

METHODS AND SYSTEMS FOR FACILITATING DISTRIBUTING PHYSICAL PRODUCTS USING NON-FUNGIBLE TOKENS

FIELD OF THE INVENTION

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The present invention relates generally to data processing. More specifically, the present invention is methods and systems for facilitating distributing physical products using Non-Fungible Tokens.

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BACKGROUND OF THE INVENTION

The field of data processing is technologically important to several industries, business organizations, and/or individuals. In particular, the use of data processing is prevalent for facilitating the distribution of physical products.

A non-fungible token (NFT) is a unique and non-interchangeable unit of data stored on a digital ledger (blockchain). NFTs can be associated with reproducible digital files such as photos, videos, and audio. NFTs use a digital ledger to provide a public certificate of authenticity or proof of ownership, but it does not restrict the sharing or copying of the underlying digital file. Further, the NFTs may be created and traded among artists, creators, and crypto enthusiasts on an NFT marketplace.

Existing techniques for facilitating distributing physical products are deficient with regard to several aspects. For instance, current technologies do not facilitate

whitelisting a user based on holding a token for allowing the user to purchase a physical product and a corresponding NFT earlier than the general public. Further, current technologies do not facilitate directing the user (or buyer) to the NFT based on scanning the physical product associated with the NFT.

5 Therefore, there is a need for improved methods and systems for facilitating distributing physical products using Non-Fungible Tokens that may overcome one or more of the above-mentioned problems and/or limitations.

SUMMARY OF THE INVENTION

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This summary is provided to introduce a selection of concepts in a simplified form, that are further described below in the Detailed Description. This summary is not intended to identify key features or essential features of the claimed subject matter. Nor is this summary intended to be used to limit the claimed subject matter's scope.

15 According to some embodiments, a method for facilitating distributing physical products using Non-Fungible Tokens is disclosed. Further, the method may include receiving, using a communication device, user data from at least one user device associated with at least one user. Further, the method may include analyzing, using a processing device, the user data for generating a user account. Further, the method may
20 include receiving, using the communication device, a request from the at least one user device. Further, the method may include generating, using the processing device, an access alert based on the request. Further, the method may include retrieving, using a storage device, a product catalog based on the access alert. Further, the method may

include transmitting, using the communication device, the product catalog to the at least one user device. Further, the method may include receiving, using the communication device, a response and a payment corresponding to the product catalog from the at least one user device. Further, the method may include processing, using the processing device, the response and the payment. Further, the method may include generating, using the processing device, an order based on the analyzing of the response and the payment. Further, the method may include generating, using the processing device, a Non-Fungible Token (NFT) associated with each physical product of the at least one physical product based on the order. Further, the method may include transmitting, using the communication device, the order and the Non-Fungible token to the at least one user device. Further, the method may include storing, using the storage device, the order, the response, the Non-Fungible token, and the payment.

In further embodiments, a system for facilitating distributing physical products using Non-Fungible Tokens is disclosed. Further, the system may include a communication device configured for receiving user data from at least one user device associated with at least one user. Further, the communication device may be configured for receiving a request from the at least one user device. Further, the communication device may be configured for transmitting a product catalog to the at least one user device. Further, the communication device may be configured for receiving a response and a payment corresponding to the product catalog from the at least one user device. Further, the communication device may be configured for transmitting an order and a Non-Fungible token to the at least one user device. Further, the system may include a processing device configured for analyzing the user data for generating a user account.

Further, the processing device may be configured for generating an access alert based on the request. Further, the processing device may be configured for processing the response and the payment. Further, the processing device may be configured for generating the order based on the analyzing of the response and the payment. Further, the processing device may be configured for generating the Non-Fungible Token (NFT) associated with each physical product of the at least one physical product based on the order. Further, the system may include a storage device configured for retrieving the product catalog based on the access alert. Further, the storage device may be configured for storing the order, the response, the Non-Fungible token, and the payment.

