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(54) METHOD AND APPARATUS TO PURCHASE CONTENTS BY USING PORTABLE STORAGE MEDIUM OR VIA NETWORK

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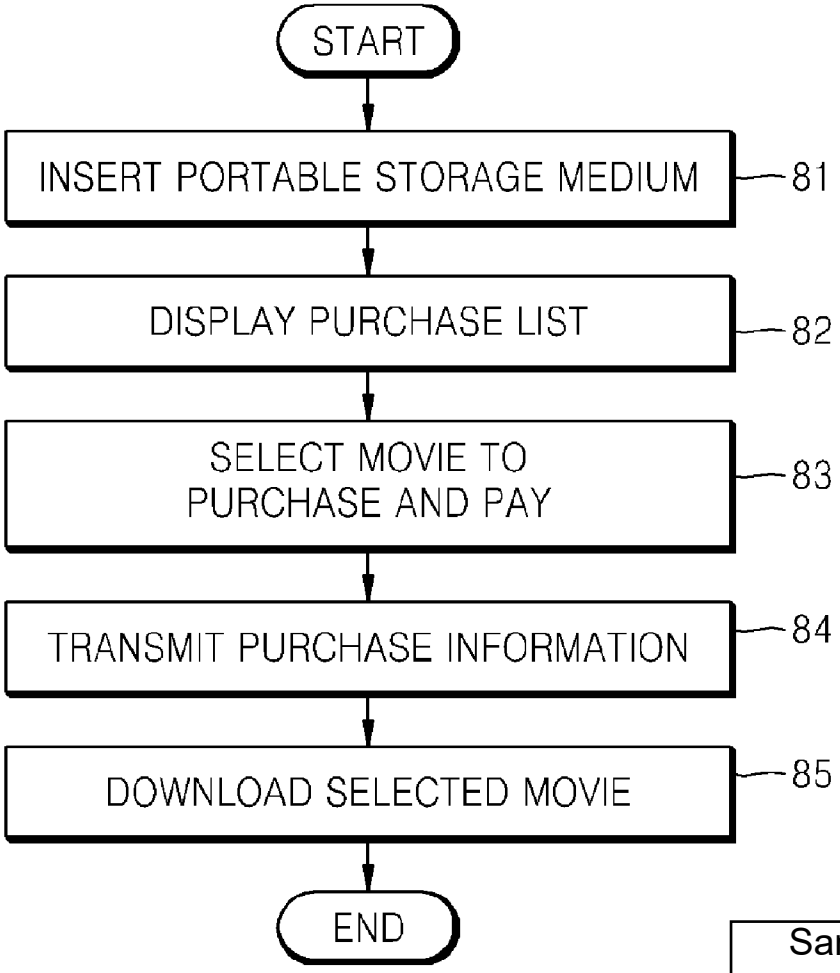
(57) **ABSTRACT**

Users of a method and apparatus to purchase (e.g., rent or buy) contents using a portable storage medium, via a network or the like. Contents purchased using embodiments of a method and apparatus may be developed to be automatically deleted or to be non-reproducible after being reproduced one time or after a predetermined period. Accordingly, users do not need to return borrowed or purchased contents. Also an owner of a contents rental shop may prevent contents from being unfairly reproduced. Further, user inconvenience due to the conventional manner in which users have to memorize information related to the contents and visit a rental shop to obtain desired contents may be avoided or decreased. Portable storage mediums or network resources of exemplary methods and apparatuses may be repeatedly used (e.g., without limitation), and thus may contribute to the saving of resources.



Samsung v. Truesight
IPR2024-01477
Exhibit 1007

FIG. 1 (PRIOR ART)

