### (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 1 August 2002 (01.08.2002)

**PCT** 

# (10) International Publication Number WO 02/059799 A1

(51) International Patent Classification<sup>7</sup>: G06F 17/50, 17/60

(21) International Application Number: PCT/AU02/00079

(22) International Filing Date: 25 January 2002 (25.01.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

PR 2704 25 January 2001 (25.01.2001) AU

(71) Applicant (for all designated States except US): QUICK-TAKES PTY LTD [AU/AU]; 1 Holroyd Avenue, St Kilda East, Victoria 3183 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GRUBER, Danny [AU/AU]; -, 1 Holroyd Avenue, St Kilda East, Victoria 3183 (AU). BUCHANAN, Philip, John [AU/AU]; -, 1 Holroyd Ave, St Kilda East, Victoria 3183 (AU).

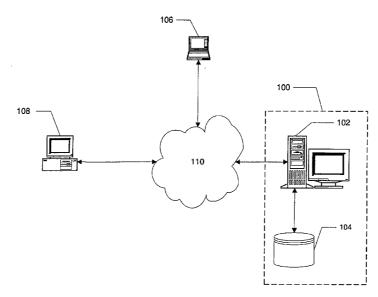
- (74) Agent: DAVIES COLLISON CAVE; WEBBER, David, Brian, PRYOR, Geoffrey, Charles, LESLIE, Keith, 1 Little Collins Street, Melbourne, VIC 3000 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

with international search report

[Continued on next page]

(54) Title: A MULTIMEDIA SYSTEM



(57) Abstract: A system (100) for generating multimedia presentations transmits queries over a network (110) to a user's computer (108) and from user's responses determines a multimedia presentation template(s). Duration and order of the components forming a presentation are determined on the basis of a user selected soundtrack. The system (100) generates a printable storyboard including static visual presentation of each shot accompanied by instructions for capturing each shot. A user then captures and downloads images/shots onto the computer (108). Local editor downloaded from the system (100) to the user's computer (108) or a remote editor executing on the system (100) is used to develop the presentation. A compiler compiles the presentation and stores it in a database (104). Different versions of the presentation for different network connection bandwidths can be generated by a format converter. A web provides a computer (106) with remote access to these presentation versions.



MO 02/059799 A

## WO 02/059799 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- 1 -

### A MULTIMEDIA SYSTEM

The present invention relates to a multimedia system, and in particular to a system and method for generating a multimedia presentation.

5

10

15

20

Multimedia presentations on the Internet are ideal for displaying promotional material to potential customers with Internet access. The development of digital video systems and low-cost video editing software on personal computers has made video production accessible to the general public. The video editing software and video production software currently available varies considerably with respect to the simplicity or complexity of operation and the editing and production features included. Yet even the most simplistic video editing software tools require their users to acquire some technical expertise in using the software and the products produced may not be sophisticated enough for the users' purposes, particularly if the products are intended to be used for promotional advertising purposes. The editing and production software used by video production houses can produce sophisticated multimedia presentations, but suffer the disadvantage that the customer does not normally have the expertise to use the software to produce the presentation. Moreover, skilled operators generally produce presentations from scratch without being able to rely on any distinct structure or product. It is desired to provide a system and method for generating a multimedia presentation that alleviate one or more of the above difficulties, or at least provide a useful alternative.

In accordance with the present invention there is provided a method for generating a multimedia presentation, including

generating queries for a user;

receiving responses to said queries from said user; and

determining at least one multimedia presentation template on the basis of said responses.

-2-

The present invention also provides an interface for defining components of a multimedia presentation template over a communications network on the basis of data provided by a user of said interface.

5 The present invention also provides a method for generating a multimedia presentation, including:

providing a plurality of questions related to desired characteristics of said presentation;

recording responses to said questions;

determining a presentation template that specifies components of said presentation, based on said responses;

receiving components of said presentation based on components of said template; and

compiling said presentation from said presentation components.

15

The present invention also provides a system for generating a multimedia presentation, including:

an expert system for determining at least one multimedia presentation template on the basis of data provided over a communications network by a user of said system;

an editing module for editing components of said presentation, said editing module for execution on computing equipment of said user; and

a compiling module for compiling said components to generate said presentation.

