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Methods, apparatus and systems for reusable assets

Abstract

An asset management system configured for receiving an indication of acceptance of an agreement for borrowing of an asset by a consumer, receiving a consumer identifier corresponding to the consumer from a payment processing system connected to the asset management system, receiving an asset identifier indicative of the asset, obtaining a term for a return of the asset, obtaining a penalty payable upon the return of the asset not occurring within the term, storing the consumer identifier, asset identifier, term and penalty in a data storage of the asset management system and upon the return of the asset not occurring within the term, sending a request to the payment processing system to charge the first consumer in an amount of the penalty using payment information of the consumer stored in the data storage of the payment processing system in association with the consumer identifier.

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Background/Summary

REFERENCE TO RELATED APPLICATIONS (1) This application is a continuation application of Patent Cooperation Treaty (PCT) application No. PCT/CA2024/050221 having an international filing date of 23 Feb. 2024, which in turn claims priority from, and for the purposes of the United States the benefit under 35 USC 119 in relation to, U.S. patent application No. 63/448,206 filed on 24 Feb. 2023, both of which are hereby incorporated herein by reference.

TECHNICAL FIELD

(1) This application relates to methods, apparatus and systems for renting, distributing, allocating, tracking, collecting and/or managing reusable assets. In some embodiments, the reusable assets comprise reusable containers and/or packaging for food, hygiene products and/or household products.

BACKGROUND

(2) It is currently understood that containers and packaging make up a significant portion of solid waste entering landfills. There is a general desire to employ reusable containers and packaging to, inter alia, reduce the amount of containers and packaging entering landfill waste streams. While in some situations it may be practical for a consumer to provide their own reusable containers and packaging, this is not always the case. Some consumers are not willing to provide their own reusable containers and packaging. Some health authorities place onerous restrictions on the use of “bring your own” reusable packaging. There is therefore a general desire for reusable containers and packaging that is provided by a retailer at the time of purchasing the packaged products. However, previous methods, systems and apparatus undesirably require consumers to pay deposits and/or provide personal information (beyond what is otherwise required to make the underlying purchase) to create accounts at the time of purchasing packaged products thereby creating a barrier to use of such reusable containers and packaging.

(3) There is therefore a general desire for improved methods, systems and apparatus to facilitate renting, distributing, allocating, tracking, collecting and/or managing reusable assets such as reusable containers and/or packaging for food, hygiene products and/or household products.

(4) The foregoing examples of the related art and limitations related thereto are intended to be illustrative and not exclusive. Other limitations of the related art will become apparent to those of skill in the art upon a reading of the specification and a study of the drawings.

SUMMARY

(5) The following embodiments and aspects thereof are described and illustrated in conjunction with systems, tools and methods which are meant to be exemplary and illustrative, not limiting in scope. In various embodiments, one or more of the above-described problems have been reduced or eliminated, while other embodiments are directed to other improvements.

(6) One aspect of the invention provide an asset management system. The asset management system may comprise a processor configured for receiving an indication of acceptance of an agreement for borrowing of an asset by a first consumer as part of a transaction for a first product, receiving a consumer identifier corresponding to the first consumer from a payment processing system employed to complete the transaction for the first product, receiving an asset identifier indicative of the asset, obtaining a term for a return of the asset, obtaining a magnitude of a penalty payable upon the return of the asset not occurring within the term, storing the consumer identifier, asset identifier, term and penalty in a data storage of the asset management system and upon the return of the asset not occurring within the term, sending a request to the payment processing system to charge the first consumer an amount equal to the magnitude of the penalty via the payment processing system using payment information of the first consumer stored in a data storage of the payment processing system in association with the consumer identifier.
(7) In some embodiments, the indication of the acceptance is received from a point of sale system. In some embodiments, the indication of the acceptance is received by the asset management system from the point of sale system. In some embodiments, the indication of the acceptance is received by the asset management system from the payment processing system. In some embodiments, receiving the indication of acceptance comprises receiving the consumer identifier.
(8) In some embodiments, the point of sale system is connected to the asset management system by a network. In some embodiments, the point of sale system is connected to the payment processing system by a network.
(9) In some embodiments, the asset identifier is unique to the asset. In some embodiments, the asset identifier is unique to a class of the asset.
(10) In some embodiments, obtaining the term comprises receiving an indication of the term from the payment processing system. In some embodiments, obtaining the term comprises receiving an indication of the term from a point of sale system connected to the asset management system by a network. In some embodiments, obtaining the term comprises determining the term based at least in part on the asset identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on a type of asset associated with the asset identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on the consumer identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on an asset borrowing history associated with the consumer identifier.
(11) In some embodiments, obtaining the penalty comprises receiving an indication of the penalty from the payment processing system. In some embodiments, obtaining the penalty comprises receiving an indication of the penalty from a point of sale system connected to the asset management system by a network. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on the asset identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on a type of asset associated with the asset identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on the consumer identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on an asset borrowing history associated with the consumer identifier. In some embodiments, the processor is configured for upon the return of the asset occurring after sending a request to the payment processing system to charge the first consumer in the amount of the penalty using payment information of the first consumer, sending a request to the payment processing system to refund the first consumer at least a portion of the amount of the penalty using the payment information of the consumer associated with the consumer identifier.
(12) In some embodiments, the asset management system and the payment processing system are operated by separate entities.
(13) In some embodiments, the asset comprises a reusable container.
(14) In some embodiments, the data storage of the asset management system is separate from the

data storage of the payment processing system.
(15) In some embodiments, the asset management system is in communication with the payment processing system via a network.
(16) In some embodiments, the payment information is obtained from the transaction for the first product. In some embodiments, the payment information is obtained from a transaction for a second product.
(17) In some embodiments, the processor is configured for sending the request to the payment processing system to charge the first consumer the amount equal to the magnitude of the penalty via the payment processing system using payment information of the first consumer stored in the data storage of the payment processing system in association with the consumer identifier only upon the return of the asset not occurring within the term.
(18) In some embodiments, the system comprises at least one server and/or processor having at least one application program and computer instructions operating thereon which are configured to cause at least one server and/or processor to perform the methods, steps and/or functions set out herein.
(19) Another aspect of the invention provides an asset management method. The method may comprise receiving an indication of acceptance of an agreement for borrowing of an asset by a first consumer as part of a transaction for a first product, receiving a consumer identifier corresponding to the first consumer from a payment processing system employed to complete the transaction for the first product, receiving an asset identifier indicative of the asset, obtaining a term for a return of the asset, obtaining a magnitude of a penalty payable upon the return of the asset not occurring within the term, storing the consumer identifier, asset identifier, term and penalty in a data storage of the asset management system and upon the return of the asset not occurring within the term, sending a request to the payment processing system to charge the first consumer an amount equal to the magnitude of the penalty via the payment processing system using payment information of the first consumer stored in a data storage of the payment processing system in association with the consumer identifier.
(20) In some embodiments, the indication of the acceptance is received from a point of sale system.
(21) In some embodiments, the point of sale system is connected to the asset management system by a network. In some embodiments, the point of sale system is connected to the payment processing system by a network.
(22) In some embodiments, the indication of the acceptance is received by the asset management system from the point of sale system. In some embodiments, the indication of the acceptance is received by the asset management system from the payment processing system. In some embodiments, receiving the indication of acceptance comprises receiving the consumer identifier.
(23) In some embodiments, the asset identifier is unique to the asset. In some embodiments, the asset identifier is unique to a class of the asset.
(24) In some embodiments, obtaining the term comprises receiving an indication of the term from the payment processing system. In some embodiments, obtaining the term comprises receiving an indication of the term from a point of sale system connected to the asset management system by a network. In some embodiments, obtaining the term comprises determining the term based at least in part on the asset identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on a type of asset associated with the asset identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on the consumer identifier. In some embodiments, obtaining the term comprises determining the term based at least in part on an asset borrowing history associated with the consumer identifier.
(25) In some embodiments, obtaining the penalty comprises receiving an indication of the penalty from the payment processing system. In some embodiments, obtaining the penalty comprises receiving an indication of the penalty from a point of sale system connected to the asset management system by a network. In some embodiments, obtaining the penalty comprises

determining the penalty based at least in part on the asset identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on a type of asset associated with the asset identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on the consumer identifier. In some embodiments, obtaining the penalty comprises determining the penalty based at least in part on an asset borrowing history associated with the consumer identifier.

(26) In some embodiments, the method comprises upon the return of the asset occurring after sending a request to the payment processing system to charge the first consumer in the amount of the penalty using payment information of the first consumer, sending a request to the payment processing system to refund the first consumer at least a portion of the amount of the penalty using the payment information of the consumer associated with the consumer identifier.

(27) In some embodiments, the asset management system and the payment processing system are operated by separate entities. In some embodiments, the asset management system and the payment processing system are located remotely from each other.

(28) In some embodiments, the asset comprises a reusable container.

(29) In some embodiments, the data storage of the asset management system is separate from the data storage of the payment processing system.

(30) In some embodiments, the asset management system is in communication with the payment processing system via a network.

(31) In some embodiments, the payment information is obtained from the transaction for the first product.

(32) In some embodiments,, the method comprises prompting the first consumer to accept the agreement for borrowing of the asset and upon receiving acceptance of the agreement for borrowing of the asset, providing the asset to the first consumer.

(33) In some embodiments, the method comprises prompting the first consumer to accept the agreement for borrowing of the asset upon receiving from the first consumer an indicated that they desire to borrow the asset and upon receiving acceptance of the agreement for borrowing of the asset, providing the asset to the first consumer.

(34) In some embodiments, the method comprises upon receiving acceptance of the agreement for borrowing of the asset, providing the asset to the first consumer without requesting the payment processing system to charge the first consumer a deposit for the asset. In some embodiments, the method comprises upon receiving acceptance of the agreement for borrowing of the asset, providing the asset to the first consumer without requesting the payment processing system to authorize a deposit for the asset with the payment information. In some embodiments, the method comprises providing the asset to the first consumer upon receipt, by the asset management system, of the indication of acceptance of the agreement for borrowing of the asset by the first consumer.