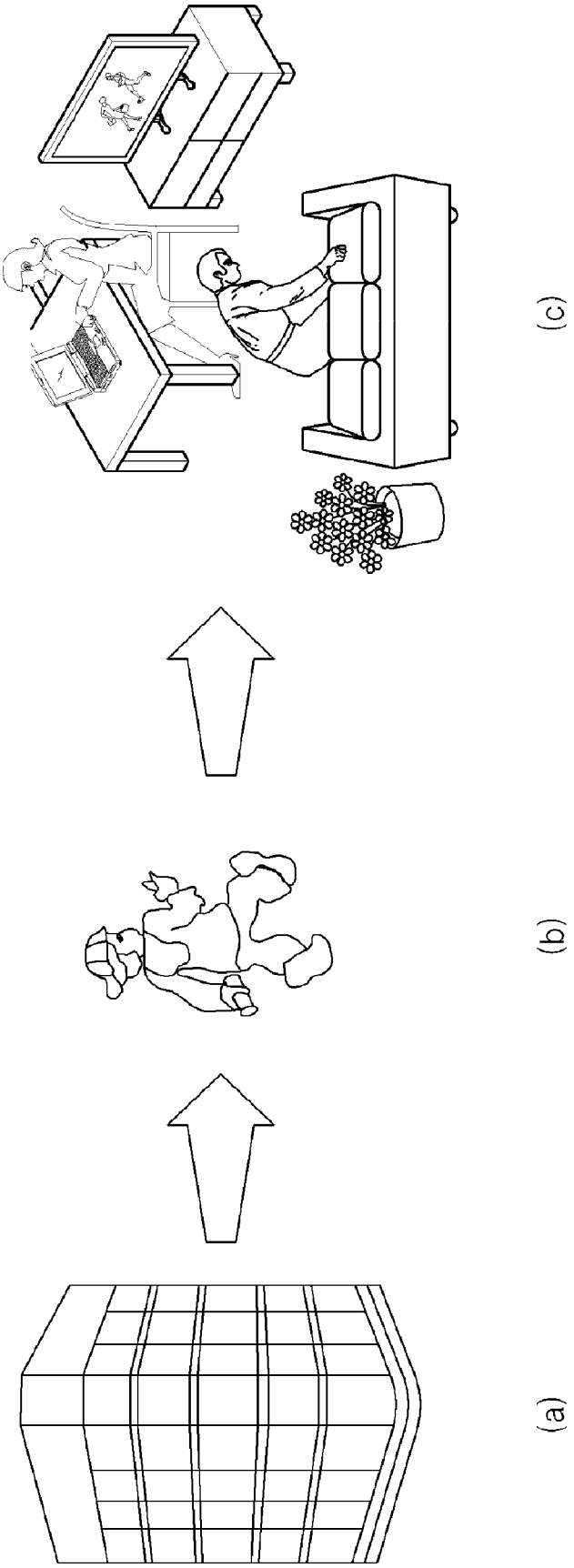


FIG. 2

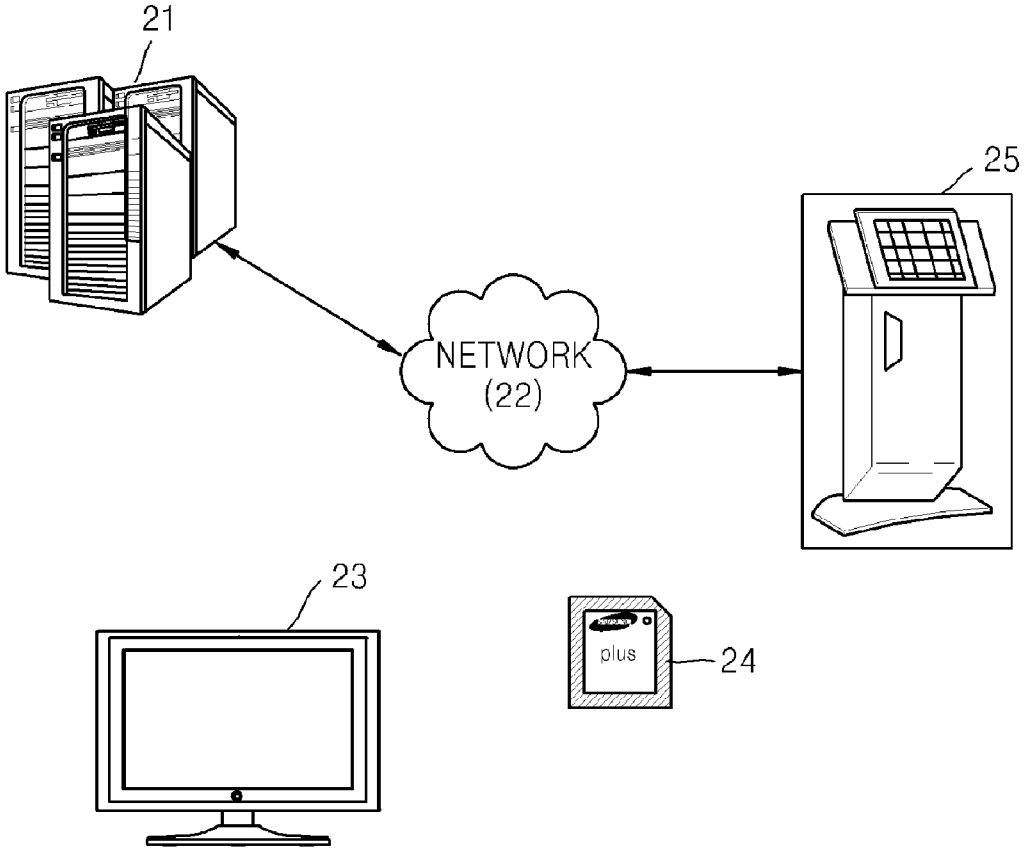


FIG. 3

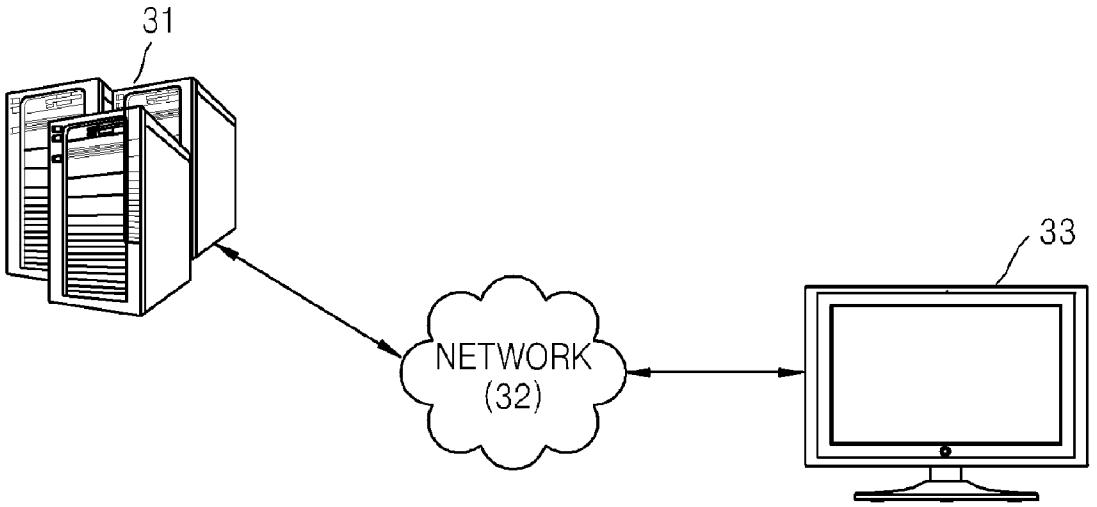


FIG. 4A

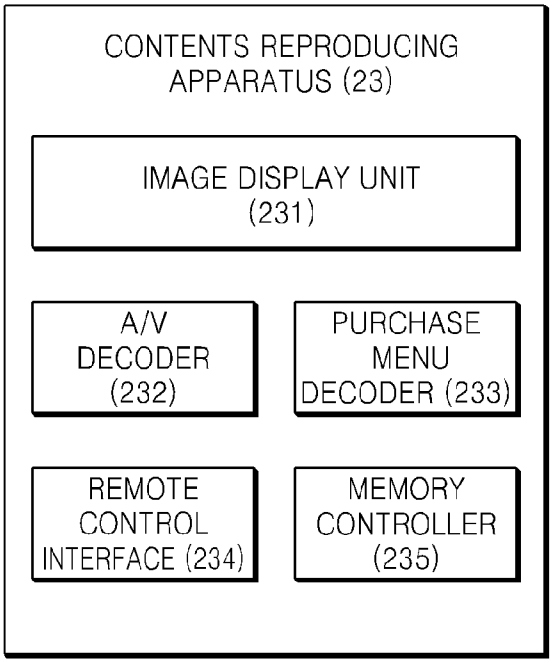


FIG. 4B

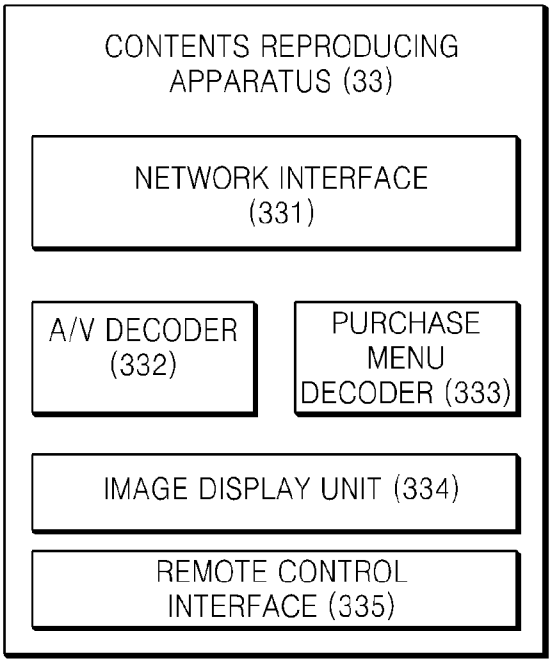


FIG. 5

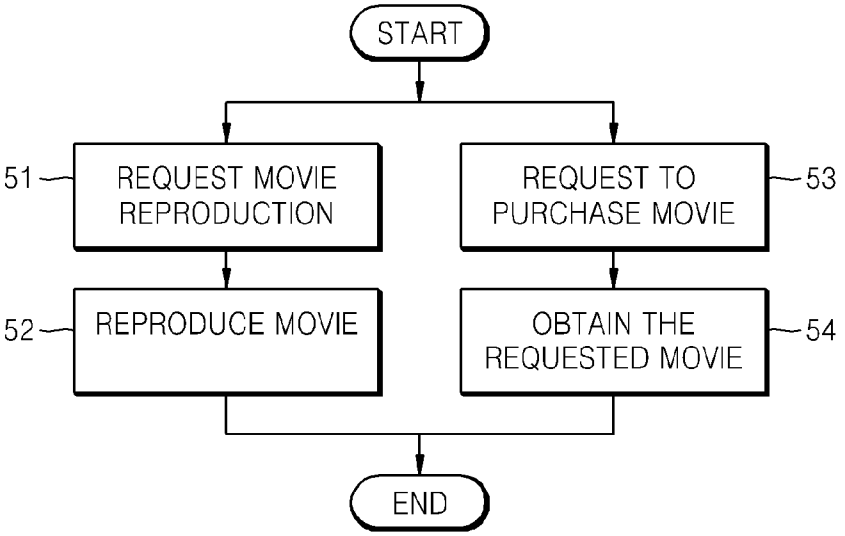


FIG. 6

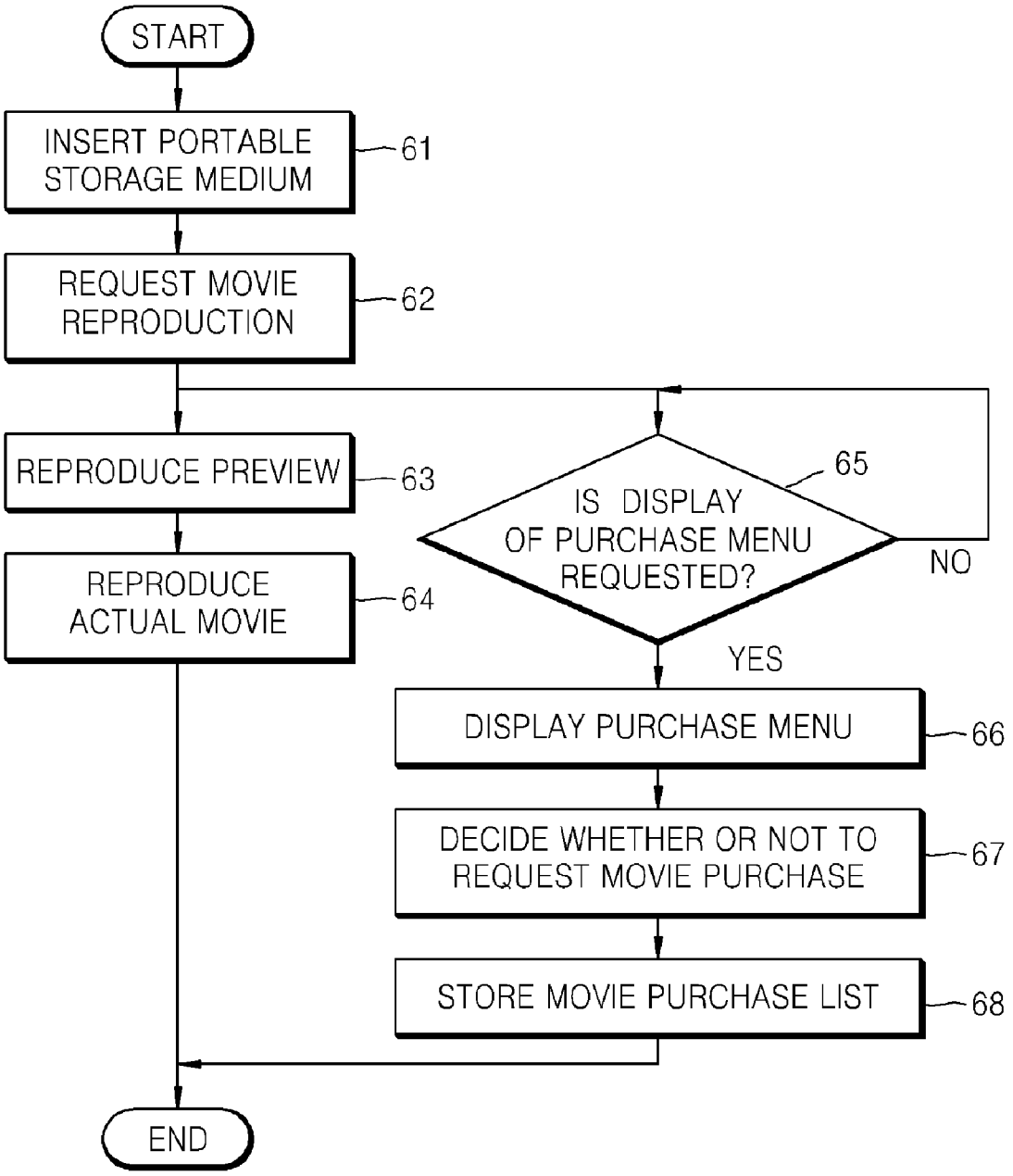

START
INSERT PORTABLE STORAGE MEDIUM
61
REQUEST MOVIE REPRODUCTION
62
REPRODUCE PREVIEW
63
REPRODUCE ACTUAL MOVIE
64
IS DISPLAY OF PURCHASE MENU REQUESTED?
