SYSTEM AND METHOD FOR SELECTING AND RETRIEVING INFORMATION FROM AN AUDIO-VISUAL PRESENTATION

Field of the invention

The present invention relates to techniques for integrating, in audio-visual presentations, means for accessing sources of information, and more particularly to a system and a method for enabling an auditor, during the course of a presentation, to select one or several topics drawing his attention or interest, and, immediately after said presentation or at a later time, to easily access information related to the topics previously selected.

Background of the invention

Presentation systems allow to create electronic foils, slides or pages and to assemble them to form a presentation that can be displayed. Presentation systems are used, during the course of a presentation, to select and display electronic foils to an audience, for illustrating and completing the speaker's explanations. In particular, presentation systems allow to advance to the next foil, to return to the previous foil or to go to any other foil within the presentation using a graphical user interface or a keyboard. The speaker also has the possibility to navigate from one foil to another, for instance to skip some foils, to present the more relevant foils of the presentation, or to present foils requested by some auditors.

A presentation system can generate or reference a sequence of HTML files stored on one or a plurality of Web servers, each HTML file being accessible by activating an hyperlink from the presentation system, said hyperlink comprising an address for locating the HTML file in the network (for instance an Uniform Resource Locator (URL) in the internet network). During the presentation, the speaker can present all or a subset of the HTML foils depending on the timing of the presentation, the interest shown by the auditors, or any other factor. Therefore, the presentation of foils and related topics can flow sequentially or in any other

convenient order, depending on the course that the presentation takes and the amount of time spent for each topic (i.e., to each chart or slide of the presentation).

Usually, the auditor of a presentation is interested in some particular topics, and not particularly interested in topics considered as being irrelevant or already known to him. Thus, very frequently, the auditor wants to select, during the course of the presentation, not all the foils that are presented by the speaker, but merely a few foils, related to the topics that have drawn his interest or attention, so that he can directly and immediately access and review, once the presentation is over, the selected foils.

Accordingly, a system and method is needed for recording information in a transparent way for the speaker while keeping the audience's attention on particular topics without needing to take notes. The selection of foils by the audience for a subsequent display should be as simple as pressing a button, and sufficiently flexible to deal with the dynamic content provided by presentation systems.

Objects of the invention

It is an object of the invention to enable an auditor of an audio-visual presentation to select one or several topics drawing his attention in the course of the presentation, and immediately, or at a later time, to access, retrieve and display information related to said selected topics.

It is another object of the invention to enable an auditor of an audio-visual presentation to select foils drawing his attention in the course of the presentation, and to immediately, or at a later time, access, retrieve and display the selected foils or information related to the selected foils.

It is a further object of the invention to enable an auditor of a presentation to select foils with a minimum effort and involvement from his side.

Summary of the invention

The present invention is directed to a system, method and computer program, as defined in independent claims, for enabling an auditor in the course of a presentation, to select one or several topics drawing his attention or interest, and, immediately after said presentation or at a later time, to easily access information related to the selected topics.

The system is based on a synchronization of a speaker device with several auditor devices (e.g., workstations, portable computers, wearable computers, Personal Digital Assistants - PDAs, WAP enabled mobile phones, smart phones or any other type of hand-held computing devices), according to a same universal time, so that the times at which topics are selected by auditors can be correlated with the time intervals during which the corresponding presentation foils are presented by the speaker. In a preferred embodiment of the invention, the synchronization between the speaker device and the auditor device is done referring to an universal time such as the Global Positioning System Time (GPS-time), the Global Orbiting Navigational Satellite System (GLONASS) time or another suitable universal time based on a satellite system. A GPS or GLONASS receiver is integrated or connected to the speaker device. A GPS or GLONASS receiver is integrated or connected to each auditor device. Each auditor device is independent and separate from the speaker workstation.

The system is also based on a plurality of hyperlinked HTLM documents located on one or several servers accessible from the speaker workstation through a network. The foils are selected by the speaker during universal time intervals that are recorded. Depending on the interest on the presented topics, one or several foils can be selected by each auditor during the course of the presentation.

More particularly, the present invention discloses a system, method and computer program for generating from a speaker device, a Presentation Time Table during the presentation of one or a plurality of foils, said Presentation Time table being accessible by one or a plurality of auditors. The method comprises the steps of:

- locating and accessing a Presentation Hyperlink Table comprising :
  - means for identifying one or a plurality of foils;
  - means for locating and accessing information related to each of said one or plurality of foils;
  - means for locating and accessing a Presentation Time Table;
- locating and accessing the Presentation Time Table using the Presentation Hyperlink Table;

and, for each presented foil :

- identifying the presented foil in the Presentation Hyperlink Table;
- determining an universal-time interval corresponding to the presentation of the foil;
- creating a new record on the Presentation Time Table;
- copying into said new record :
  - the universal-time interval corresponding to the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for identifying the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for locating and accessing information related to the presented foil.

