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**Declarations under Rule 4.17:**

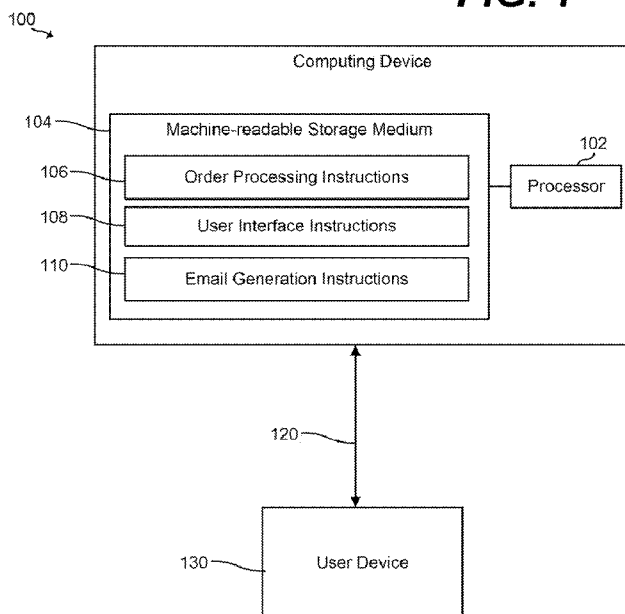
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- (54) Title: CUSTOMIZED EMAIL SUBJECT LINE

**FIG. 1**



- (57) Abstract: Example implementations relate to a customized email subject line. For example, a computing device may include a processor. The processor may receive a request associated with an order. In response to the request, the processor may provide a user interface allowing a user to specify text for a subject line of an email relating to the order. The processor may receive customized text via the user interface and may receive a user input finalizing the order. The processor may send the email relating to the order to an email address of the user, where the subject line of the email includes the customized text.

## **CUSTOMIZED EMAIL SUBJECT LINE**

### **BACKGROUND**

**[0001]** Purchasing goods and/or services online has become a prevalent way for people to shop. When an online purchase is made by a user, the user typically receives an email summarizing and/or confirming the purchase. This may allow a user to determine whether their purchase transaction was successfully completed.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

**[0002]** Some examples of the present application are described with respect to the following figures:

**[0003]** FIG. 1 is a block diagram of an example computing device for sending an email with a customized subject line;

**[0004]** FIG. 2 is a flowchart of an example method for sending an email with a customized subject line;

**[0005]** FIG. 3 is an interface diagram of an example user interface for receiving a customized subject line; and

**[0006]** FIG. 4 is an interface diagram of an example user interface for an email having a customized subject line.

### **DETAILED DESCRIPTION**

**[0007]** As described above, online shopping has become prevalent, allowing users to place online orders for various items and/or services. However, due to this prevalence, phishing attacks associated with fake order confirmations have begun to occur. A phishing attack may be any attempt to acquire sensitive user information for malicious reasons. Phishers executing phishing attacks may send out fake order confirmations in an attempt to lure users to malicious websites that install malware on the users' machines. For example, a phisher may send a fake order confirmation email containing a hyperlink that may appear as if it may lead to a website having additional

information about an order but may actually lead to a malicious website. Because online shopping has become more commonplace, if users do not carefully track what they or their family members have ordered, they may be fooled into clicking on a hyperlink within a fake order confirmation, subjecting users to these phishing attacks.

**[0008]** Examples discussed herein may give a user an opportunity to provide customized text for a subject line of an email associated with an online order. The customized text may be any suitable text that the user wishes to provide. For example, the customized text may be such that it is easily recognizable to, relatable to, and/or personalized for a user and the user's order (e.g., "crock pot for John Doe," "ebook for Jane Doe," etc.). This type of text may make it difficult for phishers to spoof.