(35) In some embodiments, the method comprises sending a request to the payment processing system to charge the first consumer for the first product using the payment information.

(36) In some embodiments, the method comprises prompting the first consumer to accept the agreement by displaying a prompt containing at least a portion of the agreement on a graphical user interface of the point of sale system.

(37) In some embodiments, receiving acceptance of the first agreement comprises receiving the payment information from the first consumer. In some embodiments, receiving acceptance of the first agreement comprises receiving a consumer identifier of the consumer and confirming that the acceptance has previously been provided in association with the consumer identifier. In some embodiments, receiving a consumer identifier of the consumer comprises receiving a previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset.

(38) In some embodiments, receiving acceptance of the first agreement comprises the first consumer selecting an element displayed on a graphical user interface of the point of sale system.

In some embodiments, receiving the payment information from the first consumer comprises the first consumer inputting the payment information via a graphical user interface of the point of sale system. In some embodiments, receiving the payment information from the first consumer comprises the user placing an RFID enabled credit card or debit card near an RFID scanner of the point of sale system thereby allowing the point of sale system to obtain the payment information. In some embodiments, receiving the payment information from the first consumer comprises receiving a consumer identifier of the consumer and obtaining the payment information from a record stored in association with the consumer identifier. In some embodiments, receiving a consumer identifier of the consumer comprises receiving a previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset.

(39) In some embodiments, receiving input of an asset identifier corresponding to the asset comprises placing an RFID enabled tag representative of the asset identifier and attached to the asset near an RFID scanner of the point of sale system thereby allowing the point of sale system to obtain the asset identifier. In some embodiments, receiving input of an asset identifier corresponding to the asset comprises scanning a barcode or QR code representative of the asset identifier and attached to the asset near a scanner of the point of sale system thereby allowing the point of sale system to obtain the asset identifier. In some embodiments, receiving input of an asset identifier corresponding to the asset comprises monitoring for the removal of the asset from among stocked assets by tracking the presence of RFID enabled tags representative of asset identifiers of the stocked assets, wherein each RFID enable tag is attached to one of the stocked assets.

(40) Another aspect of the invention comprises a system. The system may comprise a point of sale system, a payment processing system and an asset management system. The point of sale system may be configured for, prompting a first consumer to accept an agreement for the borrowing of an asset by the first consumer and receiving acceptance of the agreement, receiving acceptance of the agreement from the first consumer, prompting the first consumer to pay for a product by providing payment information, receiving the payment information from the first consumer, and receiving input of an asset identifier corresponding to the asset. The payment processing system may be configured for receiving payment information from the point of sale system, processing payment for the product with the payment information, and storing the payment information in association with a consumer identifier for future use. The asset management system may be configured for receiving an indication of acceptance of the agreement from the point of sale system, receiving the consumer identifier corresponding to the first consumer from the payment processing system, receiving the asset identifier indicative of the asset from the point of sale system, obtaining a term for a return of the asset, obtaining a penalty payable upon the return of the asset not occurring within the term, storing the consumer identifier, asset identifier, term and penalty in a data storage of the asset management system and upon the return of the asset not occurring within the term, sending a request to the payment processing system to charge the first consumer in the amount of the penalty using the payment information of the first consumer stored in data storage of the payment processing system in association with the consumer identifier.

(41) In some embodiments, prompting the first consumer to accept the agreement comprises displaying a prompt containing at least a portion of the agreement on a graphical user interface of the point of sale system.

(42) In some embodiments, receiving acceptance of the first agreement comprises receiving the payment information from the first consumer. In some embodiments, receiving acceptance of the first agreement comprises receiving a consumer identifier of the consumer and confirming that the acceptance has previously been provided in association with the consumer identifier. In some embodiments, receiving acceptance of the first agreement comprises the first consumer selecting an element displayed on a graphical user interface of the point of sale system.

(43) In some embodiments, receiving a consumer identifier of the consumer comprises receiving a

previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset. In some embodiments, receiving a consumer identifier of the consumer comprises receiving a previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset.
(44) In some embodiments, receiving the payment information from the first consumer comprises the first consumer inputting the payment information via a graphical user interface of the point of sale system. In some embodiments, receiving the payment information from the first consumer comprises the user placing an RFID enabled credit card or debit card near an RFID scanner of the point of sale system thereby allowing the point of sale system to obtain the payment information. In some embodiments, receiving the payment information from the first consumer comprises receiving a consumer identifier of the consumer and obtaining the payment information from a record stored in association with the consumer identifier.
(45) In some embodiments, receiving input of an asset identifier corresponding to the asset comprises placing an RFID enabled tag representative of the asset identifier and attached to the asset near an RFID scanner of the point of sale system thereby allowing the point of sale system to obtain the asset identifier. In some embodiments, receiving input of an asset identifier corresponding to the asset comprises scanning a barcode or QR code representative of the asset identifier and attached to the asset near a scanner of the point of sale system thereby allowing the point of sale system to obtain the asset identifier.
(46) In some embodiments, the system comprises an asset return infrastructure, the asset return infrastructure comprising a receptacle for receiving the asset and a scanner for obtaining the asset identifier when the asset is placed in, on or near the receptacle and wherein the asset return infrastructure is configured to communicate to the asset management system that the asset has been returned upon obtaining the asset identifier.
(47) In some embodiments, the system comprises at least one server and/or processor having at least one application program and computer instructions operating thereon which are configured to cause at least one server and/or processor to perform the methods, steps and/or functions set out herein.
(48) Another aspect of the invention provides a system comprising at least one server and/or processor having at least one application program and computer instructions operating thereon which are configured to cause at least one server and/or processor to perform the methods, steps and/or functions set out herein.
(49) Another aspect of the invention provides a non-transitory, computer readable medium having at least one application program or computer instructions operating thereon which are configured to cause at least one server and/or processor to perform the methods, steps and/or functions set out herein.
(50) In addition to the exemplary aspects and embodiments described above, further aspects and embodiments will become apparent by reference to the drawings and by study of the following detailed descriptions.

Description

BRIEF DESCRIPTION OF THE DRAWINGS
(1) Exemplary embodiments are illustrated in referenced figures of the drawings. It is intended that the embodiments and figures disclosed herein are to be considered illustrative rather than restrictive.
(2) FIG. **1** is a block diagram of an exemplary method of managing distribution of an asset in association with a transaction for purchase of a product according to one embodiment of the invention.

(3) FIG. **2** is a schematic diagram of a system for managing distribution of an asset in association with a transaction for purchase of a product according to one embodiment of the invention.
(4) FIG. **3** is a schematic diagram of an exemplary graphical user interface of a point of sale system of the system of FIG. **2**.
(5) FIG. **4** is a schematic diagram of another exemplary graphical user interface of a point of sale system of the system of FIG. **2**.
(6) FIG. **5** is a schematic diagram of an exemplary implementation of a method of managing distribution of an asset in association with a transaction for purchase of a product according to one embodiment of the invention.
(7) FIG. **6** is a schematic diagram of another exemplary implementation of a method of managing distribution of an asset in association with a transaction for purchase of a product according to one embodiment of the invention.
(8) FIG. **7** is a schematic diagram of another exemplary graphical user interface of a point of sale system of the system of FIG. **2**.

DESCRIPTION

(9) Throughout the following description specific details are set forth in order to provide a more thorough understanding to persons skilled in the art. However, well known elements may not have been shown or described in detail to avoid unnecessarily obscuring the disclosure. Accordingly, the description and drawings are to be regarded in an illustrative, rather than a restrictive, sense.
(10) Embodiments herein may relate to one or more reusable assets **2** (referred to herein as assets **2** or an asset **2**). An asset **2** may comprise, for example, a reusable container or packaging for holding one or more products **4**. Products **4** may comprise, for example, food products (e.g., coffee, tea, yogurt, sandwiches, soup, meals, etc.), hygiene products (e.g., soap, moisturizer, shampoo, conditioner, toothpaste, etc.), household products (e.g., household cleaners, laundry detergent, etc.), commercial products (e.g., adhesives, fertilizers, cleaning agents, etc.) or other products. For example, an asset **2** may comprise a reusable coffee cup or the like.
(11) Products **4** may be sold by merchants **60** through transactions **50**. As part of transactions **50**, consumers **6** may wish to obtain assets **2** to complement products **4** (e.g., as containers for products **4**). For example, a consumer **6** may want to obtain a reusable cup (asset **2**) at a coffee shop (merchant **60**) to hold a coffee (product **4**) being purchased at that time. However, consumer **6** may not wish to pay a deposit for asset **2** and requiring such deposits for an asset **2** may thereby discouraging consumer **6** from using asset **2** where a deposit is required. Further or alternatively, consumer **6** may not wish to provide personal information such as a name, phone number, email address, street address or the like to borrow asset **2** at that time and requiring such personal information may thereby discourage consumer **6** from using asset **2** where such personal information is required.
(12) One aspect of the invention provides a method of managing distribution of an asset in association with a transaction for purchase of a product. FIG. **1** is a block diagram of an exemplary method **100** of managing distribution of an asset **2** in association with a transaction **50** for purchase of a product **4** according to one embodiment of the invention. FIG. **2** is a schematic depiction of an exemplary system **200** for implementing method **100** of FIG. **1** although it should be understood that method **100** could be implemented using other systems. FIG. **2** depicts a point of sale system (POSS) **12**, a payment processing system (PPS) **16** and an asset management system (AMS) **18**.
(13) POSS **12** may comprise any suitable point of sale system to facilitate obtaining payment for transaction **50** for product **4** by merchant **60**. POSS **12** may comprise an in-person point of sale system (e.g., physical) or an online point of sale system (e.g., web-based, mobile application-based or the like). When a consumer **6** makes a purchase, POSS **12** communicates with a payment processing system (e.g., PPS **16**) to verify the transaction and obtain authorization. If transaction **50** is approved, POSS **12** updates the transaction status and optionally sends a receipt to consumer **6**. POSS **12** may also be integrated with other retail management systems, such as inventory

