

Technical Disclosure Commons

Defensive Publications Series

August 2021

SYSTEM AND METHOD FOR PROVIDING INSTANT LOADING FOR REQUESTED PAYMENT TO WHITE LABEL PREPAID CARD

OLEG CHANCHIKOV

Visa

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

CHANCHIKOV, OLEG, "SYSTEM AND METHOD FOR PROVIDING INSTANT LOADING FOR REQUESTED PAYMENT TO WHITE LABEL PREPAID CARD", Technical Disclosure Commons, (August 09, 2021)
https://www.tdcommons.org/dpubs_series/4528



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

**TITLE: “SYSTEM AND METHOD FOR
PROVIDING INSTANT LOADING FOR
REQUESTED PAYMENT TO WHITE LABEL
PREPAID CARD”**

VISA

OLEG CHANCHIKOV

TECHNICAL FIELD

The present subject matter relates to field of payment transaction using white label prepaid card, more particularly, but not exclusively to a system and method for providing instant loading or crediting requested payment to the white label prepaid card.

BACKGROUND

Micro finance Company (MFC) is a financial institution, which provide small-scale financial services. The financial services provided by the MFC may be in the form of loan, credit, savings and so on. The MFC companies are introduced to ease credit system for small businesses as the small businesses do not get a loan from banks due to complex process. Therefore, the MFC is commonly named as a Micro-credit or Micro-benefit organization. The MFC offer small loans to various small businesses, private customers or households that do not have access to formal banking channels or eligibility for loans. However, the MFC are not allowed to be issuer of cards, so the MFC needs to use co-brand solutions with Bank Identification Number (BIN) sponsors. Co-branding is a term used in marketing, where two brands are used together to advertise or promote a specific set of products or services. The BIN sponsor is a bank or financial institution, which is a member of relevant payment network with rights to issue cards. BIN sponsorship is the fastest way to gain direct access to the major card schemes, such as Visa, Mastercard, Discover and so on.

Customers experience with the MFC may be fully digital, so the MFC cannot use common co-brand options with debit card and credit cards from the BIN sponsor due to requirements of Know Your Customer (KYC). The KYC is also known as Know Your Client. The KYC check is mandatory process for identifying and verifying identity of a client or customer when opening an account. Thus, the MFC may be provided with a pseudo credit card for providing loans to the customer or client.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this disclosure, illustrate exemplary embodiments and, together with the description, serve to explain the disclosed principles. In the figures, the left-most digit(s) of a reference number identifies the figure in which the reference number first appears. The same numbers are used throughout the figures to reference like features and components. Some embodiments of device or system and/or methods in accordance with embodiments of the present subject matter are now described, by way of example only, and with reference to the accompanying figures, in which:

Figures 1a and **1b** illustrate exemplary environments of a system for providing instant loading for requested payment to white label prepaid card, in accordance with some embodiments of the present disclosure;

Figure 2 illustrates schematic flow diagram showing method for issuance of a white label prepaid card for instant loading of requested payment, in accordance with some embodiments of the present disclosure;

Figure 3 illustrates schematic flow diagram showing method for providing instant loading for requested payment to white label prepaid card to perform transaction, in accordance with some embodiments of the present disclosure; and

Figure 4 illustrates a block diagram of an exemplary computer system for implementing embodiments consistent with the present disclosure.

The figures depict embodiments of the disclosure for purposes of illustration only. One skilled in the art will readily recognize from the following description that alternative embodiments of the structures and methods illustrated herein may be employed without departing from the principles of the disclosure described herein.

DESCRIPTION OF THE DISCLOSURE

In the present document, the word "exemplary" is used herein to mean "serving as an example, instance, or illustration." Any embodiment or implementation of the present subject matter described herein as "exemplary" is not necessarily to be construed as preferred or advantageous over other embodiments.

While the disclosure is susceptible to various modifications and alternative forms, specific embodiment thereof has been shown by way of example in the drawings and will be described in detail below. It should be understood, however that it is not intended to limit the disclosure to the particular forms disclosed, but on the contrary, the disclosure is to cover all modifications, equivalents, and alternative falling within the spirit and the scope of the disclosure.

The terms "comprises", "comprising", or any other variations thereof, are intended to cover a non-exclusive inclusion, such that a setup, device or method that comprises a list of

components or steps does not include only those components or steps but may include other components or steps not expressly listed or inherent to such setup or device or method. In other words, one or more elements in a device or system or apparatus preceded by “comprises... a” does not, without more constraints, preclude the existence of other elements or additional elements in the device or system or apparatus.

The terms "an embodiment", "embodiment", "embodiments", "the embodiment", "the embodiments", "one or more embodiments", "some embodiments", and "one embodiment" mean "one or more (but not all) embodiments of the invention(s)" unless expressly specified otherwise.

The terms "including", "comprising", “having” and variations thereof mean "including but not limited to", unless expressly specified otherwise.

The present disclosure proposes a system and method for delivering multi-currency features onto an existing card without re-issuing of a new card. The proposed system uses virtual multi-currency ledgers to implement multi-currency payments using the existing card and issuer mobile banking app. The proposed system lightens burden of enabling multi-currency wallets by the issuer or issuer processor.