The present invention also provides a system for generation of a multimedia presentation, including:

a characteristic part for querying a user to obtain characteristic data for said presentation; and

a template part for providing, on the basis of said characteristic data, a template for said presentation and instructions for developing components of said presentation.

WO 02/059799

Preferred embodiments of the present invention are hereinafter described, by way of example only, with reference to the accompanying drawings, wherein:

Figure 1 is a schematic diagram of a preferred embodiment of a multimedia system connected to remote computer systems via a communications network;

Figure 2 is a block diagram showing components of the multimedia system;

Figures 3 and 4 are flow diagrams of a process executed by the multimedia system;

Figure 5 is a flow diagram of an editing process executed by the multimedia system;

Figures 6 to 30 are screenshots of an interface of a first preferred embodiment of the multimedia system, captured at various stages during the generation of a multimedia presentation; and

Figures 31 to 34 are screenshots of an interface of a second preferred embodiment of the multimedia system, captured at various stages during the generation of a multimedia presentation.

15

20

25

30

5

A multimedia system 100, as shown in Figure 1, generates and provides access to multimedia presentations. The system 100 includes a computer system 102 with a database 104, and is accessible from other computer systems and devices 106, 108 via a communications network 110, such as a local area network (LAN) and/or the Internet. The devices 106, 108 may be standard personal computers or any other computing device that supports remote or client/server access, such as personal data assistants (PDAs) or mobile telephones. The computer system 102 includes a number of modules or components, as shown in Figure 2, including standard web browser 202 and database 204 modules, and system modules 206. The web server module 202 is an Apache HTTP server, available from <a href="https://www.apache.org">www.apache.org</a>, and the database modules 204 include a PHP scripting language module, available from <a href="https://www.apache.org">www.apache.org</a>, and the database modules 204 include a PHP scripting language module, available from <a href="https://www.mysql.com">www.mysql.com</a>. The multimedia modules 206 have been developed for the multimedia system 100, and include control modules 208, parameter modules 210, a local editor 212, a remote editor 214, a template generator 216, a presentation compiler 218, a format converter 220 and a billing module 222, as described

-4-

below. In the described embodiment, the computer system 102 is a standard computer system such as an Intel®-based server running a Linux® operating system, and the modules 202 to 222 are software modules stored on disk storage 104 of the computer system 102. With the exception of the local editor 212, the modules 202 to 222 are executed by the computer system 102. The system modules 206 are mostly in HTML with embedded JavaScript and PHP scripting languages, but also include some components written in a high level language such as Java or C++. It will nevertheless be apparent to the skilled addressee that the components of the multimedia system 100 can be substituted by equivalent components distributed over a variety of locations. Also, at least part of the software modules 202 to 222 can be substituted by dedicated hardware components, such as application-specific integrated circuits (ASICs), to execute the technical processes described below for the preferred embodiments.

In the context of the specification, a multimedia presentation is considered to be a data file or files that can be used to generate a display including one or more of the following media:

- (i) Text;
- (ii) Still or animated graphic images;
- (iii) Video images; and
- 20 (iv) Sound.

10

The display can include multiple display areas, each including any combination of the above, and presented concurrently or sequentially.

The multimedia system 100 allows a multimedia presentation to be developed based on a template structure facilitating control in relation to the order, duration, medium and content of the components that constitute the presentation. The multimedia system 100 enables a person without multimedia production or technical skills to generate a high quality multimedia presentation. This includes providing an easy to use interface providing access not only to technical functions in relation to editing and compiling the presentation, but

- 5 -

also to business and production functions that allow a professional quality template for the presentation to be generated. For example, a plumber may decide to sell her house, using the Internet as an advertising medium. Rather than presenting still images in a brochure format, she may wish to develop a multimedia presentation including video footage of the house to be taken with her recently purchased video camera and to provide access to the presentation to potential customers with Internet access. Not knowing how to proceed, she is able to use a web browser executing on her computer 108 to access the web server module 202 executing on the multimedia system 100, and learn about a multimedia production process available on the system 100. A multimedia production process is executed on the multimedia system 100 using the system modules 206, as described below with reference to Figures 3 to 34 and the example of a user wishing to produce a multimedia presentation for promoting the sale of a house.