The present invention further discloses a system, method and computer program for selecting from an auditor device, one or a plurality of foils in a presentation of one or more foils, and for accessing at a later time, information related to each of said one or plurality selected foils, comprising the steps of:

- each time a selection command is received for selecting a foil currently presented:
  - determining the current universal-time;
  - recording the current universal-time in a Selections Time Table;
- accessing a Presentation Time Table, said Presentation Time Table accessible by one or a plurality of auditor devices, comprising for each presented foil:
  - an universal-time interval corresponding to the presentation of the foil;

- means for identifying the presented foil;
- means for locating and accessing information related to the presented foil;

for each universal-time recorded in the Selections Time Table:

- identifying in the Presentation Time Table, the foil selected at the recorded universal-time;
- retrieving from the Presentation Time Table, said means for identifying the selected foil and for locating and accessing information related to said selected foil;
- storing the retrieved means for identifying the selected foil and for locating and accessing the information related to said selected foil into the Selections Time Table.

Further embodiments of the invention are provided in the appended dependent claims.

The foregoing, together with other objects, features, and advantages of this invention can be better appreciated with reference to the following specification, claims and drawings.

Brief description of the drawings

The novel and inventive features believed characteristics of the invention are set forth in the appended claims. The invention itself, however, as well as a preferred mode of use, further objects and advantages thereof, will best be understood by reference to the following detailed description of an illustrative detailed embodiment when read in conjunction with the accompanying drawings, wherein:

- **Figure 1** shows how auditors of a presentation perceive topics of interest when listening to the speaker and viewing the presentation foils.

- **Figure 2** illustrates the principle of the invention based on the synchronization of the speaker workstation and the auditor workstations according to a same universal-time, such as, for example, the Global Positioning System (GPS) time.

- **Figure 3** shows a presentation according to the present invention, said presentation comprising a sequence of HTML foils referenced in a Presentation Hyperlink Table.

- **Figure 4** shows how the speaker workstation uses the Presentation Hyperlink Table to select HTML foils, how these HTML foils are retrieved and presented, and how the universal times corresponding to the presentation of these HTML foils by the speaker are stored in a Presentation Time Table according to the present invention.

- **Figure 5** shows an example of Presentation Time Table generated during a presentation and stored on a Presentation Server according to the present invention.

- **Figure 6** shows how, during a presentation, an auditor selects a topic by pressing a key on his workstation according to the present invention.

- **Figure 7** shows how the universal times, at which topics are selected by the auditor, are stored in a Selections Time Table located in the auditor workstation according to the present invention.

- **Figure 8** shows how, when the presentation ends, the auditor updates the Selections Time Table located in his workstation from the Presentation Time Table stored in the Presentation Server.

- **Figure 9** shows how names and URLs of HTML foils that have been presented by the speaker and selected by the auditor, are identified and retrieved from the Presentation Time Table located in the Presentation Server and how the

Selections Time Table located in the auditor workstation is updated according to the present invention.

- **Figure 10** shows how from the updated Selections Time Table, the auditor activates an hyperlink to a selected HTML foil according to the present invention.

- **Figure 11** shows how the presentation HTML foil that corresponds to the selected item is received from the Web server and is displayed on the auditor device.

- **Figure 12** shows how the foils presented by the speaker and the selections made by the auditors are correlated using a same universal-timing system.

- **Figure 13** shows the steps of the method for creating a Presentation Hyperlink Table on the speaker workstation according to the present invention.

- **Figure 14** shows the steps of the method for generating, during a presentation, a Presentation Time Table on a Presentation Server, according to the present invention.

- **Figure 15** shows the steps of the method for selecting one or several topics of interest during a presentation, according to the present invention.

- **Figure 16** shows the steps of the method for accessing information related to topics that have been selected during a presentation, according to the present invention.

Preferred embodiment of the invention

As shown in Figure 1, each auditor (100) attending a presentation has one or several particular topics of interest. At some moments, this auditor is particularly interested from what the speaker (102) is saying (103) or from what is being shown on the presentation screen (104), and while at other moments, this auditor may

consider that the presented topics are already known, lack of interest or are irrelevant. Under these circumstances there is a need to provide a simple mechanism to enable an auditor (100) to exclusively select the topics that draw his interest in the course of the presentation (e.g., exclusively the information related to the ***"Pomerol", "Medoc"*** and ***"Burgogne"*** wines during a long presentation about ***"French Red Wines"***) and to access, at a later time, information related to the selected topics, in particular the information comprised in the foils that have been presented by the speaker and which concerns the selected topics.

