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(54) **LICENSING MEDIA CONSUMPTION USING DIGITAL CURRENCY**

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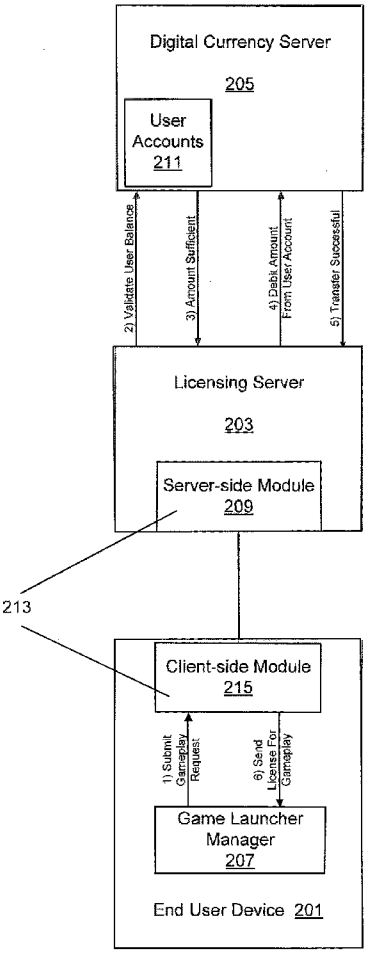
G06Q 10/00	(2006.01)
H04L 9/32	(2006.01)
G06F 21/00	(2006.01)

(52) **U.S. Cl.** **705/26**; 705/40; 705/30; 726/28

(57) **ABSTRACT**

Methods and apparatus for issuing licenses to allow end users to consume digital media content on a user device by responding to licensing requests by determining the number of digital tokens required to license the requested consumption and then issuing the license if the end user's account has a sufficient number of digital tokens.



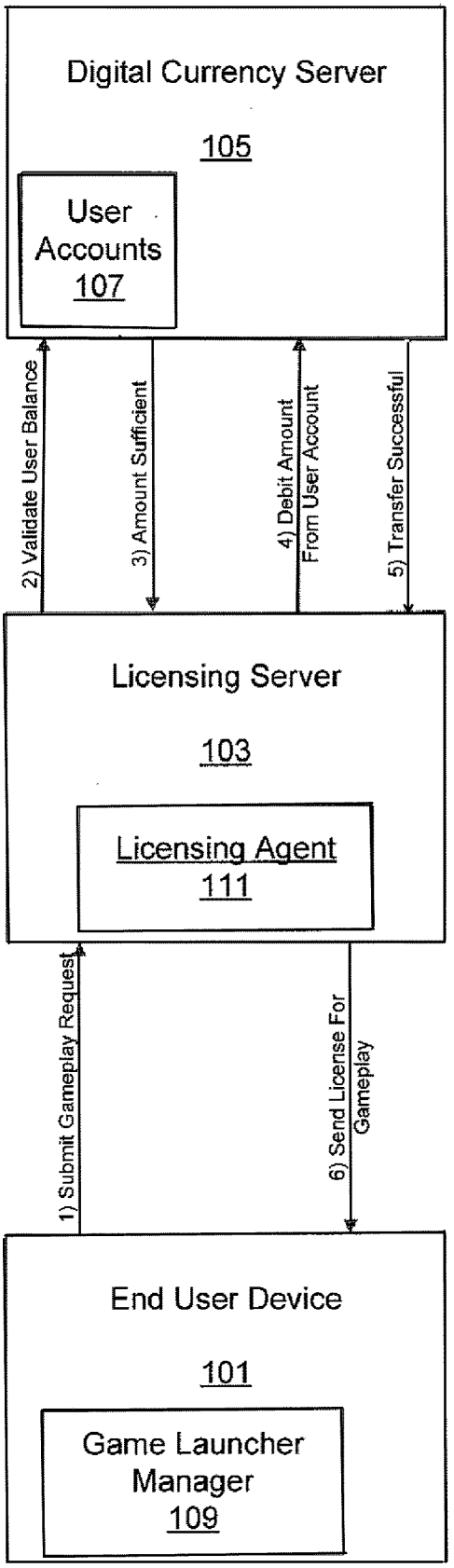

Digital Currency Server
105
User Accounts 107
2) Validate User Balance
3) Amount Sufficient
4) Debit Amount From User Account
5) Transfer Successful
Licensing Server
103
Licensing Agent 111
1) Submit Gameplay Request
6) Send License For Gameplay
End User Device
101
Game Launcher Manager 109

Figure 1

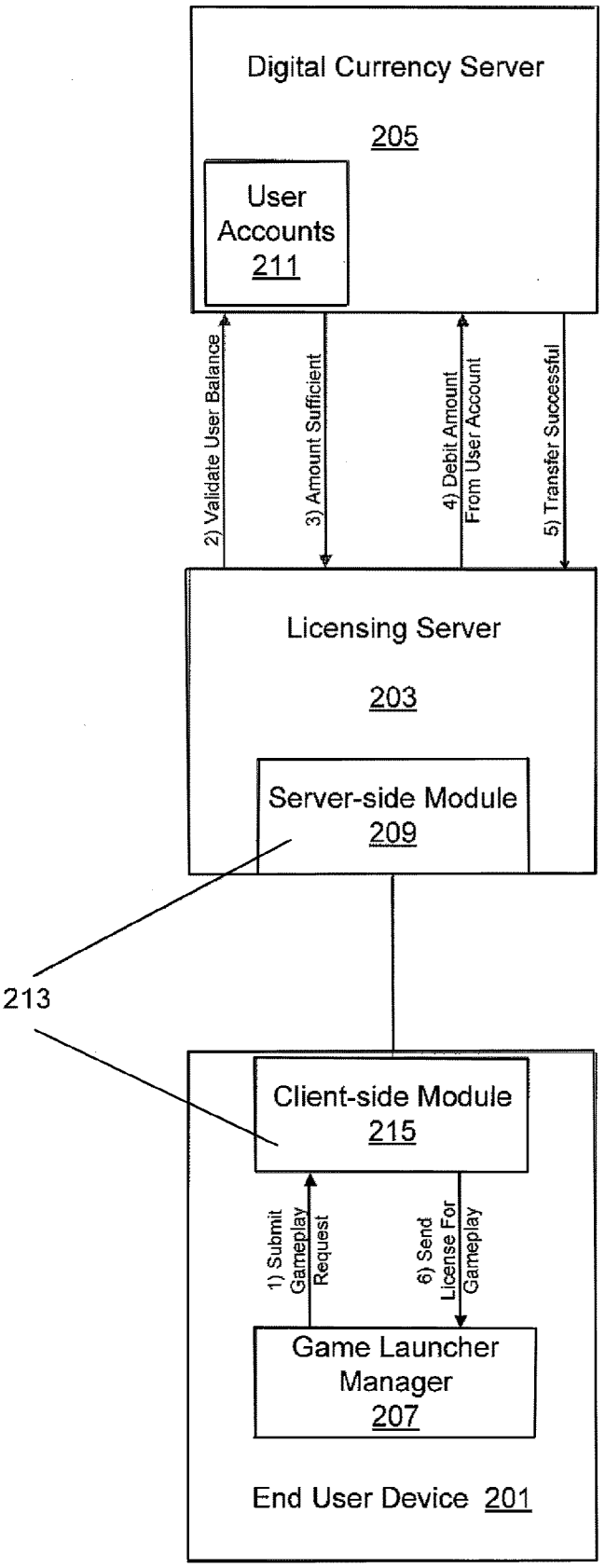

Digital Currency Server
205
User Accounts 211
2) Validate User Balance
3) Amount Sufficient
4) Debit Amount From User Account
5) Transfer Successful
Licensing Server
203
Server-side Module 209
213
Client-side Module 215
1) Submit Gameplay Request
6) Send License For Gameplay
Game Launcher Manager 207
End User Device 201

