encourage completion of the purchase. EX1012, ¶24. A POSA, therefore, would have been motivated to incorporate Sinha’s targeted advertising techniques into Balasubramanian to improve the chance that users return to abandoned shopping carts and complete checkout. EX1003, ¶188.

A POSA also would have had a reasonable expectation of success in combining Balasubramanian with Sinha. EX1003, ¶189. Sinha’s customer classification model module 212 uses machine-learning techniques to predict whether users will return to abandoned carts. EX1012, ¶51. Customer classification model module 212 is a part of online shopping cart analysis module 108, which may be implemented in software, hardware, firmware, or server-based computing systems. EX1012, ¶¶28, 34, 50. Balasubramanian likewise includes a service-provider server capable of performing Sinha’s machine learning and customer classification functions. EX1005, ¶¶21, 92, FIG. 1.

B. Claims 11, 21, 30

Balasubramanian-Wertheimer-Chen-Sinha teaches these claims. EX1003, ¶¶190-194.

Sinha teaches tailored advertising content (“*user-targeted content*”) sent to the customer with “a likelihood” that indicates “uncertainty as to whether a

customer will [] return to purchase items left in an abandoned cart.” EX1012, ¶24.

The advertising content “enables the customer to purchase the items left in the abandoned shopping cart for less than at the other online stores.” *Id.* Sinha further explains that the return likelihood is computed based on the customer’s prior behaviors, such as interactions with the online store, items left in the abandoned shopping cart, and customer interactions with emails from the online store.

EX1012, ¶18. Thus, a POSA would have understood that the customer’s prior behaviors are the customer’s “*prior engagement*” with the online store. EX1003, ¶191. Furthermore, a POSA would have understood that the likelihood calculated from the prior behavior indicates characteristics of the prior behavior and thus is the “*one or more prior engagement characteristics*.” *Id.* Because the customer’s prior behaviors are performed by the customer using a computing device, such as a mobile phone, a POSA would have understood that the prior behaviors and the likelihood calculated from the prior behaviors are associated with the phone number of the user and the mobile phone (“*associated with the electronic address*”). *Id.*; EX1012, ¶28. Furthermore, Sinha’s “likelihood” is calculated using a model, such as a regression model, using machine learning techniques (“*the prior engagement characteristics are determined using machine learning*”). EX1012, ¶¶18, 32, 51-52.

Furthermore, Balasubramanian's shopping cart is "*the second document*."

Section VI.B.7. The user can return to the shopping cart to complete the checkout.

EX1005, ¶¶45, 75. Thus, a POSA would have been motivated to modify Balasubramanian to include the advertising content taught by Sinha in the shopping cart ("*the second document comprises user-targeted content*") so that the user is more likely to complete the checkout. EX1003, ¶192.

Sinha's "likelihood" ("*the prior engagement characteristics*") is computed using a machine learning model ("*determined using machine learning*"). EX1012, Abstract, ¶¶5-6, 18, 32, 49, 51-52; EX1003, ¶193.

VIII. GROUND 2A: SPINDLER-LONG RENDERS OBVIOUS CLAIMS 1, 5-6, 8-9, 12, 15-16, 18-19, 22, 25, 27-28.

A. Motivation to Combine

A POSA would have been motivated to modify Spindler in view of Long to arrive at the techniques claimed by the '799 patent. EX1003, ¶¶196-204.

Spindler and Long are in the same field of endeavor as each other and the problem addressed by the '799 patent (e.g., facilitating e-commerce transactions via mobile devices), and are thus analogous art. EX1006, ¶¶2-3, 9, 31; EX1001, 1:40-53; EX1013, 2:48-51; EX1003, ¶197.

Spindler teaches dynamically generating customized content (i.e., "*second document*") for subscribers that facilitates transactions and improves the user experience. EX1006, ¶¶6, 37, 46. However, as discussed above, Spindler does not

disclose actually “*causing provision of the second document to the electronic address*” (e.g., to the telephone number associated with the user’s electronic device). Section IV.F.1. A POSA also would have recognized browser-based access can be limited by device capabilities (e.g., no web browser) or connection issues (e.g., weak or temporarily lost connections) and therefore would have looked to the prior art for specific techniques for extending Spindler’s teachings to delivering the content to mobile devices without relying on a web browser. Section V.A; EX1003, ¶198. Long is such a reference.

Long addresses similar e-commerce usability problems by using deeplinks that open a mobile messaging application with transaction information pre-populated for the user. EX1013, 1:32-44, 3:4-9, 7:4-8; EX1003, ¶199. This pre-populated information allows users to “initiate a process to purchase a product or service from the recipient when the message is sent,” simplifying the transaction to a sequence of only two clicks by the user. EX1013, 3:28-34, 3:65-4:2. Long’s process results in an “improved user experience and engagement when interacting with the mobile device.” *Id.*, 1:40-44.

Long, like Spindler, describes a technique for “completing mobile subscriptions, communications, and/or purchases.” EX1013, 2:48-54. Long’s technique begins when a user of a mobile device clicks “a custom-rendered deeplink” in a promotional message, e.g., on a mobile website, application,

advertisement, or in a text message. *Id.*, 3:1-7, 6:57-60. Clicking the deeplink causes a server to “initiate a messaging application at the user mobile device 150 with a message pre-populated with purchase or subscription information.” *Id.*, 7:4-8. The information for the message “can be communicated to the messaging application using the deeplink” and may include shopping cart, product, and pricing information. *Id.*, 3:19-20, 15:28-31. Thus, Long’s deeplink facilitates actually sending information, such as a customized shopping cart or subscription request, directly to a user’s telephone number in the form of the text messaging application. EX1003, ¶200.

A POSA would have been motivated to incorporate Long’s deeplinking technique into Spindler for the predictable result of an e-commerce technique having reduced user friction and increased conversion of sales. EX1003, ¶201. Both references seek to improve the e-commerce user experience. EX1013, 1:32-44; EX1006, ¶¶4-6. Both techniques send links associated with customized content to a user’s mobile device. EX1013, 6:57-66; EX1006, ¶¶34-35. Activating the link enables a purchase or subscription transaction. EX1013, 7:11-16; EX1006, ¶37. Unlike Spindler, which links to a “customized second document” that “allows completion of [a] given transaction,” EX1006, ¶37, Long’s technique *actively sends* the customized transaction content to the user’s mobile messaging

application, so that the user can complete the transaction with just one more click.

EX1013, 15:22-37.

A POSA would also have had a reasonable expectation of success because the modification would have involved only the routine application of Long's well-known "click-to-text" communication scheme to the application of "purchasing one or more tickets to an upcoming event" described by Spindler. EX1013, 2:43-45; EX1006, ¶37. Long's communication scheme requires nothing more than the mobile electronic device 110, client device 404, and ADDP server 410 already disclosed by Spindler. EX1006, ¶¶31, 80-81; EX1003, ¶202.