Both the foregoing summary and the following detailed description provide examples and are explanatory only. Accordingly, the foregoing summary and the following detailed description should not be considered to be restrictive. Further, features or variations may be provided in addition to those set forth herein. For example, embodiments may be directed to various feature combinations and sub-combinations described in the detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this disclosure, illustrate various embodiments of the present disclosure. The drawings contain representations of various trademarks and copyrights owned by the Applicants. In addition, the drawings may contain other marks owned by third parties and are being used for illustrative purposes only. All rights to various trademarks and copyrights

represented herein, except those belonging to their respective owners, are vested in and the property of the applicants. The applicants retain and reserve all rights in their trademarks and copyrights included herein, and grant permission to reproduce the material only in connection with reproduction of the granted patent and for no other purpose.

Furthermore, the drawings may contain text or captions that may explain certain embodiments of the present disclosure. This text is included for illustrative, non-limiting, explanatory purposes of certain embodiments detailed in the present disclosure.

FIG. 1 is an illustration of an online platform consistent with various embodiments of the present disclosure.

FIG. 2 is a block diagram of a computing device for implementing the methods disclosed herein, in accordance with some embodiments.

DETAIL DESCRIPTIONS OF THE INVENTION

As a preliminary matter, it will readily be understood by one having ordinary skill in the relevant art that the present disclosure has broad utility and application. As should be understood, any embodiment may incorporate only one or a plurality of the above-disclosed aspects of the disclosure and may further incorporate only one or a plurality of the above-disclosed features. Furthermore, any embodiment discussed and identified as being “preferred” is considered to be part of a best mode contemplated for carrying out the embodiments of the present disclosure. Other embodiments also may be discussed for additional illustrative purposes in providing a full and enabling disclosure. Moreover,

many embodiments, such as adaptations, variations, modifications, and equivalent arrangements, will be implicitly disclosed by the embodiments described herein and fall within the scope of the present disclosure.

Accordingly, while embodiments are described herein in detail in relation to one
5 or more embodiments, it is to be understood that this disclosure is illustrative and exemplary of the present disclosure, and are made merely for the purposes of providing a full and enabling disclosure. The detailed disclosure herein of one or more embodiments is not intended, nor is to be construed, to limit the scope of patent protection afforded in any claim of a patent issuing here from, which scope is to be defined by the claims and
10 the equivalents thereof. It is not intended that the scope of patent protection be defined by reading into any claim a limitation found herein that does not explicitly appear in the claim itself.

Thus, for example, any sequence(s) and/or temporal order of steps of various processes or methods that are described herein are illustrative and not restrictive.
15 Accordingly, it should be understood that, although steps of various processes or methods may be shown and described as being in a sequence or temporal order, the steps of any such processes or methods are not limited to being carried out in any particular sequence or order, absent an indication otherwise. Indeed, the steps in such processes or methods generally may be carried out in various different sequences and orders while still falling
20 within the scope of the present invention. Accordingly, it is intended that the scope of patent protection is to be defined by the issued claim(s) rather than the description set forth herein.

Additionally, it is important to note that each term used herein refers to that which an ordinary artisan would understand such term to mean based on the contextual use of such term herein. To the extent that the meaning of a term used herein—as understood by the ordinary artisan based on the contextual use of such term—differs in any way from
5 any particular dictionary definition of such term, it is intended that the meaning of the term as understood by the ordinary artisan should prevail.

Furthermore, it is important to note that, as used herein, “a” and “an” each generally denotes “at least one,” but does not exclude a plurality unless the contextual use dictates otherwise. When used herein to join a list of items, “or” denotes “at least one of
10 the items,” but does not exclude a plurality of items of the list. Finally, when used herein to join a list of items, “and” denotes “all of the items of the list.”