Figure 2

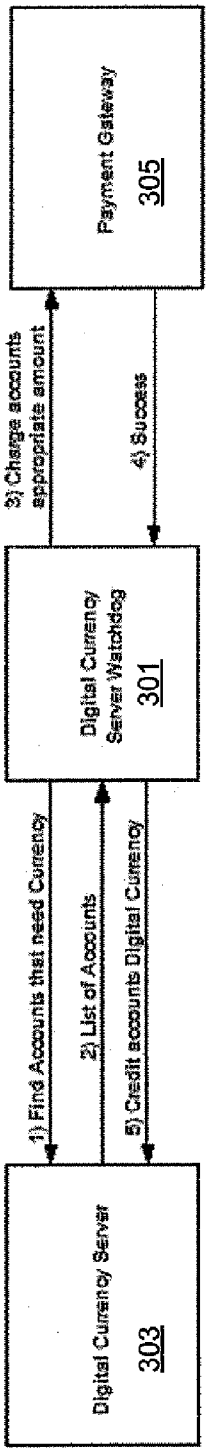


Figure 3

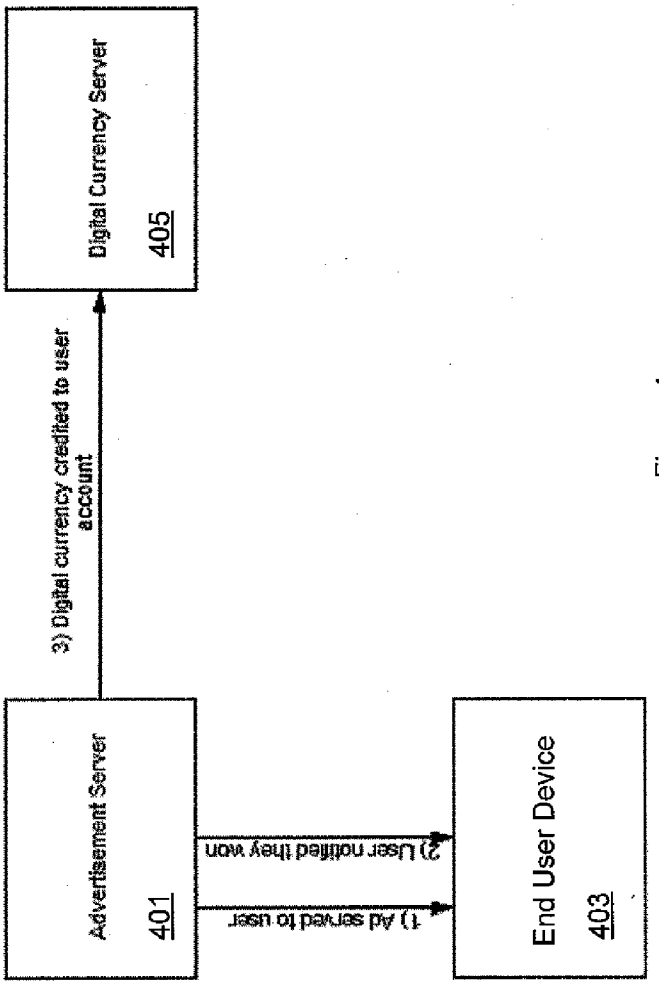


Figure 4

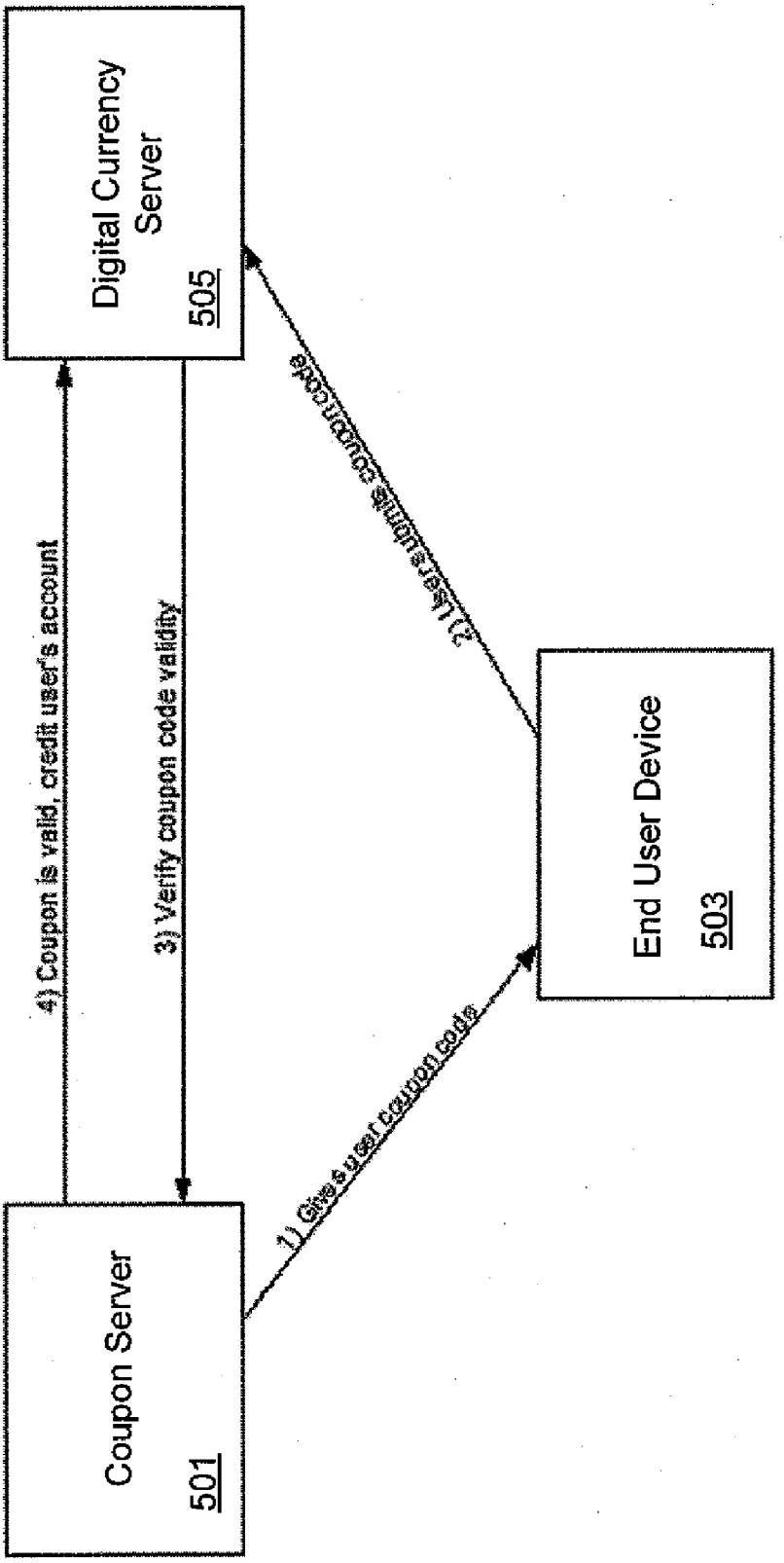

Digital Currency Server
505
End User Device
503
Coupon Server
501
1) Give a user coupon code
2) User submits coupon code
3) Verify coupon code validity
4) Coupon is valid, credit user's account

