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(54) **SYSTEM AND METHOD FOR MAPPING IDENTIFICATION CODES**

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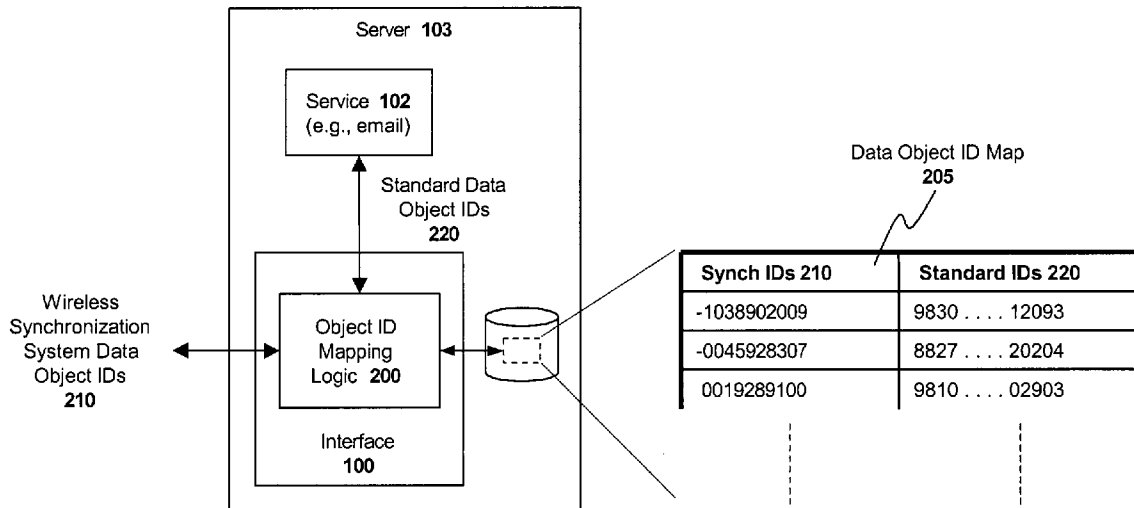
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(57) **ABSTRACT**

According to one embodiment, a system is disclosed. The system includes a wireless data processing device and a server communicatively coupled to the wireless device. The server comprises mapping logic that translates data objects having a first set of identification (ID) codes to a second set of ID codes for transmission to the wireless device to maintain synchronization of data objects with the wireless device over a wireless network.

