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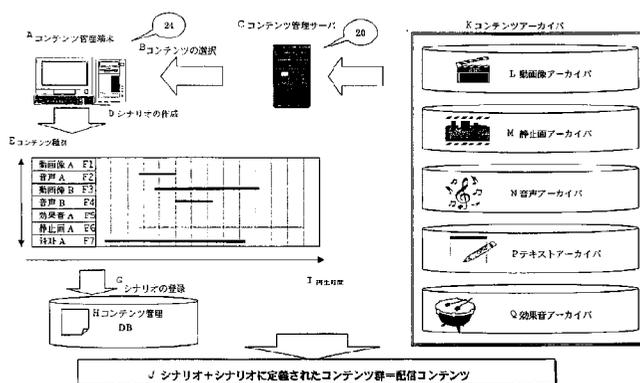
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(54) Title: CONTENT DELIVERY METHOD, SCENARIO DATA, RECORDING MEDIUM, AND SCENARIO DATA CREATION METHOD

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- A...CONTENT MANAGEMENT TERMINAL
- B...CONTENT SELECTION
- C...CONTENT MANAGEMENT SERVER
- D...SCENARIO CREATION
- E...CONTENT TYPE
- F1...MOVING PICTURE A
- F2...AUDIO A
- F3...MOVING PICTURE B
- F4...AUDIO B
- F5...SOUND EFFECT A
- F6...STILL PICTURE A
- F7...TEXT A
- G...SCENARIO LOADING
- H...CONTENT MANAGEMENT DB
- I...REPRODUCTION TIME
- J...SCENARIO + CONTENTS DEFINED IN SCENARIO DELIVERY CONTENT
- K...CONTENT ARCHIVER
- L...MOVING PICTURE ARCHIVER
- M...STILL PICTURE ARCHIVER
- N...AUDIO ARCHIVER
- P...TEXT ARCHIVER
- Q...SOUND EFFECT ARCHIVER

(57) Abstract: A content delivery method not requiring synthesizing a content to be delivered and storing the content even when the content is a combination of a plurality of material contents and thus reducing the storage capacity. By using scenario data which defines the reproduction order of the material contents serving

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as materials of the content to be delivered along time axis, material contents specified by the scenario data are taken out and delivered. The scenario data includes an attribute of the delivery content, attributes of the specified material content, its reproduction time, reproduction method, reproduction application, user terminal operation information, chairman terminal operation information, location information, and the like. Moreover, the scenario data includes a scenario template and a scenario dictionary for creating a scenario and has a function of automatic scenario creation.

(57) 要約:

配信するコンテンツが複数の素材コンテンツを合成したものであっても、事前に配信コンテンツを合成して記憶させておく必要がなく、記憶容量を削減できるコンテンツ配信方法を提供する。配信するコンテンツの素材となる素材コンテンツの再生順序を時間軸に沿って定義したシナリオデータを使用し、前記シナリオデータが指定する素材コンテンツを取り出して配信する。シナリオデータは、配信コンテンツの属性、指定した素材コンテンツの属性・再生時刻・再生方式・再生アプリケーション・利用者端末操作情報・議長端末操作情報・ロケーション情報等を含む。また、シナリオを生成するための、シナリオテンプレートやシナリオ辞書を有し、シナリオを自動生成する機能を有する。

DESCRIPTION

CONTENT DELIVERY METHOD FOR DELIVERING MULTIMEDIA CONTENT

TECHNICAL FIELD

5 The invention relates to a method of delivering multimedia content where content including moving images, still images, music, sounds, and text data are delivered to user terminals in connection with communication lines, thereby providing information communication services such as conferences, education, medical care, nursing care, and various consultations.

10

BACKGROUND ART

 In conventional content delivery methods for information communication services, content providers have registered the to-be-provided content on a server beforehand so that certain content is selected by requests from the user terminals and delivered via the communication lines. Thus, if the content to be
15 delivered is not a single piece but a plurality of pieces of material content which are synthesized, they must be synthesized and stored on the server in advance.

 Nevertheless, when the content to be provided by the content providers
20 ranges widely and delivery of a number of variations of content with partial modifications to the material content is required, work efficiency deteriorates and memory capacity must be increased to create and store all the types of delivery content, or material content must be synthesized, on the server in advance.

25 In particular, with language education at remote sites via communication lines, the educational materials need a great deal of time, place and occasion specific content (TPO-specific content), as well as various types of content by country, by language, and by theme which include recent popular topics. Since the content to be delivered includes a considerable amount of common
30 materials, it is extremely inefficient to synthesize and store them in advance. Thus a large amount of memory capacity is conventionally required.

 In view of the foregoing, the present invention may provide a content delivery method which may alleviate a need for prior synthesis and storing of

delivery content and thus may allow a reduction in memory capacity even when a plurality of pieces of material content must be synthesized to be delivered.

5 In the claims and the specification the phrase "material content" includes both an inclusive concept as well as a specific element of the content.

A reference herein to a patent document or other matter which is given as prior art is not to be taken as an admission that the document or matter was, in Australia, known or that the information it contains was part of the common general knowledge as at the priority date of any of the claims.

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SUMMARY OF THE INVENTION

According to one aspect of the present invention there is provided a content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content database storing material content which includes materials of content to be delivered and scenario data which defines the replay order of material content along a time axis, to plural user terminals connected via communication lines, wherein

15

said content delivery means executes the steps of:

20

accepting a delivery request from one user terminal of said plural user terminals;

fetching scenario data specified by said accepted delivery request from said database;

delivering said fetched scenario data to each of said plural user terminals;

25

fetching material content specified by said fetched scenario data from said database; and

delivering said fetched material content to each of said plural user terminals;

30

each of said plural user terminals executes the steps of:

receiving said delivered scenario data from said content delivery means;

receiving said delivered material content from said content delivery means;

replaying said received material content based on received scenario data;
and wherein

5 said scenario data includes replay mode specification information of each of said material content for specifying whether material content is replayed automatically at a time specified in advance or manually at a time specified by one of the user terminals;

said one of the user terminals executes the step of:

10 posting an operation instruction for controlling replay of material content to said content delivery means on every material content of which said replay mode specification information specified as manual in said received scenario data;

said content delivery means executes the steps of:

15 acquiring said posted operation instruction from said one of the user terminals;

delivering said acquired operation instruction to said plural user terminals; and

each of said plural user terminals executes the steps of:

20 receiving said delivered operation instruction from said content delivery means;

replaying said material content of which said replay mode specification information of the delivered scenario is specified as manual, based on said delivered operation instruction, so that the material content is replayed by all the user terminals synchronously.