Figure 1a illustrates an exemplary environment 100 of a system 101 which is configured to provide instant loading of required payment or amount to a white label prepaid card. The white label prepaid card is a card which may be developed by one company, say company “A” and another company, say company “B” puts branding on the white label prepaid card. The company “B” benefits from fees charged by the white label prepaid card. For example, if the white label prepaid card charges \$1 for every Automated Teller Machine (ATM) withdrawal, the company “B” will collect \$1 fee for the withdrawal. The white label prepaid card imitates mechanism of a common credit card. The white label prepaid card may be branded by the Micro Financing Companies (MFCs) and managed from white label interface. The white label prepaid card may be used for payment transactions to merchants, shopkeepers, borrow funds and like. The environment 100 for providing instant loading of required payment or amount to the white label prepaid card includes a customer/client 102, a MFC 103, a bank/issuer 104, a communication network 105 and the system 101. In an embodiment, **Figure 2** illustrates schematic flow diagram showing method for issuance of the white label prepaid card for instant

loading of requested payment. For example, consider a scenario where a customer 102 wants to borrow funds from the MFC 103. The MFC 103 may be a financial company which provides small loans to the customer 102, who may not have any access to facilities of the bank 104. At block 201 of **Figure 2**, the customer 102 may fill an application for the loan on a website or Application Programming Interface (API) provided by the MFC 103. The API provides a connection between the customer 102 and the MFC 103. In another embodiment, the API provides connection between the MFC 103 and the issuer 104. At block 202 of **Figure 2**, the MFC 103 makes a decision on the loan application in usual manner, submitted by the customer 102. The MFC 103 verifies documents of the customer 102 and if the documents are authentic and authorized, the MFC approves the loan application. At block 203 of **Figure 2**, the MFC 103 further uses data of the customer 102, to apply for the white label prepaid card and sends the white label prepaid card application to the bank 104 via the API. In an embodiment, the data of the customer may include, but is not limited to, business address proof of the customer 102, passport size photo of the customer 102, track record of repayment and so on. At block 204 of **Figure 2**, the bank 104 issues a digital white label prepaid card with the online KYC and sends credentials to the MFC 103 via the API. At block 205 of **Figure 2**, the MFC 103 shows the credentials provided by the bank 104 to the customer 102 on the website or the API. At block 206 of **Figure 2**, the customer 102 may add the white label prepaid card to wallet directly from the website of the MFC 103. In another embodiment, the customer 102 may order the physical white label prepaid card to his address. At block 207 of **Figure 2** the bank 104 may deliver the physical white label prepaid card to the customer 102. The proposed system 101, allows the customer 102 get the white label prepaid card and mimic mechanism of a credit card with less time-consuming process.

In an embodiment, **Figure 1b** illustrates an exemplary environment 100 of a system 101 which is configured to provide instant loading of required payment or amount to a white label prepaid card. The environment 100 for providing instant loading of required payment or amount to the white label prepaid card includes the customer/client 102, the MFC 103, the communication network 105 and the system 101. In an embodiment, the bank 104 may be integrated with the MFC 103. In an embodiment, the steps of **Figure 2** may be performed by the MFC 103 and the customer 102 to receive the white label prepaid card for performing mechanism of the credit card.

In an embodiment, the system 101, the customer 102, the MFC 103, and the bank/issuer 104 may communicate via the communication network 105, for providing instant loading of required payment or amount to the white label prepaid card. The communication network 105 may include, without limitation, a direct interconnection, Local Area Network (LAN), Wide Area Network (WAN), wireless network (e.g., using Wireless Application Protocol), the Internet, and the like. In an embodiment, the system 101 may be implemented in a server configured to provide instant loading of required payment or amount to the white label prepaid card. In an embodiment, such server may be a dedicated server or a cloud-based server.

Further, the system 101 may include one or more processor 106, I/O interface 107, and a memory 108. In some embodiments, the memory 108 may be communicatively coupled to the one or more processors 106. The memory 108 stores instructions, executable by the one or more processors 106, which, on execution, may cause the system 101 to provide instant loading of required payment or amount to the white label prepaid card, as disclosed in the present disclosure. In an embodiment, the memory 108 may include one or more modules 109 and data 110. The one or more modules 109 may be configured to perform the steps of the present disclosure using the data 110, to provide instant loading of required payment or amount to a white label prepaid card. In an embodiment, each of the one or more modules 109 may be a hardware unit which may be present outside the memory 108 and coupled with the system 101. The system 101 may be implemented in a variety of computing systems, such as a laptop computer, a desktop computer, a Personal Computer (PC), a notebook, a smartphone, a tablet, e-book readers, a server, a network server, a cloud-based server and the like. In an embodiment, the system 101 may be a dedicated server or may be a cloud-based server.

Figure 3 illustrates schematic flow diagram showing method for providing instant loading for requested payment to the white label prepaid card to perform transaction, in accordance with some embodiments of the present disclosure.