65
NO
YES
DISPLAY PURCHASE MENU
66
DECIDE WHETHER OR NOT TO REQUEST MOVIE PURCHASE
67
STORE MOVIE PURCHASE LIST
68
END

FIG. 7A

SHREK
PREVIEW : SHREK 2
ADD ACTUAL MOVIE TO PURCHASE LIST ?
YES
NO

FIG. 7B

SHREK
YOU HAVE WATCHED SHREK 2
ADD SHREK 3 TO PURCHASE LIST ?
YES
NO

FIG. 8

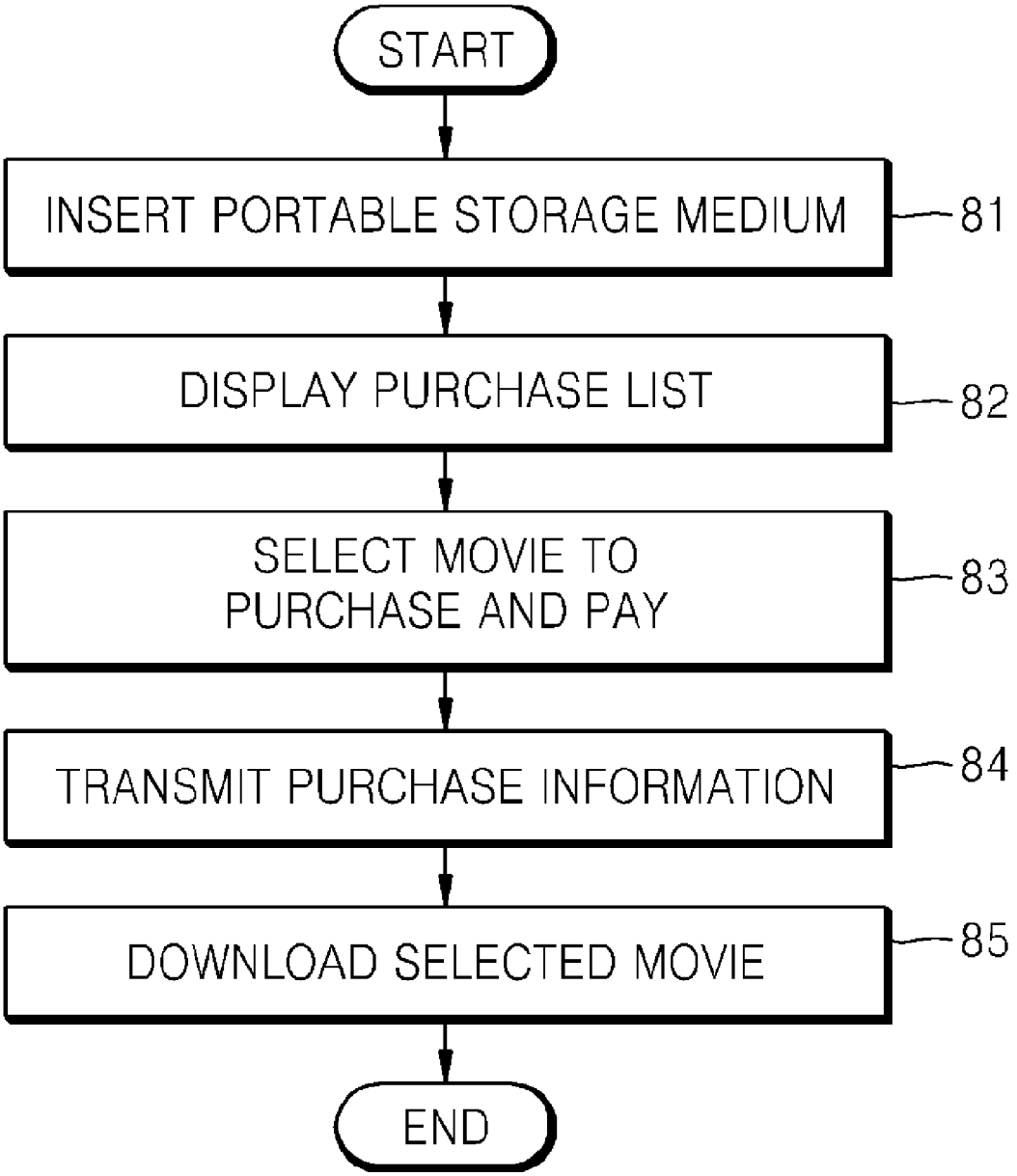

START
INSERT PORTABLE STORAGE MEDIUM
81
DISPLAY PURCHASE LIST
82
SELECT MOVIE TO PURCHASE AND PAY
83
TRANSMIT PURCHASE INFORMATION
84
DOWNLOAD SELECTED MOVIE
85
END