10

15

20

25

30

A process for generating a multimedia presentation, as shown in Figures 3 to 5, is implemented as executable program code of the system modules 206, unless otherwise apparent from the described context. The process begins at step 302 by directing a web browser application executing on the computer system 108 to the multimedia system 100. That is, a universal resource indicator (URI) referring to the multimedia media system 100 is provided to the web browser application. In response to a request sent from the computer 108 to the multimedia system 100 over the Internet 110, a web page of the control modules 208, comprising data in the hypertext markup language (HTML) is sent to the computer system 108, and the web browser generates a login screen display 600, as shown in Figure 6. The control modules 208 contain most of the general program code for interacting with a user of the system 100. In order to use the multimedia system 100 to develop a presentation, a user first registers with the system 100. This can be done at step 304 by entering personal details into a registration page that is displayed in response to selecting a link 604, on the login page 600. The personal information includes the user's first and last names, e-mail address, and credit card details for billing purposes. Once this data has been submitted to the system 100, the credit card details are verified by the billing module 222 of the system 100, and the personal information is stored in the database 104.

-6-

The user is then provided with a username and password pair, sent to the e-mail address provided. These can then be entered into login fields 604 of the login page 600, and a login button 602 selected (e.g., by clicking the button 606 with a pointing device such as a mouse) at step 306 to login to the system 100 and enable access to the system modules 206. After a successful login, a member page 700 is displayed, as shown in Figure 7. The member page 700 includes a list 702 of the user's presentations in progress, i.e., presentations that have been created, but not completed, and a list 704 of completed presentations created by the user. The entries of the lists 702, 704 are links that, when selected, open the corresponding presentation for viewing and/or editing. Symbols 706 provided next to each entry of the lists 702, 704 indicate whether the presentation is in progress, at a storyboard stage, or compiled, as described below. A link 708 is also provided to invoke a cost estimation process of the billing module 222, as described below. A download link 710 enables the user to download a copy of the local editor 212 to the user's computer system 108 from the multimedia system 100, as described below.

15

20

A new presentation can be created, for example, by selecting a link 712 on the member page 700. As described below, a number of user input screens are then displayed sequentially, with each page including one or more questions or otherwise prompting the user for input of information relevant to the desired presentation. These screens comprise HTML and PHP code of the parameter modules 210, and are used to obtain data from the user which is later used by the template generator 216 to generate the presentation template.

The first of these web pages is a user information page 800, as shown in Figure 8, that allows the user to select, at step 308, whether the system 100 will operate in novice mode or expert mode, based on selection of one of the user mode radio buttons 802. A process step display 804 on the left hand side of the display provides an indication to the user of the current step within the presentation generation process. The user mode selection is received by the system 100 after the user selects a next button 808, and the process

-7-

advances to the next step. It is also possible to return to the previous step in the process by selecting a back button 810.

5

10

15

20

25

30

If the user selects the novice mode, and then selects the next button 808, a market category page 900 is displayed, as shown in Figure 9. This page 900 provides radio buttons 902 that allow the user to select a market category for the presentation at step 310. The user can select one category from the following list: business, tourism, real estate, services, community, broadcast, employment, training, and government. For example, the plumber can select the real estate category by selecting a real estate radio button 904, followed by a next button 906. In response, a presentation sub-category selection screen 1000 is displayed, as shown in Figure 10. Having chosen a presentation category in the previous screen, this screen allows the selection of a presentation sub-category. For example, having chosen the category of real estate in a previous screen, the sub-category selection screen 1000 displays sub-category selection radio buttons 1002, allowing the user to select, at step 312, whether the real estate is commercial, residential, or industrial. To generate a residential real estate presentation, the user can select a residential radio button 1004, and a next button 1006 to advance to the next step of the process. A presentation type selection screen 1100 is then displayed, as shown in Figure 11. This provides a number of presentation type radio buttons 1102 that allow the user to select the type or grade of the presentation as standard, medium, premium, or premium+. These grades correspond to increasing durations of the presentation, with a correspondingly larger number of shots or segments in the presentation. For example, a standard impact presentation has a duration of 15 seconds, and comprises four shots, or segments. At the other end of the scale, a premium+ impact presentation has a duration of 60 seconds, and comprises 16 shots or segments. The type selection screen 1100 also includes check boxes 1104 that allow the user to select the desired bandwidths of the final presentation data files generated by the system 100. For example, the check boxes 1104 allow the user to select from 56k, 100k and 300k connections, or full quality MPEG video. Finally, a text entry box 1106 is provided in which the user can enter a text string for naming the presentation. For example, the residential presentation may be named with the address of the house being