**[0009]** In some examples, a computing device associated with an online shopping entity may receive a request associated with an order for a purchase of an item and/or a service. The request associated with the order may be received from a user device of a user. In response to the request, a user interface may be provided that may allow the user to specify text for a subject line of an email relating to the order. Customized text may be received from the user via the user interface provided, and a user input finalizing the order may be received. An email relating to the order may be sent to an email address of the user, where the subject line of the email may include the customized text. The email may be any suitable email relating to the order, such as an email confirming the order, an email providing shipping information about the order (e.g., shipment tracking information, information about when an item shipped, etc.), an email containing a hyperlink to a webpage associated with the order, and the like. The customized text may appear in any number of emails relating to a particular order (e.g., an initial confirmation email, a subsequent email with shipment tracking information, etc.). This customization may allow a user to more quickly identify legitimate emails relating to online orders.

**[0010]** Referring now to the figures, FIG. 1 is a block diagram of an example computing device 100 for sending an email with a customized subject line. Computing device 100 may be a server (e.g., a cloud-based

server) that may receive a request associated with an order of an item and/or a service from a user device 130 of a user. Computing device 100 may receive the request from user device 130 over a network 120, which may be any suitable network, such as an ad hoc network, an intranet, an extranet, a virtual private network (VPN), a local area network (LAN), a wireless LAN (WLAN), a wide area network (WAN), a wireless WAN (WWAN), a metropolitan area network (MAN), a portion of the Internet, a portion of the Public Switched Telephone Network (PSTN), a cellular telephone network, or any other type of network, or a combination of two or more such networks. User device 130 may be any suitable type of computing device that may be used by a user, such as a notebook computer, a desktop computer, an all-in-one system, a tablet computing device, a mobile phone, an electronic book reader, a printing device, or any other electronic device suitable for ordering items and/or services, providing customized subject lines, receiving email, and the like.

**[0011]** Computing device 100 may be, for example, a web-based server, a local area network server, a cloud-based server, a notebook computer, a desktop computer, an all-in-one system, a tablet computing device, a mobile phone, an electronic book reader, a printing device, or any other electronic device suitable for sending an email with a customized subject line. Computing device 100 may include a processor 102 and a machine-readable storage medium 104. Computing device 100 may receive a request associated with an order from a user and may generate an email associated with the order, where the subject line of the email may include customized text provided by the user.

**[0012]** Processor 102 is a tangible hardware component that may be a central processing unit (CPU), a semiconductor-based microprocessor, and/or other hardware devices suitable for retrieval and execution of instructions stored in machine-readable storage medium 104. Processor 102 may fetch, decode, and execute instructions 106, 108, and 110 to control a process of sending an email with a customized subject line. As an alternative or in addition to retrieving and executing instructions, processor 102 may include at

least one electronic circuit that includes electronic components for performing the functionality of instructions 106, 108, 110, or a combination thereof.

**[0013]** Machine-readable storage medium 104 may be any electronic, magnetic, optical, or other physical storage device that contains or stores executable instructions. Thus, machine-readable storage medium 104 may be, for example, Random Access Memory (RAM), an EPROM, an Electrically Erasable Programmable Read-Only Memory (EEPROM), a storage device, an optical disc, and the like. In some examples, machine-readable storage medium 104 may be a non-transitory storage medium, where the term “non-transitory” does not encompass transitory propagating signals. As described in detail below, machine-readable storage medium 104 may be encoded with a series of processor executable instructions 106, 108, and 110 for receiving a request associated with an order; in response to the request, providing a user interface allowing a user to specify text for a subject line of an email relating to the order; receiving customized text via the user interface; receiving a user input finalizing the order; and sending the email relating to the order to an email address of the user, the subject line of the email including the customized text.

**[0014]** Order processing instructions 106 may manage and control the receipt of a request associated with an order. The request may be received from user device 130 over network 120. The order specified by the request may be associated with a purchase of an item(s) and/or service(s). Order processing instructions 106 may receive a user input finalizing the order and may process the order requested in response to a user input finalizing the order. Processing of the order may include performing any functions associated with completing and fulfilling the order. For example, processing the order may include sending a request for the item(s) and/or service(s) to a supplier, taking and processing a payment for the order, managing shipping of the order, and the like.