FIG. 9

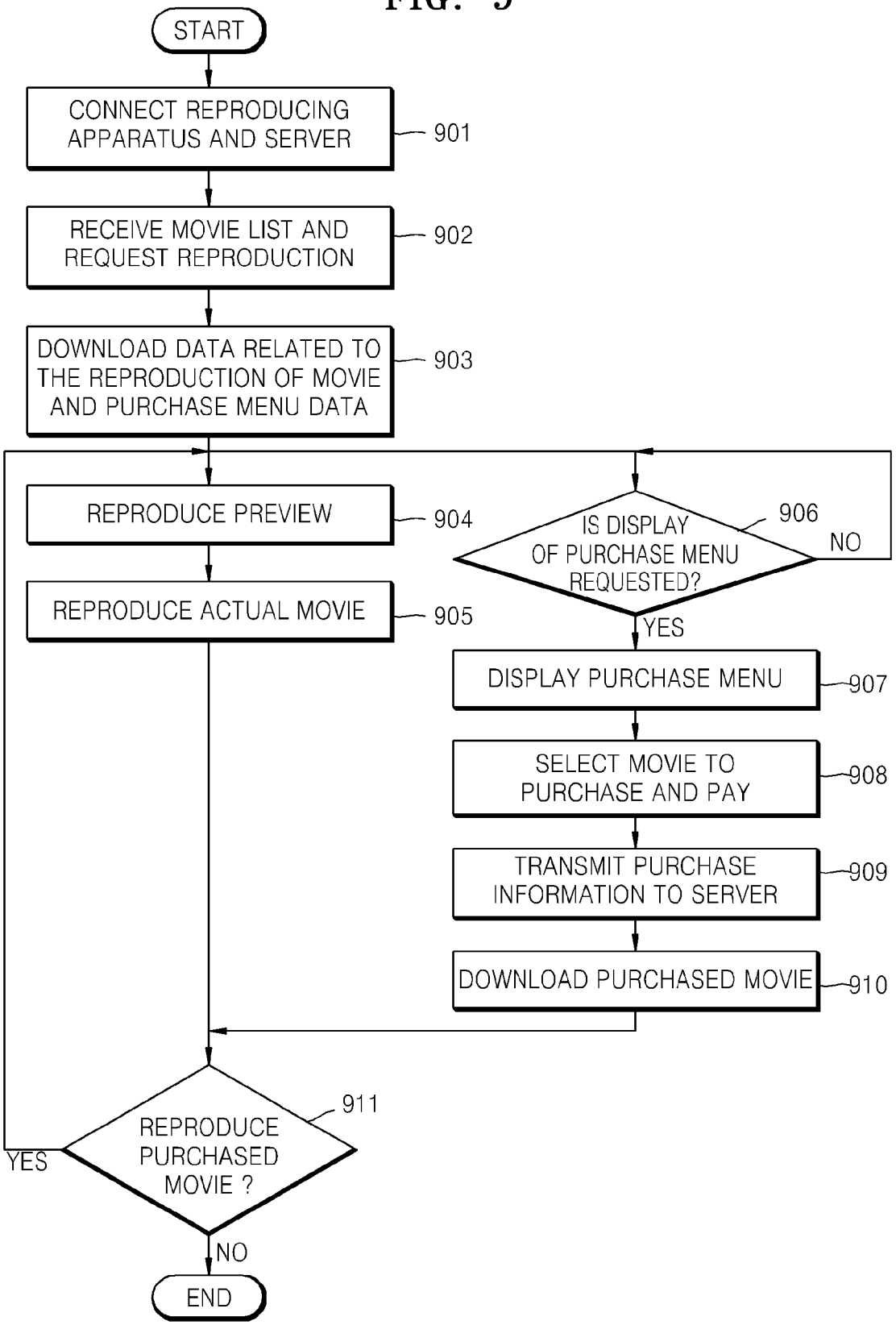

START
CONNECT REPRODUCING APPARATUS AND SERVER
901
RECEIVE MOVIE LIST AND REQUEST REPRODUCTION
902
DOWNLOAD DATA RELATED TO THE REPRODUCTION OF MOVIE AND PURCHASE MENU DATA
903
REPRODUCE PREVIEW
904
REPRODUCE ACTUAL MOVIE
905
IS DISPLAY OF PURCHASE MENU REQUESTED?
906
NO
YES
DISPLAY PURCHASE MENU
907
SELECT MOVIE TO PURCHASE AND PAY
908
TRANSMIT PURCHASE INFORMATION TO SERVER
909
DOWNLOAD PURCHASED MOVIE
910
REPRODUCE PURCHASED MOVIE ?
911
YES
NO
END

FIG. 10

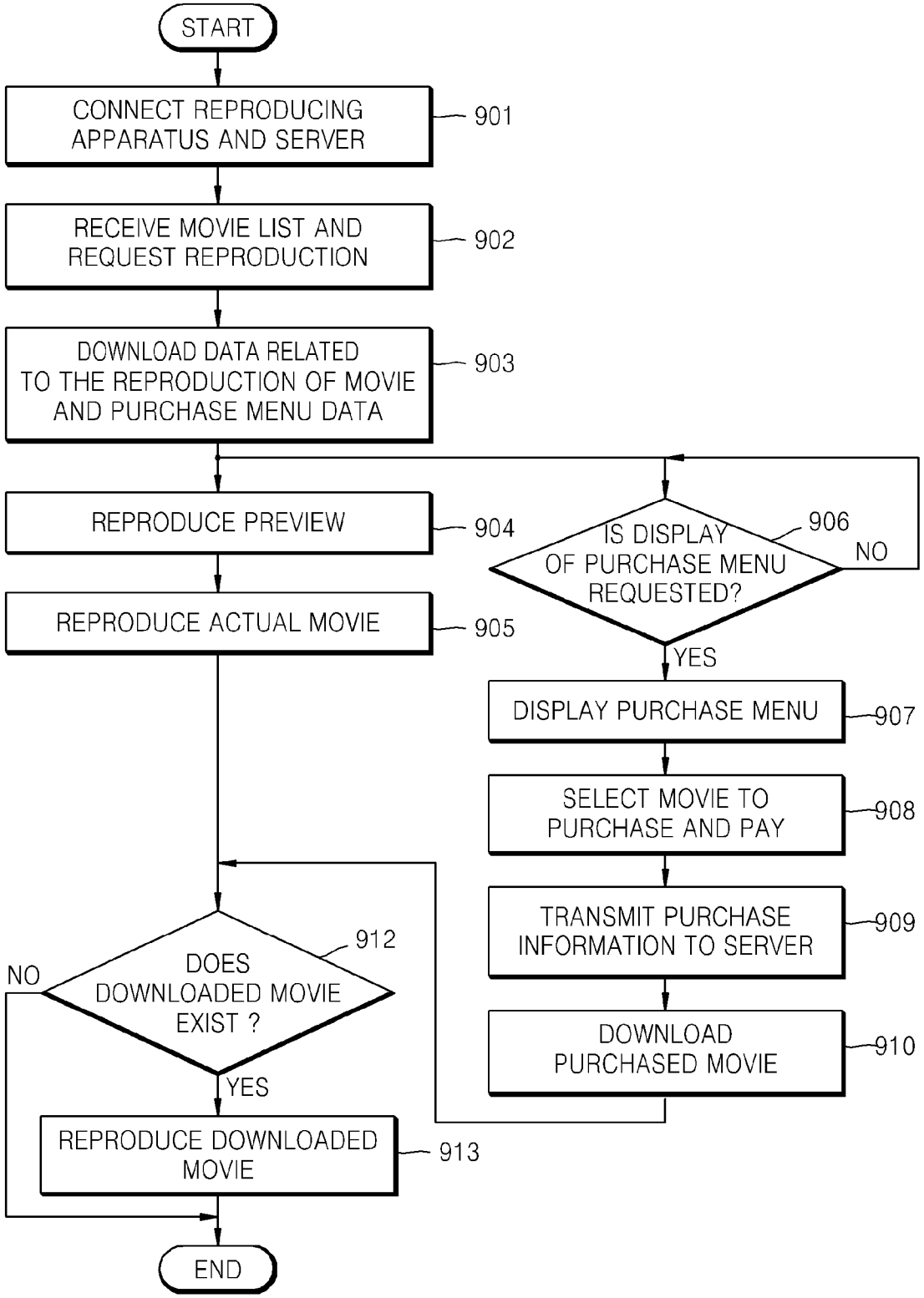
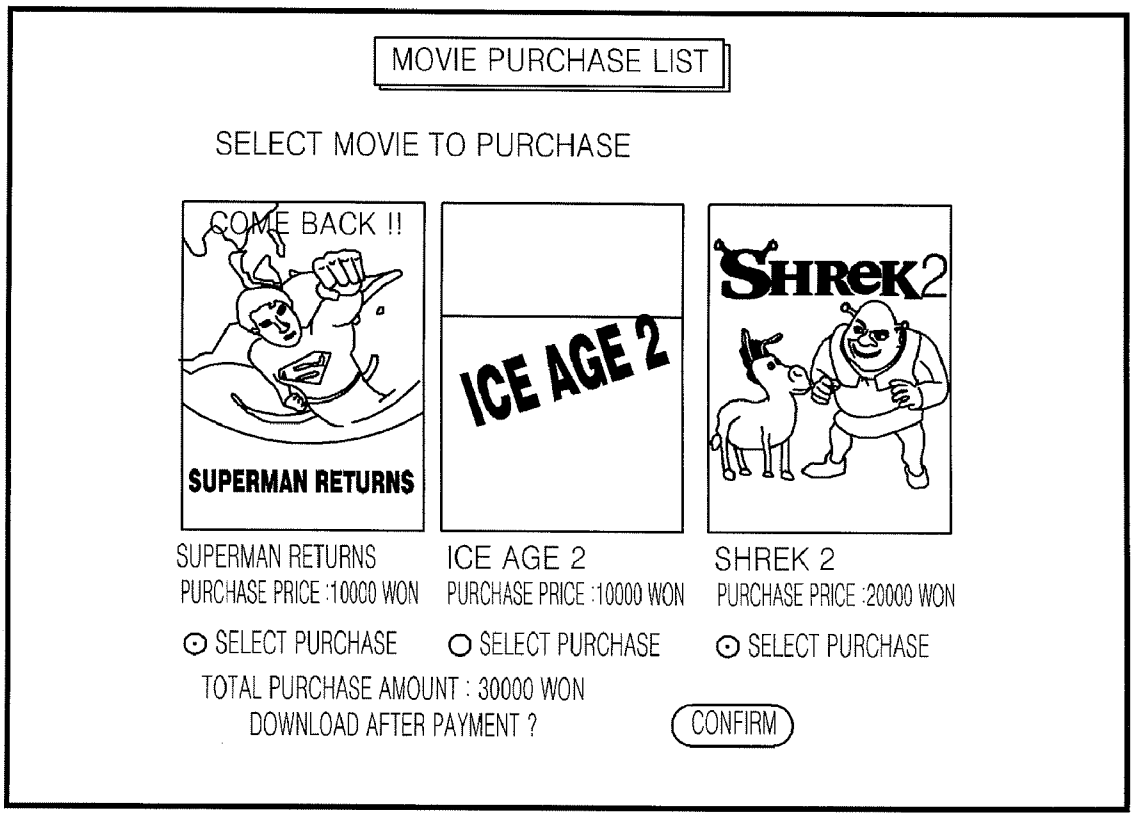

START
CONNECT REPRODUCING APPARATUS AND SERVER
901
RECEIVE MOVIE LIST AND REQUEST REPRODUCTION
902
DOWNLOAD DATA RELATED TO THE REPRODUCTION OF MOVIE AND PURCHASE MENU DATA
903
REPRODUCE PREVIEW
904
REPRODUCE ACTUAL MOVIE
905
IS DISPLAY OF PURCHASE MENU REQUESTED?
906
NO
YES
DISPLAY PURCHASE MENU
907
SELECT MOVIE TO PURCHASE AND PAY
908
TRANSMIT PURCHASE INFORMATION TO SERVER
909
DOWNLOAD PURCHASED MOVIE
910
DOES DOWNLOADED MOVIE EXIST ?
912
NO
YES
REPRODUCE DOWNLOADED MOVIE
913
END

FIG. 11


MOVIE PURCHASE LIST
SELECT MOVIE TO PURCHASE
COME BACK !!
SUPERMAN RETURNS
ICE AGE 2
SHREK2
SUPERMAN RETURNS
PURCHASE PRICE :10000 WON
ICE AGE 2
PURCHASE PRICE :10000 WON
SHREK 2
PURCHASE PRICE :20000 WON
SELECT PURCHASE
SELECT PURCHASE
SELECT PURCHASE
TOTAL PURCHASE AMOUNT : 30000 WON
DOWNLOAD AFTER PAYMENT ?
CONFIRM

METHOD AND APPARATUS TO PURCHASE CONTENTS BY USING PORTABLE STORAGE MEDIUM OR VIA NETWORK

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of Korean Patent Application No. 10-2007-0083020, filed on Aug. 17, 2007, in the Korean Intellectual Property Office, the disclosure of which is incorporated herein in its entirety by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present general inventive concept relates to a method and apparatus to purchase contents, and more particularly, to a method and apparatus by which users can purchase contents by using a portable storage medium or via a network.