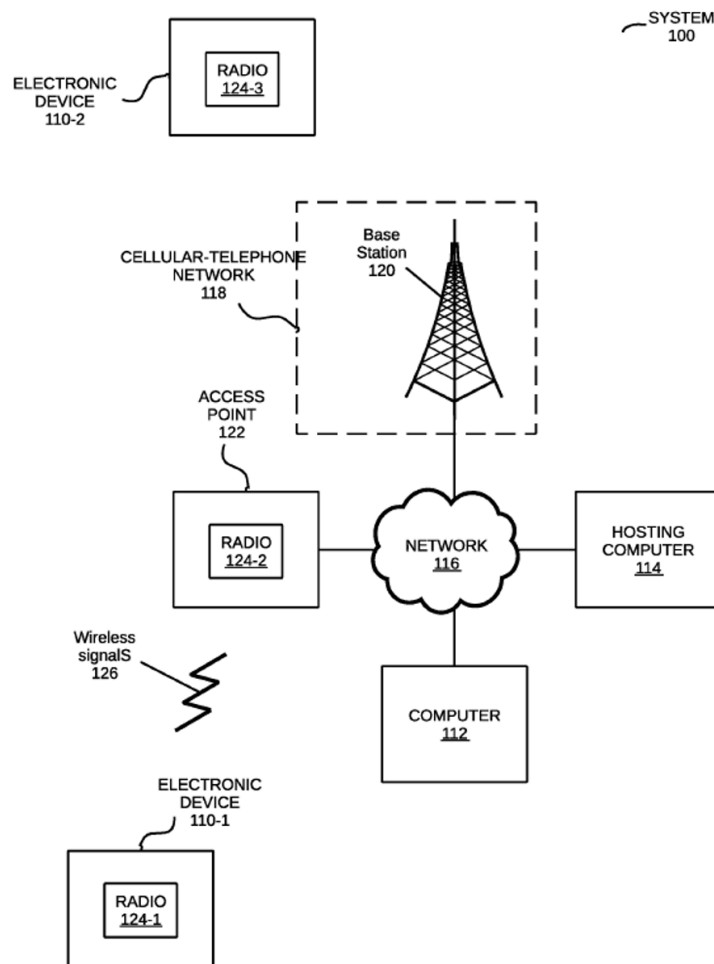
In Spindler-Long, a POSA would have been motivated to replace Spindler's "link to the customized second document" with Long's deeplink, such that activating the link opens the text messaging application pre-populated with transaction content (e.g., event tickets, shopping cart information, etc.) from the customized second document. EX1006, ¶¶34-35; EX1013, 15:22-37; EX1003, ¶203. A POSA would have understood this modification would allow the user to complete a transaction through the messaging application (as in Long) rather than navigating to a separate webpage (as in Spindler) thereby providing the "improved user experience and engagement" explicitly taught by Long. EX1013, 1:32-44, 3:40-45; EX1003, ¶203.

B. Independent Claim 1

1. [1.P]

Spindler discloses the preamble. EX1003, ¶¶205-206.

Spindler discloses a **system 100** including various electronic devices 110, hosting computer 114, network 116, and cloud-based computer 112 that may perform method 200. EX1006, ¶¶31, 48, FIGs. 1-2; EX1003, ¶206.

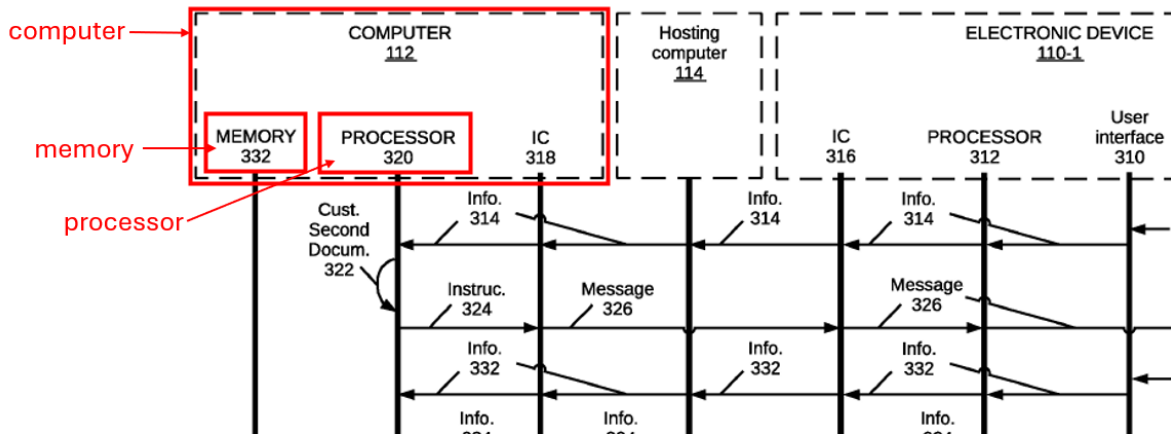


EX1006, FIG. 1.

2. [1.A]

Spindler discloses element [1.A]. EX1003, ¶¶207-208.

Spindler's cloud-based computer 112 includes **processor 320** that “dynamically generate[s] a customized second document” and “instruct[s] 324 interface circuit 318 to send a message” to a telephone number. EX1006, ¶¶59-60, FIG. 3; EX1003, ¶208.



EX1006, FIG. 3 (abridged, annotated).

3. [1.B]

Spindler discloses element [1.B]. EX1003, ¶¶209-210.

Spindler discloses that computer 112 includes **memory 332**. EX1006, ¶113, FIG. 3 *above*. The memory may be “*configured to store program instructions*” such that, “when the program instructions are executed by the processor, they cause the computer to perform” the operations of method 200. EX1006, ¶¶113, 48, FIG. 2; EX1003, ¶210.

4. [1.C]

Spindler discloses element [1.C]. EX1003, ¶¶211-213.

Spindler's computer 112 “may **inject a hosted field** [(“*a hosted input field*”)] into a document provided by hosting computer 114” “for **inclusion in a webpage associated with a third party.**” EX1006, ¶¶32, 48. A POSA would have understood that this third-party webpage is the claimed “*first document associated with a third party.*” EX1003, ¶212.

5. [1.D.1]

Spindler discloses element [1.D.1]. EX1003, ¶¶214-215.

Spindler discloses “*receiving, information indicating activation of the hosted input filed in the first document.*” During method 200, computer 112 receives information specifying activation of a hosted field in a third-party document. EX1006, ¶¶28, 48, FIG. 2 (step 210). When the user activates the hosted field and provides a telephone number, electronic device 110-1 provides “information specifying activation of the hosted field,” along with the telephone number, to hosting computer 114, which in turn provides that information to computer 112. *Id.* ¶¶33, 57-58, FIG. 3; EX1003, ¶215.

6. [1.D.2]

Spindler discloses element [1.D.2]. EX1003, ¶¶216-218.

Spindler discloses that the “*information comprises an electronic address associated with an electronic device.*” Spindler's information “specifies a

telephone number” (“*electronic address*”) “**associated with electronic device 110-1.**” EX1006, ¶¶28, 32; EX1003, ¶217.

Spindler discloses that the information comprises “*an indication of a willingness to receive one or more messages.*” Spindler’s hosted field allows a user “**to indicate a willingness to receive one or more messages** from computer 112.” EX1006, ¶¶28, 32, 48. For example, the user may select a box indicating that they would like to receive text messages. *Id.*, ¶71; EX1003, ¶218.