The following detailed description refers to the accompanying drawings. Wherever possible, the same reference numbers are used in the drawings and the following description to refer to the same or similar elements. While many embodiments
15 of the disclosure may be described, modifications, adaptations, and other implementations are possible. For example, substitutions, additions, or modifications may be made to the elements illustrated in the drawings, and the methods described herein may be modified by substituting, reordering, or adding stages to the disclosed methods. Accordingly, the following detailed description does not limit the disclosure. Instead, the
20 proper scope of the disclosure is defined by the appended claims. The present disclosure contains headers. It should be understood that these headers are used as references and are not to be construed as limiting upon the subjected matter disclosed under the header.

The present disclosure includes many aspects and features. Moreover, while many aspects and features relate to, and are described in the context of methods and systems for facilitating distributing physical products using Non-Fungible Tokens, embodiments of the present disclosure are not limited to use only in this context.

5 Overview:

The present disclosure describes methods and systems for facilitating distributing physical products using Non-Fungible Tokens. Further, FAKTÜRY™, an exemplary embodiment of the disclosed system herein, may be associated with a streetwear brand that releases quality products (or products) through limited quantity drops. Further, each
10 product purchased may have an NFT (non-fungible token) that reflects the purchase. Further, the NFT (or NFT's) may be used as wearables in the Metaverse on avatars and possibly other entities. Further, FAKTÜRY™ may conclusively evolve into an ecosystem of products.

Further, each item purchased may have a different rarity based on a rarity scale.
15 Further, the product may be associated with a minting #.

Further, the product (or physical product) may be mailed to a purchaser as an ordinary retailer may send them. Further, the NFT may be given directly to the customer upon transaction completion.

Further, in an exemplary embodiment, Bob may be a loyal \$FAKTURY holder.
20 Today is the official launch of FAKTÜRY™ DROP 0. Further, Bob may be whitelisted as a holder of 'x' amount of \$FAKTURY at snapshot, so Bob may be given access to the site, a duration of time before the general public. Further, Bob enters the online marketplace and chooses a HOODë. Not only because he was a holder of "x" amount of

token (\$FAKTURY), did he obtain early access, but also since Bob has been noted as an early buyer, Bob may receive a discount at purchase (amounts to vary). Further, Bob may receive confirmation of his purchase with an NFT of the purchased product attached. In this case, the NFT may be a wearable that may be compatible with an NFT Avatar

5 associated with the disclosed system. Ultimately, the disclosed system may be compatible with all skins. This means that if a user (or purchaser) had a Virtual-Reality headset, the user may access the avatar and enable the item purchased to be worn on the avatar in that Metaverse. Further, the physical product may be mailed, and upon delivery, the disclosed system may have QR-capability to which the user may scan the product and get directed
10 to the NFT associated with the product.

Further, the user (or customers) may be able to purchase as many items as they would like, until there is a critical reason to bottleneck the quantity that may be purchased at a time in which the majority of the community has decided to overrule this original setting

15 FIG. 1 is an illustration of an online platform 100 consistent with various embodiments of the present disclosure. By way of non-limiting example, the online platform 100 for facilitating distributing physical products using Non-Fungible Tokens may be hosted on a centralized server 102, such as, for example, a cloud computing service. The centralized server 102 may communicate with other network entities, such
20 as, for example, a mobile device 106 (such as a smartphone, a laptop, a tablet computer, etc.), other electronic devices 110 (such as desktop computers, server computers, etc.), databases 114, and sensors 116 over a communication network 104, such as, but not limited to, the Internet. Further, users of the online platform 100 may include relevant

parties such as, but not limited to, end-users, service providers, and administrators.

Accordingly, in some instances, electronic devices operated by the one or more relevant parties may be in communication with the online platform 100.

5 A user 112, such as the one or more relevant parties, may access the online platform 100 through a web-based software application or browser. The web-based software application may be embodied as, for example, but not be limited to, a website, a web application, a desktop application, and a mobile application compatible with a computing device 200.

10 In further embodiments, a method for facilitating distributing physical products using Non-Fungible Tokens is disclosed. Further, the method may include receiving, using a communication device, user data from at least one user device associated with at least one user. Further, the at least one user device may include a smartphone, a tablet, a laptop, a personal computer, and so on. Further, the user data may include a user name, an email address, a contact number, and so on. Further, the at least one user may include
15 an individual, an institution, and an organization that may want to purchase at least one physical product.