sold, such as "183 San Remo Boulevard". After entering the desired data, the user proceeds to the next step of the process by selecting a next button 1108. As shown in Figure 12, this provides a template type selection screen 1200 providing controls 1202 for specifying characteristics of the presentation. These characteristics depend on the category and sub-category selected for the presentation. In the case of a residential property, a series of radio buttons 1202 is provided, allowing the user to specify what kind of residential property is involved. The user can specify whether the property is a free standing house, a unit, an apartment, a town house, a farm/house on acreage, a warehouse, a mobile home, vacant land, or a guest house. For example, the user may, at step 316, indicate that the property is a free standing house by selecting a radio button 1204, and selecting a next button 1206 to proceed to the next step.

10

15

20

25

A feature ranking screen 1300 is then displayed, as shown in Figure 13. This allows the user to rank, at step 318, various features or characteristics of the presentation subject. In the case of a residential property, major features such as location, aspect, condition of property, and so on are provided with subfeatures for each feature category. For example, in the case of location, the subfeatures include quietness of area, overall look of surrounding properties, privacy, proximity to schools, proximity to public transport, and specific lifestyle attributes. The rankings are indicated by selecting from ranking radio buttons 1302 to select a rank for each feature. The ranks include poor, average, good, very good, fantastic, and not appropriate.

Depending upon the presentation category, the ranking of features step 318 may require a number of screens to allow the ranking of large numbers of features. For example, in the case of real estate, the features are characterised as selling points, interior, exterior, and other features, with a separate display for each feature category. Thus a selling points ranking screen 1300, as shown in Figure 13, allows the user to rank various selling point features, whereas an interior feature ranking screen 1400, as shown in Figure 14, allows the user to rank interior physical features of the property. Other feature ranking screens

-9-

are displayed sequentially, allowing the user to rank all of the appropriate features of the presentation.

As an alternative to the selection steps 310 to 318, and the data entry screens 900 to 1400 5 of Figures 9 to 14, the user may, at step 308, instruct the multimedia system 100 to enter an expert mode of operation. In response, an expert mode feature selecting and ranking screen 1500 is displayed, as shown in Figure 15. The screen 1500 includes a scrollable list box 1502 of selectable items, and a second, initially empty, scrollable list box 1504 of chosen items. The user can select items from the selectable item list box 1502 and add them to the chosen items list box 1504 by selecting an Add button 1506. Items can be removed from the latter by selecting a remove button 1508. In the case of a residential property, the selectable items list box 1502 includes both physical features and characteristic features of the property. Once items have been selected and added to the chosen items list box 1504, those features can be ranked by selecting items in the list box 1504 and using an up button 1510 to increase the ranking of that item, or a down button 1512 to decrease the ranking of the selected item. Additional text boxes 1514 are provided to allow the user to enter her own items. The expert mode screen 1500 provides a single screen for selecting and ranking features of the presentation. This is more efficient than proceeding through the multiple screens used in novice mode.

20

30

15

In either mode, the selection and ranking of features is followed by a keyword selection step 320. During this step, the user optionally selects any number of keywords from a list of keywords describing characteristics of the presentation subject. For example, keyword check boxes 1602 are provided in a real estate keyword selection screen 1600, as shown in Figure 16. The keywords include characteristics such as brilliant, enticing, alluring, different, cheerful, extensive, fresh, and so on. The user selects the keywords that describe the user's opinion or view of their property. After all the appropriate keyword check boxes 1602 are selected, at step 320, a next button 1604 is selected to advance the user to the next step. In response, the template generation module 216 generates a template based on the data provided by the user in the previous steps. The template generation module 216 is

- 10 -

based on an expert system that uses a decision hierarchy to generate a template representing the most important features of the presentation in accordance with the duration and number of shots of the presentation, the selection and ranking of features of the presentation, and, optionally, the selection of keywords, as described above. Having created a series of shots for the presentation, the template generation module 216 generates one or more soundtracks for the presentation based on the duration and number of shots in the presentation, and any keywords selected by the user.