25 According to a further aspect of the present invention there is provided a content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content database storing material content which includes materials of content to be delivered and scenario data which define combination of material content along a time axis, to plural user terminals connected via communication lines, wherein

30 said content delivery means executes the steps of:

accepting a delivery request from one user terminal of said plural user terminals;

fetching scenario data specified by said accepted delivery request from said database;

delivering said fetched scenario data to each of said plural user terminals;

5 fetching material content specified by said fetched scenario data from said database; and

delivering said fetched material content to each of said plural user terminals;

each of said plural user terminals executes the steps of:

10 receiving said delivered scenario data from said content delivery means;

receiving said delivered material content from said content delivery means;

15 replaying said received material content based on received scenario data;

and wherein

said scenario data includes source terminal operation specification information of each of said material content for specifying operations available for a source terminal during a replay of the material content;

20 said one user terminal executes the step of:

posting an operation instruction for controlling replay of material content to said content delivery means on every material content of which said source terminal operation specification information is specified in said received scenario data;

25 said content delivery means executes the steps of:

acquiring said posted operation instruction from said one user terminal;

delivering said acquired operation instruction to said plural user terminals; and

30 each of said plural user terminals executes the steps of:

receiving said delivered operation instruction from said content delivery means;

replaying said material content of which said source terminal operation specification information of the delivered scenario is specified, based on said delivered operation instruction.

5 According to a still further aspect of the present invention there is provided a content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content database storing material content which includes materials of content to be delivered and scenario data which define combination of material content along a time axis, to plural user terminals connected via communication lines,
10 wherein

said content delivery means executes the steps of:

accepting a delivery request from one user terminal of said plural user terminals;

15 fetching scenario data specified by said accepted delivery request from said database;

delivering said fetched scenario data to each of said plural user terminals;

fetching material content specified by said fetched scenario data from said database; and

20 delivering said fetched material content to each of said plural user terminals;

each of said plural user terminals executes the steps of:

receiving said delivered scenario data from said content delivery means;

25 receiving said delivered material content from said content delivery means;

replaying said received material content based on received scenario data;

and wherein

30 said scenario data includes destination terminal operation specification information of each of said material content for specifying operations available for a destination terminal during a replay of the material content; and

each of said plural user terminals executes the steps of:
acquiring an operation instruction from own terminal;
replaying said material content of which said destination terminal
operation specification information of the delivered scenario is specified, based
5 on said acquired operation instruction.

The foregoing and other features and advantages of the invention will become more apparent from the following detailed description of preferred embodiments of the invention when read in conjunction with the drawings.

10 BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the present invention will now be described with reference to the accompanying drawings wherein:

FIG. 1 is a block diagram showing a content delivery center for delivering content by the content delivery method according to an embodiment
15 of the present invention;

FIG. 2 is a conceptual diagram showing a content delivery function according to the embodiment of the present invention;

FIG. 3 is a conceptual diagram showing the method of expressing delivery content in scenario data;

20 FIG. 4 is a chart showing an example of the scenario data for use in the content delivery of the present invention;

FIG. 5 is a diagram showing the procedure for scenario data-based content delivery;

25 FIG. 6 is a diagram showing the procedure for operation control on content under delivery;

FIG. 7 is a diagram showing a content management database for automatic scenario creation;

FIG. 8 is a diagram showing a sample of description in a scenario dictionary; and

30 FIG. 9 is a diagram showing the procedure for automatic scenario creation.

FIG. 1 is a block diagram showing a content delivery center for delivering content by using the content delivery method according to an embodiment of the present invention. As shown in the diagram, the center comprises a content delivery server 12, a WWW server 16, a content management server 20, a content archiver 22, a content management terminal 24, source terminals 30, a router 40, and a firewall 42, which are connected over a network. The content delivery server 12 delivers content to users over the Internet. The WWW server 16 delivers Web pages for use in authenticating users, selecting service menus, and so on. The content management server 20 registers and stores multimedia content including moving images, still images, sounds, text, and sound effects. The content archiver 22 contain material content. The content management terminal 24 is used to make content registration and storing operations by a content manager. The source terminals 30 are user terminals installed in the center, and from which delivery and other instructions are issued. The router 40 establishes connection with the Internet. The firewall 42 avoids unauthorized entries from exterior for system protection.

In addition, the center also includes a bidirectional communication server 10, an authentication and accounting gateway 14, a mail server 18, and administration system (50-56). Description thereof will be omitted since they are not directly relevant to the present invention.

Of user terminals, destination terminals that receive content delivery are not shown. Users can access the WWW server 16 of the center to receive content delivery services with personal computers having Internet-connection facilities or dedicated terminals as the destination terminals. When this content delivery center is used for educational services, instructors use the source terminals 30, and students the destination terminals. As employed in the following description, the "user terminals" refer to both the destination terminals and the source terminals 30.

Next, description will be given of the functions and procedure for the contents delivery server 12 to provide. FIG. 2 is a conceptual diagram showing a content delivery function to be provided by this content delivery center. With the content delivery function, the content delivery server 12

delivers, to the destination terminals over the Internet, multimedia content such as moving images, still images, sounds, text, and application data that are recorded on the content archiver 22 managed by the content management server 20.

5 In the content delivery method of the present embodiment, the materials of the content to be delivered, or material content, are recorded on the content archiver 22 and combined into content for delivery. For this purpose, delivery content are expressed in scenario data which defines a combination of material content along the time axis.

10 FIG. 3 is a conceptual diagram showing the method of expressing delivery content in scenario data. More specifically, the delivery content creator previously registers the material content necessary for services into the content archiver 22 via the content management server 20 by using the content management terminal 24. At the time of creation of the delivery
15 content, the material content to be combined into the delivery content are selected out of the material content recorded on the content archiver 22. As shown in the diagram, by using a chart which indicates the replay times of the material content, or a replay chart, the material content to be combined are registered along the time axis to create scenario data. The created scenario
20 data is registered into a database of the content management server 20.

FIG. 4 shows an example of the scenario data created. As shown, a combination of moving images, still images, sound effects, and the like is defined along the time axis to constitute a single piece of delivery content. This example is of an educational material for use in language education or the like.
25 Here, the dot-line expressions represent ones which can be replayed by terminal operations anytime within a specific period. Consequently, for example, the terminal user can replay sound effects, subtitles, etc. anytime within a specific period for effective presentation.

Scenario data includes the following information in order to achieve
30 delivery of a combination of material contents and allow flexible administration.

1. Definition of Delivery Content

Information as to the entire content for delivery is defined.

- (1) Delivery Content Attribute Information

Describes creator, creation date and time, title, genre, and additional information. This allows retrieval of the scenario data.

(2) Used material contents information

Specifies material content to be used in the delivery content.

5 2. Definition of Material Content

Information as to each piece of the material content to be used in the delivery content is defined.

(1) Material Content Attribute Information

10 Describes creator, creation date and time, title, genre, and additional information. This allows retrieval of the scenario data based on the attributes of the material content used.