Further, the method may include analyzing, using a processing device, the user data for generating a user account. Further, the user account may be associated with a user profile.

20 Further, the method may include receiving, using the communication device, a request from the at least one user device. Further, the request may indicate that the at least one user may want to purchase the at least one physical product. Further, the request may include a wallet address associated with a wallet of the at least one user. Further, the

at least one user may hold a cryptocurrency (or token) using the wallet. Further, the user profile may be associated with the wallet.

Further, the method may include generating, using the processing device, an access alert based on the request. Further, the access alert may indicate that the at least
5 one user may be holding an amount associated with a token (such as \$FAKTURY). Further, the access alert may facilitate allowing the at least one user to access an online marketplace to buy the at least one physical product earlier than the general public.

Further, the method may include retrieving, using a storage device, a product catalog based on the access alert. Further, the product catalog may include information
10 corresponding to a plurality of physical products associated with the request. Further, the product information may include product name, a product price, a product photo, a product size, a product color, a product brand, etc. Further, each physical product of the plurality of physical products may have a different rarity based on a rarity scale.

Further, the method may include transmitting, using the communication device,
15 the product catalog to the at least one user device.

Further, the method may include receiving, using the communication device, a response and a payment corresponding to the product catalog from the at least one user device. Further, the response may include a selection associated with the at least one physical product from the plurality of physical products comprised in the product catalog.
20 Further, the payment may include an amount associated with the product price of the at least one physical product that may be purchased by the at least one user.

Further, the method may include processing, using the processing device, the response and the payment.

Further, the method may include generating, using the processing device, an order based on the analyzing of the response and the payment. Further, the order may include order details such as an order identity number, an order tracking number, an expected delivery date, etc.

5 Further, the method may include generating, using the processing device, a Non-Fungible Token (NFT) associated with each physical product of the at least one physical product based on the order. Further, the NFT may be used as wearables in the Metaverse on avatars and possibly other entities.

Further, the method may include transmitting, using the communication device,
10 the order and the Non-Fungible token to the at least one user device.

Further, the method may include storing, using the storage device, the order, the response, the Non-Fungible token, and the payment.

Further, in some embodiments, the storing may include storing the order, the response, the Non-Fungible token, and the payment in a distributed ledger.

15 Further, in some embodiments, the method may include receiving, using the communication device, QR data from at least one input device. Further, the QR data may be associated with a QR code corresponding to the at least one product. Further, the QR code may be disposed on the at least one product. Further, the at least one input device may be configured for generating the QR data based on scanning the QR code on the at
20 least one physical product. Further, the at least one input device may include a QR code scanner, the at least one user device, etc. Further, the method may include analyzing, using the processing device, the QR data to generate an identifier. Further, the identifier may be associated with the NFT corresponding to the at least one physical product.

Further, the method may include retrieving, using the storage device, the NFT corresponding to the at least one product based on the identifier. Further, the method may include transmitting, using the communication device, the NFT to the at least one user device based on the retrieving.

5 In further embodiments, a system for facilitating distributing physical products using Non-Fungible Tokens is disclosed. Further, the system may include a communication device configured for receiving user data from at least one user device associated with at least one user. Further, the at least one user device may include a smartphone, a tablet, a laptop, a personal computer, and so on. Further, the user data may
10 include a user name, an email address, a contact number, and so on. Further, the at least one user may include an individual, an institution, and an organization that may want to purchase at least one physical product. Further, the communication device may be configured for receiving a request from the at least one user device. Further, the request may indicate that the at least one user may want to purchase the at least one physical
15 product. Further, the request may include a wallet address associated with a wallet of the at least one user. Further, the at least one user may hold a cryptocurrency (or token) using the wallet. Further, the user profile may be associated with the wallet. Further, the communication device may be configured for transmitting a product catalog to the at least one user device. Further, the communication device may be configured for receiving
20 a response and a payment corresponding to the product catalog from the at least one user device. Further, the response may include a selection associated with the at least one physical product from the plurality of physical products comprised in the product catalog. Further, the payment may include an amount associated with the product price of the at

least one physical product that may be purchased by the at least one user. Further, the communication device may be configured for transmitting an order and a Non-Fungible token to the at least one user device.