The system 100 characterises soundtracks by five numeric scores with values between 0 and 10 and representing genre, mood, feel, emotion and tempo, respectively. Each soundtrack stored in the database 104 of the system 100 is assigned a score for each of these characteristics by an administrator of the system, and these scores are also stored in the database 104. For example, a particular soundtrack might be characterised a genre value of 2 corresponding to a "light pop" musical genre, with numeric scores for mood, feel, emotion and tempo that characterise the soundtrack as a fast tempo, high energy soundtrack.

Each keyword selectable by the user, as described above, is also associated with a numeric score for each of the five characteristics. When the user selects the next button 1604 on the real estate keyword selection screen 1600, the template generation module 216 determines an average score for each of the five characteristics from the scores assigned to each selected keyword. The template generation module 216 then searches for soundtracks stored in the database 104 that most closely match the average scores determined from the scores associated with the selected keywords. The matching can be based on minimising the cumulative difference between the average keyword scores and the soundtrack scores, or the sum of the squares of the differences between each average keyword score and the corresponding soundtrack score, for each of the five characteristics.

20

25

Each soundtrack is also divided into a series of short sections, with each section having a particular duration and associated with one or more scores representing one or more of the

- 11 -

five characteristics. For example, a soundtrack may be divided into ten sections, each section having its own mood and tempo scores, representing, for example, a quiet introduction, a climactic chorus, and an intermediate bridge section.

A particular presentation has a predefined duration and number of shots. Each matching soundtrack is analysed for sections of a duration corresponding to that of the presentation, and with a number of sections corresponding to or close to the number of shots in the presentation. The section need not begin at the beginning of the soundtrack, but can be taken from any part of a soundtrack. If a soundtrack or a portion of a soundtrack satisfies these criteria, it is selected for inclusion in a list of soundtracks presented to the user, as described below. Thus a displayed soundtrack generated for a particular presentation can correspond to a short section of a longer soundtrack stored in the database 104. Alternatively, the template generation module 216 can generate a new soundtrack from soundtrack components stored in the database 104, on the basis of genre and other scores associated with each soundtrack component.

While the soundtrack is being generated, a soundtrack generation screen 1700 is displayed, as shown in Figure 17. When the step 402 completes, a list of soundtracks is displayed in a soundtrack selection screen 1800, as shown in Figure 18. The selections are categorised by musical genre, and a soundtrack is selected by selecting a radio button 1802 adjacent to the soundtrack name. The soundtracks can be previewed at step 404 by selecting a play button 1804 adjacent to the soundtrack name. A soundtrack is chosen by the user selecting a soundtrack radio button 1802 adjacent to the soundtrack name. After selecting a soundtrack at step 406, the template generator 212 generates a storyboard at step 408. A storyboard is a static visual representation of a presentation, including one or more visual images for each sequence or shot, with each image accompanied by a textual description of the visual and, optionally, audio content. The image can be a photographic image from an image library or a sketch-like or cartoon representation of a shot. The visual representations in a storyboard are arranged sequentially and are usually labeled to indicate the temporal development of a presentation. A storyboard generated by the template

20

25

30

- 12 -

generator 212 also optionally includes instructions for the user of the system 100 that assist the user to develop the components of the presentation offline.

For example, every market category is associated with shot or image features in the database 104, representing still or video images recommended by the system 100 for inclusion in a presentation. For example, the residential real estate category includes shot features representing physical features of a house, such 'front of house', 'corridor', 'kitchen', 'backyard', and so on. Each feature is associated with text describing how that feature should be shot, including camera angle, framing, lighting issues, and, for video, 10 recommendations for shot movement, including pan, tilt, zoom, and the speed of movement, whether slow, medium or fast. For example, shots of the front of a house having durations of three, five, seven and ten seconds have different recommendations of camera positioning, lighting and speed of pan, tilt, and/or zoom. The recommendations for a particular presentation are determined from the characteristics of the presentation and the soundtrack selected by the user and are included in the storyboard generated by the system 100. For example, if the user selected a slow classical soundtrack, a slow camera pan is selected rather than a fast pan.