7. [1.E]

Spindler discloses element [1.E]. EX1003, ¶¶219-221.

Spindler discloses “*generating, a second document that includes information about one or more events of interest for a user associated with the electronic address.*” After activation of the hosted field, computer 112 “**may dynamically generate a customized second document** (such as a webpage) **that includes information about one or more** transactions (such as one or more upcoming events) **of interest to the individual ... associated with the telephone number**” (“*electronic address*”). EX1006, ¶¶28, 34, 49, 59, FIG. 2 (step 212). A POSA would have understood that these “upcoming events” correspond to the claimed “*one or more events of interest for a user associated with the electronic address.*” EX1003, ¶220.

Spindler discloses “*the second document being customized to the user.*”

Spindler’s “customized webpage” (“*the second document*”) may be created specifically for each subscriber and curated based on characteristics such as industry, events, organizer preferences (“*customized to the user*”) EX1006, ¶¶68; EX1003, ¶221.

8. [1.F]

Spindler discloses element [1.F]. EX1003, ¶¶222-224.

Spindler discloses “*sending a message to the electronic address, wherein the message comprises a link to the second document.*” After generating the second document, computer 112 sends a message, including a link to the customized second document, to the telephone number. EX1006, ¶¶28, 34, 50, 60, FIG. 2 (step 214); EX1003, ¶223.

Spindler discloses “*the link being configured to enable the user to access the second document to execute one or more transactions associated with the one or more events.*” Spindler’s message includes “an actionable item, e.g., a link to purchase tickets or view a customized webpage” EX1006, ¶84. When the user “activates the link,” the customized second document is displayed on the user’s device and may allow completion of a transaction, such as purchasing tickets to an upcoming event. EX1006, ¶¶9, 35-37, 51-52. Thus, Spindler’s link enables the user

to access the second document to execute transactions (e.g., ticket purchases) associated with the upcoming events (the “*one or more events*”). EX1003, ¶224.

9. [1.G.1]

Spindler-Long discloses this claim element. EX1003, ¶¶225-229.

As discussed above, Spindler fails to explicitly disclose “*causing provision of the second document to the electronic address.*” Section IV.F.1; EX1003, ¶226.

Long, however, teaches a “custom-rendered deeplink” that opens “a mobile messaging application” with “purchase information pre-populated for the user.” EX1013, 3:4-9, 3:28-34, 3:65-4:2. This “pre-populated” purchase information may include a shopping cart identifier, product identifiers, product names, product descriptions, and pricing information. *Id.*, 3:19-20, 15:28-31; EX1003, ¶227.

A POSA would have been motivated to modify Spindler to deliver its customized content using Long’s deeplinks, thereby facilitating transactions such as ticket purchases. Section VIII.A. A POSA would have had a reasonable expectation of success because the modification would merely substitute Long’s deeplinks for Spindler’s text messages links. *Id.*; EX1003, ¶228.

Thus, a POSA would have found it obvious to provide the second document to the electronic address in response to determining activation of the link has occurred. EX1003, ¶229.

10. [1.G.2]

Spindler discloses element [1.G.2]. EX1003, ¶¶230-231.

Spindler discloses the customized second document may allow completion of transactions, including ticket purchases for upcoming events. EX1006, ¶¶37, 52. Accordingly, Spindler discloses this limitation. EX1003, ¶231.

C. Claim 5

Spindler-Long renders obvious claim 5. EX1003, ¶¶232-235.

Spindler renders obvious that “*the message comprises [an RCS] message.*” EX1003, ¶233. Spindler discloses text messages that can include multiple different protocols, and provides non-limiting examples of SMS, EMS, and MMS. *Id.*, ¶¶34, 50, 66. Based on Spindler’s disclosure that multiple different text message protocols could be used, a POSA would have found it obvious to implement the generated third-party message as a well-known RCS message. EX1003, ¶233. Additionally, a POSA would have known that there were only a finite number of text message protocols in widespread use at the time of the ’799 patent—RCS being one of them. *Id.* Therefore, a POSA would have also found it obvious to try the RCS protocol to implement text messages in Spindler’s system. *Id.*

Spindler-Long renders obvious that “*the operations further comprise requesting and receiving authorization data corresponding to an identity of the user.*” As part of a subscription, the ADDP may create a “‘hot’ cookie” on the

subscriber's device for future payments. EX1006, ¶75. After the cookie is validated, the user may input information into a 2FA Form so that "the identity of the subscriber" can be confirmed. *Id.*, ¶93. Spindler's hot cookie and 2FA credentials are the "*authorization data corresponding to the identity of the user.*" EX1003, ¶234.

Moreover, Spindler's authorization data is sent and received "*before causing provision of the second document to the electronic address.*" EX1003, ¶235. As explained above, it would have been obvious to modify Spindler to use Long's deeplinks to access Spindler's customized content. Section VIII.A. Because Spindler's hot cookie provided during subscription, EX1006, ¶75, it is sent and received before the deeplink is sent in Spindler-Long. EX1003, ¶235.

D. Claim 6

Spindler discloses that "*the message is an Enhanced Messaging Service (EMS) message.*" EX1003, ¶¶236-237.

Specifically, Spindler discloses that, "while SMS messaging was used in the preceding discussion, different communication channels may be used" including "**Enhanced Messaging Service (EMS).**" EX1006, ¶66; EX1003, ¶237.

E. Claim 8

Spindler discloses claim 8. EX1003, ¶¶238-240.

Spindler describes, in nearly identical language, that “[i]f the link for the customized second document is shared with a second individual, the second individual may browse content customized for the first individual but will be prohibited from accessing a profile of the first individual and/or executing a transaction unless the second individual subscribes and provides his/her telephone number.” EX1006, ¶68.

F. Claim 9

Spindler discloses claim 9. EX1003, ¶¶241-243.

Spindler’s link is “*configured with a security layer*.” EX1003, ¶242. For example, Spindler places “a packet containing UIE and PIN into a subscriber customer verified link 512.” EX1006, ¶91. Following validation of the hot cookie, an access link is generated and sent to a subscriber customer number to allow account access to complete a purchase. *Id.*, ¶92.