Further, the system may include a processing device configured for analyzing the user data for generating a user account. Further, the user account may be associated with a user profile. Further, the processing device may be configured for generating an access alert based on the request. Further, the access alert may indicate that the at least one user may be holding an amount associated with a token (such as \$FAKTURY). Further, the access alert may facilitate allowing the at least one user to access an online marketplace to buy the at least one physical product earlier than the general public. Further, the processing device may be configured for processing the response and the payment. Further, the processing device may be configured for generating the order based on the analyzing of the response and the payment. Further, the order may include order details such as an order identity number, an order tracking number, an expected delivery date, etc. Further, the processing device may be configured for generating the Non-Fungible Token (NFT) associated with each physical product of the at least one physical product based on the order. Further, the NFT may be used as wearables in the Metaverse on avatars and possibly other entities.

Further, the system may include a storage device configured for retrieving the product catalog based on the access alert. Further, the product catalog may include information corresponding to a plurality of physical products associated with the request. Further, the product information may include product name, a product price, a product photo, a product size, a product color, a product brand, etc. Further, each physical product

of the plurality of physical products may have a different rarity based on a rarity scale. Further, the storage device may be configured for storing the order, the response, the Non-Fungible token, and the payment.

With reference to FIG. 2, a system consistent with an embodiment of the disclosure may include a computing device or cloud service, such as computing device 200. In a basic configuration, computing device 200 may include at least one processing unit 202 and a system memory 204. Depending on the configuration and type of computing device, system memory 204 may comprise, but is not limited to, volatile (e.g. random-access memory (RAM)), non-volatile (e.g. read-only memory (ROM)), flash memory, or any combination. System memory 204 may include operating system 205, one or more programming modules 206, and may include a program data 207. Operating system 205, for example, may be suitable for controlling computing device 200's operation. In one embodiment, programming modules 206 may include image-processing module, machine learning module and/or image classifying module. Furthermore, embodiments of the disclosure may be practiced in conjunction with a graphics library, other operating systems, or any other application program and is not limited to any particular application or system. This basic configuration is illustrated in FIG. 2 by those components within a dashed line 208.

Computing device 200 may have additional features or functionality. For example, computing device 200 may also include additional data storage devices (removable and/or non-removable) such as, for example, magnetic disks, optical disks, or tape. Such additional storage is illustrated in FIG. 2 by a removable storage 209 and a non-removable storage 210. Computer storage media may include volatile and

nonvolatile, removable and non-removable media implemented in any method or technology for storage of information, such as computer-readable instructions, data structures, program modules, or other data. System memory 204, removable storage 209, and non-removable storage 210 are all computer storage media examples (i.e., memory storage.) Computer storage media may include, but is not limited to, RAM, ROM, electrically erasable read-only memory (EEPROM), flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store information and which can be accessed by computing device 200. Any such computer storage media may be part of device 200.

Computing device 200 may also have input device(s) 212 such as a keyboard, a mouse, a pen, a sound input device, a touch input device, a location sensor, a camera, a biometric sensor, etc. Output device(s) 214 such as a display, speakers, a printer, etc. may also be included. The aforementioned devices are examples and others may be used.

Computing device 200 may also contain a communication connection 216 that may allow device 200 to communicate with other computing devices 218, such as over a network in a distributed computing environment, for example, an intranet or the Internet.

Communication connection 216 is one example of communication media.

Communication media may typically be embodied by computer-readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and includes any information delivery media.

The term “modulated data signal” may describe a signal that has one or more characteristics set or changed in such a manner as to encode information in the signal. By

way of example, and not limitation, communication media may include wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, radio frequency (RF), infrared, and other wireless media. The term computer-readable media as used herein may include both storage media and communication media.