[0004] 2. Description of the Related Art

[0005] In FIG. **1**, items (a) to (c) respectively illustrate a rental shop, a user, and a conventional reproducing apparatus, respectively, in a conventional method of renting or purchasing a movie stored in conventional portable storage mediums such as Compact Discs (CDs), Digital Video Disks (DVDs), Blue-ray Disk (BD), Video Cassettes, and the like.

[0006] Referring to FIG. **1**, a user rents or purchases (hereinafter both referred to as a 'purchase') a conventional portable storage medium, in which a movie is stored, from a rental shop (a), and reproduces the movie by using a contents reproducing apparatus (c) of the user.

[0007] However, the aforementioned conventional method of purchasing a movie is inconvenient to users since the users have to go to a movie rental shop, search for a desired movie from among various movies, and purchase the desired movie storage medium. Also, due to a limited quantity of movie storage media, if all of the movie storage media of a desired movie have been purchased, users cannot purchase the desired movie.

[0008] Also, in some cases, movie contents, which are stored in the conventional portable storage mediums such as a CD and are to be sold, may be a series or may include a preview of a movie to be released at a later time, and thus, users may desire to watch the sequel of the series or the movie corresponding to the preview while watching the movie contents. In this case, the users have to memorize the titles of the movies while watching the movie contents, and visit a rental shop at a later time to purchase the sequel of the series or the movie of the preview.

[0009] However, recently, portable storage mediums using a Hard Disk Drive (HDD) or a flash memory have been developed, and these new portable storage mediums are characterized by mass storage capacity and capability of both writing and reading data compared with conventional portable storage mediums. Thus, it is much more convenient for a user to purchase such contents as a movie using these new mediums than the conventional mediums.

[0010] As another alternative to the conventional method of purchasing a movie, a method of purchasing movie contents via a network has been provided. That is, users download movies at home by using a Personal Computer (PC) or a digital television (TV), which are connected with a contents provider via a network, and watch the movies. Such a method, having many advantages as compared to the conventional method of purchasing contents by using the conventional portable storage mediums, however, still has disadvantages or problems that need to be addressed. For example, optical communication network by which massive contents can be downloaded without interruption is not yet widely supplied to the general public, and similar to the conventional method of purchasing contents by using the conventional portable storage mediums, such an alternative method does not provide a convenient method of purchasing the sequel to the movie, or the movie of the preview.

SUMMARY OF THE INVENTION

[0011] The present general inventive concept provides a method and apparatus to purchase or rent (hereinafter both referred to as 'purchase') contents with a portable mass storage medium capable of writing/reading data.

[0012] The present general inventive concept also provides a method and apparatus to purchase contents such as a movie of a preview, or the sequel of a movie via a network.

[0013] The present general inventive concept also provides methods and apparatus by which users can purchase contents by using a portable storage medium, via a network or the like, when the contents are related to contents being reproduced.

[0014] Additional aspects and utilities of the present general inventive concept will be set forth in part in the description which follows and, in part, will be obvious from the description, or may be learned by practice of the present general inventive concept.

[0015] The foregoing and/or other aspects and utilities of the present general inventive concept may be achieved by providing a contents reproducing apparatus to purchase contents by using a portable storage medium, the contents reproducing apparatus including a purchase menu decoder to decode purchase menu data from among data related to reproduction of contents stored in the portable storage medium; and a memory controller to record a purchase list in the portable storage medium.

[0016] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a contents reproducing apparatus to purchase contents via a network, the contents reproducing apparatus including a network interface to interface to perform data communication between a contents providing server and the contents reproducing apparatus, and a purchase menu decoder to decode purchase menu data from among data related to reproduction of contents received by the network interface.

[0017] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a contents purchase system using a portable storage medium, the contents purchase system including a contents providing server to provide contents, a kiosk to transmit contents purchase information to the contents providing server, or receive data related to the reproduction of contents from the contents providing server, and store the data in the portable storage medium, and the portable storage medium to store contents purchase information of users, or data related to the reproduction of contents downloaded from the kiosk.

[0018] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a method of purchasing contents, by which users purchase contents related to contents being reproduced, the method including reproducing contents, requesting a pur-

chase of contents related to the contents being reproduced, and obtaining the applied contents.

[0019] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a method of storing contents purchase information by using a portable storage medium, the method including displaying a contents purchase menu, requesting a purchase of contents by using the contents purchase menu, and storing information regarding the contents, applied for in the purchase, in the portable storage medium.

[0020] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a method of purchasing contents by using a portable storage medium, the method including inserting the portable storage medium, in which a contents purchase list is stored, to a public terminal, selecting contents to be purchased by using the contents purchase list, and downloading data related to the reproduction of the selected contents to the public terminal, and thereby storing the data in the portable storage medium.

[0021] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a method of purchasing contents via a network, the method including reproducing contents data, requesting a purchase of contents related to the contents data being reproduced, and transmitting purchase information regarding the contents, applied for in the purchase, to a contents providing server via the network.

[0022] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a storage medium having recorded thereon a computer readable program for executing any one of disclosed methods in a computer.

[0023] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a computer readable medium having stored thereon instructions for use with a content purchase system, the instructions including first instructions for displaying a contents purchase menu, second instructions for requesting a purchase of contents by using the contents purchase menu, and third instructions for storing information regarding the contents requested to purchase in the portable storage medium.

[0024] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a method including reproducing audio/visual contents at a reproduction apparatus, and directly purchasing a movie corresponding to a currently viewed preview or a sequel to a currently viewed movie.

[0025] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a contents purchase system including a contents providing server to provide contents, and an interface unit to communicate contents purchase information related to the contents data being reproduced to the contents providing server and download for limited reproduction selected contents identified by the contents purchase information.

[0026] The foregoing and/or other aspects and utilities of the present general inventive concept may also be achieved by providing a computer readable medium having stored thereon instructions for use with a contents purchase system, the instructions including first instructions for reproducing audio/visual contents at a reproduction apparatus, and second instructions for directly purchasing a movie corresponding to a currently viewed preview or a sequel to a currently viewed movie reproduced on a screen.

BRIEF DESCRIPTION OF THE DRAWINGS

[0027] These and/or other aspects and utilities of the present general inventive concept will become apparent and more readily appreciated from the following description of the embodiments, taken in conjunction with the accompanying drawings of which:

[0028] FIG. **1** is a diagram illustrating a rental shop, a user, and a conventional reproducing apparatus in a conventional method of purchasing a movie;

[0029] FIG. **2** is a diagram schematically illustrating a contents purchase system via a portable storage medium according to an embodiment of the present general inventive concept;

[0030] FIG. **3** is a diagram schematically illustrating a contents purchase system via a wired/wireless network according to another embodiment of the present general inventive concept;

[0031] FIGS. **4**A and **4**B are diagrams schematically illustrating a contents reproducing apparatus in the contents purchase system according to embodiments of the present general inventive concept;

[0032] FIG. **5** is a flowchart illustrating a method of purchasing contents according to an embodiment of the present general inventive concept;

[0033] FIG. **6** is a flowchart illustrating a method of storing contents purchase information using a portable storage medium according to another embodiment of the present general inventive concept;

[0034] FIGS. **7**A and **7**B illustrate examples corresponding to purchase menus displayed on an image display unit of a contents reproducing apparatus;

[0035] FIG. **8** is a flowchart illustrating a method of purchasing contents using a portable storage medium according to another embodiment of the present general inventive concept;

[0036] FIG. **9** is a flowchart illustrating a method of purchasing contents via a network according to another embodiment of the present general inventive concept;

[0037] FIG. **10** is a flowchart illustrating a method of purchasing contents via a network according to yet another embodiment of the present general inventive concept;

[0038] FIG. **11** illustrates an example of a movie purchase list according to another embodiment of the present general inventive concept.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0039] Reference will now be made in detail to the embodiments of the present general inventive concept, examples of which are illustrated in the accompanying drawings, wherein like reference numerals refer to the like elements throughout. The embodiments are described below in order to explain the present general inventive concept by referring to the figures.