**[0015]** User interface instructions 108 may manage and control the providing of one or more user interfaces to user device 130 over network 120. The user interfaces provided may be any suitable user interface. For example, user interface instructions 108 may provide a user interface allowing

a user (e.g., a user of user device 130) to specify text for a subject line of an email relating to the order requested. User interface instructions 108 may receive customized text from the user via the user interface provided, where the customized text may be text that is to be displayed within a subject line of emails relating to the order that are sent from computing device 100 to user device 130. In some examples, user interface instructions 108 may also receive a user input finalizing the order via a user interface provided.

**[0016]** Email generation instructions 110 may manage and control the generation and transmission of emails relating to orders. The emails generated and sent may have subject lines that may include any customized text provided by a user and may include any suitable information related to the order. For example, the information provided in the email may include information confirming the order, shipping information associated with the order (e.g., shipment tracking information, information about when an item shipped, etc.), a hyperlink associated with the information about the order, and the like. These emails may be sent in any suitable manner. For example, once an order is finalized, email generation instructions 110 may send an email relating to the order to an email address of a user (e.g., the user of user device 130), where the subject line of the email may include the customized text provided by the user. In some examples, subsequent emails relating to the order may also be sent, where the subsequent emails may also include the customized text provided by the user with respect to the order. For example, a first email having a subject line with the customized text may be sent to provide confirmation of the user's order, and a subsequent email having a subject line with the customized text may be sent to provide shipping information associated with the user's order.

**[0017]** FIG. 2 is a flowchart of an example method 200 for sending an email with a customized subject line. Method 200 may be implemented using computing device 100 of FIG. 1.

**[0018]** Method 200 includes, at 202, receiving a request associated with an order. The order may be associated with a purchase of at least one of an item and/or a service. The request may be any suitable request associated with the order. For example, the request may be a request to view an online

shopping cart, a request to begin the payment process for an order, and the like.

**[0019]** Method 200 also includes, at 204, providing a user interface in response to the request. The user interface may allow a user to specify text for a subject line of an email relating to the order.

**[0020]** Method 200 also includes, at 206, receiving customized text and a user input finalizing the order. In some examples, the customized text and/or the user input finalizing the order may be received via the user interface provided in response to the request.

**[0021]** Method 200 also includes, at 208, processing the order. The order may be processed in any suitable manner such that an order may be completed. For example, processing the order may include taking, verifying, and/or approving payment for the order.

**[0022]** Method 200 also includes, at 210, sending the email relating to the order to an email address of the user. The subject line of the email may include the customized text. The email sent may be any suitable email relating to the order, such as an email confirming the order, an email providing shipping information associated with the order (e.g., shipping confirmation, shipment tracking information, etc.), and the like.

**[0023]** FIG. 3 is an interface diagram of an example user interface 300 for receiving a customized subject line. In some examples, user interface 300 may be provided to a user such that the user may finalize the order requested by the user. For example, user interface 300 may be provided after a user has provided payment information associated with any items and/or services associated with the order. As shown in FIG. 3, user interface 300 may include an order summary summarizing the order and the costs associated with the order. User interface 300 may also include a text box 302 that may be used to enter any text the user wishes to include within the subject lines of emails associated with the order described in user interface 300. For example, a user (e.g., John Doe) may enter the customized subject line "Ink for Jane's printer" into the text box 302 (e.g., to order ink for John Doe's wife, Jane Doe). The user may use the button 304 in user interface 300 to finalize the order,

and the text provided in the text box 302 may appear in any subject lines of emails associated with the related order.

**[0024]** FIG. 4 is an interface diagram of an example user interface 400 for an email having a customized subject line 402. The email shown in user interface 400 may be an email confirming the user's order summarized in user interface 300 of FIG. 3. The email may have a customized subject line 402 that may include the customized text provided by the user (e.g., the text "Ink for Jane's printer" provided by the user in text box 302 of FIG. 3).