Spindler’s security architecture “*provides augmented access or navigation attributes to the user*.” Spindler’s security layer protects links against misuse by addressing “security flaws in existing approaches. EX1006, ¶78. A user without the required the ‘hot’ cookie cannot access transaction information or complete a transaction, and a recipient of a shared link likewise is prohibited from executing a transaction. *Id.*, ¶68, 78. Thus, legitimate users with access to their own profile

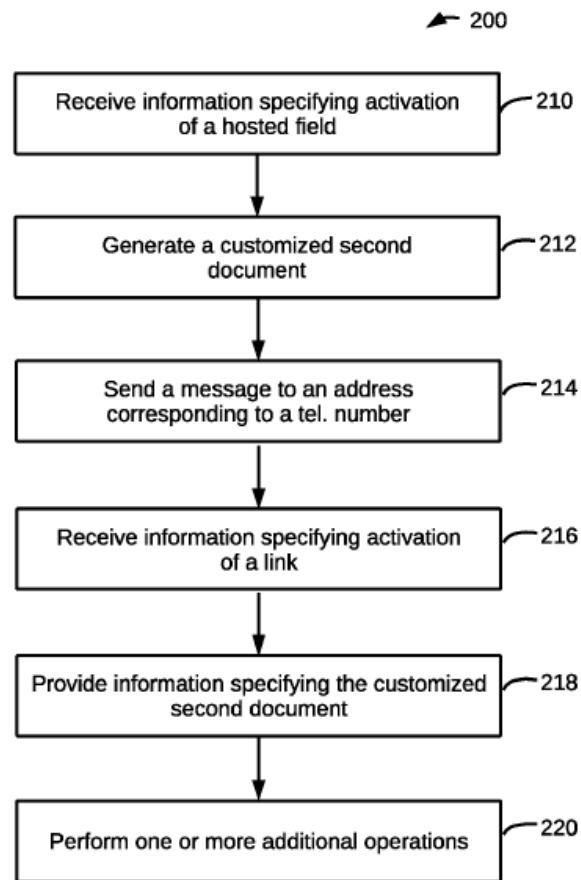
receive augmented access compared to fraudulent users or recipients of shared link. EX1003, ¶243.

G. Independent Claim 12

1. [12.P]

Spindler discloses the preamble. EX1003, ¶¶245-246.

Spindler’s “method 200” is “performed by a computer” (“*computer-implemented method*”). EX1006, ¶48, FIG. 2. By performing method 200, Spindler’s cloud-based computer 112 “dynamically generates [the] customized second document.” *Id.*, ¶28; EX1003, ¶246.



EX1006, FIG. 2.

2. [12.A]-[12.E.2]

Spindler-Long discloses or renders obvious elements [12.A]-[12.E.2] for the reasons explained regarding claim elements [1.C]-[1.G.2]. Sections VIII.B.4-VIII.B.10; EX1003, ¶247.

H. Claims 15-16, 18-19

Spindler-Long discloses or renders obvious these claims for the same reasons as respectively explained for claims 5-6, 8, and 9. Sections VIII.C-VIII.F. EX1003, ¶248.

I. Independent Claim 22

1. [22.P]

Spindler discloses the preamble. EX1003, ¶¶250-251.

Spindler discloses “a *non-transitory computer-readable storage medium* for use in conjunction with a computer, the computer-readable storage medium storing program instructions that, when executed by the computer, cause the computer to carry out one or more operations,” including the operations of method 200.

EX1006, ¶127; *id.*, ¶¶97-98, 113; EX1003, ¶251.

2. [22.A]-[22.E.2]

Spindler-Long discloses or renders obvious elements [22.A]-[22.E.2] for the reasons explained regarding claim elements [1.C]-[1.G.2]. Sections VIII.B.4-VIII.B.10; EX1003, ¶252.

J. Claims 25, 27-28

Spindler-Long discloses or renders obvious these elements for the same reasons as respectively explained for claims 5 and 8-9. Sections VIII.C, VIII.E-VIII.F. EX1003, ¶253.

IX. GROUND 2B: SPINDLER-LONG-ANDERSON RENDERS OBVIOUS CLAIMS 10, 20, 29.

A. Motivation to Combine

A POSA would have been motivated to further modify Spindler-Long in view of Anderson to arrive at claims 10, 20, and 29. EX1003, ¶¶254-262.

Spindler, Long, and Anderson are in the same field of endeavor as each other and the problem addressed by the '799 patent (e.g., facilitating e-commerce transactions via mobile devices), and are thus analogous art. Section VIII.A; EX1001, 1:40-53; EX1006, ¶¶2-3, 9; EX1007, ¶¶12, 28; EX1013, 2:48-51; EX1003, ¶255.

Spindler-Long does not explicitly disclose applying its techniques to the well-known problem of returning to prior abandoned transactions (*“resum[ing] an online user journey associated with the given transaction”*). Nonetheless, such applications had long been known in the art by the December 17, 2024 priority date, and a POSA would have looked to the prior art for guidance as to specific techniques for extending the teachings of Spindler-Long to such prior transactions. EX1003, ¶256. Anderson is such a reference.

Like Spindler, Anderson recognizes that a cumbersome user experience may frustrate users and prevent users from completing an online transaction and thus attempts to “increase[] the ease and efficiency of commerce payment” for online consumers. EX1007, ¶¶6, 11, 125. A POSA therefore would have recognized not only that poor user experiences reduce users’ willingness to transact, as taught by Spindler, but also that they may cause users to abandon transactions altogether, as taught by Anderson. EX1003, ¶257.

Anderson’s approach to solving the problem of abandoned transactions is similar to Spindler’s computer system. EX1003, ¶258. In particular, Anderson’s approach centers on an application in which a user selects items to be placed into a “virtual shopping cart.” EX1007, ¶113. If the shopping cart is abandoned, Anderson’s application sends a text message to the user that “include[s] a selectable buy option ... that allows the user to complete the abandoned transaction” when the user selects the link in the message. EX1007, ¶¶126-128; EX1003, ¶258.

A POSA would have been motivated to incorporate this teaching into Spindler-Long for the predictable result of customizing and sending transaction information to a user based not only on *future* possible transactions of interest (e.g., upcoming events) as in Spindler, but also in response to *past* possible transactions (e.g., an abandoned shopping cart) as in Anderson. EX1003, ¶259.