(2) Material.Content Type Information

15 Specifies the type of material content (moving image/still image/sound/text/application data). Here, the filename extension of the designated material content may be used for specification.

(3) Replay Time Specification Information

20 Specifies the replay start time and replay end time of the material content in terms of relative time within the delivery content. This can specify the replay period of the material content within the delivery content. A replay time may be used instead of the replay end time.

Here, the replay end time/replay time may be omitted if the material content have a fixed replay time.

(4) Replay Mode Specification Information

25 Specifies the mode of replay of the material content between automatic replay and manual replay. In the case of manual replay, the content are replayed under the instruction from the user terminal. For example, this makes it possible to replay sound effects, subtitles, and the like at arbitrary timing for effective presentation.

(5) Replay Application Specification Information

30 Specifies which application is used to replay the material content. The application for replaying the material content is thus defined by the scenario data. Here, the filename extension of the designated material content may be used for specification.

(6) Replay Screen Specification Information

Specifies the position and size of the material content to be replayed on-screen. The position and size of the material content under replay on-screen can thus be specified for effective presentation. For sounds, an icon to appear on-screen and the position thereof may be specified.

(7) Source Terminal Operation Specification Information

Specifies operations (play/stop/pause/fast forward/rewind, etc.) available for the source terminal 30 during the replay of the material content. The source-side user can thus control content replay in accordance with the progress of the service, allowing various service modes.

(8) Destination Terminal Operation Specification Information

Specifies operations (play/stop/pause/fast forward/rewind) available for the destination terminal during the replay of the material content. This allows destination users to replay the content according to their own paces.

(9) Location Specification Information

Specifies the location where the material content are stored. This makes it possible to replay the material content by designating a protocol and server name even if the user terminal does not contain the material content. Material content managed in a plurality of this content delivery centers can also be used for content delivery. Moreover, the picture and sound link unit 26 can achieve a live link when the content management server 20 is specified as the location.

(10) Replay Part Specification Information

Specifies the start time and end time of the part of the material content to replay. This allows specifications for partial replay of the material content. A replay time may be used instead of the end time.

Next, description will be given of the method of delivering content by using the scenario data described above.

FIG. 5 shows the procedure for scenario data-based content delivery. The content delivery server 12 receives a content delivery request from the source terminal 30 via the WWW server 16, and obtains the scenario data from the content management server. The content delivery server 12 also delivers

the obtained scenario data to the destination terminal for the sake of controlling by the destination terminal. Subsequently, the content delivery server 12 analyzes the scenario data, fetches the material content defined in the scenario data from the content archiver via the content management server 20 in succession along the time axis, and delivers the same to the destination terminal. These operations are performed on all the material content defined in the scenario data to complete the delivery of the delivery content.

The destination terminal receives the delivered content, and replays the same by using designated applications according to the description of the scenario data, so that images are displayed in the specified positions on-screen. When a certain operation is specified by the source terminal or the destination terminal, a predetermined replay control is effected under the command from that terminal.

Now, description will be given of the synchronization of replay of the material content between terminals. FIG. 6 shows the procedure for operation control on content under delivery. As shown in FIG. 2, a toolbar appears on the terminal screens. Operable buttons are shown activated, based on the operation specification information of the scenario data. When an active operation button is pressed, the information on the operation instruction is posted to the content delivery server 12 from the terminal. The content delivery server 12 delivers the operation instruction to the individual terminals. Since each of the terminals performs replay based on the operation instruction, the material contents are replayed by all the terminals synchronously.

The foregoing embodiment has dealt with the case where the scenario data is stored in the database of the content management server 20 and the material content are registered in the content archiver 22 in advance. However, the present invention is not necessarily limited thereto. For example, content delivery may be performed online along with scenario data creation. Material content may be supplied online from another system. The same effects can thus be obtained as long as material content are fetched and delivered based on the scenario data.

The content management server 20 is provided with the picture and sound link unit 26, and has the function of capturing picture signals and sounds signals connected thereto and converting the same into deliverable formats. This allows real-time link of live pictures and sounds to the content to be delivered.

The multimedia information to be delivered to the user terminals may be modified in quality depending on the communication band of the network. Specifically, there is provided the function of lowering the picture frame rate when the available communication band is narrow. Another function may be provided for lowering the sampling rate and the quantization bit rate of the sounds when the available communication band is narrow. The communication band may be detected by such means as packet exchange at the stage of negotiation prior to communication, or by sending packets for checking the communication band during communication. Consequently, even when the communication band of the network is limited, the content delivery functions having quality corresponding to the communication band can be maintained for optimum services.

In the foregoing embodiment, the content delivery server 12 initially transmits the scenario data to the destination terminal(s), and then delivers the material content at the respective replay times defined in the scenario data so that the destination terminal(s) performs replay based on the scenario data. Nevertheless, the destination terminal(s) may issue requests based on the scenario data that the contents delivery server 12 deliver necessary material content. In this case, if identical material content are used repeatedly, the material content delivered previously can be reused with a reduction in network load.

The content delivery server 12 may deliver images and sounds that are synthesized according to the scenario data, instead of delivering the separate material content to the destination terminal(s). This facilitates such operations as superimposing subtitles on moving images and still images. This also reduces the load on the destination terminal(s), though with limitation to the operation flexibility in the destination terminal(s). Which method to adopt, delivering separate material content or synthesized ones, may be selected

depending on the network load and the service content. Both types of content may be delivered in combination, and replayed in respective separate windows on the destination-terminal side. This makes it possible to provide a content delivery function of extremely high flexibility with suppressed network load.

5 The scenario data described above may be written in XML or other description languages. This allows the individual terminals to read the scenario data with their browsers, so that material content can be selected along the time axis and replayed automatically by plug-in applications of the browsers.

10 Next, description will be given of the method of creating the scenario data described above.

 In this content delivery center, as shown in FIG. 7, the content management database of the content management server 20 contains attribute information, scenario dictionaries, and scenario templates. The attribute information concerns the material content that are stored in the content archiver 22. The scenario dictionaries show the relationship of the types of content, or genres, with associated information. The scenario templates describe basic configuration patterns of scenarios data. Then, the content management server 20 has the function of creating scenario data automatically based on these. FIG. 8 shows a sample of description in a scenario dictionary. As shown in the diagram, associated information for a single genre is written in a tree form. Such scenario dictionaries are prepared in advance so as to cover the attribute information of the registered material content. The scenario templates describe genres, replay time, and the numbers of pieces of material content, as well as the attribute information, type information, replay time information, operation information, and the like of the material content specifiable. The scenario templates are created and registered for necessary patterns in advance.

 FIG. 9 shows the procedure for creating scenario data automatically by using the content management database mentioned above. The scenario creator activates a scenario creation tool from the content management terminal 24. When a genre is entered by the scenario creator, the contents management terminal 24 posts it to the content management server 20. The content management server 20 retrieves scenario templates and a scenario

dictionary conforming to the posted genre from the content management database. It also retrieves associated information from the scenario dictionary based on the genre and posts it to the content management terminal 24. The content management terminal 24 displays the associated information posted, and posts keywords that are entered by the scenario creator based on the display to the content management server 20. The content management server 20 retrieves the material content that fit with the scenario templates based on the keywords posted, and obtains attribute information thereof. The content management server 20 creates scenario data by transcribing the obtained attribute information of the material content into the corresponding positions of the scenario templates, and posts the results of creation to the content management terminal 24. The content management terminal 24 displays the results of creation, modifies and edits the same if needed, and registers the completed scenario data into the content management database of the content management server 20.

As above, the scenario data are created automatically in this content delivery center, and new content incorporating hot topics can be made rapidly for effective provision of content delivery service.

In the foregoing embodiment, the scenario templates are selected by entering a genre alone. It is also possible, however, to designate the replay time or the ratios of content types in the replay content. Moreover, in order to inform the scenario creator of possible genres, replay times, and content ratios in advance, the information as to the registered scenario templates may be displayed so that selections are made from the same.

In the foregoing embodiment, the scenario data are created automatically by using the scenario dictionaries which describe the relationship between genres and associated information, and scenario templates which describe scenario configuration patterns for creating scenario data. However, the scenario data need not necessarily be created automatically. The scenario creator may enter keywords, retrieve related material content based on the same, and write the attribute information of the retrieved material content in the form of scenario data. In this case, necessary material content can be fetched quickly with an improvement in the efficiency of scenario creation. Incidentally,

the attribute information of the material content may be written into scenario data by such means as a text editor.

5 The scenario dictionaries may be used alone to retrieve associated information based on the genre entry. Then, the material content are retrieved based on the associated information, and the attribute information of the retrieved material content is written into scenario data. Necessary material content can thus be fetched quicker than in the case of entering keywords, with a further improvement in the efficiency of scenario creation.

10 In addition, the replay time specification information of the material content may be set by using a replay chart which shows the replay periods of the respective pieces of material content. For example, as shown in FIG. 4, a minimum unit time for replaying material content may be determined in advance so that the replay time specification information is set by selecting frames for replaying the material content on-screen. This facilitates setting the
15 replay time specification information of the material content and clarifies the interrelationship among the replay periods of the respective pieces of material content, allowing effective content creation.

Scenario templates may be selected based on the genre entry among scenario templates. Here, a list of material content conforming thereto is
20 displayed, and desired material content are selected from the list. This automatic retrieval of material content conforming to scenario templates facilitates combining the material content. The attribute information of the material content may be transcribed to the scenario data automatically with a dramatic improvement in the efficiency of scenario creation.

25 While the foregoing embodiment has dealt with the case where the scenario templates describing basic scenario patterns are created in advance, scenario data registered previously may be used as scenario templates. This makes it possible to create scenario data without preparing scenario templates in advance. This also facilitates creating scenario data of modified content
30 easily based on the scenario data registered previously.

In the foregoing embodiment, the Internet is used as the communication lines. The services are thus available to even remote locations anytime without worry about telephone bills. The foregoing embodiment has dealt with the case

where the source-side control is effected by using the source terminals 30 in the content delivery center. Nevertheless, the present invention is not limited thereto, and terminals connected to the Internet may be used. Delivery control can thus be exercised anytime from anywhere as long as Internet-capable
5 terminals are available. Consequently, the content delivery center can be used for such application as service provision at remote locations.

The foregoing embodiment has dealt with the case where the Internet is used as the communication lines. However, the present invention is not limited thereto. Telephone lines may be used to connect to the content delivery center
10 directly.

Alternatively, LAN, WAN, and the like may be used in such applications as corporate education and school education. The present invention also provides the same effects even when used for services to be provided in a certain group. Needless to say, the communication lines are not limited to
15 wired ones, but may also be wireless ones.

The present invention is also applicable when the content delivery center is provided with booths for contents delivery services, in which a variety of multimedia contents including combinations of material content can be provided through scenario-based delivery.
20

INDUSTRIAL APPLICABILITY

As has been described, according to the present invention, scenario data for defining the order of replay of materials of content to be delivered, or material contents, along the time axis is used to fetch and deliver material
25 content defined by the scenario data. Consequently, even if the content to be delivered include a plurality of pieces of material content which are synthesized, the delivery content need not be synthesized and stored in advance. This provides the effect of a reduction in memory capacity.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content database storing material content which includes materials of content to be delivered and scenario data which defines the replay order of material content along a time axis, to plural user terminals connected via communication lines, wherein
- 5
- said content delivery means executes the steps of:
- 10 accepting a delivery request from one user terminal of said plural user terminals;
- fetching scenario data specified by said accepted delivery request from said database;
- delivering said fetched scenario data to each of said plural user terminals;
- 15
- fetching material content specified by said fetched scenario data from said database; and
- delivering said fetched material content to each of said plural user terminals;
- 20 each of said plural user terminals executes the steps of:
- receiving said delivered scenario data from said content delivery means;
- receiving said delivered material content from said content delivery means;
- 25
- replaying said received material content based on received scenario data;
- and wherein
- said scenario data includes replay mode specification information of each of said material content for specifying whether material content is
- 30
- replayed automatically at a time specified in advance or manually at a time specified by one of the user terminals;
- said one of the user terminals executes the step of:

posting an operation instruction for controlling replay of material content to said content delivery means on every material content of which said replay mode specification information specified as manual in said received scenario data;

5 said content delivery means executes the steps of:

 acquiring said posted operation instruction from said one of the user terminals;

 delivering said acquired operation instruction to said plural user terminals; and

10 each of said plural user terminals executes the steps of:

 receiving said delivered operation instruction from said content delivery means;

 replaying said material content of which said replay mode specification information of the delivered scenario is specified as manual,

15 based on said delivered operation instruction, so that the material content is replayed by all the user terminals synchronously.

2. A content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content
20 database storing material content which includes materials of content to be delivered and scenario data which define combination of material content along a time axis, to plural user terminals connected via communication lines, wherein

 said content delivery means executes the steps of:

25 accepting a delivery request from one user terminal of said plural user terminals;

 fetching scenario data specified by said accepted delivery request from said database;

30 delivering said fetched scenario data to each of said plural user terminals;

 fetching material content specified by said fetched scenario data from said database; and

delivering said fetched material content to each of said plural user terminals;

each of said plural user terminals executes the steps of:

receiving said delivered scenario data from said content delivery

5 means;

receiving said delivered material content from said content delivery means;

replaying said received material content based on received scenario data;

10 and wherein

said scenario data includes source terminal operation specification information of each of said material content for specifying operations available for a source terminal during a replay of the material content;

said one user terminal executes the step of:

15 posting an operation instruction for controlling replay of material content to said content delivery means on every material content of which said source terminal operation specification information is specified in said received scenario data;

said content delivery means executes the steps of:

20 acquiring said posted operation instruction from said one user terminal;

delivering said acquired operation instruction to said plural user terminals; and

each of said plural user terminals executes the steps of:

25 receiving said delivered operation instruction from said content delivery means;

replaying said material content of which said source terminal operation specification information of the delivered scenario is specified, based on said delivered operation instruction.