**[0025]** Examples provided herein (e.g., methods) may be implemented in hardware, software, or a combination of both. Example systems may include a controller/processor and memory resources for executing instructions stored in a tangible non-transitory medium (e.g., volatile memory, non-volatile memory, and/or machine-readable media). Non-transitory machine-readable media can be tangible and have machine-readable instructions stored thereon that are executable by a processor to implement examples according to the present disclosure.

**[0026]** An example system can include and/or receive a tangible non-transitory machine-readable medium storing a set of machine-readable instructions (e.g., software). As used herein, the controller/processor can include one or a plurality of processors such as in a parallel processing system. The memory can include memory addressable by the processor for execution of machine-readable instructions. The machine-readable medium can include volatile and/or non-volatile memory such as a random access memory ("RAM"), magnetic memory such as a hard disk, floppy disk, and/or tape memory, a solid state drive ("SSD"), flash memory, phase change memory, and the like.

**Claims**

What is claimed is:

1. A computing device, comprising:  
a processor to:  
receive a request associated with an order;  
in response to the request, provide a user interface allowing a user to specify text for a subject line of an email relating to the order;  
receive customized text via the user interface;  
receive a user input finalizing the order; and  
send the email relating to the order to an email address of the user, the subject line of the email including the customized text.
2. The computing device of claim 1, wherein the order is associated with a purchase of an item.
3. The computing device of claim 1, wherein the order is associated with a purchase of a service.
4. The computing device of claim 1, wherein the email relating to the order is an email confirming the order.
5. The computing device of claim 1, wherein the email relating to the order is an email providing shipping information associated with the order.
6. The computing device of claim 1, wherein the email includes a hyperlink associated with information about the order.
7. The computing device of claim 1, wherein the processor is further to send a subsequent email having a subsequent subject line that includes the customized text.

8. A method, comprising:  
receiving, by a computing device, a request associated with an order;  
providing, by the computing device, a user interface in response to the request, the user interface allowing a user to specify text for a subject line of an email relating to the order;  
receiving, by the computing device via the user interface, customized text and a user input finalizing the order;  
processing, by the computing device, the order; and  
sending, by the computing device, the email relating to the order to an email address of the user, the subject line of the email including the customized text.

9. The method of claim 8, wherein the order is associated with a purchase of at least one of an item or a service.

10. The method of claim 8, wherein the email relating to the order is an email confirming the order.

11. The method of claim 8, wherein the email relating to the order is an email providing shipping information associated with the order.