At block 305 of **Figure 3**, the customer 301 may initiate a transaction at Point Of Sale Terminal (POS) or the ATM using the white label prepaid card. In an embodiment, the POS may also be known as payment terminal. The POS is a device which interfaces with payment cards to make electronic funds transfer.

At block 306 of **Figure 3**, a processor 302 may request for an approval from a pre-processor 303, for initiating transaction by the customer 301 at the POS or the ATM.

At block 307 of **Figure 3**, the pre-processor 303 checks if the customer 301 has a pre-approved loan. In an embodiment, if the customer 301 has the pre-approved loan, then steps at block 308 may be performed. In an embodiment, if the customer 301 does not have the pre-approved loan, request for the transaction is failed and the customer 301 may have to pay through other modes such as cash, mobile banking and so on.

At block 308 of **Figure 3**, the pre-processor 303 requests for transferring money or requested amount from bank account of the MFC to the white label prepaid card of the customer 301. For example, the requested amount by the customer 301 may be \$500.

At block 309 of **Figure 3**, the pre-processor 303 approves the transaction of the customer 301, after the transfer of the requested amount is completed. For example, the requested amount \$500 may be transferred to the white label prepaid card of the customer 301.

At block 310 of **Figure 3**, upon receiving approval from the pre-processor 303, the processor 302 requests approval for the transaction from the issuer/bank 304.

At block 311 of **Figure 3**, the bank 304 approves the transaction and the transaction initiated by the customer 301 may be completed.

Advantages of the present disclosure

Embodiments of the present disclosure discloses a system and method to provide instant loading of requested payment to a white label prepaid card using website of MFC. Thus, the customer may get instant loan on the white label prepaid card and complete his transaction seamlessly.

Embodiments of the present disclosure allows the customer to pay only for amount which the customer uses by using the white label prepaid card.

Embodiment of the present disclosure allows the MFC to provide pre-approved loan using the white label prepaid card, instead of acquiring customer or re-activating the customers.

Computing System

Figure 4 illustrates a block diagram of an exemplary computer system 400 for implementing embodiments consistent with the present disclosure. In an embodiment, the computer system 400 is used to implement the system 101 for providing instant loading or crediting for requested payment to white label prepaid card. The computer system 400 may include a central processing unit (“CPU” or “processor”) 402. The processor 402 may include at least one data processor for executing processes in Virtual Storage Area Network. The processor 402 may include specialized processing units such as, integrated system (bus) controllers, memory management control units, floating point units, graphics processing units, digital signal processing units, etc.

The processor 402 may be disposed in communication with one or more input/output (I/O) devices 409 and 410 via I/O interface 401. The I/O interface 401 may employ communication protocols/methods such as, without limitation, audio, analog, digital, monaural, RCA, stereo, IEEE-1394, serial bus, universal serial bus (USB), infrared, PS/2, BNC, coaxial, component, composite, digital visual interface (DVI), high-definition multimedia interface (HDMI), radio frequency (RF) antennas, S-Video, VGA, IEEE 802.n /b/g/n/x, Bluetooth, cellular (e.g., code-division multiple access (CDMA), high-speed packet access (HSPA+), global system for mobile communications (GSM), long-term evolution (LTE), WiMax, or the like), etc.

Using the I/O interface 401, the computer system 400 may communicate with one or more I/O devices 409 and 410. For example, the input devices 409 may be an antenna, keyboard, mouse, joystick, (infrared) remote control, camera, card reader, fax machine, dongle, biometric reader, microphone, touch screen, touchpad, trackball, stylus, scanner, storage device, transceiver, video device/source, etc. The output devices 410 may be a printer, fax machine, video display (e.g., cathode ray tube (CRT), liquid crystal display (LCD), light-emitting diode (LED), plasma, Plasma Display Panel (PDP), Organic light-emitting diode display (OLED) or the like), audio speaker, etc.

In some embodiments, the computer system 400 may consist of the system 101. The processor 402 may be disposed in communication with a communication network 411 via a network interface 403. The network interface 403 may communicate with the communication network 411. The network interface 403 may employ connection protocols including, without limitation, direct connect, Ethernet (e.g., twisted pair 10/100/1000 Base T), transmission control protocol/internet protocol (TCP/IP), token ring, IEEE 802.11a/b/g/n/x, etc. The

communication network 411 may include, without limitation, a direct interconnection, local area network (LAN), wide area network (WAN), wireless network (e.g., using Wireless Application Protocol), the Internet, etc. Using the network interface 403 and the communication network 411, the computer system 400 may communicate with a customer 412, a MFC 413 and an issuer/bank 414 to complete any transactions with white label prepaid card. The network interface 403 may employ connection protocols include, but not limited to, direct connect, Ethernet (e.g., twisted pair 10/100/1000 Base T), transmission control protocol/internet protocol (TCP/IP), token ring, IEEE 802.11a/b/g/n/x, etc.