30

3. A content delivery method for delivering multimedia content from content delivery means, said content delivery means includes a content database storing material content which includes materials of content to be

delivered and scenario data which define combination of material content along a time axis, to plural user terminals connected via communication lines, wherein

said content delivery means executes the steps of:

5 accepting a delivery request from one user terminal of said plural user terminals;

 fetching scenario data specified by said accepted delivery request from said database;

10 delivering said fetched scenario data to each of said plural user terminals;

 fetching material content specified by said fetched scenario data from said database; and

 delivering said fetched material content to each of said plural user terminals;

15 each of said plural user terminals executes the steps of:

 receiving said delivered scenario data from said content delivery means;

 receiving said delivered material content from said content delivery means;

20 replaying said received material content based on received scenario data;

and wherein

25 said scenario data includes destination terminal operation specification information of each of said material content for specifying operations available for a destination terminal during a replay of the material content; and

 each of said plural user terminals executes the steps of:

 acquiring an operation instruction from own terminal;

30 replaying said material content of which said destination terminal operation specification information of the delivered scenario is specified, based on said acquired operation instruction.

4. A content delivery method for delivering multimedia content substantially as herein described with reference to the accompanying drawings.

Fig.1

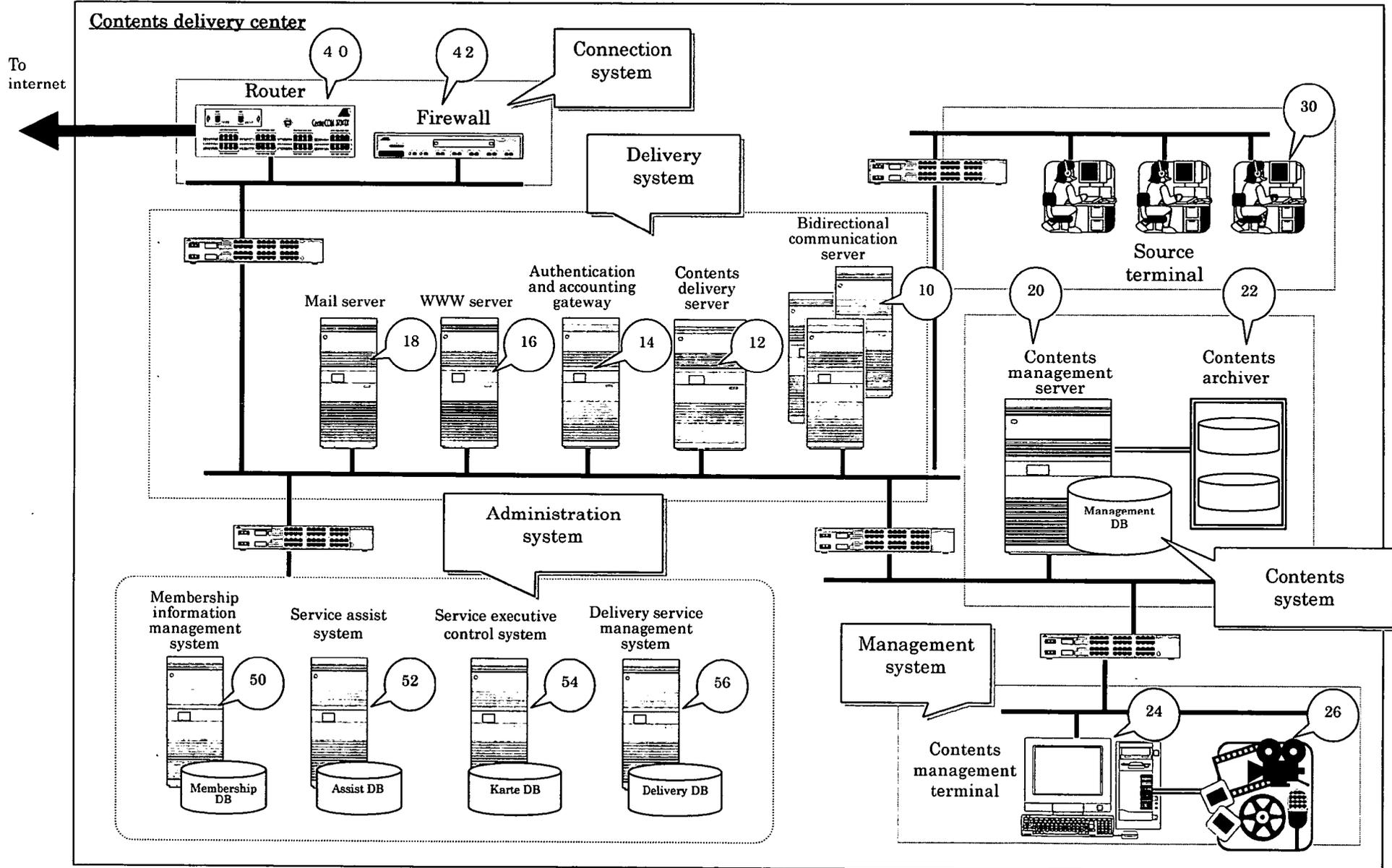


Fig.2

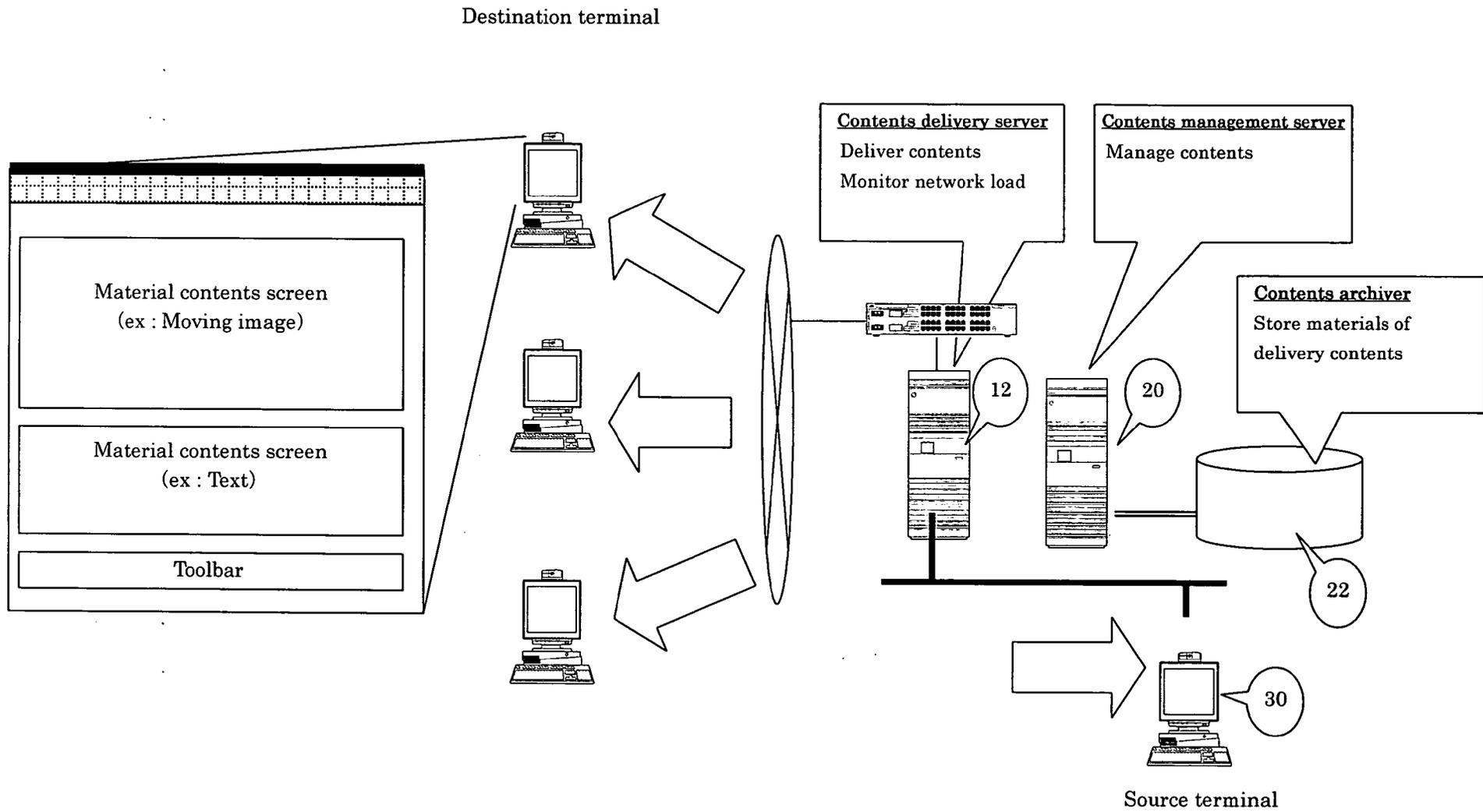


Fig.4

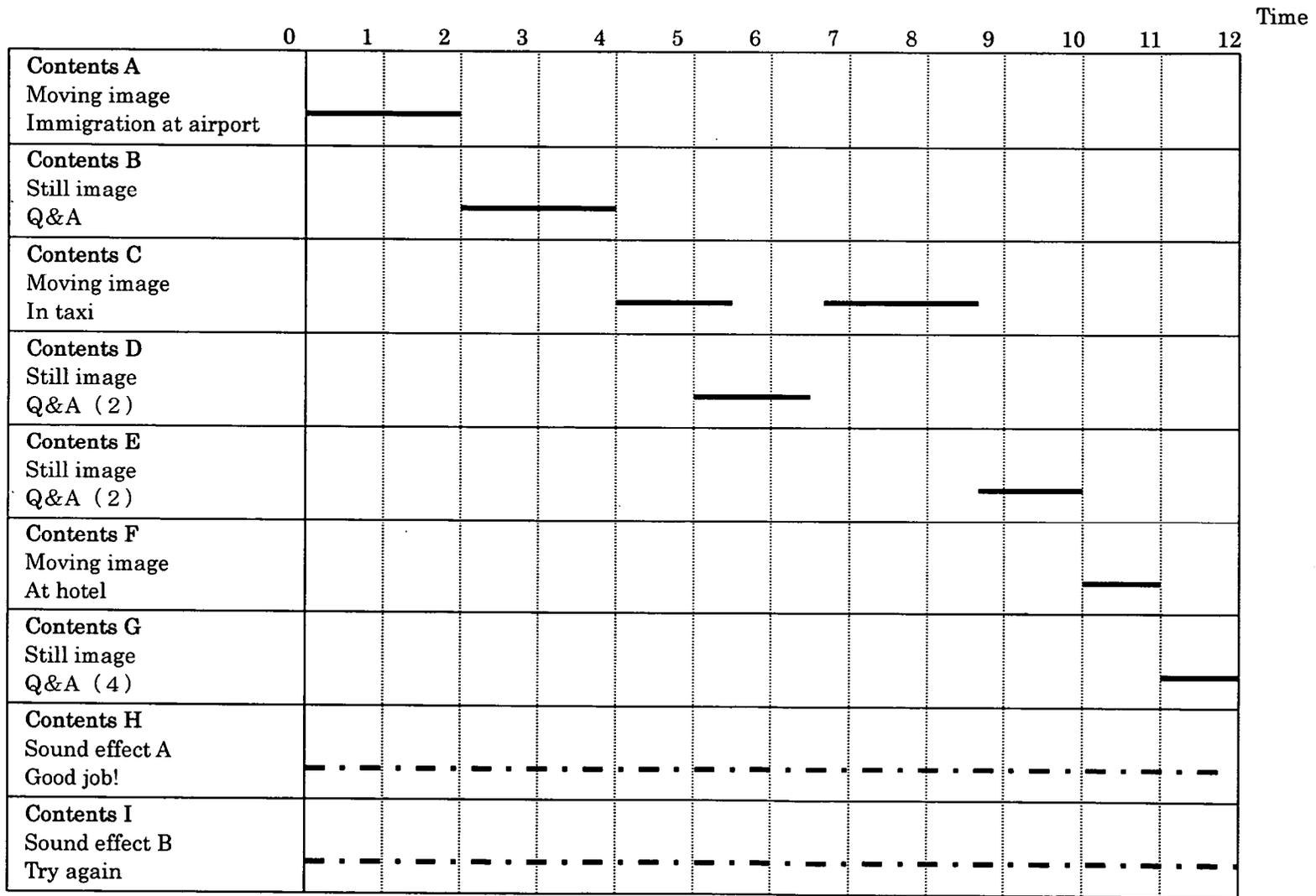


Fig.5

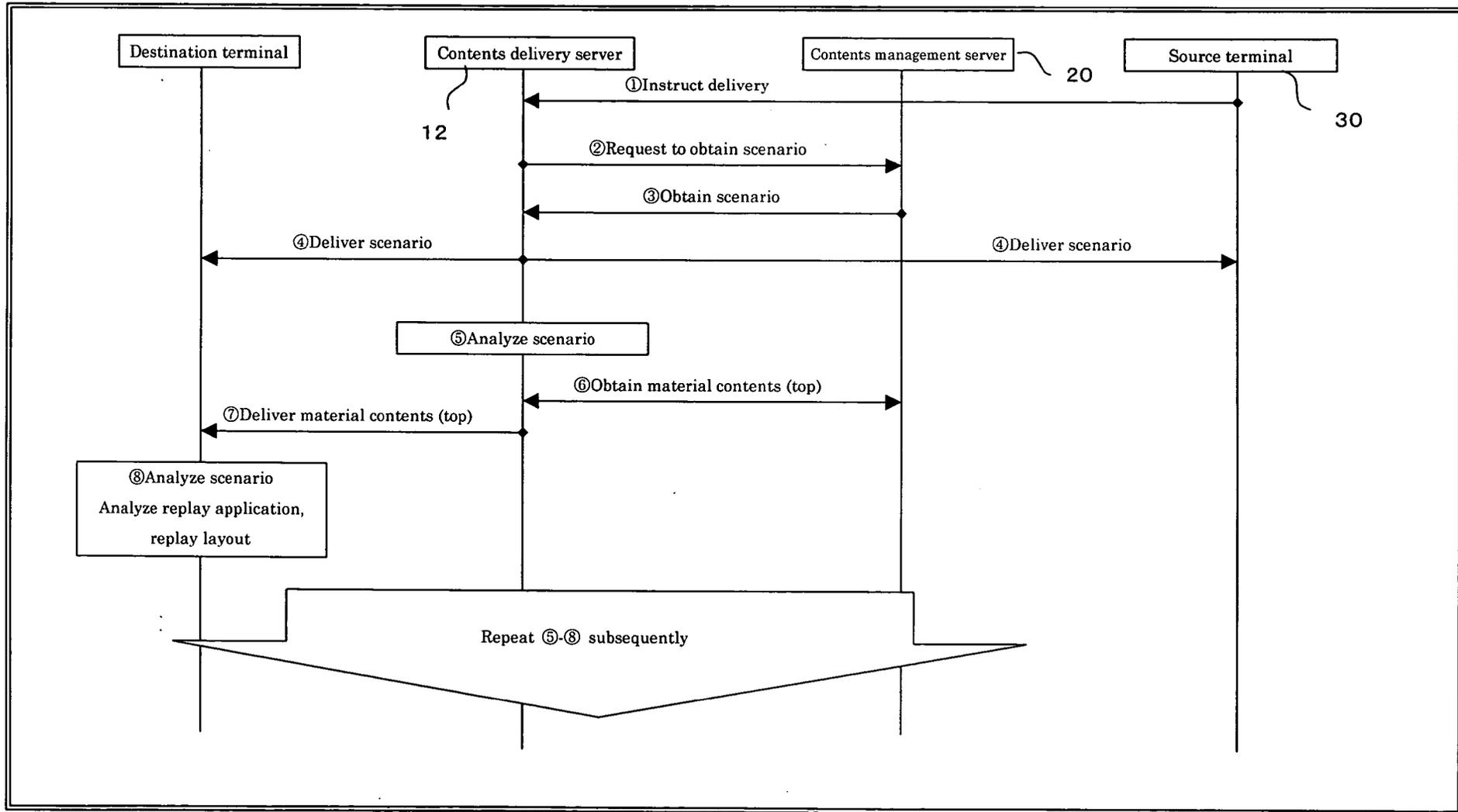


Fig.6

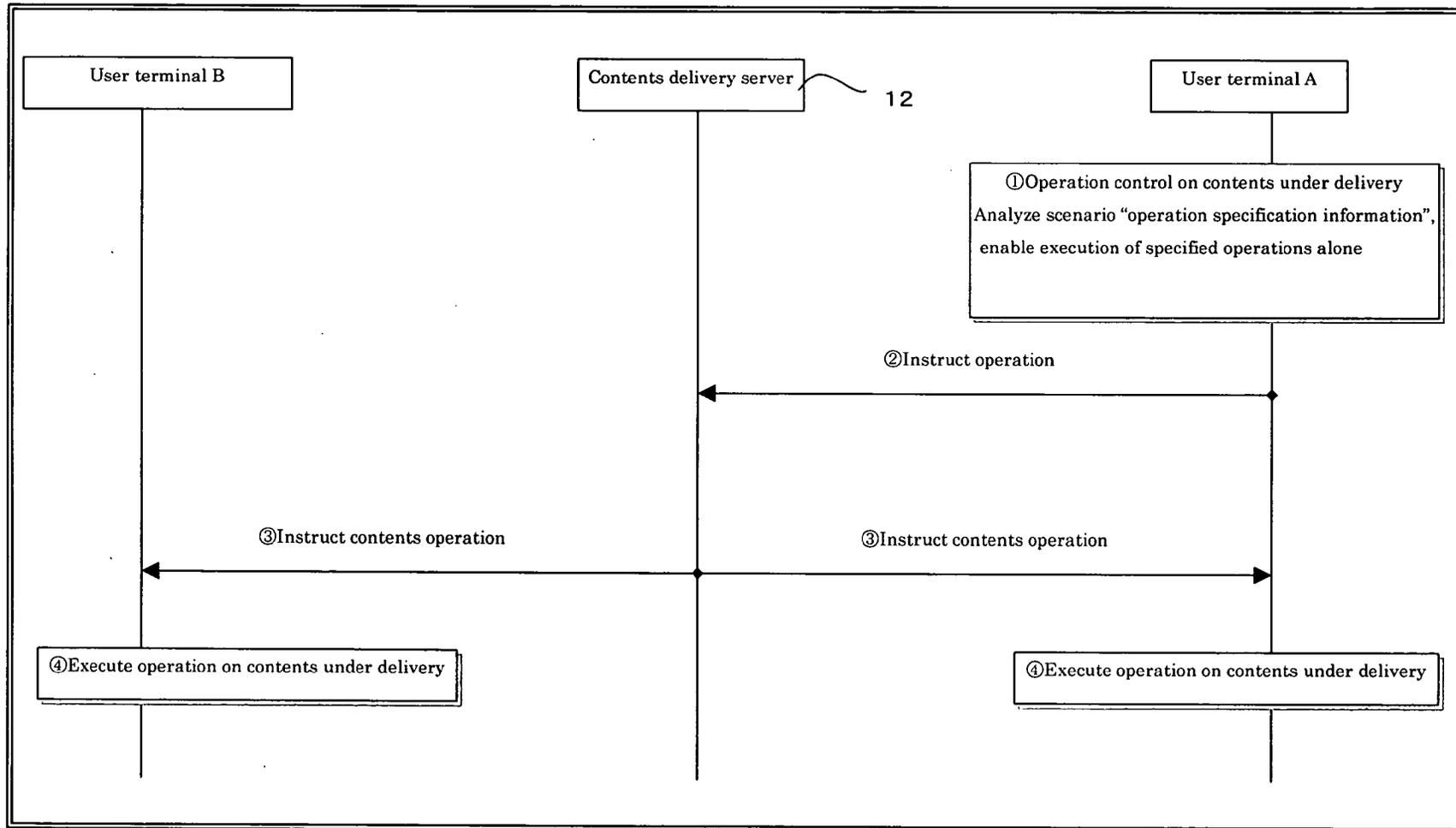


Fig.7

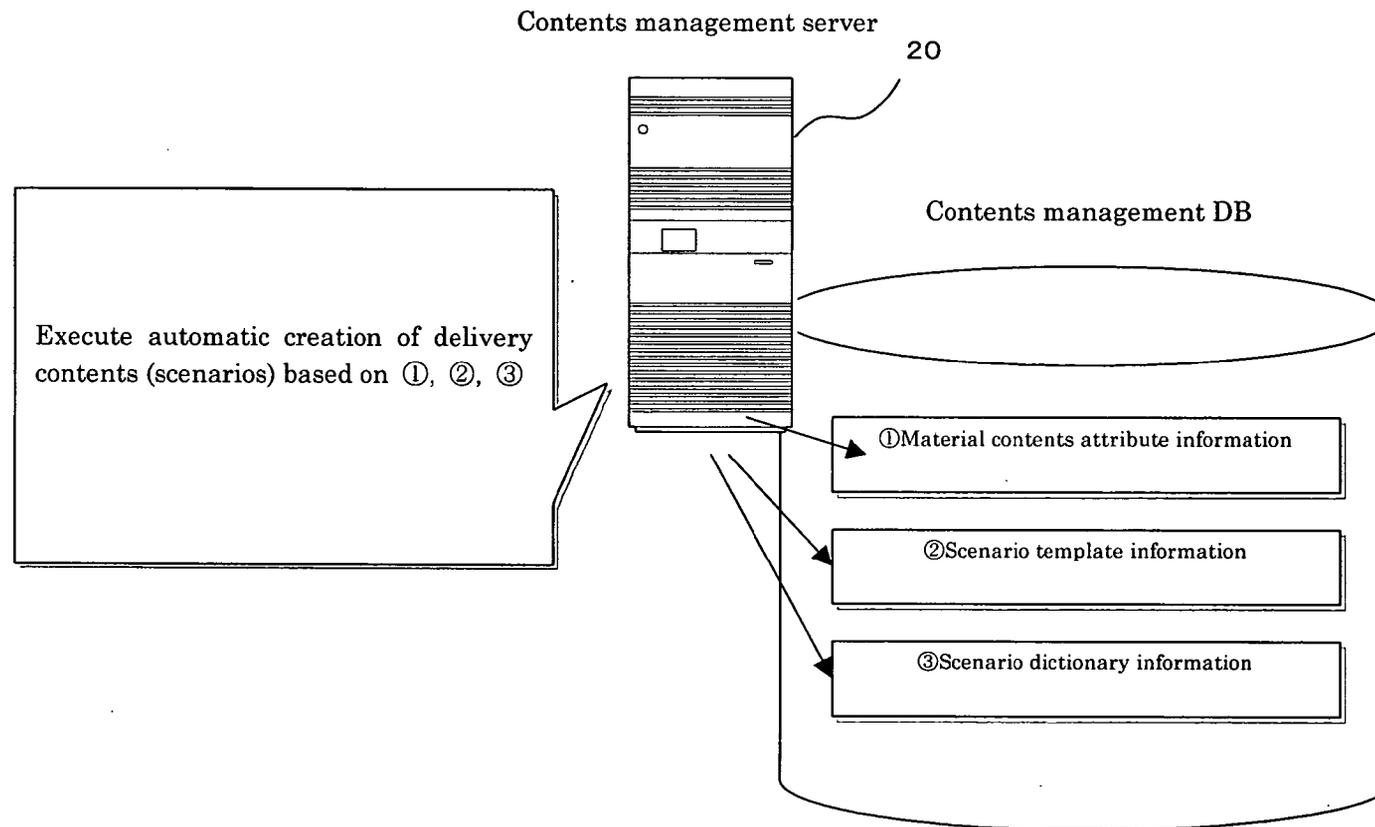


Fig.8

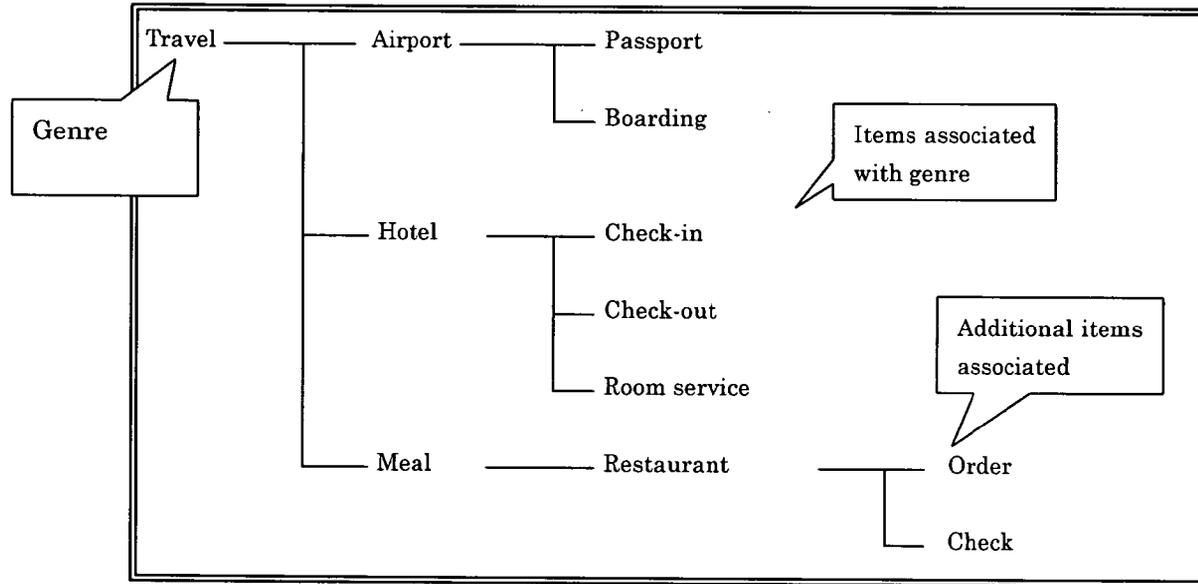


Fig.9