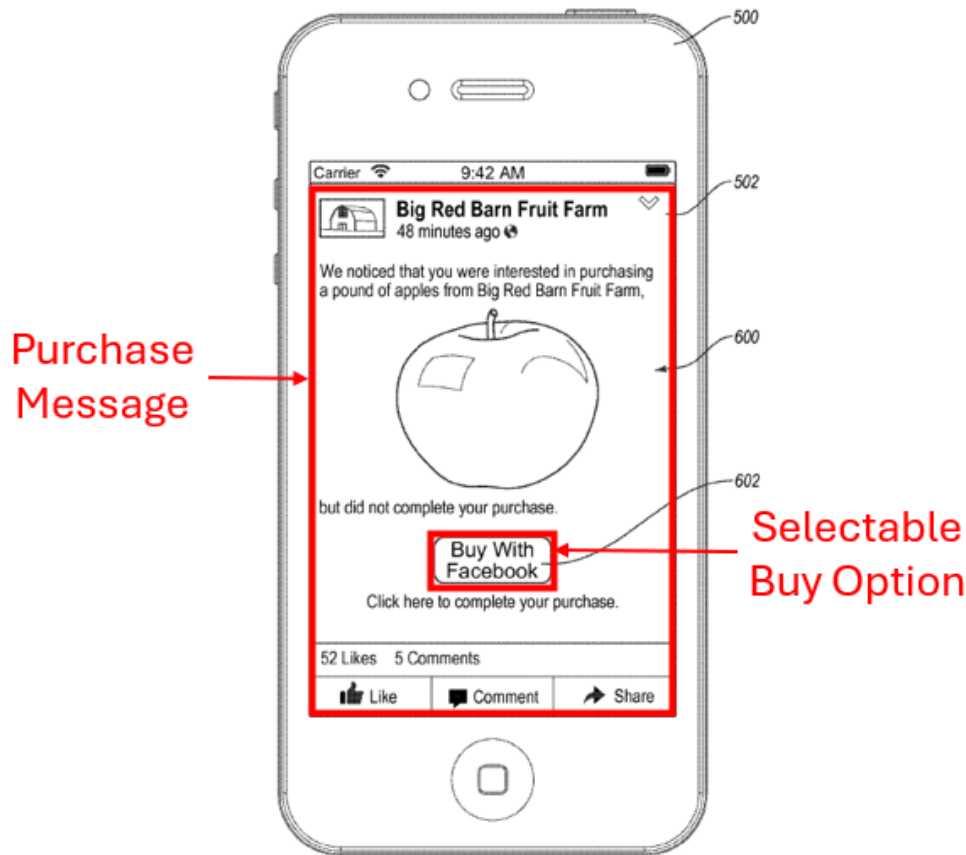
A POSA would have had a reasonable expectation of success in making this modification because it would have involved only the routine application of a known content generation and messaging scheme (e.g., Spindler-Long’s text message with a deeplink to complete a transaction) to Anderson’s specific, well-known abandoned shopping cart scenario. EX1007, ¶125; EX1003, ¶260. Anderson describes sending similar messages, including customized content, to a user in a specific application (e.g., an abandoned shopping cart) in the same way as Spindler (e.g., text message). EX1003, ¶260. A POSA would have understood that Spindler’s customized second document and text messages could readily be generated in the case of an abandoned virtual shopping cart, as explicitly taught by Anderson. *Id.*

A POSA would have understood that Anderson’s application would have provided a user with “another opportunity to complete the purchase of the items” in an abandoned shopping cart and provided merchants an opportunity to recapture abandoned transactions. EX1007, ¶126; EX1003, ¶261. A POSA would have also understood that these benefits could be realized in Spindler-Long simply by extending Spindler’s technique to also generate and send customized content in the case of recognizing an abandoned virtual shopping cart. EX1003, ¶261.

B. Claims 10, 20, 29

Spindler-Long-Anderson discloses these claims. EX1003, ¶¶263-268.

Anderson describes a network application that “provide[s] for recapturing of abandoned carts.” EX1007, ¶125. When a user adds items to a virtual shopping cart but fails to complete the transaction (“*an online user journey associated with the given transaction*”), Anderson’s application “can store the detailed information in the transaction database 232 as an un-completed transaction.” *Id.*, ¶126. If the user does not complete the transaction, the application “can provide the user with another opportunity to complete the purchase of the items in the cart” by “send[ing] a purchase message to the user.” *Id.*, ¶¶126-127. The message may “include details of items in the cart that was abandoned (name of items, price of items, etc.)” as well as “a selectable buy option ... that allows the user to complete the abandoned transaction.” *Id.*, ¶127, FIG. 6; EX1003, ¶264.



EX1007, FIG. 6 (annotated).

Activating the selectable buy option may return the user to the earlier virtual shopping cart (second user interface 508). EX1007, ¶¶113, 128, FIG. 5B; EX1003, ¶265.

Anderson's selectable buy option allows the user to complete the purchase of items previously added to the virtual cart (*"enabl[ing] the user to resume [the] online journey"*). EX1007, ¶¶127-128; EX1003, ¶266. Anderson's act of online shopping by selecting items to form the virtual shopping cart corresponds to the claimed *"online user journey,"* which is described in the '799 patent as "shopping, browsing, form filling, searching, or the like," and therefore the selectable buy

option (“*the at least one actionable item*”) also is “*associated with an online user journey*.” EX1001, 38:12-16; EX1003, ¶266.

In Spindler-Long-Anderson, in response to determining that a virtual shopping cart has been abandoned as taught by Anderson, the Spindler-Long computer generates a customized second document (e.g., a “*second document*”) listing the items in the abandoned shopping cart and then sends a message to the user with a link to the customized second document. The customized second document allows the user to “*resume an online user journey associated with the given transaction*” by completing the transaction. Section IX.A; EX1003, ¶267.

X. GROUND 2C: SPINDLER-LONG-WANG-BOGINENI RENDERS OBVIOUS CLAIMS 2-5, 7, 11, 13-15, 17, 21, 23-26, 30.

A. Motivation to Combine

A POSA would have been motivated to further modify Spindler-Long in view of Wang to use machine learning classification, scheduling, and delivery recited by these dependent claims. EX1003, ¶¶269-282.

Spindler, Long, and Wang are in the same field of endeavor as each other and the problem addressed by the ’799 patent (e.g., facilitating e-commerce via messages to mobile devices) and are thus analogous art. Section VIII.A; EX1014, ¶12; EX1003, ¶270.

Spindler-Long teaches a technique for dynamically generating customized content and sending the content to a user’s mobile device using deeplinks. Section

VIII.A. Spindler-Long does not disclose the well-known use of machine learning to classify, schedule, and deliver text messages, such as marketing messages for e-commerce. EX1003, ¶271. Further, machine learning techniques were known to provide many benefits, such as providing more relevant content for subscribers, better targeting of potential transactions to subscribers, and improved engagement and reaction rates. EX1014, ¶¶46-48 (relevancy threshold), 40-43 (targeting relevant user group), 53 (adjusting relevancy levels); EX1003, ¶271. Thus, a POSA would have been motivated to incorporate such well-known machine learning techniques into Spindler-Long, and would have looked to the prior art for guidance as to specific techniques to do so. EX1003, ¶271. Wang is such a reference.

Wang teaches “[m]essage distribution platforms may strive to improve the experience of clients and users involved in the message distributions through the platform,” using e.g., “[t]echniques for machine learning a message distribution platform.” EX1014, ¶¶13-14. Wang’s platform uses “various data regarding a user relevant to on-line shopping activities” to determine “a relevancy level between a user and an advertisement content.” *Id.*, ¶¶17, 48. Users may be grouped together and scheduled to receive delivery of one or more advertisements based on the relevancy level. *Id.*, ¶¶39, 41. In addition, Wang “determine[s] an adjusted grouping criterion to form a new target user group,” and the “relevancy score threshold of each advertisement item” may “dynamically adjust.” *Id.*, ¶¶55, 59.

A POSA would have been motivated to further modify Spindler-Long in view of Wang for the predictable result of an e-commerce technique that better optimizes advertising messages sent to users. EX1014, ¶13. Spindler teaches providing event information to subscribers via a mobile device. EX1006, ¶¶11, 30. Wang teaches providing advertising messages to users of mobile devices. EX1014, ¶49. A POSA would have realized that, like in Wang, Spindler's event information could be scheduled and delivered using a machine learning algorithm, to thereby optimize the messages sent to the subscribers in the system of Spindler-Long. EX1003, ¶273.

A POSA would have had a reasonable expectation of success in making this modification because it would have involved only the application of Wang's use of machine learning and its scheduling and distribution scheme, which Wang specifically describes as application to mobile devices, to the subscription-based system described by Spindler. EX1014, ¶¶49, 77; EX1003, ¶274.