[0040] FIG. **2** is a diagram schematically illustrating a contents purchase system via a portable storage medium according to an embodiment of the present general inventive concept.

[0041] Referring to FIG. **2**, one contents purchase system using a portable storage medium **24** according to the present general inventive concept may include a contents providing

server **21**, a wired/wireless network **22**, a contents reproducing apparatus **23**, the portable storage medium **24**, and a kiosk **25**.

[0042] The contents providing server **21** stores various contents data or content files, and provides users with the contents data or content files via the wired/wireless network **22**. Contents provided from the contents providing server **21** according to the present general inventive concept include various kinds of Audio/Video (AV) data such as movies, music, television (TV) broadcasting programs, computer games, User Created Contents (UCC), and the like.

[0043] The kiosk **25** indicates a terminal of a contents distribution system installed in public places. For example, the kiosk **25** may include a multimedia computer that has installed therein various peripherals such as a touch screen, a card reader, a printer, a network, a speaker, a video camera, an interphone, a sensor, and the like, and provides a user application using a Graphical User Interface (GUI). The contents providing server **21** monitors an operation status of the kiosk **25** via the wired/wireless network **22**. The contents providing server **21** may also diagnose and handle or repair defects of the kiosk **25**. In particular, the kiosk **25** according to the present general inventive concept relays data transmission between the contents providing server **21** and users (or the portable storage medium **24**). For example, the kiosk **25** may receive contents data from the contents providing server **21**, and transmit the contents data to the portable storage medium **24** that is inserted or connected to or communicating with the kiosk **25**. Inversely, the kiosk **25** may transmit contents purchase information of users to the contents providing server **21**.

[0044] Users may use the portable storage medium **24** to download contents or request a contents purchase. The portable storage medium **24** is preferably a mass storage medium capable of storing a plurality of contents data at a time and capable of reading/writing data. Examples of the portable storage medium **24** may include a Universal Serial Bus (USB) memory, a secure digital card, a multimedia card, a compact flash memory, an extreme disk, and the like.

[0045] As illustrated in FIG. **4**A, an exemplary embodiment of the contents reproducing apparatus **23** in the contents purchase system using the portable storage medium **24** includes an A/V decoder **232**, and an image display unit **231** as components for reproducing contents. Besides these components for reproducing contents, the contents reproducing apparatus **23** may further include a remote control interface **234**, a memory controller **235**, and a purchase menu decoder **233** to request a contents purchase by users. Functions of such components included in the contents reproducing apparatus **23** will be described herein.

[0046] FIG. **3** is a diagram illustrating a formation of a contents purchase system via a wired/wireless network **32** according to another embodiment of the present general inventive concept.

[0047] The contents purchase system embodiment via the network as illustrated in FIG. **3** can include a contents providing server **31**, the wired/wireless network **32**, and a contents reproducing apparatus **33**.

[0048] In the embodiment of FIG. **3**, the contents providing server **31** and the contents reproducing apparatus **33** may directly transmit contents data and a user purchase application via the wired/wireless network **32**, and thus, compared to the embodiment of the contents purchase system of FIG. **2**, the portable storage medium **24** and the kiosk **25** are not required. An exemplary embodiment of the contents reproducing apparatus **33** according to the embodiment of FIG. **3** is illustrated in FIG. **4**B.

[0049] As illustrated in FIG. **4**A, an exemplary embodiment of the contents reproducing apparatus **33** may include an A/V decoder **332**, and an image display unit **334** as components for reproducing contents. Besides these components for reproducing contents, the contents reproducing apparatus **33** may further include a remote control interface **335**, a network interface **331**, and a purchase menu decoder **333** to request a contents purchase by users. Identically named components of embodiments of FIGS. **4**A and **4**B may perform similar functions described herein.

[0050] FIG. **5** is a flowchart illustrating a method of purchasing contents, according to an embodiment of the present general inventive concept. The contents purchasing method embodiment of FIG. **5** will be described using the embodiments of FIGS. **2**-**3**, however, the method embodiment of FIG. **5** is not intended to be limited thereby. Hereinafter, for convenience of explanation, a movie is selected as an example of contents to be purchased. However, the present general inventive concept is not limited thereto, and thus, some other examples of contents to be purchased or reproduced according to the present general inventive concept can also be various kinds of A/V data such as music, TV broadcasting programs, computer games, UCC, and so on.

[0051] A user may select (e.g., remote control interface **234** or remote control interface **335**) one of movie files supplied to one of the contents reproducing apparatuses **23** and **33** via the portable storage medium **24** or the wired/wireless network **32**, respectively, and request reproduction (operation **51**).

[0052] Then, A/V data included in the selected movie file is reproduced (operation **52**). The movie file may include not only data related to the movie but also additional data such as preview data for advertising movies (e.g., to be released at a later time).

[0053] As described above, a user may watch a movie reproduced in one of the contents reproducing apparatuses **23** and **33**, and simultaneously request a purchase of a movie related to the movie being reproduced (operation **53**).

[0054] The movie requested to purchase in operation **53** can be obtained in an off-line manner, e.g., the kiosk **25** and the portable storage medium **24**, or in an on-line manner, e.g., via the wired/wireless network **32** (operation **54**).

[0055] Operations **51** and **52**, and operations **53** and **54** can be performed in parallel without having a specific order.

[0056] FIG. **6** is a flowchart illustrating a method of storing contents purchase information by using the portable storage medium **24** according to another embodiment of the present general inventive concept. FIG. **6** illustrates a more detailed embodiment as compared to the method of purchasing contents of FIG. **5**. For example, all operations **61** through **68** of the method of FIG. **6** may correspond to operations **51** through **53** of the method embodiment of FIG. **5**.

[0057] First, the portable storage medium **24** including data related to movie reproduction may be inserted to the contents reproducing apparatus **23** (operation **61**). The data related to the movie reproduction may include A/V data (e.g., moving picture data), header data, index data, metadata, purchase menu data, and the like. The header data may include information regarding a file title or a file size. The index data may include information regarding a data sequence. The metadata can be necessary to reproduce contents, and may include an encoding manner, a size of an image, a reproduction time, and

the like. The purchase menu data may be required for a user to purchase movies, and may include information regarding a preview or a sequel, a purchase list, and so on.

[0058] A user may select one of movies stored in the portable storage medium **24**, and request reproduction (e.g., remote control interface **234**) (operation **62**).

[0059] The A/V decoder **232** decodes A/V data of the selected movie, and outputs the decoded A/V data to the image display unit **231**. If the A/V data includes data related to a preview, the preview is preferably reproduced before reproducing the movie (operations **63** and **64**).

[0060] When the user desires to purchase a movie related to the preview or the sequel to the movie while watching the preview or the movie, the user may select a purchase menu display button of a remote control (not shown) (operation **65**).

[0061] When the contents reproducing apparatus **23** receives a remote control signal indicating a purchase menu display request via the remote control interface **234**, the contents reproducing apparatus **23** first analyzes the type of A/V data that is currently being reproduced. From the analysis, if the type of the A/V data that is currently being reproduced is a preview, a purchase menu for the movie corresponding to the preview is displayed as illustrated in FIG. **7**(*a*). On the other hand, if the A/V data currently being reproduced is an actual movie, not a preview, and corresponds to a serial movie, a purchase menu for a movie sequel to the current movie is displayed as illustrated in FIG. **7**B (operation **66**). At this time, for example, a purchase menu decoder **233** may be used to decode purchase menu data.

[0062] FIGS. **7**A and **7**B illustrate examples corresponding to purchase menus that may be displayed on the image display unit **231** of the contents reproducing apparatus **23** in operation **66**. FIG. **7**A is the example purchase menu for the movie corresponding to the preview, and FIG. **7**B is the example purchase menu to purchase the sequel movie.

[0063] The user then may decide whether to request a movie purchase (operation **67**). For example, the user may decide whether to request the movie purchase while watching the purchase menus illustrated in FIGS. **7**A and **7**B displayed in operation **66** by using a remote control, or the like.

[0064] When the user decides to request the movie purchase in operation **67**, information regarding the movie purchase requested by the user is preferably added to a movie purchase list stored in the portable storage medium **24** (operation **68**). For example, the memory controller **235** may be used to record the purchase list or the purchase menu data on the portable storage medium **24**.

[0065] Although in FIG. **6**, operation **65** is exemplary illustrated occurring before operation **63**, according to embodiments operation **65** may occur before, during, after or concurrent with operations **63** and/or **64**. Further, although preview data is illustrated, additional related movie materials such as bonus material, actor/director interviews, scenes may be considered part of the movie or a related preview.

[0066] FIG. **8** is a flowchart illustrating a method of purchasing contents by using the portable storage medium **24**, according to another embodiment of the present general inventive concept. Operations **81** through **85** of FIG. **8** may correspond to operation **54** of the method of purchasing contents embodiment in FIG. **5**. The method embodiment according to FIG. **8** will be described using and may be performed by the contents purchase system embodiment of FIG. **2**, however the method embodiment of FIG. **8** is not intended to be limited thereby.