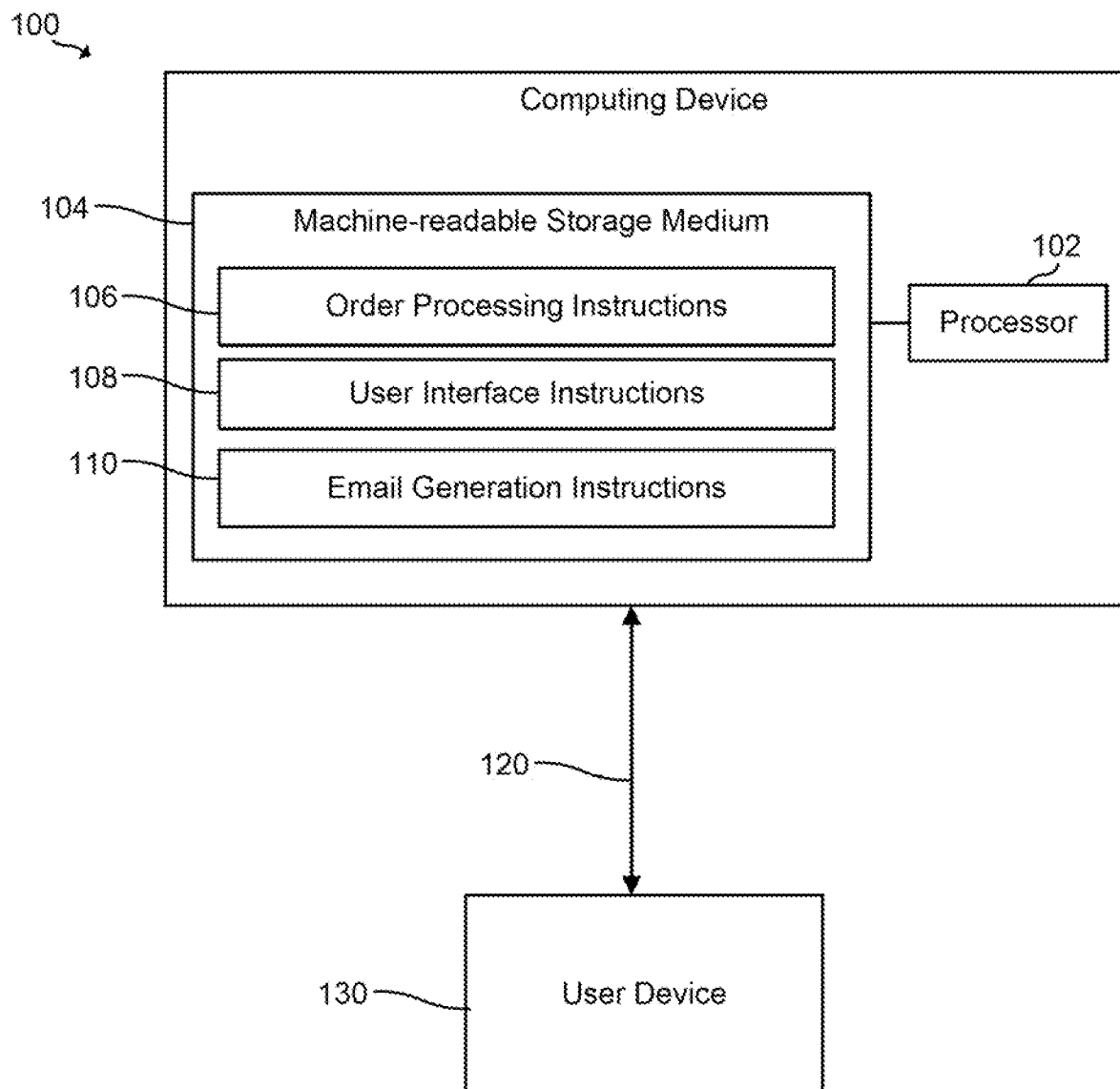
12. A non-transitory machine-readable storage medium storing instructions that, when executed by at least one processor of a computing device, cause the computing device to:  
receive a request to place an order for an item or a service;  
in response to the request, provide a user interface allowing a user to specify text for a subject line of an email relating to the order;  
receive customized text via the user interface;  
receive a user input finalizing the order; and  
send the email relating to the order to an email address of the user, wherein the email confirms the order and the subject line of the email includes the customized text.

13. The non-transitory machine-readable storage medium of claim 12, wherein the instructions further cause the computing device to send a subsequent email providing shipping information associated with the order, wherein the subsequent email has a subsequent subject line that includes the customized text.

14. The non-transitory machine-readable storage medium of claim 12, wherein the email includes a hyperlink associated with information about the order.

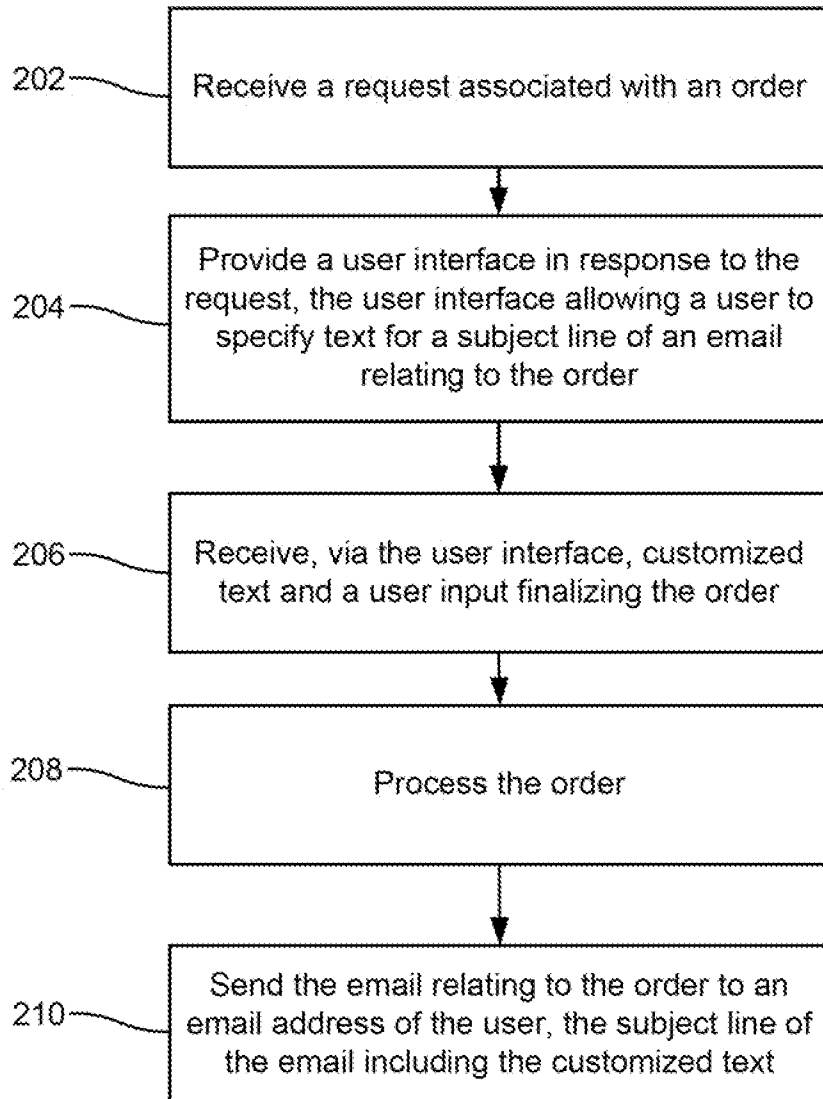
15. The non-transitory machine-readable storage medium of claim 12, wherein the instructions further cause the computing device to process the order.

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**FIG. 1**

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200 →

**FIG. 2**

300

304

**Place Your Order**

**Order Summary**

|                                |                |
|--------------------------------|----------------|
| Items:                         | \$47.92        |
| Shipping & handling:           | \$6.01         |
| <hr/>                          |                |
| Total before tax:              | \$53.93        |
| Estimated tax to be collected: | \$4.72         |
| Total:                         | \$58.65        |
| <hr/>                          |                |
| <b>Order total:</b>            | <b>\$58.65</b> |

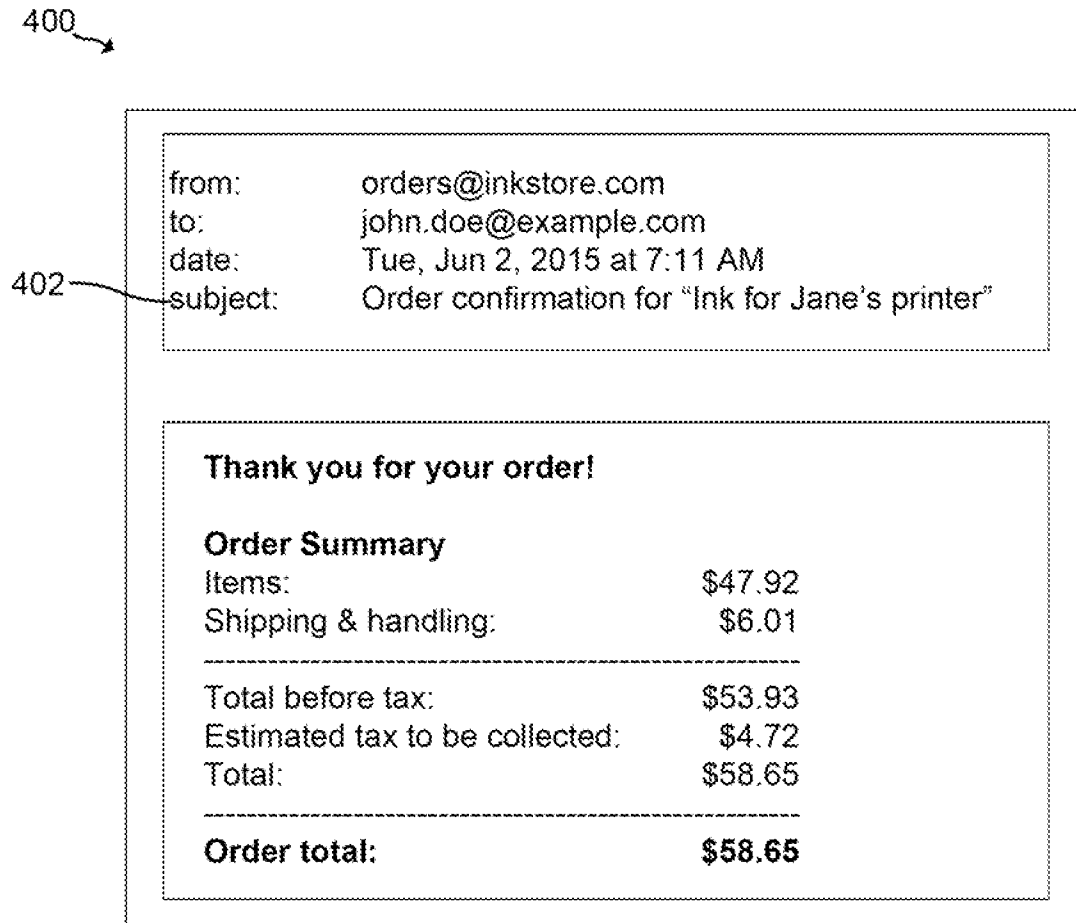
**Customized subject line:**

302

*Ink for Jane's printer*

**FIG. 3**

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**FIG. 4**

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2015/034036****A. CLASSIFICATION OF SUBJECT MATTER****G06Q 50/32(2012.01)i, G06F 17/21(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06Q 50/32; G06F 15/16; G06F 21/24; H04L 9/32; G06F 13/00; G06F 3/01; G06F 17/21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: order, email, subject line, customized text

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                                             | Relevant to claim No. |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y         | US 2013-0024924 A1 (SCOTT J. BRADY et al.) 24 January 2013<br>See abstract, paragraphs [0021], [0030]-[0031], [0034]-[0035], [0047], claims 1, 7, 9, 16-17 and figures 2-3, 6. | 1-15                  |
| Y         | JP 2013-073457 A (MITSUBISHI ELECTRIC INFORMATION SYSTEMS CORP.) 22 April 2013<br>See paragraphs [0020], [0100]-[0102], claim 1 and figure 1.                                  | 1-15                  |
| A         | KR 10-0495282 B1 (NHN CORP.) 14 June 2005<br>See abstract, claims 1, 3-5 and figures 2, 4-6.                                                                                   | 1-15                  |
| A         | US 2011-0265016 A1 (DAVID KOOPMAN) 27 October 2011<br>See abstract, claims 1-3, 20, 27 and figures 1-4, 14-15.                                                                 | 1-15                  |
| A         | US 2003-0225841 A1 (SANG-HERN SONG et al.) 04 December 2003<br>See abstract, claims 1-2, 14 and figures 2-3b.                                                                  | 1-15                  |



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

17 March 2016 (17.03.2016)

Date of mailing of the international search report

**22 March 2016 (22.03.2016)**

Name and mailing address of the ISA/KR

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2015/034036**

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s)                               | Publication<br>date                    |
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