The principle of the invention as illustrated by Figure 2, is based on the synchronization of the speaker workstation (202) (i.e., the computing system under the control of the speaker (201) which is connected to the presentation screen (203)) with the auditor devices (204) (e.g., a PDA, a hand-held computer, a wearable computer, a smart phone) to the same universal time. In a preferred embodiment of the invention, speaker workstation (202) and auditor's devices (204) are synchronized according to an universal time system (205), such as the Global Positioning System Time (GPS-time), the Global Orbiting Navigational Satellite System (GLONASS) time or another suitable universal time based on a satellite system. A GPS or GLONASS receiver (207) is integrated or connected to the speaker workstation (202). On the auditor's side, GPS or GLONASS receivers (208) can be integrated or connected to the auditor (200) devices (204), (e.g., wearable computers, Personal Digital Assistants (PDAs), smart phones or any other hand-held computing device). The auditor devices (204) are independent and are not connected nor in communication with the speaker workstation (202).

Figure 12 also shows how events (1202) generated by an auditor (600) (such as the universal times Ta, Tb corresponding to the selection by the auditor of a first and a second topic), can be correlated with events (1201) generated by the speaker (602) (such as the universal time intervals (T1,T2), (T3, T4) corresponding to the presentation by the speaker of Foil 1 and Foil 3). This correlation of independent events is based on the synchronization of the speaker workstation (202) with the auditors devices (204) according to an universal time (205). This correlation allows the identification of the foils that have been selected by the auditor during the course of the presentation.

Universal Timing Systems

Timing sequences, independent of locations of transmitters and receivers, can be derived from an absolute timing reference such as, for example, the Global Positioning System (GPS) time or the Universal Time Co-ordinated (UTC) time (also known today as GMT and ZULU time).

To transmit precise timing signals, the GPS uses 24 satellites in 55° inclined orbits 10,000 miles above the earth. These timing signals are used by any GPS receiver anywhere on the earth to determine its position. A 1575 MHz transmission carries a 1-MHz bandwidth phase-modulated signal named the clear acquisition (C/A) code. When a GPS receiver receives this signal from at least three GPS satellites, it can determine its own latitude and longitude with an accuracy of about 30 meters. Apart the determination of geographical positions, the GPS is today widely used for distributing Precise Time and Time Interval (PTTI). The system uses time of arrival (TOA) measurements for determining a position. A precisely timed clock is not essential for the user because time is obtained in addition to position by the measurement of the TOA of four satellites simultaneously in view. If the altitude over sea level is known, three satellites are sufficient. If the user is stationary at a known position then, in principle, the time can be obtained by the observation of a single satellite. Information about the GPS time service is supplied by the "**Time Service Department**", U.S. Naval Observatory, Washington, DC, at ***http://tycho.usno.navy.mil/***

GPS is today the world's principal supplier of accurate time. It is used extensively both as a source of time and as a means of transferring time from one location to another. Three kinds of time are available from GPS: GPS time, UTC as estimated and produced by the United States Naval Observatory, and the times from each free-running GPS satellite's atomic clock. The Master Control Station (MCS) at Falcon Air Force Base near Colorado Springs, Colorado, gathers the GPS satellites' data from five monitor stations around the world. A Kalman filter software program estimates the time error, frequency error, frequency drift and Keplerian orbit

parameters for each of the satellites and its operating clock. This information is uploaded to each satellite so that it can be broadcasted in real time. This process provides GPS time consistency across the constellation to within a small number of nanoseconds and accurate position determination of the satellites to within a few meters.

The second universal time standard, Universal Time Co-ordinated (UTC), introduces leap seconds to remain synchronized with the rotation of the earth. In order to provide an estimate of UTC time derivable from a GPS signal, a set of UTC corrections is also provided as part of the GPS broadcast signal. This broadcast message includes the time difference in whole seconds between GPS time and UTC. This complicates software that deals with the smooth flow of data streams or calculates the times between data samples. GPS Time is preferred in this invention as this system avoids the introduction of leap seconds and is easily related to UTC. Information about UTC (GMT) time service can be found on: ***http://time.greenwich2000.com/***

GPS Receivers

A Direct-to-Digital GPS Receiver is described in the following Web site :

http://w3.research.ibm.com/present/gto200038.htm

This is an example of a tiny low cost chip which can integrate GPS into anything (e.g., a PDA, a mobile phone, a wearable computer, a video camera) . This receiver has been jointly developed between IBM and Leica. The high speed analog capabilities of SiGe technology, when integrated with the CMOS technology, allows the integration of this single chip directly to a digital GPS (Global Positioning System) receiver. GPS derived position information is finding a multitude of diverse applications: from mapping and surveying to vehicle tracking to 911 cell phone caller location to automated farm equipment to even robotics golf carts... This receiver chip reduces the radio dimensions and complexity. There are no analog mixer stages, nor costly discrete components (such as high quality filters) that conventional two stage analog down conversion would have required. Instead, the incoming GPS signal is literally digitized right at the antenna, then filtered digitally in a CMOS based

chip. This direct digitization is made possible by the ability of SiGe technology to run at high speed on very little power, and the core of this technology is a SiGe based Analog to Digital Data Converter.