For example, the database 104 includes the following data for a "front of house" shot of 20 duration between 2 and 5 seconds, matching a soundtrack with a slow tempo (e.g., a tempo score less than 5):

Category:

Real Estate: Residential

**Type of Shot:** 

Front of House

25 **Duration:** 

30

15

2-5 Seconds

Music Type:

Slow

**Shot Recommendation:** Stand in front of your property approximately 10 meters from the front fence. Put your camera on a tripod and start the shot from the right side of your house and pan slowly from right to left. Do not zoom in our out in this shot. Please make sure there is no sun directly behind the house which may

- 13 -

interfere with the camera. If there is sun located behind property, move your tripod closer to the property. In this situation, do not pan the camera. Simply zoom your camera out as far as possible and film for the requested duration.

Alternatively, if a category of "business" was selected and the keywords selected by the user included stability and credibility, an interview may be the best way to represent this shot. A corresponding record from the database 104 is as follows:

**Category:** 

**Business** 

10

15

**Type of Shot:** 

Interview

**Duration:** 

10-20 Seconds

**Music Type:** 

Credible

Shot Recommendation: Have the participant sit on a chair with arms next to a table. Set camera two meters from chair. Zoom camera on the participant that frames the seat of the chair to the top of the head of the participant. Do not move the camera at all during the shot. If a lapel microphone is available, please affix to the participant. Please refer to "Interview Techniques" located at the base of this Storyboard.

- 20 Because the type of Shot is an Interview, the system 100 optionally includes standard information related to interview techniques in the storyboard. The standard information includes useful information for the user, including General Shooting Tips for Outdoor Settings, How to Dress for an Interview, Outdoor Audio Considerations, and so on.
- 25 The storyboard is generated on the basis of temporal characteristics of the selected soundtrack, the ranking of features, and the duration and number of shots in the presentation. For example, cuts between different shots of the presentation are chosen to coincide with appropriate changes in the soundtrack, with the ordering of shots, based on, for example, a climactic moment of the soundtrack. During storyboard generation, a storyboard generation screen 1900 is displayed to the user, as shown in Figure 19. At step

410, a presentation confirmation screen 2000 is displayed, allowing the user to add, remove, and reprioritise the list of shots provided in a suggested shot list box 2002, by using the add 2004, remove 2006, up 2008, and down 2010 buttons to generate a chosen shot list in a text box 2012. The screen 2000 also provides an upgrade pull down menu 2014, allowing the user to upgrade the presentation type to provide a longer duration and a greater number of shots. If, at step 412, the user selects an upgrade option, the process returns to generate a new template at step 402. Otherwise, the user can proceed with the suggested shot list as provided by the system, or the amended shot list as amended by the user. In either case, the result is a complete template for the presentation, including titles and overlay text, voice over text, image/video segments or shots, and soundtrack.

5

10

15

20

A new web browser storyboard window 2100 is created on the display of the user's computer 108 as shown in Figure 21. The storyboard window 2100 displays the series of shots required for the presentation. Each shot is given a description, a duration, and a transition to the subsequent shot. The description provides information providing important characteristics for that particular shot. A list of icons 2110 is provided with each shot, indicating the equipment required for the shot. For example, a title shot may require a still camera, a scanner, and an image from a brochure, whereas another video shot may require only a video camera. The instructions 2108 include detailed instructions for the composition and camera movements for each shot. Thus the user can print a copy of the storyboard by selecting a print storyboard button 2110, and, armed with the storyboard print-out and a video camera, follow the instructions to capture an appropriate video shot without requiring any prior experience other than how to operate the video camera.

After following the instructions and generating the appropriate video and/or still image footage, the user returns to the computer 108 and stores each video segment or shot as a separate data file on the computer 108. At step 416, the user can download the local editor module 212 from the multimedia system 100, if he or she has not done so previously. After downloading and installing the local editor 212 on the user's computer 108, the generation process can be continued by creating and editing the presentation components

- 15 -

at step 418. The steps of creating and editing components are shown in Figure 5. An editing web page 2200, as shown in Figure 22, allows the user to add existing video data to the presentation. Upon loading, the editing web page 2200 initiates execution of the local editor 212 on the user's computer, generating a local editor window 2202. The editing window 2200 includes a list 2204 of the presentation components or shots. Upon selecting an item from the list 2204, the local editor window 2202 displays the information for that component.