Figure 5

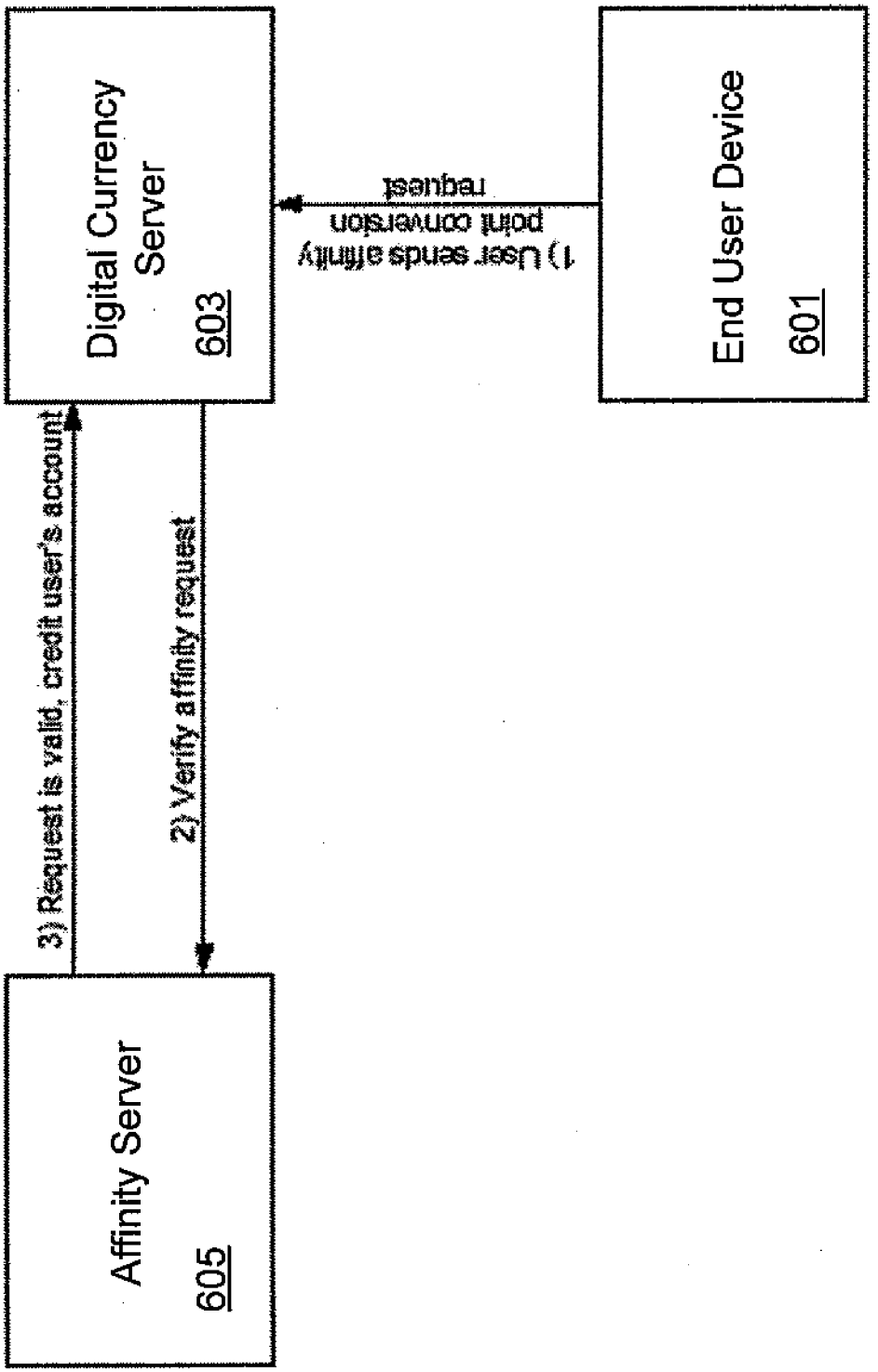

Digital Currency Server
603
End User Device
601
1) User sends affinity point conversion request
2) Verify affinity request
3) Request is valid, credit user's account
Affinity Server
605

Figure 6

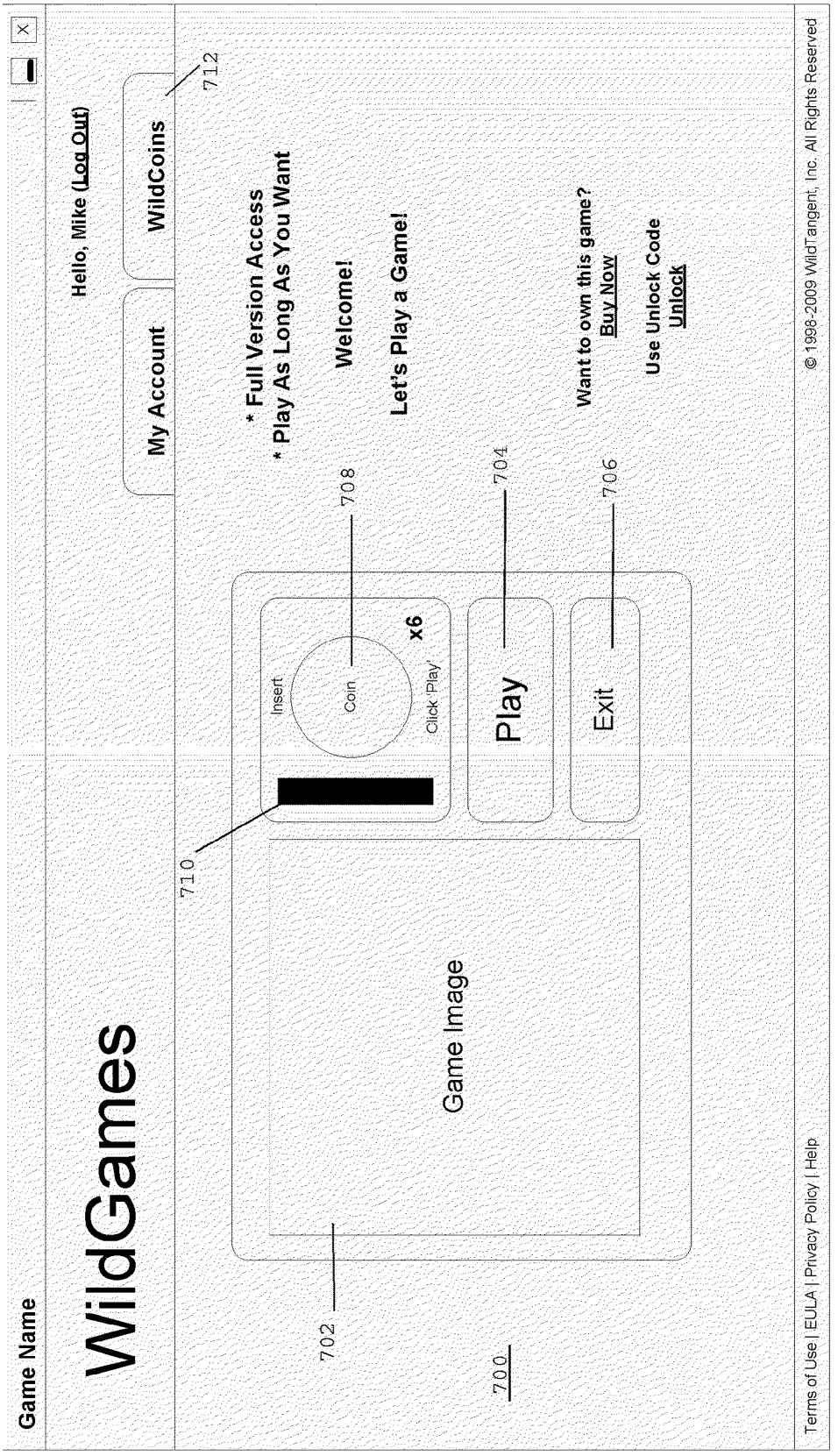

Game Name
WildGames
Hello, Mike (Log Out)
My Account
WildCoins
712
* Full Version Access
* Play As Long As You Want
Welcome!
Let's Play a Game!
Insert
Coin
x6
Click 'Play'
708
710
Play
704
Exit
706
Want to own this game?
Buy Now
Use Unlock Code
Unlock
Game Image
702
700
Terms of Use | EULA | Privacy Policy | Help
© 1998-2009 WildTangent, Inc. All Rights Reserved

Figure 7

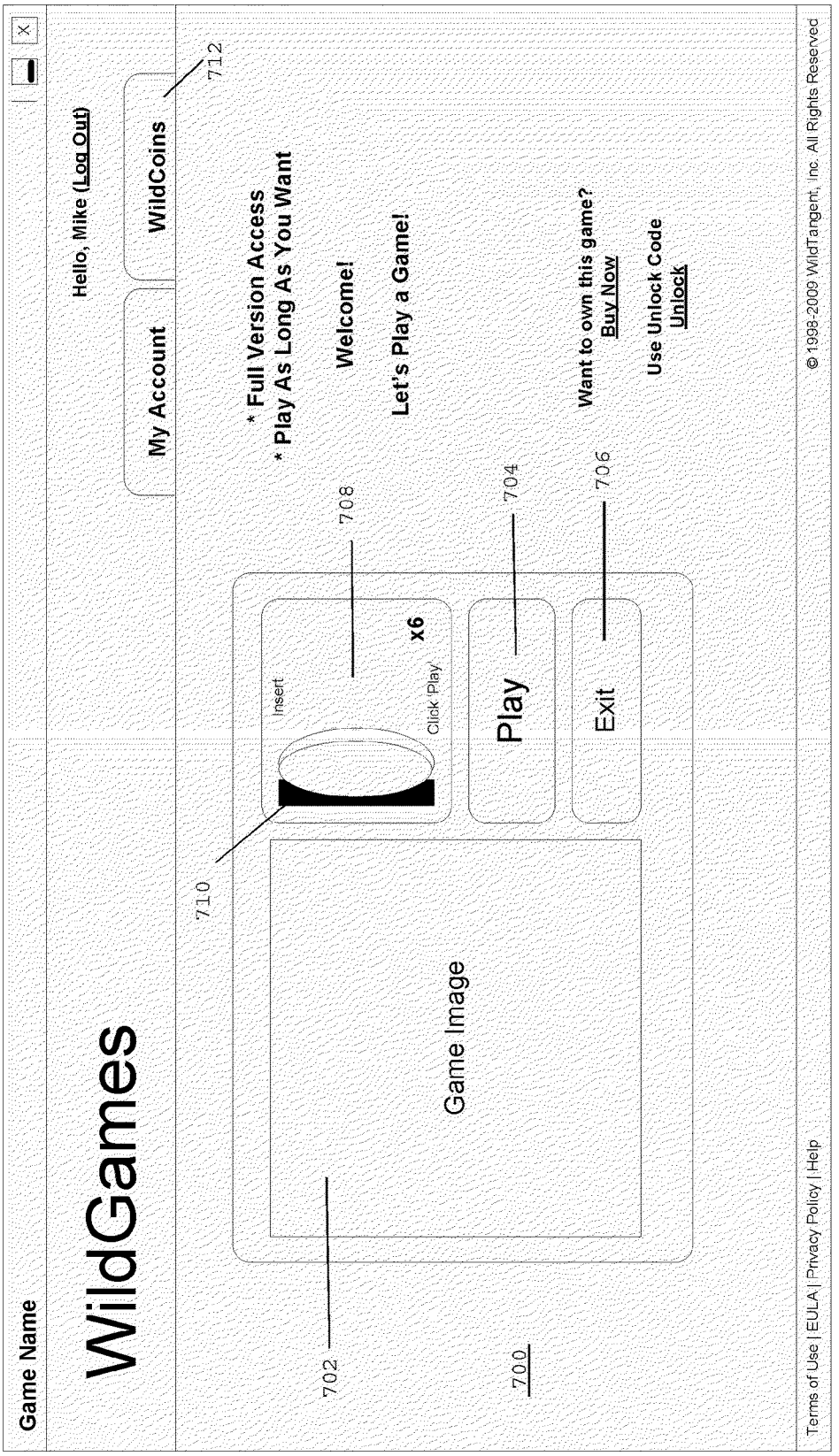

Game Name
WildGames
Hello, Mike (Log Out)
My Account
WildCoins
712
* Full Version Access
* Play As Long As You Want
Welcome!
Let's Play a Game!
708
x6
Insert
Click 'Play'
710
704
Play
Want to own this game?
Buy Now
706
Exit
Use Unlock Code
Unlock
Game Image
702
700
Terms of Use | EULA | Privacy Policy | Help
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Figure 8

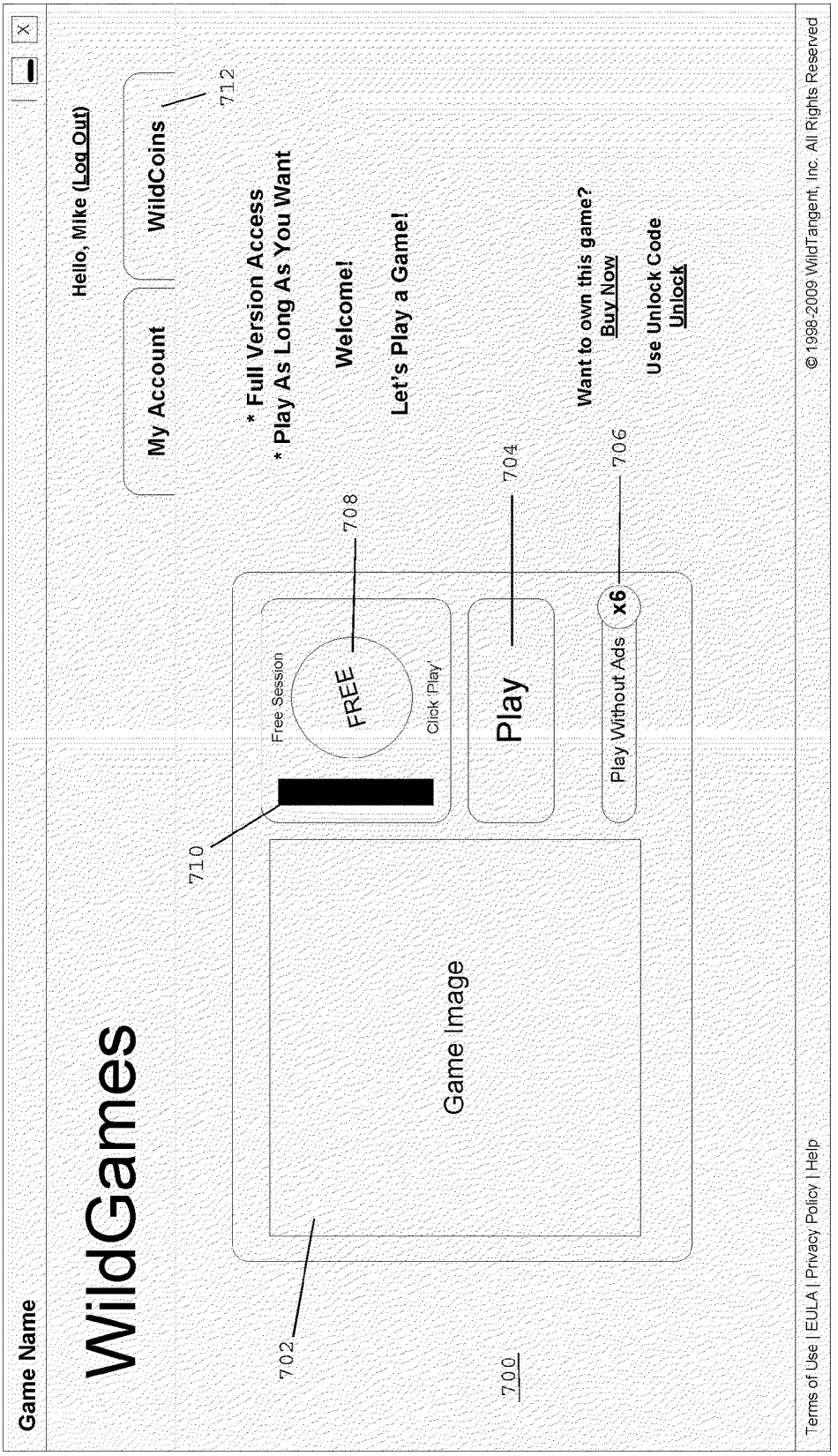
Game Name
WildGames
Hello, Mike (Log Out)
My Account
WildCoins
712
* Full Version Access
* Play As Long As You Want
Welcome!
Let's Play a Game!
710
Free Session
FREE
Click 'Play'
708
Play
704
Want to own this game?
Buy Now
Use Unlock Code
Unlock
Play Without Ads
x6
706
Game Image
702
700
Terms of Use | EULA | Privacy Policy | Help
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Figure 9

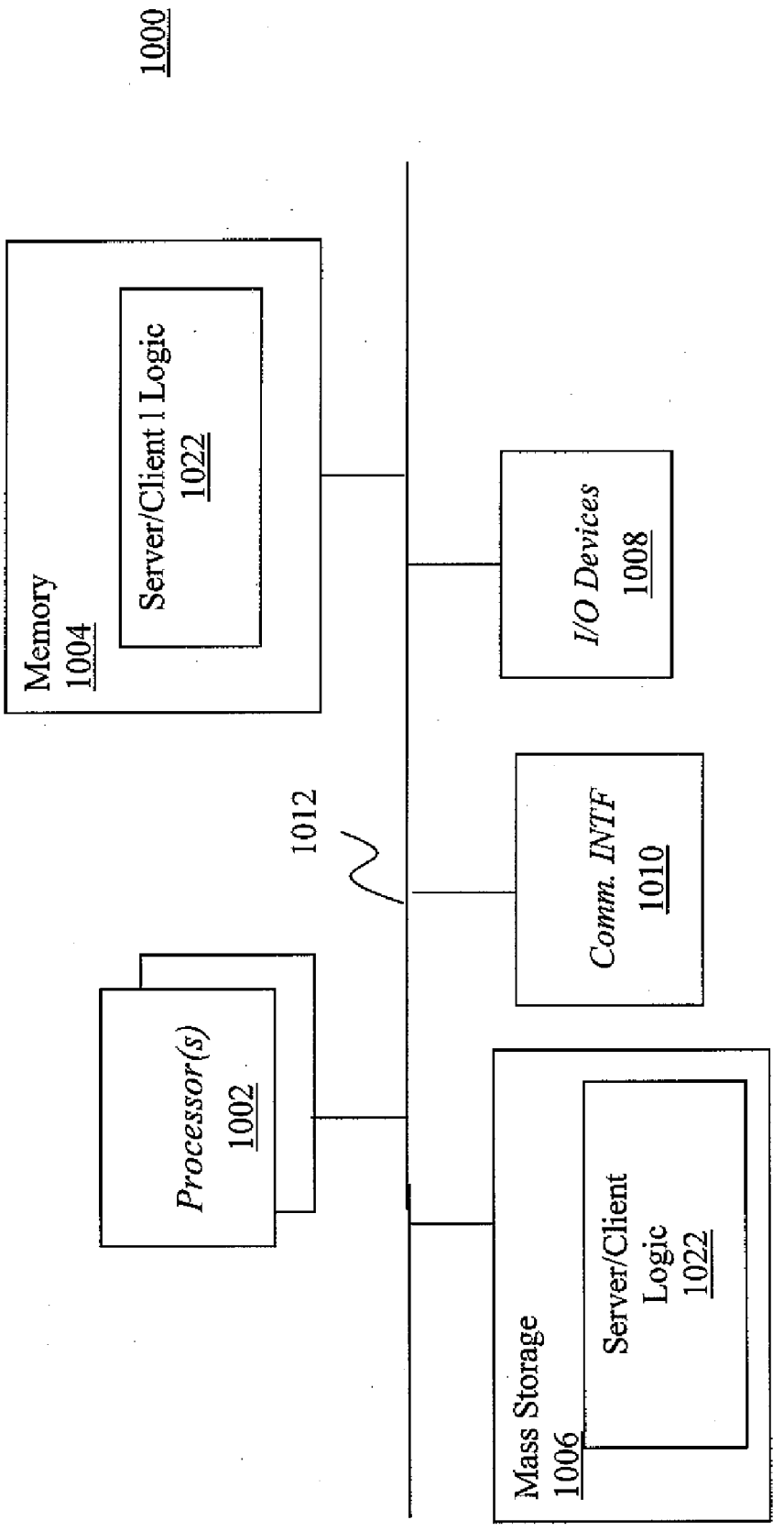
1000
Memory
1004
Server/Client 1 Logic
1022
I/O Devices
1008
1012
Comm. INTF
1010
Processor(s)
1002
Mass Storage
1006
Server/Client
Logic
1022

Figure 10

LICENSING MEDIA CONSUMPTION USING DIGITAL CURRENCY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority to U.S. Provisional Patent Application No. 60/783,527 filed Mar. 17, 2006 entitled "Multiple Source Digital Currency for Media Consumption Method and Apparatus" the entire disclosure of which is hereby incorporated by reference in its entirety. The present application also claims priority to U.S. Provisional Patent Application No. 60/784,299 filed Mar. 20, 2006 entitled "Offline Token Based Game Playing Method and Apparatus" the entire disclosure of which is hereby incorporated by reference in its entirety. The present application also claims priority to U.S. Provisional Patent Application No. 60/870,276 filed Dec. 15, 2006 entitled "Multiple Source Digital Currency for Media Consumption Method and Apparatus Including a Graphical User Interface" the entire disclosure of which is hereby incorporated by reference in its entirety.

TECHNICAL FIELD

[0002] The present application relates to the fields of data processing and media licensing. Specifically, the present application relates to methods and apparatus for the licensing of digital media content using digital currency.

BACKGROUND

[0003] As computing devices become more powerful, more nontraditional network capable computing devices are available. Some examples of nontraditional network capable computing devices include application specific devices, such as set top boxes, entertainment personal digital assistants, pagers, text messengers, smart appliances, and wireless mobile phones. Additionally, the availability of the Internet and other networks has created both commercial and noncommercial opportunities for distribution of digital media content to end users all over the world who may not otherwise have access to the same content if it were distributed using traditional means. Thus, the licensing of digital media content has become a vital concern as digital rights holders seek to take advantage of the opportunities to distribute their content, such as games, to users while ensuring that proper licensing of the content is afforded.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. **1** illustrates an overview of the invention in accordance with various embodiments wherein a licensing server facilitates the licensing of digital media content.

[0005] FIG. **2** illustrates a block diagram in accordance with embodiments in which a client device includes a licensing module for communicating with a licensing server to facilitate the licensing of digital media content.

[0006] FIG. **3** illustrates a periodic approach to accumulate and/or provide digital tokens in accordance with various embodiments.

[0007] FIG. **4** illustrates an approach to accumulating and/or providing digital tokens in which an advertisement server provides directs a digital currency server to credit a user's account with digital tokens in accordance with embodiments.

[0008] FIG. **5** illustrates a method of accumulating and/or providing digital tokens in which an end user uses a digital coupon to credit his account with digital tokens in accordance with various embodiments.

[0009] FIG. **6** illustrates a method of accumulating and/or providing digital tokens in which an end user exchanges third party affinity points for digital tokens in accordance with various embodiments.

[0010] FIG. **7** illustrates a graphical user interface suitable for practicing the invention, in accordance with various embodiments.

[0011] FIG. **8** illustrates a graphical user interface suitable for practicing the invention in which the user is provided visual feedback in accordance with various embodiments.

[0012] FIG. **9** illustrates an alternative graphical user interface suitable for practicing the invention in accordance with embodiments.

[0013] FIG. **10** illustrates an example computing system suitable for use as digital currency server, licensing server and/or a host computer hosting the game launch manager, in accordance with various embodiments.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0014] Illustrative embodiments of the present invention include, but are not limited to, the creation of an economy of digital currency and/or tokens hosted on a server accessible via a wide area network such as the Internet. These digital tokens may be used by end users to acquire licenses to access a given media content, e.g. a game, without having to purchase consumption rights for the media content outright. When the non-owner user tenders an appropriate amount of digital currency, the user may be given access to a consumption session, or sessions, of a media, e.g. a game. A "session" is defined as the launching and exit of the playing of the digital media. A session may time out if the user is not actively playing the media or using the computer. Also, in various embodiments, a maximum number of minutes may be set for a session length.

[0015] As such, methods and apparatuses for licensing digital media content using digital currency and/or tokens are described. Also, methods and apparatuses for providing and/or acquiring digital currency and/or tokens are described. Additionally, a graphical user interface suitable for practicing embodiments of the present invention is described.

[0016] Various aspects of the illustrative embodiments will be described using terms commonly employed by those skilled in the art to convey the substance of their work to others skilled in the art. However, it will be apparent to those skilled in the art that alternate embodiments may be practiced with only some of the described aspects. For purposes of explanation, specific numbers, materials, and configurations are set forth in order to provide a thorough understanding of the illustrative embodiments. However, it will be apparent to one skilled in the art that alternate embodiments may be practiced without the specific details. In other instances, well-known features are omitted or simplified in order not to obscure the illustrative embodiments.

[0017] Further, various operations will be described as multiple discrete operations, in turn, in a manner that is most helpful in understanding the illustrative embodiments; however, the order of description should not be construed as to

imply that these operations are necessarily order dependent. In particular, these operations need not be performed in the order of presentation.

[0018] The phrase "in one embodiment" is used repeatedly. The phrase generally does not refer to the same embodiment; however, it may. The terms "comprising," "having," and "including" are synonymous, unless the context dictates otherwise. The phrase "A/B" means "A or B". The phrase "A and/or B" means "(A), (B), or (A and B)". The phrase "at least one of A, B and C" means "(A), (B), (C), (A and B), (A and C), (B and C) or (A, B and C)". The phrase "(A) B" means "(B) or (A B)", that is, A is optional.

[0019] The description to follow also includes the process by which users may accrue digital currency for them to spend on licenses for media consumption. End users may accrue digital currency from multiple sources. In various embodiments, a game launcher, a license server and a digital currency server may be employed to practice the invention. In various embodiments, the game launcher may be disposed on a user/client device, and the license server and the digital current server may be remotely disposed and coupled to each other and the user/client device via the network. For these embodiments, the invention is practiced while the user/client device is connected to the network. In other embodiments, the license server includes a client side portion disposed on the user/client device, and a server side portion, remotely disposed. The two portions may cooperate to enable an amount of a user's digital currency to be pre-checked out and stored on the user's device, thereby allowing the invention to be practiced with the user/client device being offline.

[0020] In the specification and claims that follow, a "digital token" means "a digital record or representation of credit redeemable for goods and/or services including the licensing of digital media content, in various embodiments, such credit having no monetary value once purchased or acquired and redeemable only for such goods and services as determined by the issuer of the credit."

[0021] For ease of understanding, the remaining description will be substantially presented in the context of accruing and spending digital tokens for licenses to access games. However, the description is not to be read as limiting on the scope of the invention. As will be readily apparent from the description, the invention may be practiced for licensing access to a wide range of media content, including, but not limited to music and/or video.

Licensing of Digital Media using Digital Currency

[0022] FIG. **1** illustrates a system suitable for practicing various embodiments. End User Device **101** may be a general purpose personal computer, personal data assistant, dedicated game console, etc. End User Device **101** may be communicatively coupled to licensing server **103** which may, in turn be communicatively coupled to Digital Currency Server **105**. Licensing server **103** may contain licensing agent **111**. In alternative embodiments, licensing agent **111** may reside on Digital Currency Server **105**. In embodiments, licensing agent **111** may reside wholly or partially on end user device **101** (see description of FIG. **2**). In embodiments, licensing server **103** may be eliminated from the system if licensing agent **111** is housed elsewhere.

[0023] Digital tokens may be stored within user accounts **107** stored on digital currency server **105** accessible over a wide area network, e.g. the Internet. A user associated with end user device **101** may have an account **107** stored on digital currency server **105** containing a balance of digital tokens available for the user to spend on licenses for accessing games.

[0024] When a user associated with end user device **101** wants to play a game incorporated with the teachings of the invention, game launching manager **109** (hereinafter, simply referred to as "game manager", "launch manager" or "manager") within end user device **101** may submit a request to licensing server **103** and/or licensing agent **111** which may be coupled to end user device **101** via any type of networking and/or communication connection. The request, in various embodiments, may include credentials to identify the user.

[0025] Licensing server **103** and/or licensing agent **111**, in response to the request, may look up the cost for a session of the game. It may verify with digital currency server **105** that the user has the necessary amount of digital tokens in his/her account and then may instruct digital currency server **105** to debit that number of tokens from the user's account. Subsequently, licensing server **103** and/or licensing agent **111** may issue a working digital license to grant access to the game. On issuance, licensing server **103** and/or licensing agent **111** may transmit the working digital license back to launch manager **109**. In embodiments, the license transmitted to launch manager **109** may allow the user to, for example, consume a single session of the game, a certain number of game sessions greater than one, an unlimited number of game sessions during a finite period of time, etc.

[0026] In embodiments, launch manager **109** may contain the necessary software and files to run games on end user device **101**.

[0027] In various embodiments, licensing server **103** and/or licensing agent **111** may differentiate a user's digital tokens by whether the user paid for the digital tokens. Examples of digital tokens the user did not pay for may include but are not limited to free trial digital tokens from a content developer/provider, digital tokens the user "earned" through an affinity program (miles flown with an airline, nights stayed with a hotel, and so forth), and free digital tokens from a sponsor/advertiser. Licensing server **103** and/or licensing agent **111** may debit the required number of tokens from the user's digital tokens he did not pay for, until digital tokens of such type have been exhausted before debiting the user's digital tokens he did pay for. In various embodiments, licensing server **103** and/or licensing agent **111** may further differentiate the digital tokens the user did not pay for. For example, licensing server **103** and/or licensing agent **111** may first instruct digital currency server **105** to debit the user's digital tokens provided by sponsors/advertisers, until digital tokens of such type have been exhausted before debiting other digital tokens the user did not pay for (e.g., digital tokens the user accumulated though affinity programs).

[0028] Game launch manager **109**, in accordance with the invention, may be equipped to verify that the digital license is authentic, and grant access to the user upon verifying the license. Launch manager **109**, in accordance with the license, may configure itself to allow the user to play the game session indefinitely, for a certain amount of time or only while the user is actively using his/her computer. When the user exits the game, the license may be invalidated by game launch manager **109**. In that case, the user may need to resubmit another game session request through game launch manager **109** and pay more digital tokens in order to receive another license from license server **103** and/or licensing agent **111** to access and play the game again.

[0029] In various embodiments, license server **103** and/or licensing agent **111** may also be equipped to report the various licensing activities to sponsors/advertisers, distributors and/or owners of the games to enable the sponsors/advertisers to pay for the sponsorship and/or advertising, and distributors and/or owners to be compensated, e.g. in situations where the media distributors and/or owners are compensated on a usage basis.

[0030] In various embodiments, multiple users may pool their digital tokens stored on digital currency server **105**. Examples of such pooling may be a family plan, a group plan or a company plan, where any member of the group may consume content using digital tokens from the pool. In the family plan example, any family member may be allowed to consume content using digital tokens from the family's pooled digital tokens. In various embodiments, while the users' digital tokens may be pooled, each user's usage of the pooled digital tokens may be regulated. For example, a child member of a family plan may be regulated to a configurable consumption rate.

[0031] In various embodiments, the spending of digital tokens for consumption of various titles of content may be tracked, and the user may be given credit towards a reduction of the purchase price of a title, proportional to or based at least in part on the amount of digital tokens previously spent for consuming the title.

[0032] In various embodiments, game launcher **109** may offer the user a choice of viewing advertising prior to gameplay. If the user chooses to view an advertisement, this may be in lieu of payment of tokens from the user's account. The user may alternatively choose to pay for the session with their tokens and bypass the display of advertisements before, during and/or after the session of play. In alternative embodiments, viewing an advertisement may merely reduce the number of digital tokens required to play the game or consume the digital media.

[0033] In various embodiments, game launcher **109** may serve and/or display advertisements to the user during the consumption depending on the state of ownership and/or the nature of the digital tokens being used to "pay" for the consumption. For example, advertisements may be served during content consumption enabled by the usage of digital tokens provided by sponsors and/or advertisers. In embodiments, the advertisements shown may be advertisements of the sponsors or advertisers who provided the tokens only, or complementary ones. In embodiments, the serving of advertisements may be completely disabled if the user owns the content or the content consumption is enabled using digital tokens paid for by the user.

[0034] FIG. **2** illustrates various embodiments of the present invention. Similar to FIG. **1**, end user device **201** may be communicatively coupled to licensing server **203** which may, in turn, be communicatively coupled to digital currency server **205**. End user device **201** may contain game launch manager **207**. End user device **201** may contain a client side licensing module **215**. In various embodiments, therefore, licensing agent **213** may comprise of at least two portions, client side licensing module **215** disposed on end user device **201**, and server side licensing module **209** remotely disposed on licensing server **203**.

[0035] In embodiments, the two portions may cooperate to enable an amount of a user's digital tokens be cached on end user device **201**, thereby enabling a request for a digital license and the tendering of digital tokens be performed while the user/client device is offline or licensing server **203** is otherwise unavailable. In embodiments, users may be able to transfer cached tokens back to digital currency server **205**. In other embodiments, users may be unable to transfer cached tokens back to digital currency server **205**.

[0036] In various embodiments, client side module **215** may be further equipped to monitor to determine whether end user device **201** is online. On determining that it is, client side module **215** may further determine whether the amount of digital tokens cached on end user device **201** has fallen below a predetermined threshold. If the amount of digital tokens cached on end user device **201** is determined to have fallen below the predetermined threshold, client side module **215** may send a pre-request to server side module **209** of license server **203** to pre-check out an amount of the user's digital tokens from digital currency server **205**, and re-fill the digital token cache on end user device **201**. In other embodiments, client side module **215** may request digital tokens from server side module **209** upon the explicit direction of the user. This request may be made via an interface or process on end user device **201**. In embodiments, this interface may be, for example, a graphical user interface or other interface. In embodiments, this interface may be included within game launcher **207**.

[0037] In various embodiments, client side module **215** of licensing agent **213** may further be adapted to record and track licensing activities while end user device **201** is offline. In embodiments, client side module **215** may be adapted to upload the recorded information to server side module **209** of license server **203** for reporting upon detecting that end user device **201** has been re-connected to the network reestablishing communication to licensing server **203**.

[0038] In alternative embodiments, server side module **209** of licensing agent **213** may reside on digital currency server **205**. In embodiments, server side module **209** may reside on end user device **201** wholly or in part.

Acquiring and/or Providing Digital Currency for Licensing Digital Media

[0039] End users, as alluded to earlier, may acquire digital tokens from a variety of sources. In various embodiments, a licensing server may be equipped with payment handling logic to allow the user to purchase tokens via a real world payment mechanism such as, for example, credit card, check, cash or other real world payment mechanism. This purchase may occur via the following example conditions as well as others.

[0040] Recurring Payment: Every X days (e.g. 30 days), the user is charged $Y dollars to received Z digital tokens in their account

[0041] On Demand: When a user's account is below a threshold of digital tokens, they are automatically charged $A dollars to receive B digital tokens in their account

[0042] One Time Purchase: The user pays $F dollars to received G digital tokens in their account

[0043] FIG. **3** illustrates various embodiments of the present invention including providing end users with digital tokens using the "Recurring Payment" and "On Demand" payment schemes listed above in addition to others. In various embodiments, digital currency server watchdog module **301** disposed within or associated with a licensing server (not shown), may be a software process that automatically runs and monitors the balance of accounts in the digital token system stored on digital currency server **303**. Each user

account may be credited digital tokens and their payment method on file charged via payment gateway **305**. The digital tokens the user receives may timeout and become invalid after a certain amount of time. In embodiments, the digital tokens may be valid indefinitely.

[0044] Watchdog **301** may query digital currency server **303** for all accounts that require processing. In response, digital currency server **303** may respond with a list of all such accounts. This list may be created by determining if any of the accounts stored within digital currency server **303** satisfy an account condition. For example, in regards to user accounts identified as recurring payment accounts, the condition to be satisfied may be that the current date is a predetermined date or that a pre-determined amount of time has passed since the most recent processing (such as, for example, between 1 and 40 days, especially 30 days). In embodiments, for accounts identified as on-demand accounts the condition to be satisfied may be that token balances have fallen below a predetermined threshold level. In other embodiments, other conditions may be used and the scope of this disclosure is not meant to be limited in any way by these two example conditions.

[0045] Once digital currency server watchdog **301** has the list of accounts that require processing, it may, in turn, send a request to payment gateway **305** to charge each user associated with each of the listed user accounts for payment of a certain amount of real-world currency in exchange for the digital tokens. In embodiments, payment method information may be included with the user account information sent by digital currency server **303**. In embodiments, the amount of payment and the number of digital tokens to be credited may be also included in the user account information.

[0046] Upon successful charging of the user, payment gateway **305** may report to watchdog **301** that charging was successful. In embodiments, watchdog **301** may authorize digital currency server **303** to credit the processed user accounts with the digital tokens successfully purchased.

[0047] In embodiments, watchdog **301** and/or payment gateway **305** may be disposed within digital currency server **303**. In embodiments various functions of digital currency server **303** as described may be provided by a licensing server or some other server not shown.

[0048] In various embodiments such as those illustrated in FIGS. **4** through **6**, a digital currency server may be equipped such that end users can receive digital tokens without the requirement of payment. In these example situations, as well as others, end users may receive digital tokens via the following example conditions or requirements:

[0049] Advertisers: An advertiser may give an end user digital tokens after he/she watches a given ad. An advertiser may give the user a chance to win digital tokens.

[0050] Consumer Product Company: A consumer product company may give an end user a code or coupon upon purchasing one of their products. Users may redeem the code or coupon with the Digital Currency Server for digital tokens in their account.

[0051] External Affinity System: Users may accrue affinity points with one or more external partners, e.g. an airline, a hotel chain, a car rental company, and may choose to convert the accrued affinity points (e.g. frequent flyer miles, frequent stays) into digital tokens to be credited to their associated user accounts.

[0052] FIG. **4** illustrates a system for allowing users a chance to acquire digital tokens by watching an advertisement and entering a contest or random drawing. Advertising server **401** may serve an advertisement via a wide area network, such as the Internet, to end user device **403**. Subsequently, advertisement server **401** may notify the user associated with end user device **403** that they have won a certain number of digital tokens. Next, advertisement server **401** may authorize the crediting of digital tokens to a user account associated with the user stored within digital currency server **405**.

[0053] In various embodiments, digital currency server **405** may be equipped to track the source of a given digital token to a particular advertiser. In embodiments, this information may be used to charge the advertisers. In other embodiments where the digital token was purchased directly by the user, digital currency server **405** may tender appropriate payments to the distributors and/or owners of the game or digital media.

[0054] FIG. **5** illustrates a system for allowing users to redeem electronic coupons for digital tokens in accordance with various embodiments. Coupon server **501** may provide a user associated with end user device **503** with a digital coupon or coupon code. The user then may access digital currency server **505** via a user interface, such as for example a graphical user interface or some other interface, and submit the electronic coupon or coupon code. Digital currency server **505** may then submit a query to coupon server **501** to determine if the electronic coupon or coupon code is valid. Coupon server **501** may respond that the electronic coupon or coupon code is valid. If so, then a user account stored within digital currency server **505** may be credited with a certain number of digital tokens. In embodiments, digital currency server **505** may query a device other than coupon server **501** or, in embodiments, a different coupon server than the one that initially provided the user with the electronic coupon or coupon code. In alternate embodiments, digital currency server **505** may contain the appropriate logic to verify the electronic coupon or coupon code.

[0055] In embodiments, digital currency server **505** may track the use of digital tokens and report to coupon server **501** whenever a user uses a token acquired through the use of an electronic coupon or coupon code. In this way, digital currency server **505** may facilitate the charging of the entity associated with coupon server **501**—which may or may not be associated with the entity associated with digital currency server **505**—for the coupon-acquired tokens upon use. In alternate embodiments, digital currency server **505** may facilitate charging for the tokens immediately upon the crediting of the user's account.

[0056] FIG. **6** illustrates a system to allow user to exchange affinity points for digital tokens in accordance with various embodiments. An end user associated with end user device **601** may access digital currency server **603** via an interface such as, for example, a graphical user interface or other interface. The end user may then request that affinity points be exchanged for digital tokens. Upon receipt of the end user request, digital currency server **603** may query affinity server **605** to verify that the user's affinity point conversion request is valid. In response, affinity server **605** may verify that the user's request is valid and authorize the crediting of a user account associated with the user and stored on digital currency server **603** with a certain number of digital tokens. In alternate embodiments, digital currency server **603** may contain the appropriate logic to verify the affinity request.

[0057] In embodiments, digital currency server **603** may track the use of digital tokens and report to affinity server **605** whenever a user uses a token acquired through the use of

affinity points. In this way, digital currency server **603** may facilitate the charging of the entity associated with affinity server **605**—which may or may not be associated with the same entity associated with digital currency server **603**—for the affinity-acquired tokens upon use. In alternate embodiments, digital currency server **603** may facilitate charging for the tokens immediately upon the crediting of the user's account.

[0058] In various embodiments such as those depicted in FIGS. **5** and **6**, end users may access digital currency server **505** and/or digital currency server **603** via an intermediary device such as, for example, a web server, or other device communicatively coupled to digital currency server **505** and/or digital currency server **603**.

Graphical User Interface

[0059] FIGS. **7-9** illustrate various exemplary graphical user interface (GUI) views suitable for practicing the invention, in accordance with various embodiments. As illustrated, for the embodiments, graphical user interface **700** may include display region **702** for displaying game titles available for play. Display region **702** may also include graphics such as static images and/or video files to entice the user. GUI **700** may also support audio to accompany the graphics. A game title may also have associated with it "links" to learn more about the game ("About Game"), who are the current leaders and their scores ("Leaderboards"), and information about or associated with a community ("Community").

[0060] Further, for the embodiments, graphical user interface **700** may include a number of control buttons, such as control button **704** for initiating gameplay of a selected game and exit button **706**. To improve user experience, graphical user interface **700** of the embodiments may also include a coin icon **708** and slot image **710** for facilitating animation of the consumption of digital tokens of the present invention for game play.

[0061] As described earlier, embodiments of the present invention allow for digital tokens to be purchased by the user or accrued by other means, including but not limited to, digital tokens provided by sponsors or advertisers. For the embodiments, coin icon **708** is either unlabeled (FIG. **7-8**) to depict that playing of a selected title will consume a number of digital tokens, or labeled "Free" (FIG. **9**) to depict that playing of a selected title will not consume any digital token. In embodiments, a label may be provided to indicate the number of digital tokens required to license the content. In other embodiments, the label may additionally depict the type of digital token will be consumed such as, for example, tokens acquired from advertisers and/or affinity partners, and other types. In embodiments, coin icon **708** may be customized to indicate an advertiser and/or affinity partner. Such customization may include, for example, an advertiser's logo. In still other embodiments, the different types of earlier described digital tokens may be differentiated by other means.

[0062] FIG. **8** illustrates a GUI view wherein coin icon **708** may be shown being inserted into slot **710**. Upon selection of play button **704**, software logic may cause a sequence of successive displays to move coin icon **708** into slot image **710** to animate the dropping of one or more of coins **708** into a slot, to provide feedback to the user upon the granting of access to the digital media content and/or consumption of the user's digital tokens. In embodiments, such feedback may be provided even if the content is provided to the user for free and/or if the user is granted access without exchanging digital tokens. In various embodiments, the coin dropping animation may also be supplemented with the playing of an audio file having, for example, the sound of coin dropping or other audio file. The length of the animation and/or the number of coins dropped may be proportional, linearly or non-linearly, to the number of digital tokens consumed for a particular game play selection.

[0063] For the embodiments, game display region **702**, play button **704**, coin icon **708** and slot image **710** may be proximally disposed adjacent to each other as shown, on a common "tab". For the embodiments, an "exit" button **706** may also be provided to facilitate user exit from game selection and play initiation.

[0064] For the embodiments, advertisements may be rendered at a lower display region **714**. Further, tab **712** may be provided to take the user to a different set of end user interfaces to manage the digital token account or otherwise replenish their digital tokens.