The communication network 411 includes, but is not limited to, a direct interconnection, an e-commerce network, a peer to peer (P2P) network, local area network (LAN), wide area network (WAN), wireless network (e.g., using Wireless Application Protocol), the Internet, Wi-Fi, and such. The first network and the second network may either be a dedicated network or a shared network, which represents an association of the different types of networks that use a variety of protocols, for example, Hypertext Transfer Protocol (HTTP), Transmission Control Protocol/Internet Protocol (TCP/IP), Wireless Application Protocol (WAP), etc., to communicate with each other. Further, the first network and the second network may include a variety of network devices, including routers, bridges, servers, computing devices, storage devices, etc.

In some embodiments, the processor 402 may be disposed in communication with a memory 405 (e.g., RAM, ROM, etc. not shown in **Figure 4**) via a storage interface 404. The storage interface 404 may connect to memory 405 including, without limitation, memory drives, removable disc drives, etc., employing connection protocols such as, serial advanced technology attachment (SATA), Integrated Drive Electronics (IDE), IEEE-1394, Universal Serial Bus (USB), fibre channel, Small Computer Systems Interface (SCSI), etc. The memory drives may further include a drum, magnetic disc drive, magneto-optical drive, optical drive, Redundant Array of Independent Discs (RAID), solid-state memory devices, solid-state drives, etc.

The memory 405 may store a collection of program or database components, including, without limitation, user interface 406, an operating system 407, web browser 408 etc. In some embodiments, computer system 400 may store user/application data, such as, the data,

variables, records, etc., as described in this disclosure. Such databases may be implemented as fault-tolerant, relational, scalable, secure databases such as Oracle ® or Sybase®.

The operating system 407 may facilitate resource management and operation of the computer system 400. Examples of operating systems include, without limitation, APPLE MACINTOSH® OS X, UNIX®, UNIX-like system distributions (E.G., BERKELEY SOFTWARE DISTRIBUTION™ (BSD), FREEBSD™, NETBSD™, OPENBSD™, etc.), LINUX DISTRIBUTIONS™ (E.G., RED HAT™, UBUNTU™, KUBUNTU™, etc.), IBM™ OS/2, MICROSOFT™ WINDOWS™ (XP™, VISTA™/7/8, 10 etc.), APPLE® IOS™, GOOGLE® ANDROID™, BLACKBERRY® OS, or the like.

In some embodiments, the computer system 400 may implement a web browser 408 stored program component. The web browser 408 may be a hypertext viewing application, such as Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, Apple Safari, etc. Secure web browsing may be provided using Hypertext Transport Protocol Secure (HTTPS), Secure Sockets Layer (SSL), Transport Layer Security (TLS), etc. Web browsers 408 may utilize facilities such as AJAX, DHTML, Adobe Flash, JavaScript, Java, Application Programming Interfaces (APIs), etc. In some embodiments, the computer system 400 may implement a mail server stored program component. The mail server may be an Internet mail server such as Microsoft Exchange, or the like. The mail server may utilize facilities such as ASP, ActiveX, ANSI C++/C#, Microsoft .NET, Common Gateway Interface (CGI) scripts, Java, JavaScript, PERL, PHP, Python, WebObjects, etc. The mail server may utilize communication protocols such as Internet Message Access Protocol (IMAP), Messaging Application Programming Interface (MAPI), Microsoft Exchange, Post Office Protocol (POP), Simple Mail Transfer Protocol (SMTP), or the like. In some embodiments, the computer system 400 may implement a mail client stored program component. The mail client may be a mail viewing application, such as Apple Mail, Microsoft Entourage, Microsoft Outlook, Mozilla Thunderbird, etc.

Furthermore, one or more computer-readable storage media may be utilized in implementing embodiments consistent with the present disclosure. A computer-readable storage medium refers to any type of physical memory on which information or data readable by a processor may be stored. Thus, a computer-readable storage medium may store instructions for execution by one or more processors, including instructions for causing the processor(s) to perform steps or stages consistent with the embodiments described herein. The term “computer-readable

medium” should be understood to include tangible items and exclude carrier waves and transient signals, i.e., be non-transitory. Examples include Random Access Memory (RAM), Read-Only Memory (ROM), volatile memory, non-volatile memory, hard drives, Compact Disc (CD) ROMs, DVDs, flash drives, disks, and any other known physical storage media. media.

The described operations may be implemented as a method, system or article of manufacture using standard programming and/or engineering techniques to produce software, firmware, hardware, or any combination thereof. The described operations may be implemented as code maintained in a “non-transitory computer readable medium”, where a processor may read and execute the code from the computer readable medium. The processor is at least one of a microprocessor and a processor capable of processing and executing the queries. A non-transitory computer readable medium may include media such as magnetic storage medium (e.g., hard disk drives, floppy disks, tape, etc.), optical storage (CD-ROMs, DVDs, optical disks, etc.), volatile and non-volatile memory devices (e.g., EEPROMs, ROMs, PROMs, RAMs, DRAMs, SRAMs, Flash Memory, firmware, programmable logic, etc.), etc. Further, non-transitory computer-readable media may include all computer-readable media except for a transitory. The code implementing the described operations may further be implemented in hardware logic (e.g., an integrated circuit chip, Programmable Gate Array (PGA), Application Specific Integrated Circuit (ASIC), etc.).

The illustrated steps are set out to explain the exemplary embodiments shown, and it should be anticipated that ongoing technological development will change the manner in which particular functions are performed. These examples are presented herein for purposes of illustration, and not limitation. Further, the boundaries of the functional building blocks have been arbitrarily defined herein for the convenience of the description. Alternative boundaries can be defined so long as the specified functions and relationships thereof are appropriately performed. Alternatives (including equivalents, extensions, variations, deviations, etc., of those described herein) will be apparent to persons skilled in the relevant art(s) based on the teachings contained herein. Such alternatives fall within the scope and spirit of the disclosed embodiments. Also, the words "comprising," "having," "containing," and "including," and other similar forms are intended to be equivalent in meaning and be open ended in that an item or items following any one of these words is not meant to be an exhaustive listing of such item or items or meant to be limited to only the listed item or items. It must also be noted that as used herein and in the

appended claims, the singular forms “a,” “an,” and “the” include plural references unless the context clearly dictates otherwise.

Furthermore, one or more computer-readable storage media may be utilized in implementing embodiments consistent with the present disclosure. A computer readable storage medium refers to any type of physical memory on which information or data readable by a processor may be stored. Thus, a computer readable storage medium may store instructions for execution by one or more processors, including instructions for causing the processor(s) to perform steps or stages consistent with the embodiments described herein. The term “computer readable medium” should be understood to include tangible items and exclude carrier waves and transient signals, i.e., are non-transitory. Examples include random access memory (RAM), read-only memory (ROM), volatile memory, non-volatile memory, hard drives, CD ROMs, DVDs, flash drives, disks, and any other known physical storage media.

Finally, the language used in the specification has been principally selected for readability and instructional purposes, and it may not have been selected to delineate or circumscribe the inventive subject matter. Accordingly, the disclosure of the embodiments of the disclosure is intended to be illustrative, but not limiting, of the scope of the disclosure.

With respect to the use of substantially any plural and/or singular terms herein, those having skill in the art can translate from the plural to the singular and/or from the singular to the plural as is appropriate to the context and/or application. The various singular/plural permutations may be expressly set forth herein for sake of clarity.

SYSTEM AND METHOD FOR PROVIDING INSTANT LOADING FOR REQUESTED PAYMENT TO WHITE LABEL PREPAID CARD

ABSTRACT

The present disclosure provides a system and a method to provide instant loading/crediting for requested payment to white label prepaid card, upon initiating transaction from customer. The proposed system provides loan to customer using a pseudo credit card. The proposed system allows Micro-Finance Centre (MFC) to receive loan request along with prepaid card application from customer. The proposed system allows customer to do transaction with the prepaid card and provides instant loan for the requested amount from account of the MFC. The instant loading/crediting of requested amount may be accessed through website or mobile banking application provided by the MFC. The proposed system provides online loan to customer during transaction.

Figures 2 and 3

1/5

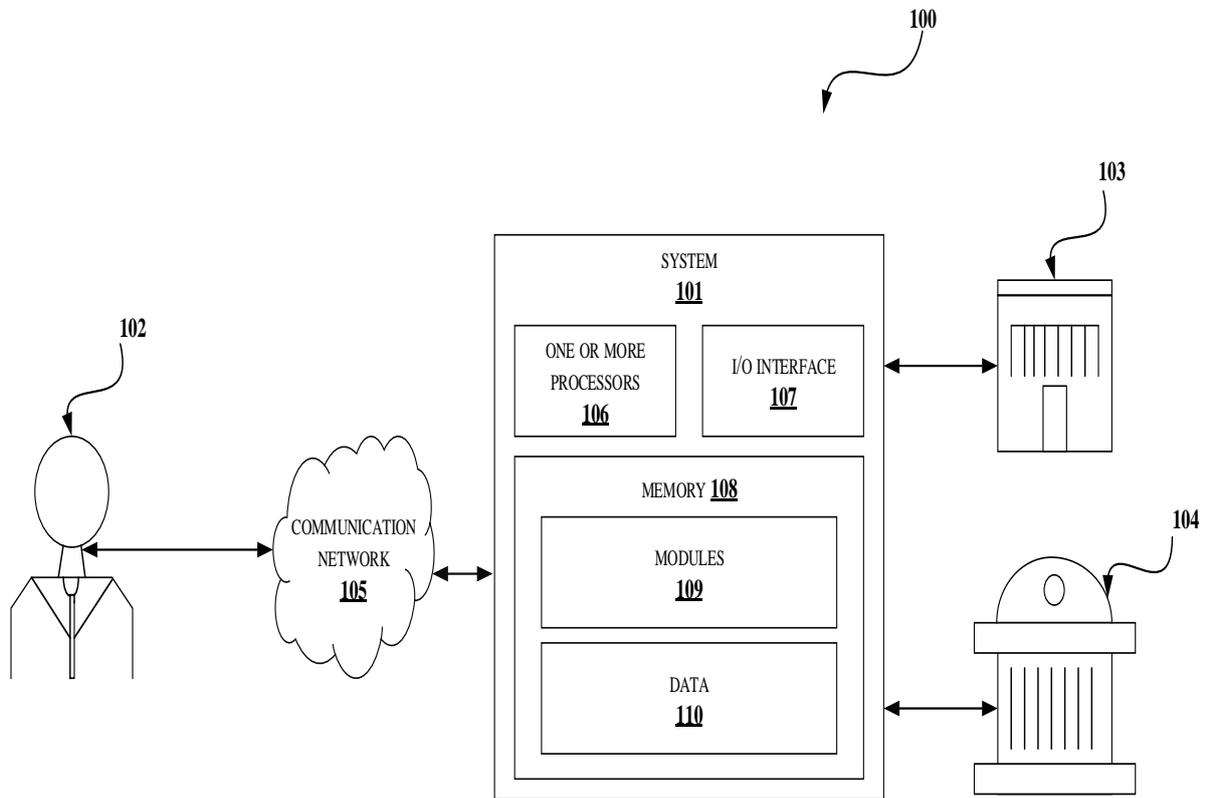


Figure 1a

2/5

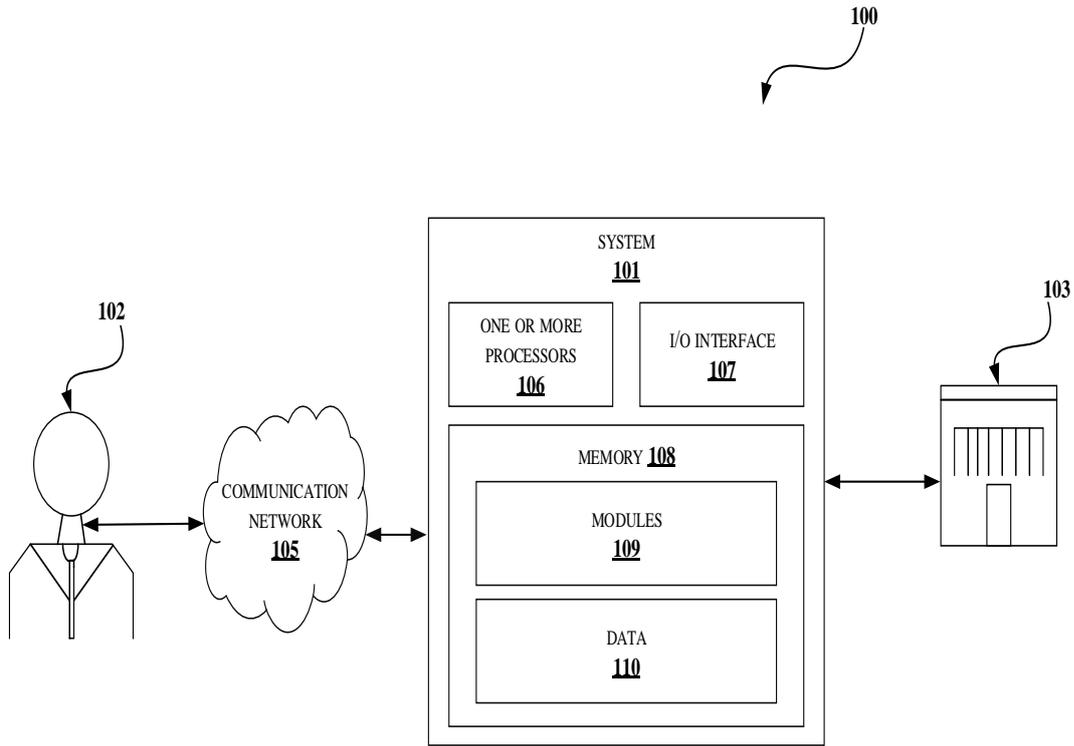


Figure 1b

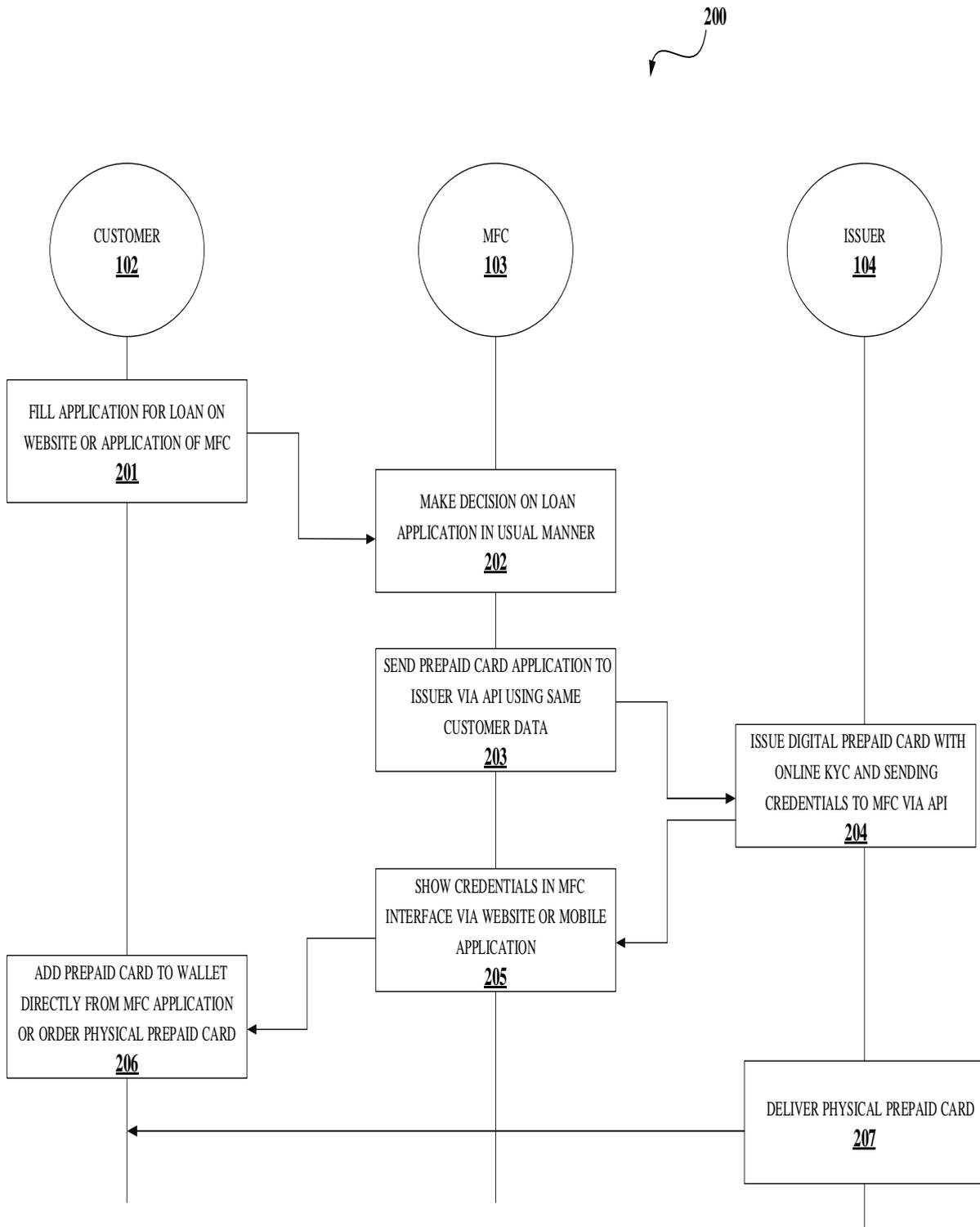


Figure 2

4/5

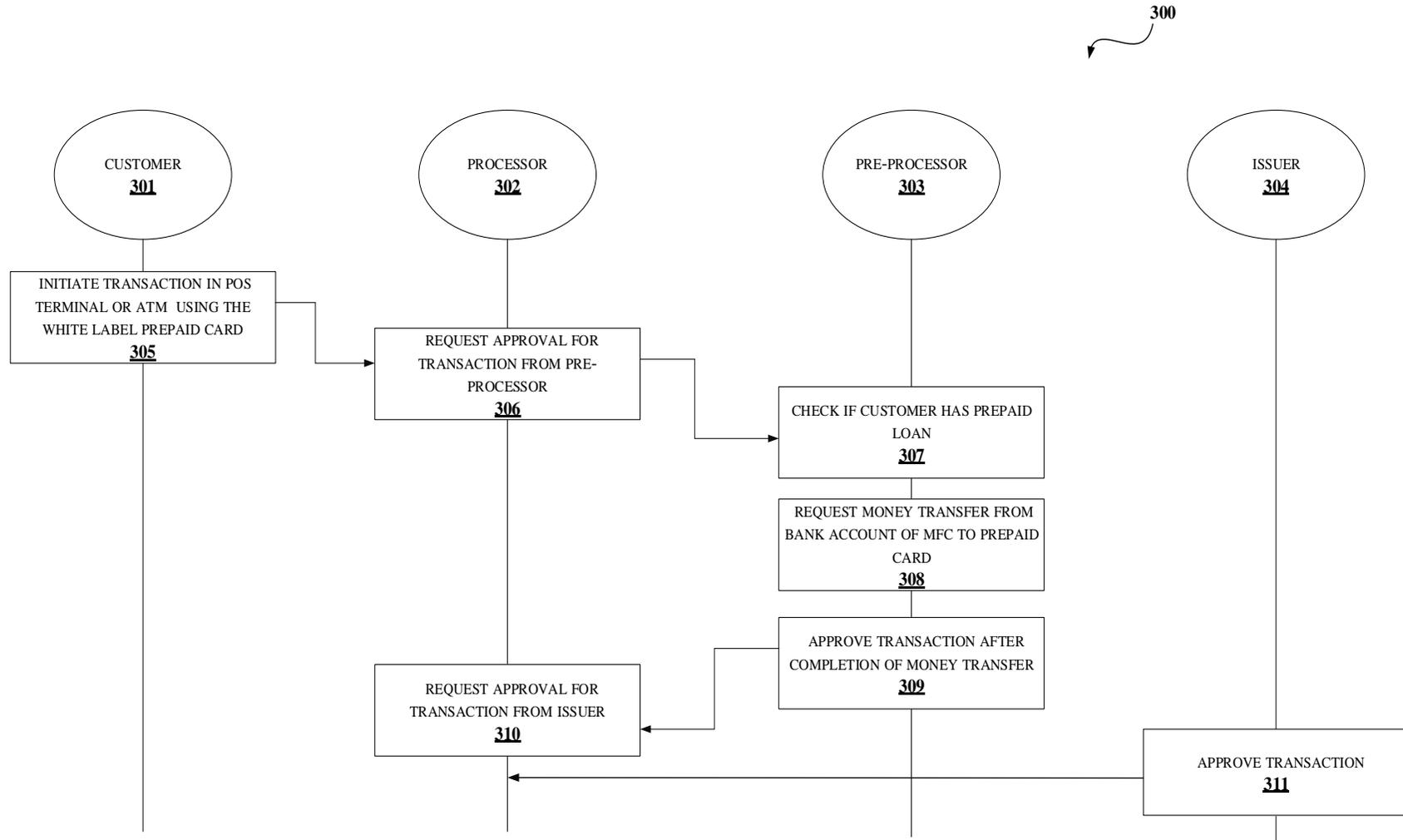


Figure 3

5/5

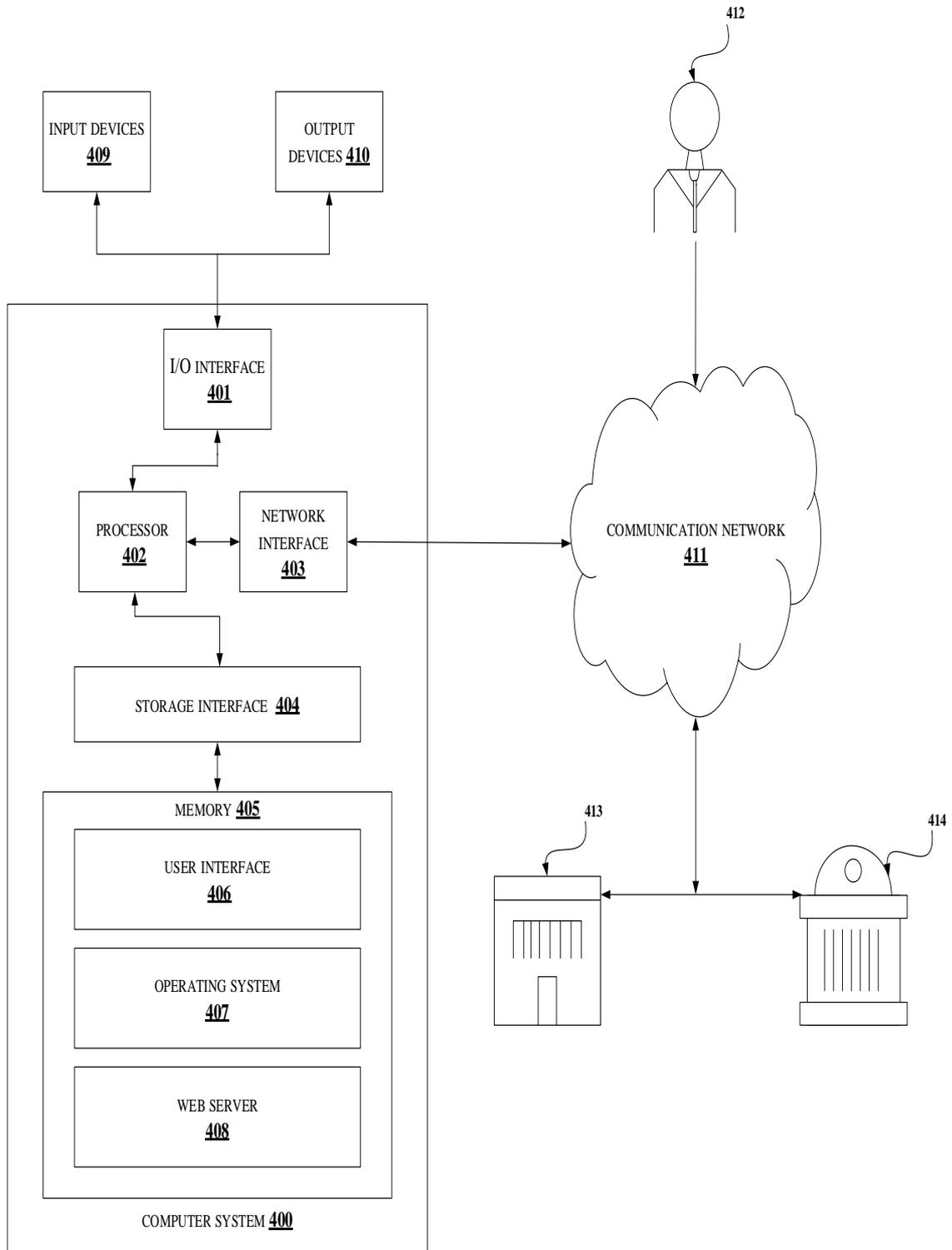


Figure 4