According to the present invention GPS or GLONASS receivers must be integrated or connected to the speaker workstation (202) (e.g., a Personal Computer), and to auditor devices (204) (e.g., wearable computers, Personal Digital Assistants (PDAs), smart phones, WAP enabled phones, games consoles). The universal timing signals that are received from GPS or GLONASS satellites, are used to initialize and synchronize the internal electronic clocking systems according to the same universal time. During the periods on which GPS or GLONASS satellites are out of sight (e.g., when user's devices are inside buildings or not connected to an external antenna), and no timing signals are thus received from those satellites, timing information must be continuously derived from the autonomous electronic clocking systems of those devices. Depending on the drift of the clocking systems set up in the devices, and to keep enough timing precision and to be sure that auditor devices and speaker workstation are synchronized at the same universal-time, a more or less frequent periodic reception of satellite signals must be performed. In practice,

- if the user device is a portable satellite signals will be received when the user is out of doors or is traveling.
- If the user device is fixed or installed in a house or building during long periods, the user device must be connected to an outdoors installed GPS or GLONASS antenna, (e.g., antenna installed on the roof of the building).

Presentation Hyperlink Table

As illustrated in Figure 3, a presentation, according to a preferred embodiment of the present invention, is structured as a set of HTML foils stored on one or a plurality Web servers. These Web servers are referenced in a Presentation Hyperlink Table (300) preferably stored on the speaker workstation (202). For each presentation foil, the Presentation Hyperlink Table encodes :

- A foil number (301),
- A foil name or short title (302), and
- A network address (i.e., the URL) (303) where the HTML foil (or information related to the foil) can be found on the internet network.

Figure 3 shows an example of a Presentation Hyperlink Table (300) for a presentation entitled ***"French Red Wines"***, presented by a speaker called ***"Robert Durand"***. During the presentation, the sequence of the foils that are presented by the speaker, is stored on a Presentation Time Table, located on a Presentation Server, at the URL (304):

Http://www.directbuyer.com/presentation-0173.htm/

For instance, when the speaker selects the foil number **"14"** (301), named ***"Bourgogne"*** (302), the hyperlink to the URL address (303):

http://www.french-wines.com/bourgogne.htm

Is activated. The HTML foil is retrieved from this network address and shown to the audience.

PRESENTATION: French Red Wines	**SPEAKER:** Robert Durand	**PRESENTATION TIME TABLE URL:** http://www.directbuyer.com/presentation-0173.htm/
FOIL NUMBER	**FOIL NAME**	**FOIL URL**
1	French red wines	http://www.french-wines.com/red%20wine.htm
2	Bordeaux	http://www.french-wines.com/bordeaux.htm
3	Pomerol	http://www.french-wines.com/pomerol.htm
4	St Emilion	http://www.french-wines.com/st%20emilion.htm
5	St Estephe	http://www.french-wines.com/st%20estephe.htm
6	St Julien	http://www.french-wines.com/st%20julien.htm
7	Pauillac	http://www.french-wines.com/pauillac.htm
8	Moulis	http://www.french-wines.com/moulis.htm
9	Medoc	http://www.french-wines.com/medoc.htm
10	Margeaux	http://www.french-wines.com/margeaux.htm
11	Haut Medoc	http://www.french-wines.com/haut%20medoc.htm
12	Beaujolais	http://www.french-wines.com/beaujolai.htm
13	Beaune	http://www.french-wines.com/beaune.htm
14	Bourgogne	http://www.french-wines.com/bourgogne.htm
15	Brouilly	http://www.french-wines.com/brouilly.htm
16	Fronsac	http://www.french-wines.com/fronsac.htm
17	Cote de Castillon	http://www.french-wines.com/cote%20castillon.htm
18	Cote de Bourg	http://www.french-wines.com/cote%20bourg.htm
19	Cotes de Blaye	http://www.french-wines.com/cotes%20blaye.htm

Method for Creating a Presentation Hyperlink Table on a Speaker Workstation

As shown in Figure 13 , the present invention discloses a method for creating a Presentation Hyperlink Table (300) for a presentation (like the presentation entitled ***"French Red Wines"*** described in the previous example) and for defining, in this Presentation Hyperlink Table, hyperlinks (303) to one or a plurality of servers (403) (i.e., Web servers) connected to a network (404) (i.e., to the Internet Network) where foils can be accessed. These hyperlinks can be used by the auditor (301) to access the foils (i.e., Web pages, HTML foils) of the presentation on the servers.

The method of creating a Presentation Hyperlink Table in a speaker device and for defining, in said Presentation Hyperlink Table, hyperlinks to one or a plurality of servers where foils can be accessed, comprises the steps of:

- (1301) creating a new Presentation Hyperlink Table (300), said Presentation Hyperlink Table comprising a header (305);
- assigning to said Presentation Hyperlink Table means for locating and accessing address (for instance an URL within the network) (304) a Presentation Time Table on a Presentation Server;
- copying said locating and accessing means in the Presentation Hyperlink Table, preferably in the header (305);

and, for each new created foil of a presentation:

- (1302) creating a new record in the Presentation Hyperlink Table;
- (1303) assigning means (302) for identifying the foil (a name (302) and/or a short description);
- copying said identifying means in said record;
- (1304) assigning means for locating and accessing the foil, preferably a destination address (303) (for instance an URL within the network) where said foil can be accessed;
- copying said locating and accessing means (303) in said record.

Method for Generating a Presentation Time Table on a Presentation Server

As shown in Figure 4 the present invention also discloses a method for generating during a presentation, a Presentation Time Table (408) on a Presentation Server (407). The speaker (400) selects the HTML foils using a presentation software application running on his workstation (402). Each time the speaker selects (401) a new foil (e.g., the HTML foil number ***"14"***, named ***"Bourgogne"***), the URL corresponding to the selected HTML foil (e.g.,***http://www.french-wines.com/bourgogne.htm***) is retrieved from the Presentation Hyperlink Table (300). The hyperlink associated with the selected HTML foil is then activated using a browser program on the speaker workstation. The selected HTML foil (405) is then accessed and retrieved from the Web server (403) through the network (404) and is presented to the auditors on a presentation screen (406).

Figure 4 also shows how, each time the speaker selects (401) a new HTML foil, the universal-time interval (409) corresponding to this selection, is determined using the GPS receiver connected to the speaker workstation (402). The name (302) and the URL (303) of the selected HTML foil are then retrieved from the Presentation Hyperlink Table (300) and transmitted, with the corresponding universal-time interval (409), to a Presentation Server (407) and copied into a Presentation Time Table (408) located on said Presentation Server. The URL of the Presentation Time Table (408) is retrieved (304) using the presentation software application, from the header of the Presentation Hyperlink Table (300). In the present example, the URL:
http://www.directbuyer.com/presentation-0173.htm/ is the network address of the Presentation Time Table (***presentation-0173.htm***) stored on the Presentation Server (***www.directbuyer.com***). The speaker must provide the audience, the URL of the Presentation Time Table (304) before the presentation.

More particularly, as illustrated in Figure 14, the method, for generating from a speaker device (402), a Presentation Time Table (408) on a Presentation Server (407) during the presentation of one or a plurality of foils, comprises the steps of:

- locating and accessing a Presentation Hyperlink Table (300), said Presentation Hyperlink Table, preferably located in the speaker device (402), comprising :
  - means for identifying (302) one or a plurality of foils (each foil being preferably identified by a name (302) and/or a short description);
  - means for locating and accessing (303) said one or plurality of foils (preferably a destination address (303), for instance an URL within the network);
  - means for locating and accessing (304) a Presentation Time Table (408) on a Presentation Server (407);
- (1401) locating and accessing the Presentation Time Table (408) on the Presentation Server (407);

and, for each presented foil :

- (1402) identifying (401) the presented foil in the Presentation Hyperlink Table;
- (1403) determining an universal-time interval (409) corresponding to the presentation of the foil by means of an universal-time device (e.g., a GPS receiver);
- (1404) creating a new record on the Presentation Time Table (408) located on the Presentation Server (407);
- (1405) copying into said new record :
  - the universal-time interval (501) corresponding to the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for identifying (502) the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for locating and accessing (303) the presented foil.

Figure 5 shows an example (also shown in the next table) of Presentation Time Table (500) stored on a Presentation Server (407) at the end of a presentation.

PRESENTATION:	SPEAKER:	PRESENTATION TIME TABLE URL:
French Red Wines	Robert Durand	http://www.directbuyer.com/presentation-0173.htm/

SELECT. TIME	FOIL NAME	FOIL URL
12/05/2001 14:21:52	French red wines	http://www.french-wines.com/red%20wine.htm
12/05/2001 14:23:18	Bordeaux	http://www.french-wines.com/bordeaux.htm
12/05/2001 14:25:07	Pomerol	http://www.french-wines.com/pomerol.htm
12/05/2001 14:27:18	St Emilion	http://www.french-wines.com/st%20emilion.htm
12/05/2001 14:30:12	St Estephe	http://www.french-wines.com/st%20estephe.htm
12/05/2001 14:31:11	St Julien	http://www.french-wines.com/st%20julien.htm
12/05/2001 14:35:15	Pauillac	http://www.french-wines.com/pauillac.htm
12/05/2001 14:38:43	Moulis	http://www.french-wines.com/moulis.htm
12/05/2001 15:05:21	Medoc	http://www.french-wines.com/medoc.htm
12/05/2001 15:07:44	Margeaux	http://www.french-wines.com/margeaux.htm
12/05/2001 15:08:56	Haut Medoc	http://www.french-wines.com/haut%20medoc.htm
12/05/2001 15:11:16	Beaujolais	http://www.french-wines.com/beaujolai.htm
12/05/2001 15:15:29	Beaune	http://www.french-wines.com/beaune.htm
12/05/2001 15:22:38	Bourgogne	http://www.french-wines.com/bourgogne.htm
12/05/2001 15:25:58	Brouilly	http://www.french-wines.com/brouilly.htm
12/05/2001 15:28:09	Fronsac	http://www.french-wines.com/fronsac.htm
12/05/2001 15:32:24	Cote de Castillon	http://www.french-wines.com/cote%20castillon.htm
12/05/2001 15:35:56	Cote de Bourg	http://www.french-wines.com/cote%20bourg.htm
12/05/2001 15:38:13	Cotes de Blaye	http://www.french-wines.com/cotes%20blaye.htm

The header section (504) of this Presentation Time Table is the same and is directly copied from the header (305) of the Presentation Hyperlink Table (300) located on the speaker workstation. Each row of the table corresponds to a foil of the presentation (300) selected by the speaker. For each selected foil, the three columns of the Presentation Time Table corresponds respectively to:

- (501) the universal-time interval at which the HTML foil has been selected by the speaker;
- (502) the title (or short name, or short description) of the selected HTML foil;
- (503) the address or URL of the selected HTML foil.

Method for Selecting Topics of Interest

In the example illustrated by Figure 6, during the course of the presentation (for example, the presentation entitled ***"French Red Wines"***), the auditor (600) uses a portable workstation (601) in stand-alone mode (i.e., isolated, not connected to a network). In the particular embodiment shown in this figure, each time the auditor (600) perceives (603) during the presentation done by the speaker (602), an interesting topic (604), he selects this topic simply by pressing (605) a reserved key

on his portable workstation (601). Universal times (606) at which interesting topics are selected by the auditor, are locally stored on a Selections Time Table on the auditor workstation (601).

Figure 15 shows the steps of the method for selecting in a presentation, one or a plurality of foils corresponding to one or a plurality of interesting topics, and for accessing at a later time said selected foils. To select particular topics of interest, the auditor (600) of a presentation:

- (1501) creates on his workstation (601), a Selections Time Table for the presentation;
- (1502) receives from the speaker device (602), means for locating and accessing (304) a Presentation Time Table (500) on a Presentation Server (407), preferably a destination address (for instance an URL within the network);
- (1503) stores on his workstation (601) said means (304) for locating and accessing the Presentation Time Table (500);
- (1504) perceives (listens or views) during the presentation a topic of interest (604) for which he desires to review the corresponding foil at a later time;
- (1505) selects the foil corresponding to the topic of interest by entering a selection command (605) on his workstation (601);
- (1506) determines the current universal-time (606) by means of an universal-time device (for instance a GPS receiver) integrated or connected to his workstation;
- (1507) records the current universal-time in the Selections Time Table.

The following table, also shown in Figure 7, is an example of Selections Time Table created on an auditor workstation (601) during the course of a presentation (for instance, the presentation about ***"French Red Wines"***). Each row of this table corresponds to a selection by the auditor, of a foil presented by the speaker at the universal-time recorded in the first column. In the header section of this table, the auditor has copied the URL (701) of the Presentation Time Table (e.g., ***http://www.directbuyer.com/presentation-0173.htm/***). This URL is provided by the speaker to the auditors in advance, before the presentation.

PRESENTATION: French Red Wines	SPEAKER: Robert Durand	PRESENTATION TIME TABLE URL: http://www.directbuyer.com/presentation-0173.htm/
SELECTION TIME	FOIL NAME	FOIL URL
12/05/2001 14:26:33		
12/05/2001 15:07:18		
12/05/2001 15:23:51		

Method for Accessing and Displaying Selected Foils

Once the auditor (600) has selected one or a plurality of topics of interest (604) during a presentation (for example in the presentation entitled ***"French Red Wines"***), and once the universal-times (606) corresponding to these selected topics have been stored or recorded in the Selections Time Table (700) on the auditor workstation (601), by means of the method described in Figure 16, the auditor or viewer can retrieve from the Presentation Server (803) the names and URLs associated with the selected foils. The retrieved names and URLs are locally stored in the Selections Time Table (700) on the auditor workstation (601). From the updated Selections Time Table, the auditor can select, retrieve and display anyone of said foils. The method for an auditor of a presentation, of accessing and displaying selected foils from a workstation, comprises the steps of:

- (1601) accessing from the workstation (800), the Presentation Time Table (802) on the Presentation Server (803);
- (1602) sending to the Presentation Server (803), the universal-times of the selections recorded on the Selections Time Table (700) located on the workstation (800);
- (1603) searching in the Presentation Time Table, for the foils that were presented at these universal-times;
- (1604) retrieving from the Presentation Server (803), the means for identifying the selected foils (names or descriptions) (502) and the associated URLs (503);
- (1605) storing the retrieved foil names and URLs into the Selections Time Table (902).

The method includes the further steps of:

- (1606) selecting a foil (1001) from the Selections Time Table (1002);
- (1607) activating the hyperlink (1003) from the workstation using a browser program;
- (1608) accessing the foil on a server (1102) (preferably a Web server) through the network (1103) (preferably the internet network);
- (1609) retrieving from the network (1101) and displaying the foil (1104) on the workstation using a browser program (1100).

Figures 8, 9, 10 and 11 illustrate the different steps according to the present method. As illustrated in Figure 8, when the presentation ends (for instance, the presentation of ***"French Red Wines"***), the auditor connects his workstation (800) to a communications network (e.g., the Internet network (801)). By means of a software application running on his workstation, the Presentation Time Table (802) on the Presentation Server (803) is accessed and the Selections Time Table (804), which is locally stored on his workstation (800), is updated.

Figure 9 illustrates the process of updating the Selections Time Table (900) on the auditor workstation (800) using the information stored in the Presentation Time Table (901) located on the Presentation Server (803). Basically, for each universal-time recorded in the Selections Time Table (900), the name and the URL of the HTML foil that was being presented by the speaker at that time, are identified on the Presentation Time Table (901) and are copied into the Selections Time Table (902). The following table shows a Selections Time Table, updated by means of this process:

PRESENTATION: French Red Wines	**SPEAKER:** Robert Durand	**PRESENTATION TIME TABLE URL:** http://www.directbuyer.com/presentation-0173.htm/
SELECTION TIME	**FOIL NAME**	**FOIL URL**
12/05/2001 14:26:33	Pomerol	http://www.french-wines.com/pomerol.htm
12/05/2001 15:07:18	Medoc	http://www.french-wines.com/medoc.htm
12/05/2001 15:23:51	Bourgogne	http://www.french-wines.com/bourgogne.htm

Figure 10 illustrates how the auditor selects and accesses, from his workstation, (1000) HTML foils previously selected during the presentation.

Basically, the auditor points to and selects an HTML foil (1001) on the updated Selections Time Table (1002). By means of a software application located on his workstation (1001), he activates the hyperlink (1003) pointing to the URL of the selected item. In the example shown in Figure 10, the auditor selects the topic of interest ***"Medoc"*** (1001) (in fact a denomination of French red wine) and activates the hyperlink (1003) pointing to the URL: ***http://www.french-wines.com/medoc.htm***

Finally, Figure 11 shows how an HTML foil (1101) (e.g., ***medoc.htm***) associated with the item selected (1001) in the Selections Time Table, (e.g., ***"Medoc"***), is received from a Web server (1002) (e.g., ***www.french-wines.com***) through the network (1103) and is finally displayed (1104) on the auditor workstation (1100).

In the previous examples, it has been shown that the auditor can access after the presentation to the foils previously selected during the course of the presentation. In fact when the auditor selects a topic of interest during a presentation (e.g., while the speaker is presenting the foil "Bourgogne wines"), the information related with the selected topic ("Bourgogne wines"), that can be retrieved by the auditor when the presentation is over, can be :

- the HTML foil that have been presented when the selection was made.
- a long (HTML) document comprising a description concerning La Bourgogne (geography, history, economy, agriculture) and the wines from this region.
- even a list of references (hyperlinks) to several Web documents or multimedia concerning "Les vins de la Bourgogne".

While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood that various changes in form and detail may be made therein without departing from the spirit, and scope of the invention.

Claims

What is claimed is :

1. A method, for generating from a speaker device (402), a Presentation Time Table (408) during the presentation of one or a plurality of foils, said Presentation Time table being accessible by one or a plurality of auditors, comprising the steps of:

- locating and accessing a Presentation Hyperlink Table (300) comprising :
  - means for identifying (302) one or a plurality of foils ;
  - means for locating and accessing (303) information related to each of said one or plurality of foils;
  - means for locating and accessing (304) a Presentation Time Table (408);
- locating and accessing (1401) the Presentation Time Table (408) using the Presentation Hyperlink Table (300);

and, for each presented foil :

- identifying (1402) the presented foil in the Presentation Hyperlink Table;
- determining (1403) an universal-time interval (409) corresponding to the presentation of the foil;
- creating (1404) a new record on the Presentation Time Table (408);
- copying (1405) into said new record :
  - the universal-time interval (501) corresponding to the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for identifying (502) the presented foil;
  - means, retrieved from the Presentation Hyperlink Table, for locating and accessing (303) information related to the presented foil.

2. The method according to the preceding claim comprising the preliminary steps of :

- creating a Presentation Hyperlink Table (300), preferably in the speaker device (402);
- defining, in said Presentation Hyperlink Table (300), hyperlinks (303) to one or a plurality of servers (403) where information related to foils can be accessed.

3. The method according to the preceding claim wherein the step of defining, in said Presentation Hyperlink Table (300), hyperlinks (303) to one or a plurality of servers (403) where information related to foils can be accessed, comprises the further steps of:

- assigning to said Presentation Hyperlink Table means for locating and accessing (304) the Presentation Time Table (408);
- copying said locating and accessing means in the Presentation Hyperlink Table, preferably in a header (305);

and, for each new created foil of a presentation:

- creating (1302) a new record in the Presentation Hyperlink Table;
- assigning and copying (1303) means (302) for identifying the foil in said record;
- assigning and copying (1304) means (303) for locating and accessing information related to the foil in said record.

4. The method according to any one of the preceding claims wherein :

- said information related to a foil is located on one or a plurality of servers (403);
- said means (302) for identifying a foil comprises a name and/or a description;
- said means (303) for locating and accessing information related to a foil comprises a destination address within a network;
- said Presentation Time Table (408) is located on a Presentation Server (407);
- said means (304) for locating and accessing the Presentation Time Table (408) comprises a destination address within a network (404).

5. The method according to any one of the preceding claims wherein :

- information related to a foil comprises a copy of said foil.

6. The method according to any one of the preceding claims wherein :

- said network is an internet network;
- said destination addresses are Uniform Resource Locators;
- information related to a foil is a web page;
- said servers are web servers.

7. The method according to any one of the preceding claims comprising the step of:

- sending to one or a plurality of auditor devices means for locating and accessing the Presentation Time Table.

8. A speaker device comprising means adapted for carrying out the method according to any one of the preceding claims.

9. A computer program comprising instructions for carrying out the method according to any one of claims 1 to 7 when executed on the speaker device according to the preceding claim.

10. A method for selecting from an auditor device (601), one or a plurality of foils in a presentation of one or a plurality of foils, and for accessing, at a later time, information related to each of said one or plurality of selected foils, comprising the steps of:

- each time a selection command is received for selecting a foil currently presented:
  - determining (1506) the current universal-time (606);
  - recording (1507) the current universal-time in a Selections Time Table;
- accessing (1601) a Presentation Time Table (802), said Presentation Time Table accessible by one or a plurality of auditor devices, comprising for each presented foil:
  - an universal-time interval (501) corresponding to the presentation of the foil;
  - means for identifying (502) the presented foil;
  - means for locating and accessing (503) information related to the presented foil;

for each universal-time recorded in the Selections Time Table (700):

- identifying (1603) in the Presentation Time Table, the foil selected at the recorded universal-time;
- retrieving (1604) from the Presentation Time Table, said means for identifying (502) and for locating and accessing (503) the selected foil;
- storing (1605) the retrieved means for identifying (502) the selected foil and for locating and accessing (503) information related to the selected foil into the Selections Time Table (902).

11. The method according to the preceding claim comprising the preliminary step of:

- creating (1501) the Selections Time Table for the presentation.

12. The method according to any one of claims 10 to 11 comprising the preliminary step of:

- receiving (1502) means for locating and accessing (701) a Presentation Time Table (500).

13. The method according to any one of claims 10 to 12 wherein :

- information related to a foil is located on one or a plurality of servers;
- said means (502) for identifying a foil comprises a name and/or a description;
- said means (503) for locating and accessing information related to a foil comprises a destination address within a network;
- said Presentation Time Table (802) is located on a Presentation Server (803);
- said means (701) for locating and accessing the Presentation Time Table (803) comprises a destination address within a network (801).

14. The method according to any one of claims 10 to 13 wherein :

- information related to a foil comprises a copy of said foil.

15. The method according to any one of claims 10 to 14 wherein :

- said network is an internet network;
- said destination addresses are Uniform Resource Locators;
- information related to a foil is a web page;
- said auditor device comprises a web browser;
- said servers are web servers.

16. The method according to any one of claims 10 to 15 comprising the further step of:

- receiving (1606) a display command for displaying information related to a foil (1001), said display command comprising means for identifying said foil;
- identifying, in the Selection Time Table (1002), means for locating and accessing information related to said foil;
- retrieving (1609) and displaying said information (1104).

17. An auditor device comprising means adapted for carrying out the method according to any one of claims 10 to 16.

18. A computer program comprising instructions for carrying out the method according to any one of claims 10 to 16 when executed on the auditor device according to the preceding claim.