[0067] First, a user may couple or insert the portable storage medium **24** to the kiosk **25** (operation **81**), and the portable storage medium **24** may store a movie purchase list. For example, the movie purchase list may be obtained by the method of storing the contents purchase information embodiment according to the present general inventive concept described herein (e.g., FIG. **6**).

[0068] The kiosk **25** preferably decodes the movie purchase list stored in the portable storage medium **24**, and then can operate to visually display the movie purchase list to the user (operation **82**).

[0069] FIG. **11** is a diagram that illustrates an example of a movie purchase list according to another embodiment of the present general inventive concept. Referring to FIG. **11**, movies purchases that have been requested by the user (e.g., operation **67** of the method of FIG. **6**), and a purchase price for the respective movies may be displayed in the movie purchase list. The movie purchase list can request the user to select (e.g., confirm) a movie to be purchased, or the like.

[0070] The user may select all desired movies from among one or more movies included in the movie purchase list, and then, pay for the total purchase amount (operation **83**).

[0071] The kiosk **25** preferably transmits purchase information regarding the movies selected by the user (e.g., and paid) in operation **83** to the contents providing server **21** (operation **84**), and the contents providing server **21** preferably transmits movie data corresponding to the purchase information to the kiosk **25**. Such movie data received by the kiosk **25** may be stored in the portable storage medium **24** (e.g., by the memory controller **235**) (operation **85**). Alternative implementations of the kiosk **25** and the contents providing server **21** may be used according to the present general inventive concept to provide the described functions of remote selection, payment and content data transfer to the portable storage medium **24**.

[0072] Contents purchased/stored by using the method of purchasing contents embodiment using the portable storage medium **24** described in FIG. **8** are preferably designed to be automatically deleted or to be non-reproducible after being reproduced one time (e.g., after a prescribed number of times or after a predetermined period). Preferably, users do not need to again visit a contents rental shop corresponding to the movie purchase to return borrowed contents, and an owner of a contents rental shop may reduce the likelihood or preferably prevent contents from being unfairly reproduced by many people.

[0073] FIG. **9** is a flowchart illustrating a method of purchasing movies via a network, according to another embodiment of the present general inventive concept. The method embodiment of FIG. **9** can correspond to the method of purchasing contents embodiment described in FIG. **5**. The method embodiment according to FIG. **9** will be described using and may be performed by the contents purchase system via a network embodiment of FIG. **3**, however the method embodiment of FIG. **9** is not intended to be limited thereby.

[0074] First, the contents providing server **31** and the contents reproducing apparatus **33** are electrically connected via the wired/wireless network **32** (operation **901**).

[0075] The contents reproducing apparatus **33** preferably receives a movie list provided from the contents providing server **31** to display the movie list on an image display unit **334** of a content reproducing apparatus **33**. A user may select a desired movie from the movie list, and then request reproduction (e.g., remote control interface **335**) (operation **902**).

[0076] The contents providing server **31**, which received information regarding the selected movie, may transmit data related to the reproduction of the movie (such as A/V data, purchase menu data, and the like) to the content reproducing apparatus **33** (operation **903**).

[0077] The data transmitted in operation **903** may be reproduced in an order of a preview and the movie (operations **904** and **905**). Operations **904** and **905** are preferably the same as operations **63** and **64** of FIG. **6**.

[0078] When a user requests display of a purchase menu while watching the movie, a movie purchase menu can be displayed on the image display unit **334** (operations **906** and **907**). Operations **906** and **907** are preferably the same as operations **65** and **66** of FIG. **6**.

[0079] The user may select a movie to purchase through the movie purchase menu displayed on the image display unit **334**, and pay the purchase amount (operation **908**).

[0080] Information regarding the movie selected in operation **908**, that is, purchase information, is transmitted to the contents providing server **31** (e.g., via a network interface **331** of the contents reproducing apparatus **33**) (operation **909**).

[0081] The contents providing server **31** may receive the purchase information, and transmit data related to reproduction of the purchased movie to the contents reproducing apparatus **33** (operation **910**).

[0082] The user is preferably asked whether the downloaded movie is to be reproduced (operation **911**), and if the user wants the downloaded movie to be reproduced, the movie may be reproduced (e.g., by again performing operations **904** through **910**).

[0083] Although in FIG. **9**, operation **906** is exemplary illustrated occurring before operation **904**, according to embodiments operation **906** may occur before, during, after or concurrent with operations **904** and/or **905**.

[0084] FIG. **10** is a flowchart illustrating a method of purchasing movies via a network, according to another embodiment of the present general inventive concept.

[0085] Most operations of the method embodiment of FIG. **10** are similar or the same as operations of the method embodiment of FIG. **9**. However, when there is data of a downloaded movie, the process according to the method embodiment in FIG. **9** returns to operation **904**. On the other hand, when there is data of a downloaded movie, the process according to the method embodiment in FIG. **10** can automatically reproduce the downloaded movie regardless of the intention of the user (operation **912**).

[0086] The method of purchasing movies via the network according to the present general inventive concept described in relation to FIGS. **9** and **10** may further include the operation of monitoring a transmission channel of the wired/wireless network **32** by the contents providing server **31**. For example, after the contents providing server **31** has received a request for a movie purchase from a user, the contents providing server **31** may monitor the transmission channel of the wired/wireless network **32**, and then determine whether there is available channel bandwidth in which data related to reproduction of the movie requested to purchase is to be transmitted. When other users are using all of the transmission channels, whereby it is not possible to secure channel bandwidth for the user, the contents providing server **31** may refuse the request for the movie purchase from the user.

[0087] However, in another embodiment of the present general inventive concept, even if it is not currently possible to secure a channel bandwidth necessary for transmission of the movie, the contents providing server **31** may not refuse a request for a movie purchase, but may receive the request for the movie purchase and then transmit data related to the reproduction of the movie at a later time when a channel bandwidth for the transmission of the movie is available

[0088] Contents purchased by using the method and apparatus to purchase contents according to the present general inventive concept are designed to be automatically deleted or to be non-reproducible after being reproduced one time or after a predetermined period, and accordingly users do not need to again visit a contents rental shop to return contents. Further, an owner of a contents rental shop may prevent contents from being unfairly reproduced by many people.

[0089] The method and apparatus to purchase contents according to the present general inventive concept can enable users to conveniently request a contents purchase via the portable storage medium, the wired/wireless network or the like, which may decrease user inconvenience caused by the conventional manner in which users have to memorize information related to contents and visit a rental shop to obtain desired contents.

[0090] The portable storage medium or network resources used for the present general inventive concept are capable of repeatedly being used without limitation, and thus, the present general inventive concept may contribute to the saving of resources.

[0091] The present general inventive concept can also be embodied as computer readable codes on a computer readable recording medium. The computer readable recording medium is any data storage device that can store data, which can be thereafter read by a computer system. Examples of the computer readable recording medium include read-only memory (ROM), random-access memory (RAM), CD-ROMs, magnetic tapes, floppy disks, optical data storage devices, and carrier waves (such as data transmission through the Internet). The computer readable recording medium can also be distributed over network coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

[0092] Embodiments according to the present general inventive concept are described with reference to block diagrams or flowchart illustrations. It will be understood that each block of the flowchart illustrations, and combinations of blocks in the flowchart illustrations, can be implemented by computer program instructions. These computer program instructions can be provided to a processor of a general purpose computer, special purpose computer, or other programmable data processing apparatus, such that the instructions, which execute via the processor of the computer or other programmable data processing apparatus, create means for implementing the functions specified in the flowchart block or blocks.

[0093] These computer program instructions may also be stored in a computer usable or computer-readable memory that can direct a computer or other programmable data processing apparatus to function in a particular manner, such that the instructions stored in the computer usable or computer-readable memory produce an article of manufacture including instruction means that implement the function specified in the flowchart block or blocks.

[0094] The computer program instructions may also be loaded into a computer or other programmable data processing apparatus to cause a series of operational steps to be performed on the computer or other programmable apparatus

to produce a computer implemented process such that the instructions that execute on the computer or other programmable apparatus provide steps for implementing the functions specified in the flowchart block or blocks.

[0095] Further, each block of the flowchart illustrations may represent a module, segment, or portion of code, which comprises one or more executable instructions for implementing the specified logical function(s). It should also be noted that in some alternative implementations, the functions noted in the blocks may occur out of order. For example, two blocks shown in succession may in fact be executed substantially concurrently or the blocks may sometimes be executed in reverse order depending upon the functionality involved.

[0096] Any reference in this specification to "one embodiment," "an embodiment," "example embodiment," etc., means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. The appearances of such phrases in various places in the specification are not necessarily all referring to the same embodiment. Further, when a particular feature, structure, or characteristic is described in connection with any embodiment, it is submitted that it is within the purview of one skilled in the art to affect such feature, structure, or characteristic in connection with other ones of the embodiments. Furthermore, for ease of understanding, certain method procedures may have been delineated as separate procedures; however, these separately delineated procedures should not be construed as necessarily order dependent in their performance. That is, some procedures may be able to be performed in an alternative ordering, simultaneously, etc.