5 As stated above, a number of program modules and data files may be stored in system memory 204, including operating system 205. While executing on processing unit 202, programming modules 206 (e.g., application 220 such as a media player) may perform processes including, for example, one or more stages of methods, algorithms, systems, applications, servers, databases as described above. The aforementioned process
10 is an example, and processing unit 202 may perform other processes. Other programming modules that may be used in accordance with embodiments of the present disclosure may include sound encoding/decoding applications, machine learning application, acoustic classifiers, etc.

 Generally, consistent with embodiments of the disclosure, program modules may
15 include routines, programs, components, data structures, and other types of structures that may perform particular tasks or that may implement particular abstract data types. Moreover, embodiments of the disclosure may be practiced with other computer system configurations, including hand-held devices, general-purpose graphics processor-based systems, multiprocessor systems, microprocessor-based or programmable consumer
20 electronics, application-specific integrated circuit-based electronics, minicomputers, mainframe computers, and the like. Embodiments of the disclosure may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network. In a distributed computing

environment, program modules may be located in both local and remote memory storage devices.

Furthermore, embodiments of the disclosure may be practiced in an electrical circuit comprising discrete electronic elements, packaged or integrated electronic chips
5 containing logic gates, a circuit utilizing a microprocessor, or on a single chip containing electronic elements or microprocessors. Embodiments of the disclosure may also be practiced using other technologies capable of performing logical operations such as, for example, AND, OR, and NOT, including but not limited to mechanical, optical, fluidic, and quantum technologies. In addition, embodiments of the disclosure may be practiced
10 within a general-purpose computer or in any other circuits or systems.

Embodiments of the disclosure, for example, may be implemented as a computer process (method), a computing system, or as an article of manufacture, such as a computer program product or computer-readable media. The computer program product may be a computer storage media readable by a computer system and encoding a
15 computer program of instructions for executing a computer process. The computer program product may also be a propagated signal on a carrier readable by a computing system and encoding a computer program of instructions for executing a computer process. Accordingly, the present disclosure may be embodied in hardware and/or in software (including firmware, resident software, micro-code, etc.). In other words,
20 embodiments of the present disclosure may take the form of a computer program product on a computer-usable or computer-readable storage medium having computer-usable or computer-readable program code embodied in the medium for use by or in connection with an instruction execution system. A computer-usable or computer-readable medium

may be any medium that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

The computer-usable or computer-readable medium may be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. More specific computer-readable medium examples (a non-exhaustive list), the computer-readable medium may include the following: an electrical connection having one or more wires, a portable computer diskette, a random-access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or Flash memory), an optical fiber, and a portable compact disc read-only memory (CD-ROM). Note that the computer-usable or computer-readable medium could even be paper or another suitable medium upon which the program is printed, as the program can be electronically captured, via, for instance, optical scanning of the paper or other medium, then compiled, interpreted, or otherwise processed in a suitable manner, if necessary, and then stored in a computer memory.

Embodiments of the present disclosure, for example, are described above with reference to block diagrams and/or operational illustrations of methods, systems, and computer program products according to embodiments of the disclosure. The functions/acts noted in the blocks may occur out of the order as shown in any flowchart. For example, two blocks shown in succession may in fact be executed substantially concurrently or the blocks may sometimes be executed in the reverse order, depending upon the functionality/acts involved.

While certain embodiments of the disclosure have been described, other embodiments may exist. Furthermore, although embodiments of the present disclosure have been described as being associated with data stored in memory and other storage mediums, data can also be stored on or read from other types of computer-readable media, such as secondary storage devices, like hard disks, solid-state storage (e.g., USB drive), or a CD-ROM, a carrier wave from the Internet, or other forms of RAM or ROM. Further, the disclosed methods' stages may be modified in any manner, including by reordering stages and/or inserting or deleting stages, without departing from the disclosure.

10 Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention.