PROXIMITY SENSOR FOR CLOUD-BASED ENTITLEMENT

Applicant: Disney Enterprises, Inc., Burbank, CA (US)

Inventors: Edward Drake, Stevenson Ranch, CA (US); Mark Arana, West Hills, CA (US); Evan Acosta, La Crescenta, CA (US)

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ABSTRACT

A server receives a first key from a mobile device. The mobile device comprises a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within a proximity to the product and/or product package proximity-based device. Further, the server receives a second key from the mobile device. In addition, the server receives a third key from a checkout device after purchase of the product and/or the product package. The server also provides cloud-based entitlement to media content associated with the product and/or the product package to a user identifier.
Figure 3
receive, at a server, a first key from a mobile device

receive, at the server, a second key from the mobile device

receive, at the server, a third key from a checkout device after purchase of the product and/or the product package

provide, with the server, cloud-based entitlement to media associated with the product and/or the product package to a user identifier

Figure 4
Figure 5

- Purchased Media Content
- Bonus Videos
- Bonus Games
- Bonus Features
PROXIMITY SENSOR FOR CLOUD-BASED ENTITLEMENT

RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 61/766,065, filed on Feb. 18, 2013, entitled TRANSFERENCE OF DATA TO PROVIDE CONTENT, which is hereby incorporated by reference in its entirety.

BACKGROUND

[0002] 1. Field
[0003] This disclosure generally relates to the field of data transference.
[0004] 2. General Background
[0005] Media products are typically placed in packaging on store shelves that allow consumers to read information about the content of the media products. Examples of such media products are Blu-ray discs or DVDs with movies, television shows, video games, or the like. Consumers typically peruse different packages to find out more information about the products of potential interest.
[0006] Current configurations allow users to obtain various forms of redemptions, gifts, rewards, or the like after purchase of a media product. For example, a user may purchase a media product stored in a media package. The media package may have a code stored therein that may be utilized subsequently by the purchaser to obtain the redemption, gift, reward, or the like. For instance, the user may go online to a website after purchase, fill out a form with the code, and then obtain a reward such as additional footage for the media product that was purchased. Such configurations are often cumbersome for the purchaser.

SUMMARY

[0007] A process receives, at a server, a first key from a mobile device. The mobile device comprises a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within a proximity to the product and/or product package proximity-based device. Further, the process receives, at the server, a second key from the mobile device. In addition, the process receives, at the server, a third key from a checkout device after purchase of the product and/or the product package. The process also provides, with the server, cloud-based entitlement to media associated with the product and/or the product package to a user identifier.

[0008] Further, a computer readable program comprises a computer readable storage device. The computer readable storage device comprises a computer readable program stored thereon. The computer readable program when executed on a computer causes the computer to receive, at a server, a first key from a mobile device. The mobile device comprises a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within a proximity to the product and/or product package proximity-based device. Further, the computer readable program when executed on the computer causes the computer to receive, at the server, a second key from the mobile device. In addition, the computer readable program when executed on the computer causes the computer to receive, at the server, a third key from a checkout device after purchase of the product and/or the product package. The computer readable program when executed on the computer also causes the computer to provide, with the server, cloud-based entitlement to media associated with the product and/or the product package to a user identifier.

[0009] In addition, an apparatus is provided. The apparatus includes a server that receives a first key from a mobile device, receives a second key from the mobile device, receives a third key from a checkout device after purchase of the product and/or the product package, and provides cloud-based entitlement to media associated with the product and/or the product package to a user identifier. The mobile device comprises a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within a proximity to the product and/or product package proximity-based device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The above-mentioned features of the present disclosure will become more apparent with reference to the following description and accompanying drawings, wherein like reference numerals denote like elements and in which:

[0011] FIG. 1 illustrates a data transference configuration that allows for proximity-based detection.

[0012] FIG. 2 illustrates a cloud-based entitlement configuration that provides for automatic cloud-based entitlement based upon the first key received by the mobile device as illustrated in FIG. 1.

[0013] FIG. 3 illustrates a cloud-based entitlement grant configuration.

[0014] FIG. 4 illustrates a process that is utilized to provide cloud-based entitlement.

[0015] FIG. 5 illustrates a user interface that is displayed on the display of the mobile device.

DETAILED DESCRIPTION

[0016] A cloud-based entitlement configuration provides digital rights for media content associated with a product and/or a product package subsequent to the purchase of the product by the user. The product may be a media product, e.g., a Blu-ray disc, DVD, video game, or the like. Alternatively, the product may be an entertainment product that is not a media product, e.g., an action figure, a doll, or the like. The user purchases the product and then obtains digital rights for a redemption, gift, reward, or the like in the form of media content associated with the product and/or the product package. The user obtains such rights for the user or for an intended recipient automatically without having to go through the cumbersome process of online registrations, filling out forms, or the like. The media content provided to the user may include bonus movie footage, deleted scenes of a movie, bonus games, bonus levels of a game, bonus costumes, weapons, or other video game accessories, promotions, coupons, special offers, a video (such as a video involving an action figure and/or a movie), music (such as music corresponding to an action figure and/or a movie), an offer to purchase a digital copy of a movie (such as with a movie character corresponding to an action figure), additional information, or the like.
A user may peruse various products and/or product packages within a store. The user may utilize a mobile device with a proximity sensor in proximity to a product and/or product package of interest. Such interaction initiates the process of cloud-based entitlement. The user then does not need to be aware of the subsequent tasks that lead to the cloud-based entitlement of the media content associated with the product and/or product package.

FIG. 1 illustrates a data transference configuration 100 that allows for proximity-based detection. A product and/or product package 102 may be placed on store shelves, in an amusement park, and/or in various entertainment environments. The product package 102 may have various information, e.g., pictures, text, or the like, on different portions of the product package 102 so that the user may learn about the product 102 prior to purchase.

In one aspect, the product and/or product package 102 has a proximity-based sensor and/or transceiver 104, e.g., an RFID chip, RFID tag, Near Field Communication ("NFC") chip, NFC tag, Bluetooth, or the like. The proximity-based sensor and/or transceiver 104 may establish radio or other communication with another device based upon one or more standards, e.g., NFC standards.

The data transference configuration 100 also has a mobile device 106. The mobile device 106 is a device such as a smartphone, tablet, laptop, or the like. The mobile device 106 has a display 110 that displays data such as text, video, or the like on the mobile device 106. The display 110 may be a display that is integrated within the mobile device 106, e.g., a smartphone display. Alternatively, the display 110 may be a display that is operably connected to the mobile device, e.g., an LED monitor, an LCD monitor, or the like. Further, the mobile device 106 has a proximity-based reader 108. The proximity-based reader 108 is a receiver that detects the presence of the proximity-based sensor and/or transceiver 104 and receives the data associated with the product and/or product package 102 when in proximity with the proximity-based sensor and/or transceiver 104 of the product and/or the product package 102.

Upon detection of the proximity-based sensor and/or transceiver 104, the proximity-based reader 108 receives a first key. The first key is then automatically utilized by the mobile device 106 during the process of cloud-based entitlement. The first key may be a variety of types of keys. An example is a unique movie identifier such as a Pre-recorded Media Serial Number ("PMSN"). The PMSN of the product 102, e.g., a DVD, may be the same as the PMSN of the proximity-based sensor and/or transceiver 104 in the product package 102.

FIG. 2 illustrates a cloud-based entitlement configuration 200 that provides for automatic cloud-based entitlement based upon the first key received by the mobile device 106 as illustrated in FIG. 1. The mobile device 106 illustrated in FIG. 1 provides the first key (identifying the product) and a second key to a cloud-based server 202 through a network 204. In one aspect, the second key is a user identifier stored in the mobile device 106.

When the user purchases the media product, a checkout device 206 sends a third key to the cloud-based server 202. The third key is utilized for purchase authentication. After receiving all of the keys, the cloud-based server 202 then provides cloud-based entitlement for the user ID identified by the second key or an alternative user ID to the media content associated with the product package 102 to one or more user devices.

Various security mechanisms, e.g., token-based authentication, may be utilized to ensure the authenticated and secure delivery of key information from the checkout device 206 and the mobile device 106. Such security mechanisms may be utilized to bind the transaction together to provide authentication of the mobile device 106. As an example, the mobile device 106 may provide the first key and the second key to the checkout device 106 during purchase of the product and/or product package 102. The third key may be a hash token that is generated by the checkout device 206 based upon the first key and the second key. The checkout device 206 may then provide the hash token to the mobile device 106. Further, the mobile device 106 may provide the hash token to the cloud-based server 202 to obtain entitlement. As a result, a different mobile device is prevented from posing as the mobile device 106 to obtain entitlement as the different mobile device would not have the hash token. This example is provided only as an example as a variety of security configurations may be utilized.

The third key is utilized for purchase authentication. After receiving all of the keys, the cloud-based server 202 then provides cloud-based entitlement for the user ID identified by the second key or an alternative user ID to the media content associated with the product package 102 to one or more user devices. In one aspect, a security mechanism may be utilized to ensure that only a designated user is provided entitlement. For example, a user may want to provide entitlement as a gift to another user. The user that purchases the entitlement may obtain a hash token and provide that hash token to another user to provide entitlement as a gift. FIG. 3 illustrates a cloud-based entitlement grant configuration 300. The cloud-based entitlement grant configuration 300 includes the cloud-based server 202 and the network 204 illustrated in FIG. 2 in addition to a plurality of computing devices, e.g., computing device A 302 and computing device B 304, associated with the user ID to which the cloud-based entitlement is intended by the user. In other words, a user may have obtained cloud-based entitlement for a variety of devices associated with a user ID rather than being limited to a particular device. As an example, a user that purchases a movie at a store may have the movie downloaded to his or her smartphone or tablet device before reaching his or her automobile after the purchase of the movie.

FIG. 4 illustrates a process 400 that is utilized to provide cloud-based entitlement. At a process block 402, the process 400 receives, at a server, a first key from a mobile device. The mobile device comprises a mobile device proximity device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package based when the mobile device is within a proximity to the product and/or product package proximity-based device. Further, at a process block 404, the process 400 receives, at the server, a second key from the mobile device. In addition, at a process block 406, the process 400 receives, at the server, a third key from a checkout device after purchase of the product and/or the product package. At a process block 408, the process 400 also provides, with the server, cloud-based entitlement to media content associated with the product and/or the product package to a user identifier.
In an alternative aspect, a process is utilized to check the entitlement grant in the event that the media product is purchased for another user, e.g., as a gift. As an example, a hash token may be authenticated. Accordingly, a user that purchased the product and/or product package 102 may keep the hash token or provide the hash token as a gift to another user to obtain entitlement.

In contrast with previous redemption configurations that have a user fill out a form, log onto a website and provide a code, or the like, the process 400 allows a user to obtain media content immediately after purchase without any redemption or additional information after purchase. The cloud-based entitlement may provide access to the media content itself and/or other content associated with the media content. In other words, the cloud-based entitlement provides access to an experience associated with the media content.

FIG. 5 illustrates a user interface 500 that is displayed on the display 110 of the mobile device 106. As an example, the user interface 500 may display purchased media content 502, bonus videos 504, bonus games 506, and/or bonus features 508. Such items are illustrated only as examples. Various other items may be displayed by the user interface 500.

The processes described herein may be implemented in a general, multi-purpose or single-purpose processor. Such a processor will execute instructions, either at the assembly, compiled or machine-level, to perform the processes. Those instructions can be written by one of ordinary skill in the art following the description of the figures corresponding to the processes and stored or transmitted on a computer-readable medium. The instructions may also be created using source code or any other known computer-aided design tool. A computer-readable medium may be any medium capable of carrying those instructions and include a CD-ROM, DVD, magnetic or other optical disc, tape, silicon memory (e.g., removable, non-removable, volatile or non-volatile), packetized or non-packetized data through wireline or wireless transmissions locally or remotely through a network.

It is understood that the apparatuses, systems, computer program products, and processes described herein may also be applied in other types of apparatuses, systems, and computer program products, and processes. Those skilled in the art will appreciate that the various adaptations and modifications of the aspects of the apparatuses, systems, computer program products, and processes described herein may be configured without departing from the scope and spirit of the present apparatuses, systems, computer program products, and processes. Therefore, it is to be understood that, within the scope of the appended claims, the present apparatuses, systems, computer program products, and processes may be practiced other than as specifically described herein.

We claim:

1. A method comprising:
   receiving, at a server, a first key from a mobile device, the mobile device comprising a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within proximity to the product and/or product package proximity-based device;
   receiving, at the server, a second key from the mobile device;
   receiving, at the server, a third key from a checkout device after purchase of the product and/or the product package; and
   providing, with the server, a cloud-based entitlement to media content associated with the product and/or the product package to a user identifier.

2. The method of claim 1, wherein the first key is a product identifier of the product and/or the product package.

3. The method of claim 2, wherein the product identifier is a PMSN.

4. The method of claim 1, wherein the second key is a mobile device user identifier that identifies a user associated with the mobile device.

5. The method of claim 4, wherein the user identifier is the mobile device user identifier.

6. The method of claim 4, wherein the user identifier identifies a user distinct from a purchaser of the product and/or the product package.

7. The method of claim 6, further comprising confirming the user distinct from the purchaser of the product and/or the product package for the cloud-based entitlement.

8. The method of claim 1, wherein the product and/or product package proximity-based device is a Near Field Communication transmitter.

9. The method of claim 1, wherein the mobile device proximity-based device is a Near Field Communication receiver.

10. The method of claim 1, further comprising sending the media associated with the product and/or the product package to a device associated the user identifier based upon cloud-based entitlement.

11. The method of claim 1, wherein the proximity is predefined.

12. A computer program product comprising a computer readable storage device having a computer readable program stored thereon, wherein the computer readable program when executed on a computer causes the computer to:
   receive, at a server, a first key from a mobile device, the mobile device comprising a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within proximity to the product and/or product package proximity-based device;
   receive, at the server, a second key from the mobile device;
   receive, at the server, a third key from a checkout device after purchase of the product and/or the product package; and
   provide, with the server, cloud-based entitlement to media associated with the product and/or the product package to a user identifier.

13. The method of claim 12, wherein the first key is a product identifier of the product and/or the product package.

14. The method of claim 13, wherein the product identifier is a PMSN.

15. The method of claim 12, wherein the second key is a mobile device user identifier that identifies a user associated with the mobile device.

16. The method of claim 15, wherein the user identifier is the mobile device user identifier.

17. The method of claim 15, wherein the user identifier identifies a user distinct from a purchaser of the product and/or the product package.
18. The method of claim 17, further comprising confirming the user distinct from the purchaser of the product and/or the product package for the cloud-based entitlement.

19. The method of claim 12, wherein the product and/or product package proximity-based device is a Near Field Communication transmitter.

20. The method of claim 12, wherein the mobile device proximity-based device is a Near Field Communication receiver.

21. The method of claim 12, further comprising sending the media associated with the product and/or the product package to a device associated the user identifier based upon cloud-based entitlement.

22. The method of claim 22, wherein the proximity is predefined.

23. An apparatus comprising:

a server that receives a first key from a mobile device, receives a second key from the mobile device, receives a third key from a checkout device after purchase of the product and/or the product package, and provides cloud-based entitlement to media associated with the product and/or the product package to a user identifier, the mobile device comprising a mobile device proximity-based device that receives the first key from a product and/or product package proximity-based device associated with a product and/or a product package when the mobile device is within a proximity to the product and/or product package proximity-based device.