[0097] Although a few embodiments of the present general inventive concept have been illustrated and described, it will be appreciated by those skilled in the art that changes may be made in these embodiments without departing from the principles and spirit of the present general inventive concept, the scope of which is defined in the appended claims and their equivalents. As used in this disclosure, the term "preferably" is non-exclusive and means "preferably, but not limited to." Terms in the claims should be given their broadest interpretation consistent with the present general inventive concept as set forth in this description. For example, the terms "coupled" and "connect" (and derivations thereof) are used to connote both direct and indirect connections/couplings. As another example, "having" and "including", derivatives thereof and similar transitional terms or phrases are used synonymously with "comprising" (i.e., all are considered "open ended" terms)—only the phrases "consisting of" and "consisting essentially of" should be considered as "close ended". Claims are not intended to be interpreted under **112** sixth paragraph unless the phrase "means for" and an associated function appear in a claim and the claim fails to recite sufficient structure to perform such function.

What is claimed is:

1. A contents reproducing apparatus to purchase contents by using a portable storage medium, the contents reproducing apparatus comprising:

a purchase menu decoder to decode purchase menu data from among data related to reproduction of contents stored in the portable storage medium; and

a memory controller to record a purchase list in the portable storage medium.

2. The contents reproducing apparatus of claim **1**, further comprising an A/V (audio/video) decoder to decode A/V data from among the data related to reproduction of contents stored in the portable storage medium.

3. The contents reproducing apparatus of claim **1**, wherein the portable storage medium is one of a USB (Universal Serial Bus) memory, a secure digital card, a multimedia card, a compact flash, or an extreme disk.

4. A contents reproducing apparatus to purchase contents via a network, the contents reproducing apparatus comprising:

a network interface interfacing to perform data communication between a contents providing server and the contents reproducing apparatus; and

a purchase menu decoder to decode purchase menu data from among data related to reproduction of contents received by the network interface.

5. A contents purchase system using a portable storage medium, the contents purchase system comprising:

a contents providing server to provide contents;

a kiosk to transmit contents purchase information to the contents providing server, or receive data related to the reproduction of contents from the contents providing server and store the received data in the portable storage medium; and

the portable storage medium to store contents purchase information of users, or store data related to the reproduction of contents downloaded from the kiosk.

6. The contents purchase system of claim **5**, further comprising a contents reproducing apparatus to reproduce contents by using the data related to the reproduction of contents, or process a contents purchase request by users.

7. The contents purchase system of claim **5**, wherein the data related to the reproduction of contents comprises purchase menu data used to request a contents purchase by users.

8. A method of purchasing contents, by which users purchase contents related to contents being reproduced, the method comprising:

reproducing contents;

requesting a purchase of contents related to the contents being reproduced; and

obtaining the requested contents.

9. A method of storing contents purchase information by using a portable storage medium, the method comprising:

displaying a contents purchase menu;

requesting a purchase of contents by using the contents purchase menu; and

storing information regarding the contents requested to purchase in the portable storage medium.

10. The method of claim **9**, wherein the portable storage medium comprises a contents list for storing purchase information.

11. The method of claim **9**, further comprising reproducing contents.

12. The method of claim **11**, wherein, when the contents being reproduced is a preview of a movie, the displaying of the contents purchase menu comprises displaying a purchase menu for purchasing the movie of the preview.

13. A method of purchasing contents by using a portable storage medium, the method comprising:

inserting the portable storage medium, in which a contents purchase list is stored, to a public terminal;

selecting contents to be purchased by using the contents purchase list; and

downloading data related to the reproduction of the selected contents to the public terminal, and storing the data in the portable storage medium.

14. The method of claim **13**, wherein the selecting of the contents comprises:

displaying a purchase list; and

selecting one or more contents by the users, wherein the contents are comprised in the contents purchase list.

15. The method of claim **13**, wherein the contents is one of movies, music, TV (television) broadcasting programs, computer games, and UCC (User Created Contents).

16. The method of claim **13**, wherein the data related to the reproduction of the selected contents comprises A/V data, header data, index data, metadata, and purchase menu data

17. A method of purchasing contents via a network, the method comprising:

reproducing contents data;

requesting purchasing contents related to the contents data being reproduced; and

transmitting purchase information regarding the contents, requested to purchase, to a contents providing server via the network.

18. The method of claim **17**, further comprising downloading data, which is related to the reproduction of the contents requested to purchase, from the contents providing server.

19. The method of claim **17**, further comprising monitoring a transmission channel of the network by the contents providing server.

20. A computer readable medium having stored thereon instructions for use with a content purchase system, the instructions comprising:

first instructions to display a contents purchase menu;

second instructions to request a purchase of contents by using the contents purchase menu; and

third instructions to store information regarding the contents requested to purchase in the portable storage medium.

21. A method of purchasing contents through a reproduction apparatus, the method comprising:

reproducing audio/visual contents at the reproduction apparatus; and

directly purchasing a movie corresponding to a currently viewed preview or a sequel to a currently viewed movie through the reproduction apparatus.

22. The method of claim **21**, wherein the directly purchasing comprises:

displaying a purchase list populated with selected contents to identify the sequel or the corresponding movie;

storing the purchase list on a portable storage medium;

electronically connecting the portable storage medium with a contents provider;

paying a corresponding cost for the selected contents;

receiving the selected contents from the contents provider and storing the selected contents on the portable storage medium;

reproducing the stored selected contents; and

deleting the stored selected contents from the portable storage medium after s single reproduction.

23. The method of claim **21**, wherein the directly purchasing comprises:

displaying a purchase list populated with data for the sequel or the corresponding movie as selected contents;

electronically connecting the reproduction apparatus with a contents provider;

paying a corresponding cost for the selected contents;

receiving the selected contents from the contents provider and reproducing the selected contents on the reproduction apparatus; and

making the reproduced selected contents not reproducible after a single reproduction at the reproduction apparatus.

24. A contents purchase system, the contents purchase system comprising:

a contents providing server to provide contents; and

an interface unit to communicate contents purchase information related to the contents data being reproduced to the contents providing server and to download for limited reproduction selected contents identified by the contents purchase information.

25. The contents purchase system of claim **24**, wherein the limited reproduction is a single reproduction at a reproduction apparatus.

26. The contents purchase system of claim **24**, wherein the interface unit comprises:

a remote terminal to transmit the contents purchase information to the contents providing server or to receive data related to the reproduction of contents from the contents providing server and store the received data in a portable storage medium; and

the portable storage medium to store contents purchase information of users or to store the selected contents and data related to the reproduction of contents downloaded from the remote terminal.

27. The contents purchase system of claim **26**, further comprising:

a contents reproducing apparatus to reproduce the selected contents by using the data related to the reproduction of contents or to process a contents purchase request by users.

28. The contents purchase system of claim **27**, wherein the contents reproducing apparatus comprises:

a purchase menu decoder to decode purchase menu data from among the data related to reproduction of contents stored in the portable storage medium;

a memory controller to record a purchase list in the portable storage medium; and

an A/V (audio/video) decoder to decode A/V data from among the data related to reproduction of contents stored in the portable storage medium.

29. The contents purchase system of claim **24**, wherein the interface unit comprises:

a network to transmit the contents purchase information to the contents providing server, or receive data related to the reproduction of contents from the contents providing server and store the received data in a portable storage medium; and

a contents reproducing apparatus to store contents purchase information of users, or store the selected contents and data related to the reproduction of contents downloaded from the network.

30. The contents purchase system of claim **29**, wherein the contents reproducing apparatus comprises:

a network interface to interface to perform data communication between the contents providing server and the contents reproducing apparatus; and

a purchase menu decoder to decode purchase menu data from among the data related to reproduction of contents received by the network interface.

31. The contents purchase system of claim **24**, wherein the selected contents comprise a movie corresponding to a currently viewed preview or a sequel to a currently viewed movie reproduced on a image display unit of a contents reproduction apparatus.

32. A computer readable medium having stored thereon instructions for use with a contents purchase system, the instructions comprising:

first instructions to reproduce audio/visual contents at a reproduction apparatus; and

second instructions to directly purchase a movie corresponding to a currently viewed preview or a sequel to a currently viewed movie reproduced on a screen.

33. A computer readable medium having stored thereon instructions to purchase contents by using a portable storage medium, the instructions comprising:

first instructions to insert the portable storage medium, in which a contents purchase list is stored, to a public terminal;

second instructions to select contents to be purchased by using the contents purchase list; and

third instructions to download data related to the reproduction of the selected contents to the public terminal, and store the data in the portable storage medium.

34. A computer readable medium having stored thereon instructions to purchase contents via a network, the instructions comprising:

first instructions to reproduce contents data;

second instructions to request purchasing contents related to the contents data being reproduced; and

third instructions to transmit purchase information regarding the contents, requested to purchase, to a contents providing server via the network.

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