management, customer relationship management, and accounting systems, to provide a comprehensive solution for merchants.
(14) If POSS **12** is an in-person point of sale system, POSS **12** may comprise software and hardware components, such as a computer (mobile phone, tablet or the like), a cash drawer, a scanner (e.g., for scanning barcodes, QR codes, radio frequency identification (RFID) tags such as low frequency RFID tags, high frequency RFID tags, ultra-high frequency RFID tags and near field communication (NFC) tags, or the like), input peripherals (such as a keyboard and/or a mouse), output peripherals (e.g., a printer, speakers, etc.), and/or a customer display screen, that work together to allow, for example, inputting of information regarding product **4**, inputting of payment information **120** (discussed further herein) and communication of payment information **120** to a payment processing system (e.g., PPS **16**). For example, POSS **12** may comprise a graphical user interface (GUI) **12**A and a scanner **12**B (e.g., for scanning barcodes, QR codes, RFID tags, NFC tags, or the like). The point of sale system may manage other aspects of the transaction process, including product pricing, inventory management, customer tracking, and financial reporting.
(15) If POSS **12** is an online point of sale system, POSS **12** may comprise primarily or entirely software components which integrate with an online store (e.g., web-based, mobile application-based, etc.) of merchant **60**, allowing consumers **6** to make purchases and pay for their purchases using various payment methods, including credit cards, debit cards, electronic checks, cryptocurrency, gift cards, and/or other forms of electronic payment. The online POSS **12** may work by connecting the e-commerce platform of merchant **60** to a payment processing system (e.g., PPS **16**).
(16) PPS **16** may comprise any suitable payment processing system used to facilitate electronic transactions between merchants **60** and consumers **6**. PPS **16** may securely process payment transactions, including credit cards, debit cards, electronic checks, cryptocurrency, gift cards, prepaid accounts (e.g., cafeteria meal plans such as university or college cafeteria meal plans or workplace meal plans), employee benefit plans, rewards or loyalty program points (e.g., Aeroplan™, Avion Rewards™, Air Miles™ or the like) and other forms of electronic payment. PPS **16** may be employed in various retail environments of merchants **60**, including brick-and-mortar stores, online stores, mobile commerce, university cafeterias, workplace cafeterias, etc. PPS **16** may connect POSS **12** to a bank, financial institution, gift card provider, prepaid account system, employee benefit plan system, university cafeteria payment system, etc. to verify and authorize transaction **50**. If the transaction is approved, PPS **16** communicates the approval to POSS **12**, which then updates the transaction status. PPS **16** may offer integration with other retail management systems, such as inventory management, customer relationship management, and accounting systems, to provide a comprehensive solution for merchants. PPS **16** may comprise a data storage **16**A for storing payment information of consumers. PPS **16** may comprise any payment processing system such as, for example, those operated by Stripe™, Square™, Toast™, Clover™, Global Payments™, etc. In some embodiments, POSS **12** is a point of sale system provided by the provider of PPS **16**.
(17) AMS **18** may comprise any suitable software and/or hardware-based system configured to, inter alia, manage user accounts, manage and track the distribution, allocation, collection, cleaning, and/or status of assets **2**. AMS **18** may use various technologies such as GPS, RFID, or barcode scanning to collect data about assets **2**. This information may be stored in a data storage **18**A and can be accessed and analyzed by authorized personnel to help make informed decisions about the management and deployment of assets **2**.
(18) POSS **12**, PPS **16** and/or AMS **18** may communicate with each other by any suitable technique. POSS **12**, PPS **16** and/or AMS **18** may communicate with each other wirelessly and/or by wired connection. POSS **12**, PPS **16** and/or AMS **18** may communicate with each other via suitable software (e.g., suitable application programming interfaces (APIs) or the like).
(19) In some embodiments, POSS **12** may be integrated with PPS **16** but this is not mandatory and

POSS **12** may be separate from PPS **16**. In some embodiments, AMS **18** may be integrated into POSS **12** or PPS **16** but this is not mandatory and AMS **18** may be separate from POSS **12** and/or PPS **16**. In some embodiments, AMS **18** may be operated by a separate legal entity from POSS **12** and/or PPS **16**.

(20) Method **100** may be implemented in conjunction with transaction **50** for product **4**. Method **100** may include providing a consumer **6** with an option to borrow an asset **2** or may start after consumer **6** has indicated a desired to borrow an asset **2**. In some embodiments, asset **2** may be a reusable container for product **4** such that product **4** is delivered to consumer **6** in asset **2** (e.g., asset **2** may comprise a reusable coffee cup and product **4** may comprise coffee such that the coffee is provided to consumer **6** in the reusable coffee cup).

(21) Consumer **6** may indicate their desire to borrow asset **2** and purchase product **4** in an in-person setting by, for example: verbally (or otherwise) indicating to a clerk **14** their intent to purchase product **4** and borrow asset **2**; bringing product **4** and asset **2** to a checkout counter or self-checkout counter at a retail store, restaurant, cafeteria, canteen or the like (e.g., where product **4** is already packaged in asset **2** or where they product **4** and asset **2** are provided separately); bringing product **4** to a self-checkout counter at a retail store, restaurant, cafeteria, canteen or the like and requesting asset **2** at the time of checkout through a POSS of the self-checkout or otherwise; choosing product **4** and asset **2** on a physical POSS **12** (e.g., by using GUI **12**A); choosing product **4** and asset **2** from a vending machine; etc.

(22) Consumer **6** may indicate their desire to borrow asset **2** and purchase product **4** in an online setting by, for example: putting product **4** and asset **2** in an online shopping cart of a website, mobile application, or the like; putting product **4** in an online shopping cart of a website, mobile application, or the like and selecting an option to borrow asset **2**; purchasing product **4** and selecting asset **2** through one-click purchasing such as making a purchase via Amazon™; etc.

(23) Method **100** may begin at any one of blocks **102**, **116** or **128**. In some embodiments, one or more of blocks **102**, **116** and **128** occur substantially simultaneously. In some embodiments, the occurrence of a first branch of method **100** comprising of blocks **102** and **106** occurs in series with a second branch of method **100** comprising of blocks **116**, **108**, **118**, **122** and **124** and/or a third branch of method **100** comprising of block **128**. It should be understood that the order of occurrence of the first, second and third branches of method **100** may be varied without departing from the scope of the invention and that the occurrence of at least a portion of one or more of the first, second and third branches of method **100** may overlap temporally. For convenience, the first branch of method **100** will be described first but it should be understood that this does not require that the first branch of method **100** occurs prior to the second and/or third branches of method **100**.

(24) At block **102**, consumer **6** is presented with a prompt **102**A comprising at least a portion of the terms of an agreement **104**. Prompt **102**A may comprise any suitable prompt. For example, where method **100** is occurring in-person (e.g., not online), prompt **102**A may be displayed on GUI **12**A of POSS **12**, prompt **102**A may be an oral or verbal prompt from a clerk **14** of merchant **60** to consumer **6**, prompt **102**A may be posted on a physical or digital sign board visible to consumer **6** or otherwise. Where method **100** is occurring online, prompt **102**A may be displayed in text in a web browser (or in a temporary window or dialogue of the web browser), in text within a mobile application, or by audio from a web browser, mobile application or the like.

(25) At block **102**, prompt **102**A may comprise at least a portion of agreement **104**. Agreement **104** may govern the borrowing of asset **2** by consumer **6**. For example, agreement **104** may set out a penalty **110** (e.g., a financial penalty) to be charged if asset **2** is not returned (as discussed further herein) within a term **112** (e.g., period of time), how to return asset **2** (e.g., via return infrastructure **20**), circumstances in which penalty **110** may be at least partially refunded upon return of asset **2** after term **112** has expired, penalties for damage, etc. Prompt **102**A may include all terms of agreement **104** or just a portion of agreement **104**. In some embodiments, where less than the entirety of agreement **104** is included in prompt **102**A, further terms or details of agreement **104**

may be made available to consumer **6** elsewhere (e.g., by selecting a link **102**B displayed in the block **102** prompt as shown in FIG. **3**, by making a request to clerk **14**, on a hardcopy located nearby, etc.). Agreement **104** may be a smart contract registered or registerable on a blockchain or distributed ledger such that once accepted, agreement **104** is automatically executed based on one or more events occurring (or expected to occur) during method **100**.

(26) FIG. **3** is a schematic depiction of an exemplary prompt **102**A displayed on GUI **12**A of an exemplary POSS **12** according to an exemplary embodiment of the invention. As can be seen from FIG. **3**, consumer **6** has indicated that they would like to purchase a large coffee (i.e., product **4**) for $5.00, term **112** is 10 days and penalty **110** is $10.

(27) Penalty **110** may be a fiat currency penalty (e.g., payable by credit card, debit card, mobile payment, electronic cheque, e-transfer, digital wallet, etc.) but this is not mandatory. In some embodiments, penalty **110** comprises a cryptocurrency penalty or a penalty against a balance of a gift card, prepaid account, prepaid payment card, cafeteria meal plan, employee benefit plan, rewards or loyalty program or the like. Penalty **110** may be a fixed amount payable once but this is not mandatory. Penalty **110** may be a recurring late fee that continues to accrue until asset **2** is returned or a recurring late fee that is charged on a regular basis until asset **2** is returned. The magnitude of penalty **110** may depend on the replacement value of asset **2** (e.g., if asset **2** is a reusable coffee cup, then penalty **110** may be less expensive than if asset **2** is a reusable container for an entire meal), damage to asset **2**, the length of term **112**, prior borrowing history of consumer **6**, the location or time of transaction **50**, etc. In some embodiments, penalty **110** is not fixed and may be dependent on how long it takes to return asset **2**. In some embodiments, agreement **104** optionally sets out that at least a portion of penalty **110** charged to consumer **6** on failure to return asset **2** within term **112** may be refunded to consumer **6** upon return of asset **2** outside of term **112**. Penalty **110** may be determined at least in part on a past history of borrowing assets **2** of consumer **6**. Penalty **110** may be determined based at least in part on the nature of product **4**, details of consumer **6**, consumer demand for asset **2**, contextual factors and/or pre-set penalties for each product **4**.