In Spindler-Long-Wang, a POSA would have been motivated to use Wang's machine-learning techniques to determine "a relevancy level" between users and advertisement content, identify target user groups and schedule delivery of messages to those groups. EX1014, ¶¶41-42, 48. A POSA would have understood that applying those techniques to the Spindler-Long system would improve user and client experience in message distribution. *Id.*, ¶13; EX1003, ¶275.

In addition, the claims also recite limitations related to RCS messages. As explained above, such RCS messages are rendered obvious by Spindler. Section VIII.C; EX1003, ¶276. To the extent Patent Owner argues that Spindler does not teach or suggest RCS messages, Bogineni does. A POSA would have been motivated to modify Spindler-Long-Wang in view of Bogineni to include RCS messages. EX1003, ¶277.

To start, Bogineni is in the same field of endeavor as the '799 patent, Spindler, Long, and Wang (e.g., mobile device communication), and is thus analogous art. *Compare* EX1009, 1:6-7, 1:47-2:22, *with* EX1001, Abstract, 5:46-48; EX1006, ¶30; EX1013, 2:48-51; EX1014, ¶¶14-15; EX1003, ¶278.

In Spindler-Long-Wang, the text messages sent to a user “may include a[n SMS] message.” EX1006, ¶34. However, Spindler does not discuss any details about how these messages would be implemented. EX1003, ¶279. As explained above, one well-known technique for sending messages to mobile devices (like Spindler’s electronic device) is via RCS messages, as taught by Bogineni. Section VI.A; EX1003, ¶280. A POSA would have been motivated to implement RCS messages as the specific text message type used for the Spindler-Long-Wang text messages to provide the additional functionality available with RCS messages. *Id.*

Similar to Balasubramanian, Spindler’s electronic devices, hosting computer, and cloud-based computer can be implemented as computer systems and

the network can be the Internet. EX1006, ¶¶30-31, 80. Thus, a POSA would have had a reasonable expectation of success in further modifying Spindler-Long-Wang in view of Bogineni for the same reasons discussed in Section VI.A above. EX1003, ¶281.

The combination would merely amount to combining prior art elements according to known methods to yield the predictable (yet improved) result of sending text messages having the additional functionality available with RCS messages. EX1009, 1:9-12; EX1003, ¶282.

B. Claim 2

Spindler-Long-Wang-Bogineni renders obvious claim 2. EX1003, ¶¶283-287.

Spindler-Long-Wang-Bogineni teaches “*the message comprises [an RCS] message.*” EX1003, ¶284. In the combination, Spindler’s “message” to the subscriber’s electronic device (“*the message*” comprising “*a link to the second document*”) is specifically transmitted as “*an RCS message,*” as taught by Bogineni, to provide the additional functionality RCS messages provide. *Id.*; Section X.A. When Spindler’s message is sent as an RCS message, it can similarly include the deeplinks taught by Long. EX1003, ¶284.

Spindler-Long-Wang-Bogineni renders obvious that the message is “*provided to the electronic address according to a schedule.*” EX1003, ¶285.

Wang describes a technique for using machine learning in a message distribution system in which a message is scheduled for delivery “to users of a user group.” EX1014, Title, Abstract, ¶50. Wang’s delivery schedule specifies a “delivery manner,” which “may include a time frame and a display slot for delivering the advertisement item to a user of the target user group.” *Id.*, ¶50. A “load balancing unit 112 causes the advertisement to be delivered to users of the target user group through relevant application(s) based on the received delivery schedule.” *Id.*, ¶51. Wang further describes that the “advertisement item” may be a message delivered to a user’s “Mobile Computing Device 210-3.” *Id.*, ¶49. In Spindler-Long-Wang-Bogineni, the RCS text messages of Spindler-Long-Bogineni would be delivered to the user’s mobile computing device (e.g., a smart phone) according to a predetermined schedule, as taught by Wang. EX1003, ¶285.

Spindler-Long-Wang-Bogineni renders obvious that the schedule is “*generated based at least in part on a determined classification of the user.*” EX1003, ¶286. Wang further describes that the scheduling of messages may be to “a target group of users” that is “determine[d] based on a grouping criterion.” EX1014, ¶41. Wang’s “grouping criterion” “may include a threshold on a relevancy level or a relevancy score of a user to a content of the advertisement item.” *Id.* Such a relevancy level may be based, for example, on a user’s “historical shopping information.” *Id.*, ¶66. Thus, Wang teaches a machine learning system

that determines classifications of users and, based on that classification, generates a delivery schedule for advertisement messages. EX1003, ¶286. In the combination, Spindler's messages are delivered according to Wang's scheduling and delivery criteria.

C. Claim 3

Spindler-Long-Wang-Bogineni renders obvious claim 3. EX1003, ¶¶288-290.

Wang teaches "*the classification of the user comprises criteria corresponding to an application, a website, or a service associated with the electronic address.*" In Wang, information about the user's past shopping behavior/experience is used to "determine the user's preferences with respect to on-line shopping." EX1014, ¶63. Wang's "past shopping behavior" that relates to a user's preferences for "on-line shopping" is "*criteria corresponding to ... a website.*" EX1003, ¶289. And, since the preferences are specific to the user, they would be "*associated with the electronic address*" that is a telephone number of the user. *Id.*

D. Claim 4

Spindler-Long-Wang-Bogineni renders obvious claim 4. EX1003, ¶¶291-294.

Wang “collect[s] information regarding the user’s past shopping behavior/experience.” EX1014, ¶63. In addition, Wang “monitor[s] a total amount of user reactions to the advertisement item,” such as user clicks on an advertisement (“*a message recipient that has selected a link provided by the system to the electronic address, but has not completed a transaction*”). *Id.*, ¶53. Other user reactions, such as “user enquiries in relation to the advertisement content” and “the actual number of purchases of the advertised product” (“*a message recipient that has selected a link provided by the system to the electronic address and completed at least one prior transaction*”) may also be recorded. *Id.*, ¶30. Based on such user reactions, Wang “adjusts a grouping criterion and/or a delivery manner” to, for example, form “a new target group of users” (“*the classification of the user*”) by changing “the relevancy threshold to include more users into the new target user group.” *Id.*, ¶¶54-55. Thus, Wang teaches monitoring views, clicks, and purchases of an advertisement item to determine an updated classification scheme for users. EX1003, ¶292.

E. Claim 5

Spindler-Long-Wang-Bogineni renders obvious claim 5. EX1003, ¶¶295-298.

Spindler-Long-Wang-Bogineni renders obvious that “*the message comprises [an RCS] message.*” Sections VIII.C, X.A; EX1003, ¶296.

For the reasons explained, Spindler-Long-Wang-Bogineni renders obvious the remaining limitations of claim 5. Section VIII.C.

F. Claim 7

Spindler-Long-Wang-Bogineni renders obvious claim 7. EX1003, ¶¶299-301.