[0065] Resultantly, user experience with game or other digital media consumption involving digital token of the present invention may be enhanced.

Exemplary Computer System

[0066] FIG. **10** illustrates an example computing system/device suitable for use to practice the client device (end user device) and/or any of the servers depicted in any of FIGS. **1-6** or described in the accompanying text in accordance with one embodiment. As shown, computing system/device **1000** may include one or more processors **1002**, and system memory **1004**. Additionally, computing system/device **1000** may include mass storage devices **1006** (such as diskette, hard drive, CDROM and so forth), input/output devices **1008** (such as keyboard, cursor control and so forth) and communication interfaces **1010** (such as network interface cards, modems and so forth). The elements may be coupled to each other via system bus **1012** which represents one or more buses. In the case of multiple buses, they may be bridged by one or more bus bridges (not shown).

[0067] Each of these elements performs its conventional functions known in the art. In particular, system memory **1004** and mass storage **1006** may be employed to store a working copy and a permanent copy of the programming instructions implementing one or more aspects of the above described teachings to practice the present invention. The programming instructions may also implement other related functions. For example, in the case of computing system/device **1000** being used as an end user device **101** of FIG. **1**, the programming instructions may also implement telephony, PIM applications and so forth. When computing system/device **1000** is being used as a server, the programming instructions may also implement accounting and other advertisement services related functions. The programming instructions may be implemented in assembler instructions supported by processor(s) **1002** or high level languages, such as C or Java, that may be compiled into such instructions, or instructions for a virtual machine (VM) operating on the processor(s), memory, and software systems of the computing system/device.

[0068] The permanent copy of the programming instructions may be placed into permanent storage **1006** in the factory, or in the field, through e.g. a distribution medium (not shown) or through communication interface **1010** (from a

distribution server (not shown)). The constitution of these elements **1002-1012** are known, and accordingly will not be further described.

[0069] Although specific embodiments have been illustrated and described herein for purposes of description of the preferred embodiment, it will be appreciated by those of ordinary skill in the art that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiment shown and described without departing from the scope of the present invention. Those with skill in the art will readily appreciate that the present invention may be implemented in a very wide variety of embodiments. This application is intended to cover any adaptations or variations of the embodiments discussed herein.

1. A method comprising:
receiving, by a licensing agent, a request for a user to consume a digital media content on a user device;
determining, by the licensing agent, a number of digital currency tokens required to license the digital media content for the requested consumption; and
facilitating an exchange, by the licensing agent, of a digital license to be issued to the user device in exchange for the determined number of digital currency tokens if sufficient digital currency tokens are present in a user account associated with the user, wherein the digital currency tokens include digital currency tokens the user paid for or digital currency tokens the user otherwise earned.

2. The method of claim **1** wherein the facilitating the exchange further comprises verifying that the user account has least the determined number of digital currency tokens; and
the method further comprises debiting the user account by the determined number of digital currency tokens.

3. The method of claim **2** wherein the debiting of digital currency tokens comprises not debiting digital currency tokens that the user paid for until all digital currency tokens that the user did not pay for are exhausted.

4. The method of claim **3** further comprising reporting the debiting of digital currency tokens the user did not pay for and those the user did pay for.

5. The method of claim **2** wherein the debiting of digital currency tokens comprises not debiting digital currency tokens that the user paid for until all digital currency tokens that the user obtained through an accrual program are exhausted, and not debiting said accrual digital currency tokens until all digital currency tokens obtained from a third party, other than through an accrual program, are exhausted.

6. The method of claim **5** further comprising reporting the number of digital currency tokens debited that the user paid for, the number that the user obtained through an accrual program, and the number that the user obtained from a third party, as applicable.

7. The method of claim **2** wherein the debiting is accomplished by a digital currency server and the verifying is accomplished by sending a request to the digital currency server.

8. The method of claim **1** wherein the verifying comprises the licensing agent sending a request to a digital currency server to determine if sufficient digital currency tokens are in the user account.

9. The method of claim **1** further comprising the user device granting, to the user, access to the digital media content upon verification of the issued license, said license being valid for a period of time selected from: an indefinite period of time, a definite period of time, a period of time that the user device remains active.

10. The method of claim **9** wherein the license is invalidated upon the user terminating the consumption of the digital media content.

11. The method of claim **1** wherein the licensing agent is comprised of a client-side portion residing on the client device and a server-side portion residing on a separate server, the client device and separate server adapted to be communicatively coupled via a wired and/or wireless network, the client-side portion enabled to cache a quantity of digital currency tokens to enable the receiving, verifying, and issuing to be performed without communicating with the server-side portion of the licensing agent.

12. The method of claim **11** further comprising requesting, by the client-side portion of the licensing agent, additional digital currency tokens upon determining that the client-side cache has fallen beneath a pre-determined number of digital currency tokens and the client device is currently communicatively coupled to the server-side portion of the licensing agent.

13. The method of claim **12** further comprising tracking and reporting, by the client-side portion of the licensing agent, the licensing activities of the client-side portion of the licensing agent.

14. The method of claim **1** wherein the digital media content is a selected one of: computer game content, interactive media content, video content, audio content, graphical content, and textual content.

15. A media licensing server comprising:
a processor; and
a mass storage device including a plurality of programming instructions designed to implement a licensing module adapted to operate the processor to:
receive a request for a user to consume a digital media content on a user device;
determine a number of digital currency tokens required to license the digital media content for the requested consumption;
verify that a user account associated with the user has a sufficient number of digital currency tokens to redeem the license; and
issue a digital license to the user device in exchange for the number of digital currency tokens if the digital currency tokens are present in the user account, wherein the digital currency tokens include digital currency tokens the user paid for or digital currency tokens the user otherwise earned.

16. The media licensing server of claim **15** wherein the licensing module is further adapted to operate the processor to send a request to a digital currency server to determine if the user account has a sufficient number of digital currency tokens.

17. A media licensing server comprising:
a processor; and
a mass storage device including a plurality of programming instructions designed to implement a server-side licensing module adapted to operate the processor to:
receive, from a client-side licensing module on a client device, a request for digital currency tokens;
sending, to a digital currency server, a request to verify that a user account associated with a user contains at least the requested number of digital currency tokens;

receiving, from the digital currency server, verification that the user account contains at least the requested number of digital currency tokens; and

sending, to the client-side module, authorization to cache the requested number of digital currency tokens.

18. The media licensing server of claim **17** wherein the server-side licensing module is further adapted to record and track the transfer of digital currency tokens.

19. A digital currency server comprising:

a processor; and

a mass storage device including a database of user accounts and a plurality of programming instructions adapted to operate the processor to:

receive a request, from a digital media licensing server, to verify that a user account associated with a user has at least a certain number of digital currency tokens;

sending to the digital media licensing server, in response, a reply indicating whether or not the user account has at least the certain number of digital currency tokens; and

debit the user account the certain number of digital currency tokens if at least the certain number of digital currency tokens are present in the account.

20. (canceled)

21. The digital currency server of claim **19** wherein the debiting of digital currency tokens comprises not debiting digital currency tokens that the user paid for until all digital currency tokens that the user did not pay for are exhausted.

22. The digital currency server of claim **19** wherein the plurality of programming instructions are further adapted to operate the processor to not debit digital currency tokens that the user paid for unless all digital currency tokens that the user obtained through an accrual program are exhausted, and not debit said accrual digital currency tokens unless all digital currency tokens obtained from a third party, other than through an accrual program, are exhausted.

23. The digital currency server of claim **19** wherein the plurality of programming instructions are further adapted to operate the processor to provide an accounting of the debited digital currency tokens.

24. A client device comprising:

a processor; and

a mass storage device including a plurality of programming instructions adapted to implement a client-side digital media licensing module to operate the processor to:

receive a user request for a digital media license to consume digital media content;

determine a number of digital currency tokens required to obtain the license; and

debit the number of digital currency tokens required to license the requested media from a local cache of digital currency tokens.

25. (canceled)

26. (canceled)

27. The client device of claim **24** wherein the client-side portion of the digital media licensing module is further adapted to operate the processor to:

request, via a wireless and/or wired network, from a server-side of digital media licensing module, authorization to cache a certain number of digital currency tokens on the client device; and

receive, in response, authorization from the server-side digital media licensing module to cache the requested number of digital currency tokens.

28. The client device of claim **27** wherein the client-side digital media licensing module is further adapted determines whether a current quantity of cached digital currency tokens is smaller than a pre-determined number and to request the authorization to cache the certain number of digital currency tokens if the determined current quantity of cached digital currency tokens is smaller than the predetermined number.

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