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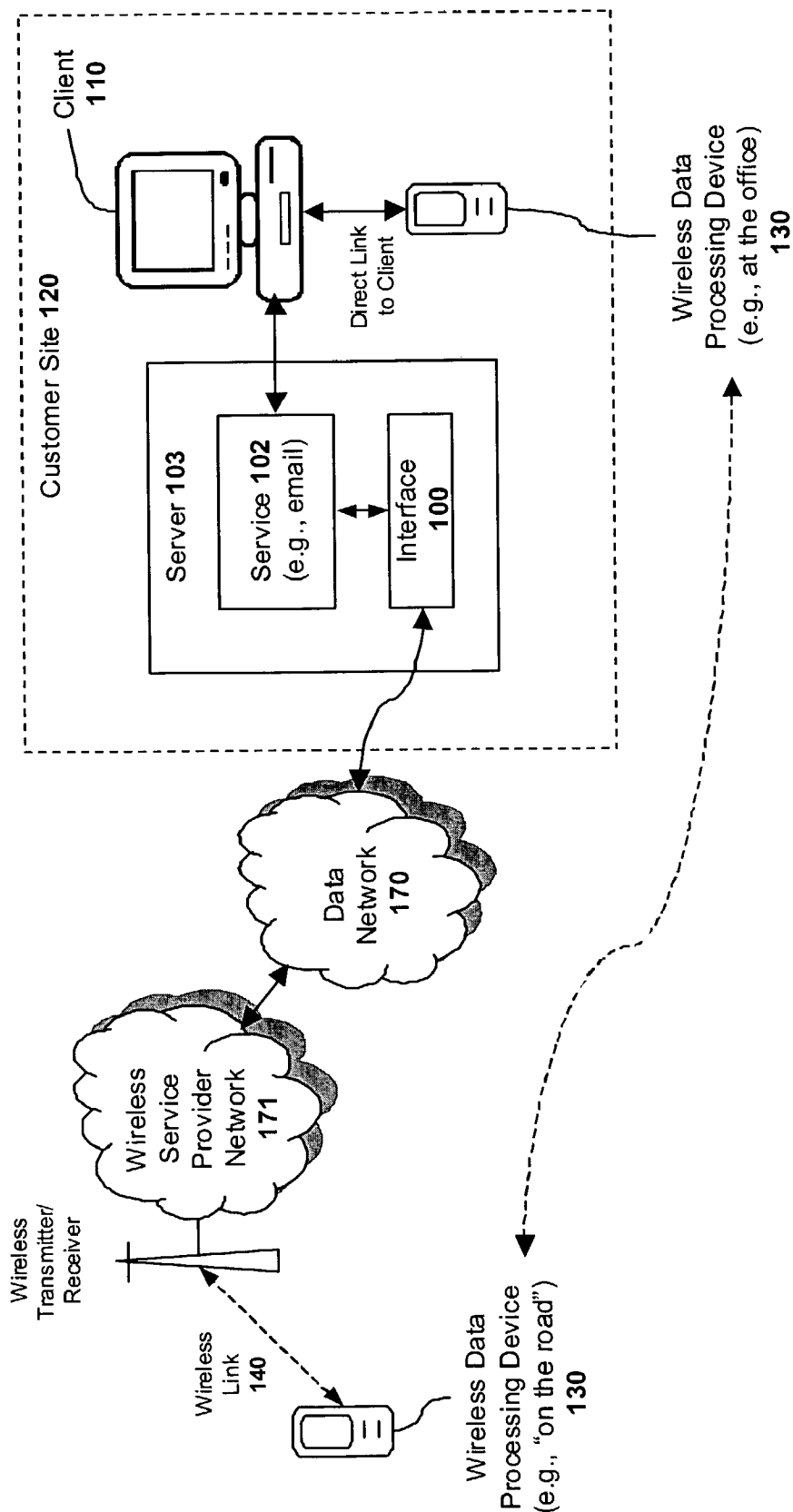


FIG. 1

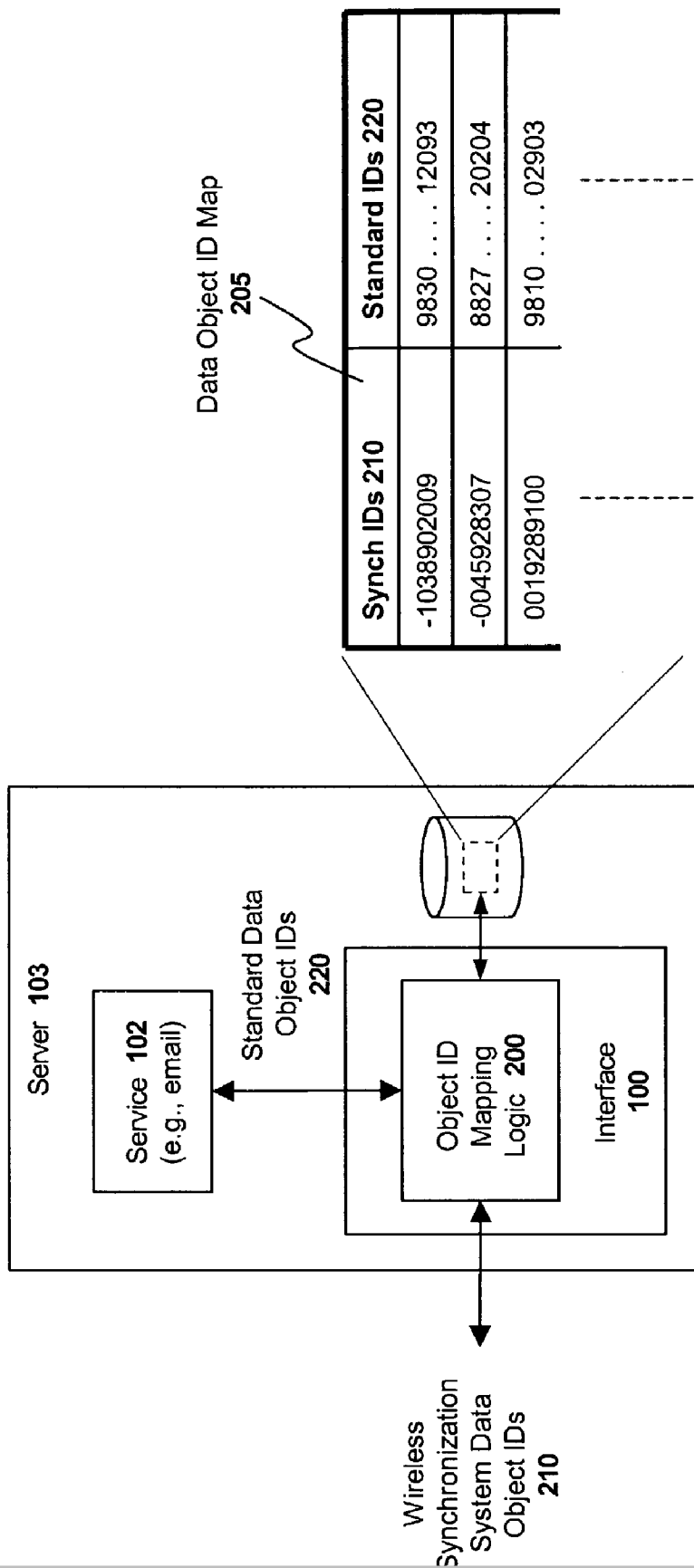


FIG. 2

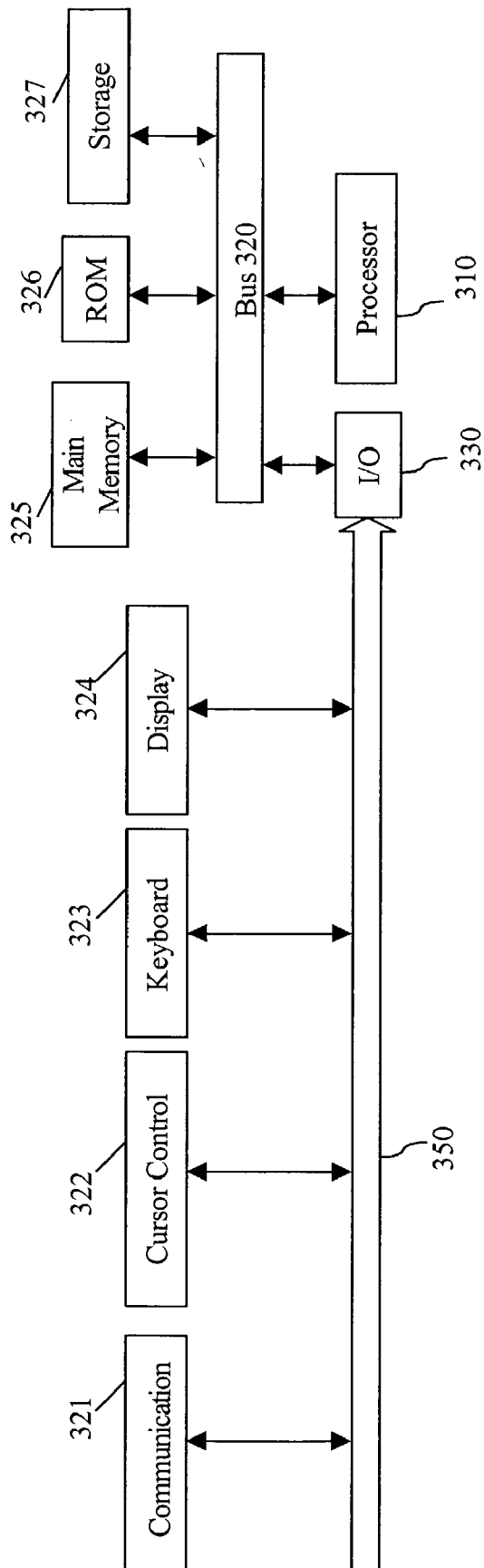


FIG. 3

SYSTEM AND METHOD FOR MAPPING IDENTIFICATION CODES

PRIORITY

[0001] This application is a continuation-in-part of co-pending U.S. application entitled SYSTEM AND METHOD FOR FULL WIRELESS SYNCHRONIZATION OF A DATA PROCESSING APPARATUS WITH A DATA SERVICE, application Ser. No. 10/109,928, filed Mar. 29, 2002, which is a continuation-in-part of co-pending U.S. application entitled APPARATUS AND METHOD FOR CONSERVING BANDWIDTH BY BATCH PROCESSING DATA TRANSACTIONS, application Ser. No. 09/924,283, filed Aug. 7, 2001.

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FIELD OF THE INVENTION

[0003] This invention relates generally to the field of network data services. More particularly, the invention relates to an apparatus and method for synchronizing a wireless data processing device with a wireless messaging service.

BACKGROUND

[0004] A variety of wireless data processing devices have been introduced over the past several years. These include wireless personal digital assistants ("PDAs") such as the Palm® VIIx handheld, cellular phones equipped with data processing capabilities (e.g., those which include wireless application protocol ("WAP") support), and, more recently, wireless messaging devices such as the Blackberry™ wireless pager developed by Research In Motion ("RIM").™

[0005] Personal digital assistants such as the Palm devices typically provide only limited wireless messaging capabilities (e.g., instant messaging and basic Internet access). For example, these devices typically require a user to manually establish a connection to the Internet via an Internet Service Provider ("ISP") or to a corporate server to check e-mail messages.

[0006] Although corporate messaging systems such as the RIM Blackberry provide more comprehensive messaging capabilities, there are significant limitations to these systems. Specifically, these systems employ e-mail "redirection" or "forwarding" techniques in which messages are redirected to the wireless device only if certain conditions are met. These conditions, referred to as "redirection events," may include, for example, an indication that the user is not working at his corporate desktop (e.g., removal of the wireless device from the desktop cradle, a screen saver firing on the desktop, . . . etc) or a manual redirection command initiated by the user (e.g., via the wireless device

Method for Pushing Information From a Host System to a Mobile Data Communication Device Having a Shared Electronic Address").

[0007] As a result, these systems are (as a practical matter) incapable of providing complete synchronization between the wireless device and the corporate e-mail database. For example, because messages are only redirected to the wireless device under certain conditions (e.g., following a redirection event), at any given point in time, the wireless device may contain an incomplete set of e-mail data. Moreover, even when messages are actively being forwarded to the wireless device, the e-mail data stored at the wireless device and the e-mail database are not truly synchronized. For example, certain types of transactions performed on the wireless device, such as an indication that a message has been viewed by the user, message deletions, movement of messages from one folder to another, . . . etc., are not updated at the e-mail service wirelessly.

[0008] Moreover, only basic e-mail functions such as sending and receiving messages may be controlled at the wireless device. More advanced e-mail management functions must be set at the user's desktop (e.g., configuring e-mail filters, outgoing e-mail signatures, security settings such as passwords, . . . etc).

[0009] In addition, prior messaging systems require a corporate desktop to which the device must be attached when the user is in the office. The problem with this is not merely that a corporate desktop is required, but also that the corporate desktop must be configured with software and a proprietary "cradle" that allows it to communicate directly to the wireless device.

[0010] Accordingly, what is needed is a system and method for providing complete synchronization and management between a wireless device and a messaging service (e.g., a corporate e-mail account). What is also needed is a wireless apparatus for receiving and sending e-mail messages, which does not require a corporate desktop or any software to be installed and executed on the corporate desktop.

SUMMARY

[0011] According to one embodiment, a system is disclosed. The system includes a wireless data processing device and a server communicatively coupled to the wireless device. The server comprises mapping logic that translates data objects having a first set of identification (ID) codes to a second set of ID codes for transmission to the wireless device to maintain synchronization of data objects with the wireless device over a wireless network.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] A better understanding of the present invention can be obtained from the following detailed description in conjunction with the following drawings, in which:

[0013] FIG. 1 illustrates an exemplary network architecture used to implement elements of the present invention;

[0014] FIG. 2 illustrates one embodiment of a mechanism

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