Spindler-Long-Wang-Bogineni renders obvious the use of RCS messages. EX1003, ¶300. As explained in Ground 1B (Section VI.E), Bogineni teaches RCS messages including the claimed “*send and receive indicators*,” and a POSA would have understood that Bogineni’s indicators “*depict[] real time typing...*,” because this is part of the RCS standard. EX1003, ¶300. Therefore, because Spindler-Long-Wang-Bogineni implements Spindler’s text messages as RCS messages, the combination renders obvious claim 7. *Id.*

G. Claim 11

Spindler-Long-Wang-Bogineni renders obvious claim 11. EX1003, ¶¶302-306.

Spindler’s “customized document is tailored, at a particular time, to the specific interests of the individual or subscriber customer” to be “more relevant to the individual or subscriber customer and immediately actionable.” EX1006, ¶40; *id.*, ¶34. Thus, Spindler’s customized second document comprises “*user-targeted content*.” EX1003, ¶303.

In addition, the content in Spindler's customized second document is "*based on one or more prior engagement characteristics associated with the electronic address.*" Spindler's customized second document is generated based on a user's indication of "a willingness to receive one or more messages" and a specification of "a telephone number associated with electronic device 110-1." EX1006, ¶32. Spindler also describes that the transactions of interest to the subscriber "may be associated with an entity" and the "subscriber may have a subscription with the entity." *Id.*, ¶38. Spindler's willingness to receive messages, specification of a telephone number, and previous subscription with an entity are "*on one or more prior engagement characteristics associated with the electronic address.*" EX1003, ¶304.

In Spindler-Long-Wang-Bogineni, a POSA would have found it obvious to modify Spindler's customized second document so that "*the prior engagement characteristics are determined using machine learning,*" as taught by Wang. Section X.A. Wang uses machine learning to classify a user according to the "user's past shopping behavior/experience" and describes adjusting relevance scores, regrouping users, and adjusting "the delivery manner/display slots" based on "*prior engagement characteristics*" such as clicks, purchases, and views. EX1014, ¶¶31, 34, 53-55, 63. This allows for "dynamically adjust[ing] the target user group and/or delivery manners to potentially increase or decrease the exposure

of the advertisement.” *Id.*, ¶35. Thus, it would have been obvious to a POSA to adjust Spindler’s customized second document, which is “tailored” to an individual user’s interests, EX1006, ¶40, by using machine learning to adjust the user classification and scheduling based on clicks, purchases, and views, as taught by Wang. EX1003, ¶305. As explained by Dr. Jansen, such a combination would result in a “*second customized document*” that is even more relevant to the user’s actual interests, as measured based on the user’s reactions. *Id.* And a POSA would have had a reasonable expectation of success in modifying Spindler’s second customized document in view of Wang because such modification would require only, for example, monitoring a user’s clicking on the links already supplied in Spindler’s text messages. *Id.*

H. Claims 13-15, 17, 21, 23-26, 30

Spindler-Long-Wang-Bogineni discloses or renders obvious these claims for the same reasons as respectively explained for claims 2-3, 5, 7, and 11.

Sections X.B-X.C, X.E-X.G; EX1003, ¶307.

XI. GROUNDS FOR STANDING (37 C.F.R. § 42.104(A))

Petitioner certifies that the ’799 patent is available for IPR and Petitioner is not barred or estopped from requesting IPR of any ’799 patent claim.

XII. MANDATORY NOTICES (37 C.F.R. § 42.8(A)(1))

Real Party-in-Interest (37 C.F.R. § 42.8(b)(1)): The real party-in-interest is Salesforce, Inc.

Related Matters (37 C.F.R. § 42.8(b)(2)): The '799 patent is at issue in pending litigations *IQX Corp. v. Salesforce, Inc.*, Civil Action No. 7:26-cv-00213 (W.D. Tex.), filed May 28, 2026, and *IQX Corp. v. Intuit Inc.*, Civil Action No. 2-26-cv-00351 (E.D. Tex.), filed April 30, 2026.

U.S. Patent Nos. 11,876,924; 12,200,165; and 12,438,978 are also at issue in one or both of the above litigation proceedings and are being challenged in the below concurrently filed IPRs:

Patent No.	Case No.
11,876,924	IPR2026-00476
12,200,165	IPR2026-00477
12,438,978	IPR2026-00478

The '799 patent claims the benefit of U.S. Patent Nos. 12,200,165; 12,126,752; 11,876,924; and 11,765,262.

U.S. Patent Nos. 12,647,506 and 12,438,978, and pending U.S. Patent Application Nos. 19/680,798 and 19/645,697, claim the benefit of the '799 patent.

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Service Information (37 C.F.R. § 42.8(b)(4)): Please direct all correspondence regarding this Petition to counsel at the above addresses and PTAB@sternekessler.com. Petitioner consents to service by email at the addresses above.

XIII. CONCLUSION

The challenged claims are unpatentable and IPR is warranted.

Respectfully submitted,

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APPENDIX A: LISTING OF CLAIMS

Claim 1

Element	
[1.P]	A system comprising:
[1.A]	a processor; and
[1.B]	memory configured to store program instructions, wherein, when executed by the processor, the program instructions cause the processor to perform operations comprising:
[1.C]	providing a hosted input field for inclusion in a first document associated with a third party;
[1.D.1]	receiving, information indicating activation of the hosted input field in the first document,
[1.D.2]	wherein the information comprises an electronic address associated with an electronic device and an indication of a willingness to receive one or more messages;
[1.E]	generating, a second document that includes information about one or more events of interest for a user associated with the electronic address, the second document being customized to the user;
[1.F]	sending a message to the electronic address, wherein the message comprises a link to the second document, the link being configured to enable the user to access the second document to execute one or more transactions associated with the one or more events; and
[1.G.1]	in response to determining activation of the link has occurred, causing provision of the second document to the electronic address,
[1.G.2]	wherein the second document is configured to facilitate completion of a given transaction in the one or more transactions.

Claim 2

Element	
[2]	The system of claim 1, wherein the message comprises a Rich Communication Services (RCS) message provided to the electronic address according to a schedule generated based at least in part on a determined classification of the user.

Claim 3

Element	
[3]	The system of claim 2, wherein the classification of the user comprises criteria corresponding to an application, a website, or a service associated with the electronic address.

Claim 4

Element	
[4.P]	The system of claim 2, wherein the classification of the user indicates whether the user is:
[4.A]	a message recipient that has selected a link provided by the system to the electronic address and completed at least one prior transaction;
[4.B]	a message recipient that has selected a link provided by the system to the electronic address, but has not completed a transaction; or
[4.C]	a message recipient that has not selected a link provided by the system to the electronic address.

Claim 5

Element	
[5.P]	The system of claim 1, wherein the message comprises a Rich Communication Service (RCS) message and the operations further comprise:
[5.A]	requesting and receiving authorization data corresponding to an identity of the user before causing provision of the second document to the electronic address.

Claim 6

Element	
[6]	The system of claim 1, wherein the message is an Enhanced Messaging Service (EMS) message.

Claim 7

Element	
[7]	The system of claim 1, wherein the message comprises content including send and receive indicators provided in a user interface of a mobile computing device associated with the electronic address, the

	indicators depicting real time typing between a message provider and the mobile computing device or between another computing device and the mobile computing device.
--	---

Claim 8

Element	
[8.P]	The system of claim 1, wherein the link is further configured to:
[8.A]	allow users other than the user to access the second document to browse the second document while prohibiting execution of the one or more transactions through the link for the users other than the user.

Claim 9

Element	
[9]	The system of claim 1, wherein the link is further configured with a security layer to provide augmented access or navigation attributes to the user.

Claim 10

Element	
[10]	The system of claim 1, wherein the link is further configured to enable the user to resume an online user journey associated with the given transaction.

Claim 11

Element	
[11]	The system of claim 1, wherein the second document comprises user-targeted content based on one or more prior engagement characteristics associated with the electronic address, wherein the prior engagement characteristics are determined using machine learning.

Claim 12

Element	
[12.P]	A computer-implemented method comprising:
[12.A]	providing a hosted input field for inclusion in a first document associated with a third party;

[12.B]	receiving, information indicating activation of the hosted input field in the first document, wherein the information comprises an electronic address associated with an electronic device and an indication of a willingness to receive one or more messages;
[12.C]	generating, a second document that includes information about one or more events of interest for a user associated with the electronic address, the second document being customized to the user;
[12.D]	sending a message to the electronic address, wherein the message comprises a link to the second document, the link being configured to enable the user to access the second document to execute one or more transactions associated with the one or more events; and
[12.E.1]	in response to determining activation of the link has occurred, causing provision of the second document to the electronic address,
[12.E.2]	wherein the second document is configured to facilitate completion of a given transaction in the one or more transactions.

Claim 13

Element	
[13]	The computer-implemented method of claim 12, wherein the message comprises a Rich Communication Services (RCS) message provided to the electronic address according to a schedule generated based at least in part on a determined classification of the user.

Claim 14

Element	
[14]	The computer-implemented method of claim 13, wherein the classification of the user comprises criteria corresponding to an application, a website, or a service associated with the electronic address.

Claim 15

Element	
[15.P]	The computer-implemented method of claim 12, wherein the message comprises a Rich Communication Service (RCS) message and the method further comprises:
[15.A]	requesting and receiving authorization data corresponding to an identity of the user before causing provision of the second document to the electronic address.

Claim 16

Element	
[16]	The computer-implemented method of claim 12, wherein the message is an Enhanced Messaging Service (EMS) message.

Claim 17

Element	
[17]	The computer-implemented method of claim 12, wherein the message comprises content including send and receive indicators provided in a user interface of a mobile computing device associated with the electronic address, the indicators depicting real time typing between a message provider and the mobile computing device or between another computing device and the mobile computing device.

Claim 18

Element	
[18.P]	The computer-implemented method of claim 12, wherein the link is further configured to:
[18.A]	allow users other than the user to access the second document to browse the second document while prohibiting execution of the one or more transactions through the link for the users other than the user.

Claim 19

Element	
[19]	The computer-implemented method of claim 12, wherein the link is further configured with a security layer to provide augmented access or navigation attributes to the user.

Claim 20

Element	
[20]	The computer-implemented method of claim 12, wherein the link is further configured to enable the user to resume an online user journey associated with the given transaction.

Claim 21

Element	
[21]	The computer-implemented method of claim 12, wherein the second document comprises user-targeted content based on one or more prior engagement characteristics associated with the electronic address, wherein the prior engagement characteristics are determined using machine learning.

Claim 22

Element	
[22.P]	A non-transitory computer-readable storage medium for use in conjunction with a processor, the computer-readable storage medium storing program instructions that, when executed by the processor, cause the processor to carry out operations comprising:
[22.A]	providing a hosted input field for inclusion in a first document associated with a third party;
[22.B]	receiving, information indicating activation of the hosted input field in the first document, wherein the information comprises an electronic address associated with an electronic device and an indication of a willingness to receive one or more messages;
[22.C]	generating, a second document that includes information about one or more events of interest for a user associated with the electronic address, the second document being customized to the user;
[22.D]	sending a message to the electronic address, wherein the message comprises a link to the second document, the link being configured to enable the user to access the second document to execute one or more transactions associated with the one or more events; and
[22.E.1]	in response to determining activation of the link has occurred, causing provision of the second document to the electronic address,
[22.E.2]	wherein the second document is configured to facilitate completion of a given transaction in the one or more transactions.

Claim 23

Element	
[23]	The non-transitory computer-readable storage medium of claim 22, wherein the message comprises a Rich Communication Services (RCS) message provided to the electronic address according to a schedule generated based at least in part on a determined classification of the user.

Claim 24

Element	
[24]	The non-transitory computer-readable storage medium of claim 23, wherein the classification of the user comprises criteria corresponding to an application, a website, or a service associated with the electronic address.

Claim 25

Element	
[25.P]	The non-transitory computer-readable storage medium of claim 22, wherein the message comprises a Rich Communication Service (RCS) message and the operations further comprise:
[25.A]	requesting and receiving authorization data corresponding to an identity of the user before causing provision of the second document to the electronic address.

Claim 26

Element	
[26]	The non-transitory computer-readable storage medium of claim 22, wherein the message comprises content including send and receive indicators provided in a user interface of a mobile computing device associated with the electronic address, the indicators depicting real time typing between a message provider and the mobile computing device or between another computing device and the mobile computing device.

Claim 27

Element	
[27.P]	The non-transitory computer-readable storage medium of claim 22, wherein the link is further configured to:

[27.A]	allow users other than the user to access the second document to browse the second document while prohibiting execution of the one or more transactions through the link for the users other than the user.
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Claim 28

Element	
[28]	The non-transitory computer-readable storage medium of claim 22, wherein the link is further configured with a security layer to provide augmented access or navigation attributes to the user.

Claim 29

Element	
[29]	The non-transitory computer-readable storage medium of claim 22, the link is further configured to enable the user to resume an online user journey associated with the given transaction.

Claim 30

Element	
[30]	The non-transitory computer-readable storage medium of claim 22, wherein the second document comprises user-targeted content based on one or more prior engagement characteristics associated with the electronic address, wherein the prior engagement characteristics are determined using machine learning.

CERTIFICATE OF WORD COUNT (37 C.F.R. § 42.24(d))

1. This Petition for *Inter Partes* Review complies with the type-volume limitation of 14,000 words, comprising 13,986 words, excluding the parts exempted by 37 C.F.R. § 42.24(a)(1).

2. This Petition for *Inter Partes* Review complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman font.

Respectfully submitted,

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Date: September 24, 2016

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CERTIFICATE OF SERVICE (37 C.F.R. §§ 42.6(e)), 42.105(a))

I certify that the above-captioned **PETITION FOR *INTER PARTES***
REVIEW FOR U.S. PATENT NO. 12,368,799 and associated Exhibits 1001-
1007, 1009-1014, 1018, 1021-1022, 1024-1026, 1031-1032, 1034, and 1037-1045
were served in their entireties upon the Patent Owner on September 24, 2026, via
FedEx® Express at the following addresses:

AURORA CONSULTING LLC c/o ASHLEY SLOAT
810 Cottageview Dr., Ste. G10
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