(28) The length of term **112** may be any suitable amount of time. In some embodiments, term **112** is dependent on the type of product **4** to be provided within asset **2**. For example, where product **4** is quickly consumable or expected to be consumed on the spot (e.g., a coffee or a beer), then term **112** may be relatively shorter. In contrast, where product **4** is slowly consumable or expected to be consumed at another location (e.g., shampoo), then term **112** may be relatively longer. Term **112** may be determined at least in part on a past history of borrowing assets **2** of consumer **6**. Term **112** may be determined at least on consumer demand for asset **2** at the time of borrowing or predicted consumer demand for asset **2** at a later time. Term **112** may be determined based at least in part on the nature of product **4**, past, present or predicted consumer behaviour related to product **4**, and/or pre-set terms **112** for each product **4**.

(29) After or during block **102**, consumer **6** may be provided with an opportunity to accept agreement **104**. Consumer **6** may accept agreement **104** in any suitable manner. For example, where method **100** occurs in person, consumer **6** may accept agreement **104** by selecting an option displayed on GUI **12**A of POSS **12** (e.g., by checking box **102**C as shown in FIG. **3**), by orally confirming acceptance to clerk **14** (which may be recorded), by signing a physical copy of agreement **104**, by providing a digital signature via GUI **12**A of POSS **12** or otherwise, by proceeding to provide payment information **120** (as discussed further herein), etc. In some embodiments, consumer **6** may accept agreement **104** via a secondary POSS **12**′ connected to AMS **18** rather than POSS **12**, a mobile device of consumer **6** in communication with AMS **18** or another device.

(30) In some embodiments, consumer **6** may provide a blanket acceptance of future agreements **104** such that consumer **6** does not need to re-accept agreement **104** each time they borrow an asset **2** according to method **100**. The blanket acceptance of future agreements **104** may provide that

future agreements **104** all have the same term **112** and penalty **110** or may allow for different terms **112** and penalties **110**. For example, during a first time that consumer **6** participates in method **100**, they may provide acceptance of future agreements **104** such that blocks **102** and **106** may be skipped on subsequent occurrences of method **100** where consumer **6** is participating. Consumer **6** may identify themselves as having previously accepted agreement **104** using any suitable method. For example, consumer **6** may provide some sort of identification such as an account number/name, user ID, payment information **120**, etc. which may be provided by any suitable input means (e.g., by RFID, by scanning a barcode or QR code, by visual inspection by clerk **14**, by inputting through a GUI such as GUI **12**A, etc.) and their identification may cross-referenced with an indication that they have previously indicated agreement **104** stored in data storage **18**A of AMS **18**. As another example, consumer **6** may identify themselves by presenting a previously borrowed asset **2** which is associated with their consumer identifier **126** such that by obtaining asset identifier **130** of the previously borrowed asset **2**, consumer identifier **126** of consumer **6** may be determined (e.g., by cross-referencing of asset identifier **130** of the previously borrowed asset **2** and consumer identifier **126** in data storage **18**A of AMS **18**) and blanket acceptance of agreement **104** may be confirmed.
(31) At block **106**, it is determined whether or not consumer **6** has accepted agreement **104**. The block **106** determination may be made by, for example, clerk **14**, POSS **12**, PPS **16** and/or AMS **18**. If at block **106**, it is determined that consumer **6** did not accept agreement **104**, then method **100** ends. For example, at block **106**, if clerk **14** does not receive oral acceptance of agreement **104**, then clerk **14** can end method **100**. As another example, if POSS **12** does not receive an indication of acceptance of agreement **104**, then POSS **12** can end method **100**. As yet another example, if PPS **16** does not receive indication of acceptance of agreement **104** (e.g., as indicated by receipt of payment information **120** at PPS **16**), then PPS **16** can end method **100**. If at block **106**, it is determined that consumer **6** did accept agreement **104**, then method **100** may continue to block **132** as discussed further herein.
(32) Returning back to the second branch of method **100**, block **116** comprises presenting consumer **6** with a prompt **116**A for payment for product **4**. Payment for product **4** may solely be a payment for product **4** such that, as long as asset **2** is returned according to the terms of agreement **104**, consumer **6** does not directly incur any expense to borrow asset **2**. For example, as long as asset **2** is returned according to the terms of agreement **104**, the cost to consumer **6** of product **4** may be the same whether they choose to borrow asset **2** or not. Instead, merchant **60** may cover the cost of borrowing asset **2** as part of the revenue received by the sale of product **4** to consumer **6** (or otherwise). In some embodiments, payment for product **4** may also include a deposit for asset **2** that is refundable upon return of asset **2**. As discussed above, block **116** may occur before block **102**, substantially concurrently with block **102** or after block **102** (e.g., during or after the occurrence of the blocks of the first branch of method **100**).
(33) Prompt **116**A may indicate various ways in which consumer **6** can pay for product **4**. For example, prompt **116**A may indicate that a user can pay with any suitable payment type (e.g., credit card, debit card, mobile payment, electronic cheque, e-transfer, digital wallet, cryptocurrency, gift card, prepaid account, meal plan, prepaid payment card, etc.). The payment information **120** (e.g., the credit card or debit card number, expiration date and security code, digital wallet identifier, or the like) associated with such payment type may be provided to POSS **12** by any suitable method. For example, payment information **120** may be provided to POSS **12** by manually inputting payment information **120** through GUI **12**A or another peripheral of POSS **12**, by swiping a payment card in a scanner **12**B of POSS **12**, by inserting at least a portion of a payment card into scanner **12**B of POSS **12**, by wireless communication (e.g., “tapping”) between a card, smartphone, smartwatch, or other form of mobile payment and scanner **12**B of POSS **12**, by completing an e-commerce transaction (e.g., by selecting “complete purchase” or “buy”) which authorizes use of payment information by the e-commerce platform, etc.
(34) In some embodiments, consumer **6** has previously provided payment information **120** to PPS

16 and/or AMS **18** and payment information **120** is stored by PPS **16** and/or AMS **18** for future use such that consumer **6** does not need to provide payment information **120** again (such that one or more of blocks **116**, **122** and **124** may be skipped). Instead, consumer **6** may merely need to identify themselves using any suitable method and payment information **120** associated with consumer **6** may be retrieved (e.g., by PPS **16**). For example, consumer **6** may provide some sort of identification such as an account number/name, user ID, payment information **120**, etc. which may be provided by any suitable input means (e.g., by RFID, by scanning a barcode or QR code, by visual inspection by clerk **14**, by inputting through a GUI such as GUI **12**A, etc.). As another example, consumer **6** may identify themselves by presenting a previously borrowed asset **2** which is associated with their consumer identifier **126** such that by obtaining asset identifier **130** of the previously borrowed asset **2**, consumer identifier **126** of consumer **6** may be determined (e.g., by cross-referencing of asset identifier **130** of the previously borrowed asset **2** and consumer identifier **126** in data storage **18**A of AMS **18**).

(35) Prompt **116**A may comprise any suitable prompt. For example, where method **100** is occurring in-person (e.g., not online), prompt **116**A may be displayed on GUI **12**A of a point of POSS **12**, prompt **116**A may be an oral prompt by a clerk **14**, prompt **116**A may be posted on a physical or digital sign board visible to consumer **6** or otherwise. Where method **100** is occurring online, prompt **116**A may be displayed in text in a web browser (or in a temporary window or dialogue of the web browser), in text within a mobile application, or by audio from a web browser, mobile application or the like. FIG. **3** depicts an exemplary prompt **116**A displayed on GUI **12**A of an exemplary POSS **12**.

(36) FIG. **4** is a schematic depiction of further exemplary prompts **102**A and **116**A displayed on GUI **12**A of an exemplary POSS **12** according to an exemplary embodiment of the invention. As can be seen from FIG. **4**, consumer **6** has indicated that they would like to purchase a large coffee (i.e., product **4**) in a reusable cup (i.e., asset **2**) for $5.00. Unlike the FIG. **3** embodiment, consumer **6** is prompted (e.g., at block **102**) to agree to agreement **104** set out at least in part in prompt **102**A by proceeding with payment which may be accomplished as indicated in prompt **116**A (e.g., at block **116** which is occurring substantially simultaneously with block **102**). In this way, consumer **6** can provide their acceptance of agreement **104** and payment information **120** in a single step thereby facilitating (e.g., simplifying) the borrowing of asset **2**.

(37) If payment information **120** is provided (e.g., in response to block **116**), payment information **120** may be transferred to PPS **16** to complete the payment for transaction **50** for product **4** at block **108**. Alternatively, if consumer **6** identifies themselves as someone who has previously provided payment information **120**, payment information **120** associated with their consumer identifier **126** may be retrieved by PPS **16** or AMS **18** and processed at block **108** to complete the payment for transaction **50** for product **4**.

(38) At block **118**, it is determined whether or not payment with payment information **120** was successfully processed at block **108** or confirmed at block **108** as having previously occurred in the case that product **4** was previously paid for is included as part of a meal plan or the like. The block **118** determination may be made by, for example, clerk **14**, POSS **12** or PPS **16**. If at block **118**, it is determined that payment did not occur (e.g., due to insufficient funds linked to payment information **120**), then method **100** ends. If at block **118**, it is determined that consumer **6** did provide payment information **120** and PPS **16** was able to process payment for product **4** with payment information **120**, then method **100** may continue to block **122**.

(39) Together, blocks **116**, **108** and **118** and delivery of product **4** to consumer **6** comprise transaction **50** for purchase of product **4**.

(40) At block **122**, payment information **120** is stored in a data storage **16**A of PPS **16** (or in a data storage of POSS **12**, or AMS **18**). Data storage **16**A may be a secure data storage having appropriate security measures for storing payment information **120**. In some embodiments, payment information **120** is pre-authorized in the amount of penalty **110** (e.g., to ensure that funds

for penalty **110** are available at the end of term **112**) but this is not mandatory.
(41) At block **124**, payment information **120** may be associated with a unique consumer identifier **126**. Block **124** may occur substantially concurrently, before or after block **122** such that payment information **120** is stored in data storage **16**A in association with consumer identifier **126**. Consumer identifier **126** may comprise a name of consumer **6** but this is not mandatory. For example, consumer identifier **126** may comprise a randomly generated string of characters (e.g., alphanumeric characters or the like). Consumer identifier **126** could be a "user ID". In some embodiments, a consumer **6** may have multiple instances of payment information **120** (e.g., payment information for a first credit card, a second credit card, a debit card, a mobile payment device, etc.) associated with a single consumer identifier **126**. In other embodiments, each unique instance of payment information **120** has its own consumer identifier **126**. As will become evident, associating consumer identifier **126** with payment information **120** allows PPS **16** to communicate with AMS **18** about payment information **120** and consumer **6** without actually sharing payment information **120** between PPS **16** and AMS **18** which would otherwise introduce security risks and/or require AMS **18** to incorporate security measures and/or regulatory oversight which may undesirable and/or costly.
(42) Returning back to the third branch of method **100**, block **128** comprises determining an asset identifier **130** for the instance of asset **2** subject of method **100**. As discussed above, block **128** may occur before one or more of blocks **102** and **116**, substantially concurrently with one or more of blocks **102** and **116** or after one or more of blocks **102** and **116** (e.g., during or after the occurrence of the blocks of the first and/or second branches of method **100**).
(43) Asset identifiers **130** may be provided for all assets **2** prior to allowing such assets **2** to be borrowed according to method **100**. Alternatively, a new asset identifier **130** is generated at the time of purchase of product **4** and is associated with the asset **2** being borrowed at that time. Asset identifiers **130** may comprise at least in part a type of class of an asset **2** (e.g., "coffeecup" or "coffeecup1") but this is not mandatory. For example, asset identifier **130** may comprise a randomly generated string of characters (e.g., alphanumeric characters or the like). Unique asset identifiers **130** may be provided for each asset **2** such that two otherwise identical assets **2** could be uniquely identifiable. Alternatively, all assets **2** of a particular type or class could have the same asset identifier **130**.
(44) Asset identifiers **130** may be associated with assets **2** using various techniques. Asset identifiers **130** may be printed directly onto surfaces of assets **2**. Asset identifiers **130** may be printed on stickers or the like adhered to surfaces of assets **2**. Asset identifiers **130** may be represented by barcodes, QR codes, etc. printed on asset **2** (or printed on stickers adhered to asset **2**). Asset identifiers **130** may be represented by RFID tags such as near-NFC tags or the like adhered to or otherwise incorporated into assets **2**. Asset identifiers **130** may be represented by unique physical arrangements of material microstructures (e.g., unique physical arrangements of steel grain structure) or macrostructures.
(45) At block **128**, the asset identifier **130** for asset **2** subject of method **100** may be determined automatically or manually. For example, where the purchase of product **4** is occurring in-person, consumer **6** or clerk **14** may input asset identifier **130** into POSS **12** (e.g., by scanning a representation of asset identifier **130** with scanner **12**B of POSS **12** or another scanner) or by typing asset identifier **130** into POSS **12** (e.g., via a keyboard or GUI **12**A). Alternatively, a secondary scanner or secondary POSS **12**′ may be provided, as shown in FIG. **1**, for obtaining asset identifier **130** and sending asset identifier **130** to AMS **18**. Asset identifier **130** may be obtained from an ordered list of asset identifiers **130** wherein the ordered list corresponds in order to a stock of assets **2** (e.g., such that an asset identifier **130** of an asset **2** pulled from the top of a pile or stack matches the asset identifier **130** at the top of the ordered list).
(46) Where a plurality of assets **2** are stocked (e.g., in one or more stacks) in an area (e.g., on a shelf or in a cabinet), one or more sensors or scanners may be provided to keep track of the asset

identifiers **130** of assets **2** in the stack such that it can be determined which assets **2** are present and which are not. This may facilitate corresponding an asset identifier **130** to a transaction **50**. For example, where assets **2** have RFID tags, an RFID scanner may be employed to keep track of the inventory of assets **2** in the presence of the scanner. In this way, if an asset **2** is removed from inventory, the asset identifier **130** of that asset **2** may no longer be present and AMS **18** may infer that such asset **2** corresponds to a particular transaction **50**.

(47) Block **128** may not occur until the time at which the purchase of product **4** is being fulfilled (e.g., the time at which product **4** is inserted into asset **2** so that product **4** can be delivered to consumer **6**) in which case a fulfillment employee **22** or clerk **14** may input asset identifier **130** at the time of fulfillment rather than at the time of ordering. For example, where consumer **6** requests a coffee (product **4**) in a reusable coffee cup (asset **2**) as consumer **5** placed their order at a coffee shop, the unique asset **2** may not be chosen and associated with transaction **50** until a few moments later when a fulfilment employee **22** (e.g., a barista) takes a reusable coffee cup (asset **2**) from storage and makes the coffee. Similarly, consumer **6** may order a product **4** and asset **2** online at a first time (e.g., via a mobile app), the unique asset **2** may not be chosen and associated with transaction **50** until a fulfillment employee **22** physically gathers product **4** and asset **2** for delivery to consumer **6** at a later time (e.g., minutes, hours or days later).

(48) At block **132**, transaction information **134** is obtained and stored by AMS **18**. Transaction information **134** may comprise one or more of penalty **110**, term **112**, acceptance **114**, consumer identifier **126** and asset identifier **130**. In some embodiments, one or more of penalty **110**, term **112**, acceptance **114**, consumer identifier **126** and asset identifier **130** are received by AMS **18** concurrently at block **132** but this is not mandatory. For example, each of the one or more of penalty **110**, term **112**, acceptance **114**, consumer identifier **126** and asset identifier **130** received at block **132** may be received as they become available (e.g., as the first, second and third branches of method **100** are completed). In some embodiments, transaction information **134** does not include payment information **120** such that consumer **6** can be confident that payment information **120** will not be undesirably used or stored by the proprietor of AMS **18** and/or AMS **18** may not require the type of security typically required for storing payment information **120**.

(49) In some embodiments, transaction information **134** comprises each of penalty **110**, term **112**, acceptance **114**, consumer identifier **126** and asset identifier **130**, but this is not mandatory. For example, in some embodiments, transaction information **134** only comprises consumer identifier **126** and asset identifier **130**. In some embodiments, AMS **18** may derive one or more of penalty **110**, term **112** and acceptance **114** from consumer identifier **126** and/or asset identifier **130** and/or other information about asset **2** received at block **132**. For example, penalty **110** and/or term **112** may be determined by AMS **18** based at least in part on asset identifier **130** (e.g., penalty **110** and/or term **112** may be based on the type of asset **2** represented by asset identifier **130**). In some embodiments, penalty **110** and/or term **112** may be determined by AMS **18** based at least in part on other information related to the purchase of product **4** (e.g., the nature of product **4**, where the purchase of product **4** was made, the time of the purchase of product **4**, etc.) that may be provided to AMS **18** as part of transaction information **134**. In some embodiments, AMS **18** may determine that acceptance of agreement **104** has occurred due to receipt of consumer identifier **126** (e.g., because consumer identifier **126** is provided to AMS **18**, it is implicitly determined that consumer **6** accepted agreement **104** at block **106**).

(50) At block **136**, transaction information **134** is stored in a data storage **18**A of AMS **18**. Data storage **18**A may be separate from data storage **16**A (e.g., stored in different physical locations, stored on different servers, stored on different storage devices, separated within a common storage device, stored by separate organizations, etc.). Since data storage **18**A of AMS **18** may not receive payment information **120**, data storage **18**A may employ lesser (e.g., less costly) security protocols than data storage **16**A of PPS **16**, which does receive payment information **120**.

(51) Where elements of transaction information **134** are received separately by AMS **18**, block **136**

may comprise associating such elements with one another (e.g., a consumer identifier **126** received at the time of placing an order may be associated with asset identifier **130** received after fulfillment of the order). Elements of transaction information **134** may be associated with one another based on a transaction number provided to AMS **18** in association with each element, based on context (time of receipt, from which merchant **60** the information is received, the nature of product **4** and the nature of asset **2**, etc.) or by other suitable means.

(52) In some embodiments, AMS **18** employs consumer identifier **126** to identify consumer **6** but this is not mandatory and AMS **18** may alternatively generate its own identifier for consumer **6**. An identifier for consumer **6** generated by AMS **18** may be related to a single consumer identifier **126** or multiple consumer identifiers **126** (e.g., where a single consumer **6** uses or has used multiple forms of payment). In some embodiments, PPS **16** and/or AMS **18** may determine that multiple forms of payment (e.g., multiple instances of payment information **120**) belong to a single consumer **6** and may associate multiple instances of payment information **120** with consumer identifier **126** (or an identifier generated by AMS **18**). In some embodiments, determining that multiple forms of payment belong to a single consumer **6** comprises cross-referencing a database of customer information and payment information for one or more payment types (e.g., for a single credit card issuer or for multiple credit card issuers). This database may be maintained by PPS **16**, AMS **18**, POSS **12**, merchant **60** or a third party.

(53) Transaction information **134** may be associated with other information of consumer **6**. For example, consumer **6** may optionally provide further information such as, for example, their name, address, email address, social media handles, phone number, preferences, etc. which may be stored in data storage **16**A with transaction information **134**. Consumer **6** may provide this information via a website, mobile application or the like associated with AMS **18**. Consumer **6** may provide this information at the time of transaction **50** (e.g., via clerk **14**, POSS **12** or otherwise). Transaction information **134** may be associated with historical transaction information of consumer **6** if consumer **6** has borrowed one or more assets **2** previously.

(54) At block **138**, AMS **18** monitors for a return of asset **2** with the asset identifier **130** input at block **128**. Block **138** may be a passive or active step. In some embodiments, AMS **18** takes no action at block **138** unless asset **2** with identifier **130** is returned. For example, monitoring for the return of asset **2** may comprise merely allowing time to pass. In other embodiments, AMS **18** may actively search for asset **2** with identifier **130** (e.g., by tracking a tracking beacon attached to or integrated into asset **2**).

(55) Asset **2** may be returned using any suitable technique or return infrastructure **20**. For example, asset **2** may be returned to clerk **14** (e.g., by handing asset **2** to clerk **14** or by placing asset **2** in a receptacle or on a counter near clerk **14**), by placing asset **2** in a designated location (e.g., a receptacle), by returning asset **2** to a head office of the operator of AMS **18**, by placing asset **2** in a mailbox (e.g., where asset **2** has prepaid postage or similar) or any other suitable means. Asset **2** may be returned by consumer **6** or by another person that comes into possession of asset **2**.

(56) The return of asset **2** may be tracked by inputting asset identifier **130** into POSS **12** (e.g., if returned at the point of borrowing), secondary POSS **12′** or a similar POSS located at the location of return or at a centralized return location where returns from various locations are tracked. Asset identifier **130** may be inputted into a POSS (e.g., POSS **12**) using any suitable technique, such as the techniques described herein in relation to block **128**. The return of asset **2** may be tracked automatically where return infrastructure **20** includes a scanner for reading asset identifier **130** and a network connection to AMS **18** for communicating which assets **2** have been returned (e.g., where asset **2** is dropped into a network connected receptacle with an integrated scanner for reading asset identifier **130**). The return of asset **2** may be tracked by consumer **6** submitting to AMS **18** a photo, video or the like of asset **2** being returned to a designated location or receptacle.

(57) In some embodiments, such as, but not limited to, where asset identifier **130** is not unique to asset **2** (e.g., a single asset identifier **130** is provided for a class of assets **2** such as coffee cups),

consumer **6** may identify themselves at the time of return to facilitate determining who has returned asset **2**. For example, consumer **6** may be prompted to provide some sort of identification at the time of return of asset **2** such as an account number/name, user ID, receipt of borrowing, payment information **120**, etc. which may be provided by any suitable input means (e.g., by RFID, by scanning a barcode or QR code, by visual inspection by clerk **14**, by inputting through a GUI such as GUI **12**A, etc.). Alternatively, AMS **18** may determine which consumer identifier **126** is associated with an asset **2** having a generic asset identifier **130** through context (e.g., when and where returned, type of asset **2**, etc.).

(58) At block **140**, if asset **2** has not been returned (i.e., a "no" determination), method **100** continues to block **142** and AMS **18** determines whether or not term **112** has elapsed. If term **112** has not elapsed (i.e., a "no" determination), then method **100** returns to block **138**. If term **112** has elapsed (i.e., a "yes" determination), method **100** continues to block **144**.

(59) At block **144**, AMS **18** requests payment of penalty **110** by consumer **6**. AMS **18** may send such a request for payment of penalty **110** by consumer **6** to PPS **16** by suitable communication (e.g., via an API or the like). This communication may comprise consumer identifier **126** and the magnitude of penalty **110** to be charged to consumer **6**. PPS **16** may then retrieve payment information **120** stored by PPS **16** which corresponds to consumer identifier **126** so that it may process a payment for penalty **110** with payment information **120** which was stored in data storage **16**A at block **122**. PPS **16** may provide a report to AMS **18** when the payment for penalty **110** for consumer identifier **126** is completed. PPS **16** may provide a report to consumer **6** when the payment for penalty **110** for consumer identifier **126** is completed. For example, PPS **16** may email consumer **6** with a receipt for payment of penalty **110** at an email address collected as part of transaction **50** or previously by PPS **16**.

(60) At block **146**, AMS **18** receives confirmation of payment for penalty **110** for consumer identifier **126** is completed. Optionally, AMS **18** may send a communication to consumer **6** confirming that penalty **110** has been paid at block **146**. AMS **18** may optionally continue to monitor for return of asset **2** at block **138**.

(61) Returning to block **140**, if asset **2** has been returned (i.e., a "yes" determination), then method **100** continues to block **148**. If, at block **148**, term **112** has not elapsed (i.e., a "no" determination), then method **100** may end or continue to optional block **150**. Optionally, AMS **18** may send a communication to PPS **16** that penalty **110** is not to be charged using payment information **120**. If a deposit for asset **2** was charged or pre-authorized using payment information **120** (e.g., as part of transaction **50**), then AMS **18** may send a request to PPS **16** to refund the deposit or release the pre-authorization upon a "yes" determination at block **148**.

(62) Optionally, if it is determined when asset **2** is returned that asset **2** has sustained damage, consumer **6** may be charged with a damage penalty following similar steps to those set out in blocks **144** and **146**.

(63) At block **150**, data from method **100** (e.g., transaction information **134**, the borrowing time, date and/or location of asset **2**, the return time, date and/or location of asset **2**, details of product **4**, details of merchant **60**, other information associated with transaction information **134**, etc.) may be stored in a data storage of AMS **18** (e.g., data storage **18**A or a separate data storage). Such data may be used for various purposes such as, but not limited to: providing rewards to consumer **6**; determining whether consumer **6** should be allowed to continue to borrow assets **2**; determining future penalties **110** and terms **112** for consumer **6** if further assets **2** are borrowed; determining how to distribute assets **2**; determining whether or not to obtain more assets **2** for distribution; and/or otherwise.

(64) Returning to block **148**, if term **112** has elapsed (i.e., a "yes" determination), then method **100** may end (or proceed to block **150**). Alternatively, if, at block **148**, term **112** has elapsed and penalty **110** (or a deposit) has already been paid by consumer **6**, then, if agreement **104** provides for it, method **100** may continue to block **152** where at least a portion of penalty **110** (or the deposit) is

refunded to consumer **6**. For example, at block **152**, if penalty **110** has already been paid by consumer **6** pursuant to the request at block **144** and agreement **104** provides for it, then AMS **18** may send a request to PPS **16** for at least a partial refund of penalty **110** to consumer **6**. AMS **18** may send such a request for refund of at least a portion of penalty **110** paid by consumer **6** to PPS **16** by suitable communication (e.g., via an API or the like). This communication may comprise consumer identifier **126** and the magnitude of the portion of penalty **110** to be refunded to consumer **6**. PPS **16** may then retrieve payment information **120** stored by PPS **16** which corresponds to consumer identifier **126** so that it may process a refund of the portion of penalty **110** with payment information **120**. PPS **16** may provide a report to AMS **18** when the refund for consumer **6** is completed. PPS **16** may provide a report to consumer **6** when the refund for the at least a portion of penalty **110** for consumer identifier **126** is completed at which point method **100** ends (or method **100** proceeds to block **150**.

(65) In some embodiments, one or more of blocks **132**, **136**, **142**, **144**, **146**, **148**, **150** and **152** may be executed by PPS **16**. To execute such blocks, PPS **16** may need to be updated with certain information (e.g., the determination at block **140** of whether or not asset **2** has been returned, the time of return of asset **2**, etc.) which may be provided by AMS **18**.

(66) Where agreement **104** comprises a smart contract registered on a distributed ledger or blockchain, one or more of blocks **132**, **136**, **142**, **144**, **146**, **148**, **150** and **152** may be executed by the smart contract by communication with AMS **18** (e.g., by receiving the block **140** determination and related information) and/or PPS **16** (e.g., by sending instructions to PPS **16** according to block **144**). To execute such blocks, the smart contract may need to be updated with certain information (e.g., the determination at block **140** of whether or not asset **2** has been returned, the time of return of asset **2**, etc.) For example, updating the smart contract with such information may comprise the use of a blockchain oracle, registering the determination at block **140** by AMS **18** on the blockchain in a manner accessible by the smart contract (or accessible by the nodes of the distributed ledger or blockchain on which the smart contract is registered) or by other mechanisms.

(67) As may be evident, one or more blocks of method **100** that occur prior to block **132** may occur without communication between AMS **18** and POSS **12** and/or without communication between AMS **18** and PPS **16** thereby allowing a consumer **6** to borrow an asset **2** even if AMS **18** goes offline due to a power outage, network failure, or the like. In such a situation, blocks **132** and onwards of method **100** may occur at a later time when the network connection is restored (or by some other method of information transfer to AMS **18**). Similarly, return infrastructure **20** may accept a return of an asset **2** even if at that moment, communication between return infrastructure **20** and AMS **18** is unavailable. In such a situation, the occurrence of the return of asset **2** may be later reported to AMS **18** (e.g., with a timestamp so that a block **142** determination may be made accurately and/or penalty **110** may be refunded if it has already been wrongfully charged).

Exemplary First Implementation of Method **100**

(68) In a first exemplary non-limiting implementation of method **100** depicted schematically in FIG. **5**, a consumer **6** is purchasing a coffee (product **4**) at a coffee shop (merchant **60**) and wishes for their coffee to be provided in a reusable cup (asset **2**).

(69) Prior to the start of method **100** in this first exemplary non-limiting implementation of method **100**, consumer **6** approaches an order or checkout area **60**A at the coffee shop and requests to order a coffee. Clerk **14** enters the order into POSS **12** and, according to blocks **102** and **116** which occur simultaneously, consumer **6** is presented with GUI **12**A of POSS **12** which displays prompt **102**A and prompt **116**A as shown, for example, in FIG. **3**. Consumer **6** reads prompt **102**A and prompt **116**A and provides acceptance **114** of agreement **104** and payment information **120** through a single action by tapping their RFID enabled credit card on scanner **12**B of POSS **12** which obtains payment information **120** of the credit card via this action.

(70) Payment for the coffee is processed by PPS **16** according to block **108** using payment information **120** which is sent to PPS **16** by POSS **12**. PPS **16** then stores payment information **120**

(e.g., the credit card number, expiry date and security code) in data storage **16**A of PPS **16**, according to block **122**, in association with a pre-existing consumer identifier **126** since consumer **6** has provided payment information **120** to PPS **16** previously, according to block **124**.
(71) At any time after the occurrence of a "yes" determination at both block **106** and **118**, clerk **14** may provide the details of the order of consumer **6** to fulfillment employee **22** of merchant **60** who may then retrieve the reusable coffee cup from storage (e.g., a stack of clean reusable coffee cups). Fulfillment employee **22** inputs asset identifier **130** of the chosen cup by scanning a QR code on the reusable cup with a scanner attached to POSS **12** according to block **128**. Fulfillment employee **22** then proceeds to fill the reusable coffee cup with coffee before handing it to consumer **6**.
(72) At block **132**, the magnitude of the term **112** (e.g., 10 days as set out in FIG. **3**), the penalty **110** (e.g., $10 as set out in FIG. **3**), consumer identifier **126** and asset identifier **130** (together comprising transaction information **134**) are received by AMS **18** via PPS **16** (although one or more of term **112**, penalty **110**, consumer identifier **126** and asset identifier **130** may be sent from POSS **12** directly to AMS **18**).
(73) At block **136**, transaction information **134** is stored in data storage **18**A of AMS **18**. Transaction information **134** does not include payment information **120**, which is instead stored in database **16**A of PPS **16**. As it happens, consumer **6** has previously borrowed assets **2** using payment information **120** and so transaction information **134** is associated with a pre-existing profile associated with consumer identifier **126** stored in data storage **18**A of AMS **18**.
(74) Consumer **6** drinks their coffee at the coffee shop and sees a designated network-connected return bin for reusable coffee cups (return infrastructure **20**) within the coffee shop. Consumer **6** proceeds to place the reusable coffee cup in a slot of the designated return bin which automatically scans the QR code on the cup to obtain asset identifier **130**. The return bin communicates asset identifier **130** to AMS **18** prompting method **100** to proceed from block **138** to block **150** with "yes" determination at block **140** and a "no" determination at block **148**. At block **150** the details of this instance of method **100** are stored in data storage **18**A of AMS **18** and method **100** is complete.
(75) From the perspective of consumer **6**, the borrowing of the reusable coffee cup (asset **2**) for their coffee (product **4**) was accomplished with minimal extra steps, without pre-authorization tying up funds on their credit card, without a deposit being paid and without any additional cost as compared to what would otherwise occur with a similar purchase of a coffee (product **4**) in a disposable coffee cup. Further, the security of payment information **120** was no different than would be the case with a similar purchase of a coffee (product **4**) in a disposable coffee cup since payment information is not received by or stored by AMS **18**.
Exemplary Second Implementation of Method **100**
(76) In a second exemplary non-limiting implementation of method **100** depicted schematically in FIG. **6**, a consumer **6** is purchasing shampoo (product **4**) for delivery to their home **70** via an online store of merchant **60** accessed through their device **75** (e.g., a mobile device, personal computer, etc.) and consumer **6** wishes for their shampoo to be provided in a reusable container (asset **2**).
(77) Prior to the start of method **100**, consumer **6** browses the online store of merchant **60** on their device **75** to find the shampoo that they wish to purchase and clicks an "add to cart" button on the web page. Consumer **6** is then directed to a checkout page (or consumer **6** clicks a "go to checkout page" button). At the checkout page, POSS **12** simultaneously presents consumer **6** with prompt **102**A and prompt **116**A according to blocks **102** and **116** as shown, for example, in FIG. **7**. Consumer **6** reads prompt **102**A and provides acceptance **114** of agreement **104** by checking box **102**C. Consumer **6** then provides their payment information **120** by typing payment information **120** into device **75** (or by otherwise providing payment information **120** stored in device **75**).
(78) Payment information **120** is sent to PPS **16** by POSS **12** and payment for the shampoo is processed according to block **108** by PPS **16** using payment information **120**. PPS **16** then stores payment information **120** (e.g., the credit card number, expiry date and security code) in data storage **16**A of PPS **16**, according to block **122**, in association with consumer identifier **126**,

according to block **124**.
(79) At any time after the occurrence of a “yes” determination at both block **106** and block **118**, POSS **12** may provide the details of the order of consumer **6** to fulfillment employee **22** located at a fulfillment center of merchant **60**. Fulfillment employee **22** may then retrieve the reusable shampoo container from storage (e.g., a stack of clean reusable containers). Fulfillment employee **22** inputs an asset identifier **130** represented by an RFID tag on the shampoo container via a scanner attached to secondary POSS **12′**, according to block **128**, and proceeds to fill the reusable container with shampoo before it is picked up by a delivery employee **24** and delivered to consumer **6** at their home **70**.
(80) At block **132**, the magnitude of the term **112** (e.g., 100 days as set out in FIG. **7**), the magnitude of penalty **110** (e.g., $15as set out in FIG. **7**), consumer identifier **126** and asset identifier **130** (together comprising transaction information **134**) are received by AMS **18**. One or more of the magnitude of the term **112**, the magnitude of penalty **110** and consumer identifier **126** may be received at AMS **18** via PPS **16** while asset identifier **130** may be received at AMS **18** directly from secondary POSS **12′**.
(81) At block **136**, transaction information **134** is stored in data storage **18**A of AMS **18**. Since, in this exemplary embodiment, consumer **6** has never borrowed assets **2** using payment information **120**, transaction information **134** is associated with a new profile of consumer **6** stored in data storage **18**A of AMS **18**. Since asset identifier **130** was received by AMS **18** separately from term **112**, penalty **110** and/or consumer identifier **126**, AMS **18** associates asset identifier **130** with the separately-received term **112**, penalty **110** and/or consumer identifier **126** at block **136** (e.g., based on a transaction identifier generated by POSS **12** or PPS **16** or based on other contextual information).
(82) Over the following **100** days, consumer **6** does not finish the shampoo and therefore does not return the reusable shampoo container. Meanwhile, AMS **18** is monitoring for the return of the reusable shampoo container according to block **138** and at the end of **100** days, AMS **18** sends a request to PPS **16** for payment of penalty **110** at block **144** based on a “no” determination at block **140** and a “yes” determination at block **142**. The request contains the magnitude of penalty **110** and consumer identifier **126**. PPS **16** then process payment of penalty **110** using stored payment information **120** (stored at block **122**) and sends a confirmation to AMS **18** that payment of penalty **110** has occurred. AMS **18** and/or PPS **16** then sends a report to consumer **6** informing them that they have been charged with penalty **110** for failure to return the reusable shampoo container. At block **150** the details of this instance of method **100** are stored in data storage **18**A of AMS **18**. Method **100** is optionally complete at this point.
(83) 110 days after transaction **50** occurred, consumer **6** finishes the shampoo and returns the reusable shampoo container via return infrastructure **20** (e.g., a designated return bin) monitored by AMS **18**. Depending on the terms of agreement **104**, AMS **18** may optionally send a request to PPS **16** to refund at least a portion of penalty **110** at block **152** based on “yes” determination at block **140** and a “yes” determination at block **148**. At block **150** the new details of this instance of method **100** are stored in data storage **18**A of AMS **18** and method **100** is complete.
(84) From the perspective of consumer **6**, the borrowing of the reusable shampoo container (asset **2**) for their shampoo (product **4**) was accomplished with minimal extra steps as compared to a similar purchase of a shampoo (product **4**) in a disposable container and the only cost paid by consumer **6** was due to a late return of asset **2**. Further, the security of payment information **120** was no different than would be the case with a similar purchase of shampoo (product **4**) in a disposable container since payment information is not received by or stored by AMS **18**.
Interpretation of Terms
(85) Unless the context clearly requires otherwise, throughout the description and the claims: “comprise”, “comprising”, and the like are to be construed in an inclusive sense, as opposed to an exclusive or exhaustive sense; that is to say, in the sense of “including, but not limited to”;

“connected”, “coupled”, or any variant thereof, means any connection or coupling, either direct or indirect, between two or more elements; the coupling or connection between the elements can be physical, logical, or a combination thereof; “herein”,“above”, “below”, and words of similar import, when used to describe this specification, shall refer to this specification as a whole, and not to any particular portions of this specification; “or”, in reference to a list of two or more items, covers all of the following interpretations of the word: any of the items in the list, all of the items in the list, and any combination of the items in the list; the singular forms “a”, “an”, and “the” also include the meaning of any appropriate plural forms.

(86) Words that indicate directions such as “vertical”, “transverse”, “horizontal”, “upward”, “downward”, “forward”, “backward”, “inward”, “outward”, “left”, “right”, “front”, “back”, “top”, “bottom”, “below”, “above”, “under”, and the like, used in this description and any accompanying claims (where present), depend on the specific orientation of the apparatus described and illustrated. The subject matter described herein may assume various alternative orientations. Accordingly, these directional terms are not strictly defined and should not be interpreted narrowly.

(87) For example, while processes or blocks are presented in a given order, alternative examples may perform routines having steps, or employ systems having blocks, in a different order, and some processes or blocks may be deleted, moved, added, subdivided, combined, and/or modified to provide alternative or subcombinations. Each of these processes or blocks may be implemented in a variety of different ways. Also, while processes or blocks are at times shown as being performed in series, these processes or blocks may instead be performed in parallel, or may be performed at different times.

(88) In addition, while elements are at times shown as being performed sequentially, they may instead be performed simultaneously or in different sequences. It is therefore intended that the following claims are interpreted to include all such variations as are within their intended scope.

(89) Where a component (e.g., a software module, processor, assembly, device, circuit, etc.) is referred to above, unless otherwise indicated, reference to that component (including a reference to a “means”) should be interpreted as including as equivalents of that component any component which performs the function of the described component (i.e., that is functionally equivalent), including components which are not structurally equivalent to the disclosed structure which performs the function in the illustrated exemplary embodiments of the invention.

(90) Specific examples of systems, methods and apparatus have been described herein for purposes of illustration. These are only examples. The technology provided herein can be applied to systems other than the example systems described above. Many alterations, modifications, additions, omissions, and permutations are possible within the practice of this invention. This invention includes variations on described embodiments that would be apparent to the skilled addressee, including variations obtained by: replacing features, elements and/or acts with equivalent features, elements and/or acts; mixing and matching of features, elements and/or acts from different embodiments; combining features, elements and/or acts from embodiments as described herein with features, elements and/or acts of other technology; and/or omitting combining features, elements and/or acts from described embodiments.

(91) Various features are described herein as being present in “some embodiments”. Such features are not mandatory and may not be present in all embodiments. Embodiments of the invention may include zero, any one or any combination of two or more of such features. This is limited only to the extent that certain ones of such features are incompatible with other ones of such features in the sense that it would be impossible for a person of ordinary skill in the art to construct a practical embodiment that combines such incompatible features. Consequently, the description that “some embodiments” possess feature A and “some embodiments” possess feature B should be interpreted as an express indication that the inventors also contemplate embodiments which combine features A and B (unless the description states otherwise or features A and B are fundamentally incompatible).

(92) In some embodiments, a non-transitory, computer readable medium is provided having one or more of an application program including computer instructions configured to cause at least one server and/or at least one processor to perform the methods (or one or more steps/blocks thereof) according to any of the disclosed methods.
(93) Method embodiments (as well as one or more steps thereof) can be configured as computer readable program instructions (corresponding to the blocks/steps/methods) and can be downloaded to respective computing/processing devices from a computer readable storage medium or to an external computer or external storage device via a network, for example, the Internet, a local area network, a wide area network and/or a wireless network.
(94) Aspects of the present disclosure are described sometimes with reference to a flow, a flow diagram, and/or block diagram of methods, apparatus (systems), and computer program products according to embodiments of the invention. It will be understood that each block of the flowchart illustrations and/or block diagrams, and combinations of blocks in the flowchart illustrations and/or block diagrams, can be implemented by computer readable program instructions, operable, for example, on one or more components (e.g., server(s), processor(s)). These computer readable program instructions may also be stored in a computer readable storage medium that can direct a computer, a programmable data processing apparatus, and/or other devices to function in a particular manner, such that the computer readable storage medium having instructions stored therein includes an article of manufacture including instructions which implement aspects of the function/act specified in the flowchart and/or block diagram block or blocks, in accordance with embodiments of the present disclosure.
(95) Any flowchart and block diagrams of the present disclosure are examples of architecture, functionality, and operations, of at least some of the embodiments of systems, methods, and computer readable media supported herein. In this regard, each block in the flowchart or block diagrams may represent a module, segment, or portion of instructions, which includes one or more executable instructions for implementing the specified logical function(s). It will also be noted that each block of the block diagrams and/or flowchart illustration, and combinations of blocks in the block diagrams and/or flowchart illustration, can be implemented by special purpose hardware-based systems that perform the specified functions or acts or carry out combinations of special purpose hardware and computer instructions.
(96) It should be understood that at least some embodiments of the present disclosure can correspond to a cloud computing environment, but are not so limited, as embodiments of the present disclosure are capable of being implemented in conjunction with any other type of computing environment now known or later developed. With respect to a cloud computing environment, such is a model of service delivery for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, network bandwidth, servers, processing, memory, storage, applications, virtual machines, and services) that can be rapidly provisioned and released with minimal management effort or interaction with a provider of the service.
(97) It is therefore intended that the following appended claims and claims hereafter introduced are interpreted to include all such modifications, permutations, additions, omissions, and sub-combinations as may reasonably be inferred. The scope of the claims should not be limited by the preferred embodiments set forth in the examples, but should be given the broadest interpretation consistent with the description as a whole.

Claims

1. An asset management method comprising: receiving, at an asset management system, an indication of acceptance of an agreement for borrowing of an asset by a first consumer as part of a transaction for a first product; receiving, at the asset management system, a consumer identifier

corresponding to the first consumer from a payment processing system employed to process a payment for the transaction for the first product using payment information of the first consumer; receiving, at the asset management system, an asset identifier indicative of the asset; obtaining, by the asset management system, a term for a return of the asset; obtaining, by the asset management system, a magnitude of a penalty payable upon the return of the asset not occurring within the term; storing the asset identifier, the term and the penalty in a data storage of an asset management server of the asset management system in association with the consumer identifier; storing the payment information of the first consumer in a data storage of a payment processing server of the payment processing system in association with the consumer identifier; monitoring, by the asset management system, for the return of the asset; and initiating a charge to the first consumer for the penalty when the term elapses without the return of the asset occurring by sending a request from the asset management system to the payment processing system to charge the first consumer an amount equal to the magnitude of the penalty via the payment processing system using the payment information of the first consumer stored in the data storage of the payment processing server of the payment processing system in association with the consumer identifier.

2. A method according to claim 1 wherein the indication of the acceptance is received from a point of sale system.

3. A method according to claim 1 wherein receiving the indication of acceptance comprises receiving the consumer identifier.

4. A method according to claim 1 wherein obtaining the term comprises receiving an indication of the term from the payment processing system.

5. A method according to claim 1 wherein obtaining the term comprises determining the term based at least in part on a type of asset associated with the asset identifier.

6. A method according to claim 1 wherein obtaining the term comprises determining the term based at least in part on the consumer identifier.

7. A method according to claim 1 wherein obtaining the penalty comprises receiving an indication of the penalty from the payment processing system.

8. A method according to claim 1 wherein obtaining the penalty comprises determining the penalty based at least in part on a type of asset associated with the asset identifier.

9. A method according to claim 1 wherein obtaining the penalty comprises determining the penalty based at least in part on the consumer identifier.

10. A method according to claim 1 comprising upon the return of the asset occurring after sending the request to the payment processing system to charge the first consumer in the amount of the penalty using the payment information of the first consumer, sending, from the asset management system, a further request to the payment processing system to refund the first consumer at least a portion of the amount of the penalty using the payment information of the first consumer.

11. A method according to claim 1 wherein the asset comprises a reusable container.

12. A method according to claim 1 wherein: receiving acceptance of the first agreement comprises receiving the payment information from the first consumer; and the payment information is obtained from the transaction for the first product.

13. A method according to claim 1 comprising upon receiving acceptance of the agreement for borrowing of the asset, providing the asset to the first consumer without requesting the payment processing system to charge the first consumer a deposit for the asset and without requesting the payment processing system to authorize a deposit for the asset with the payment information.

14. A method according to claim 1 comprising providing the asset to the first consumer upon receipt, by the asset management system, of the indication of acceptance of the agreement for borrowing of the asset by the first consumer.

15. A method according to claim 1 wherein receiving the payment information from the first consumer comprises receiving a consumer identifier of the consumer and obtaining the payment information from a record stored in the data storage of a payment processing server of the payment

processing system in association with the consumer identifier wherein receiving a consumer identifier of the consumer comprises receiving a previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset.
16. A method according to claim 1 wherein receiving acceptance of the first agreement comprises receiving a consumer identifier of the consumer and confirming that the acceptance has previously been provided in association with the consumer identifier and wherein receiving a consumer identifier of the consumer comprises receiving a previously borrowed asset and obtaining the consumer identifier of the consumer based on an asset identifier of the previously borrowed asset.
17. An asset management system comprising: a processor configured for: receiving an indication of acceptance of an agreement for borrowing of an asset by a first consumer as part of a transaction for a first product; receiving a consumer identifier corresponding to the first consumer from a payment processing system employed to process a payment for the transaction for the first product using payment information of the first consumer; receiving an asset identifier indicative of the asset; obtaining a term for a return of the asset; obtaining a magnitude of a penalty payable upon the return of the asset not occurring within the term; storing the asset identifier, the term and the penalty in a data storage of an asset management server of the asset management system in association with the consumer identifier; monitoring for the return of the asset; and initiating a charge to the first consumer for the penalty upon the return of the asset not occurring within the term by sending a request to the payment processing system to charge the first consumer an amount equal to the magnitude of the penalty via the payment processing system using the payment information of the first consumer stored in a data storage of a payment processing server of the payment processing system in association with the consumer identifier.
18. A system comprising: a point of sale system configured for: prompting the first consumer to pay for a product by providing payment information; and receiving the payment information from the first consumer; a payment processing system configured for: receiving the payment information from the point of sale system; processing payment for the product with the payment information; and storing the payment information in a data storage of a payment processing server of the payment processing system in association with a consumer identifier; an asset management system configured for: receiving an indication of acceptance of an agreement for borrowing of an asset by the first consumer; receiving the consumer identifier corresponding to the first consumer; receiving an asset identifier indicative of the asset; obtaining a term for a return of the asset; obtaining a penalty payable upon the return of the asset not occurring within the term; storing the asset identifier, the term and the penalty in a data storage of an asset management server of the asset management system in association with the consumer identifier; monitoring for the return of the asset; and initiating a charge to the first consumer for the penalty upon the return of the asset not occurring within the term by sending a request to the payment processing system to charge the first consumer in the amount of the penalty using the payment information of the first consumer stored in the data storage of the payment processing server of the payment processing system in association with the consumer identifier.