A browse button 2208 of the local editor window 2202 allows the user to import a data file as data for that component at step 502. For example, a short video shot by the user can be saved as a file in any one of a number of video formats on the user's computer 108. This file can be associated with the presentation by selecting it in a file selection dialog window that appears when the browse button 2208 is selected. Icons 2206 adjacent to each shot name indicate whether that shot has been imported to the presentation. Once imported, a shot display window 2210 of the local editor window 2202 allows the clip to be played, and its length adjusted to fit the required shot length at step 504. For example, a clip length box 2212 may indicate a required length of 4 seconds, and a current length of 3.8 seconds, with a deficit of .2 seconds. The local editor 212 adjusts the length of the clip to meet the requirements of the presentation. A transition types button 2214 allows the user to select the transition to the next shot from a number of predefined transition types. The adjusted clip and its associated transition can be saved by selecting a save button 2216 at step 506. The saved clip can be uploaded to the multimedia system 100 over the Internet 110 at step 508 by selecting an upload button 2218.

10

20

After all of the still and/or video images have been uploaded (step 510) to the multimedia system 100, the voice over text can be developed using a voice over text display 2300, as shown in Figure 18. The voice over display 2300 provides voice over information to the user such as the required length of the voice over and the appropriate talking speed in words per second. At step 512, an editable scrolling text box 2302 allows the user to change the text that was generated by the template generator 216 of the system 100. Once

- 16 -

the voice over text has been finalised, it can be saved by selecting a save button 2304. A voice over record window 2400 is then displayed, as shown in Figure 24. The voice over display 2400 includes a scrollable text box 2402 for displaying the voice over text interspersed with instructions for the reader. A highlight region 2403 indicates the current position during recording. Recording control buttons 2404 are provided, allowing the user to control the recording process at step 514. A recording level bar graph 2406 is displayed to provide feedback of the recording volume to the user, and a timer display component 2408 provides a pie chart indicating the elapsed and remaining record time, together with the textual representation of these items. Once the voice over has been recorded, reviewed and approved, it can be saved by selecting a save button 2410 at step 516. An upload button 2412 allows the user to upload the audio to the multimedia system 100 via the Internet 110 at step 518.

10

15

20

A graphic editor window 2500, as shown in Figure 25, allows the user to develop text and/or graphic elements for the presentation at step 520. Text can be used for titles and for superimposing over images. The display 2500 includes a scrollable text box 2502 for entering and/or editing text to be displayed, and formatting controls 2504 for changing text formatting characteristics such as layout and font characteristics. Background display controls 2506 are provided to allow the user to change the characteristics of the background display behind the text. Once the text and/or graphics have been finalised, they can be saved (at step 522) and uploaded (at step 524) to the multimedia system 100 using buttons 2508.

An upload status screen 2600 displays the upload status of the various components of a presentation, as shown in Figure 26. The upload status screen 2600 includes links 2602 that allow the user to retry failed uploads, and provides information on the progress of uploads in progress, and uploads scheduled for future times.

After all the presentation components have been uploaded to the multimedia system 100, they are compiled into a complete presentation at step 420. A presentation preview screen

5

10

15

20

25

30

- 17 -

2700, as shown in Figure 27 allows the user to preview the presentation in a video display component 2702. A list of links 2704 is provided, allowing the user to quickly modify some aspects of the presentation, including, music, duration of shots, number of shots, existing shots, graphic/text, transition effects, bullets points, or voice over. Selection of one of these links takes the user to an appropriate screen allowing that component to be modified to a limited extent by the remote editor 214 of the system 100. More extensive editing is performed on the user's computer 108 using the local editor 212, as described above, and uploading the modified components to the system 100. Once the user is satisfied with the presentation, an estimation screen 2800 is displayed, at step 424, as shown in Figure 28. The estimation screen displays the characteristics of the presentation types for various bandwidths, as requested by the user at step 314. For each presentation type selected, the clip length, encoding type, and bit rates are displayed in pull down menus 2802, allowing each of these parameters to be adjusted as desired. An encoding fee text box 2804 is provided for each presentation type, displaying the cost of encoding the presentation as requested. A hosting check box 2814 allows the user to indicate whether the presentation data files are to be hosted on the multimedia system 100 allowing them to be remotely accessed by users of the Internet 110. Hosting radio buttons 2806 are also provided, allowing the user to specify the duration over which the presentations will be hosted on the multimedia system 100. A hosting cost text box 2808 displays the cost of the selected hosting period. A delivery method pull down menu 2810 allows this user to select a method by which the presentation data files can be delivered to the user, in addition to being hosted on the multimedia system 100. For example, the files can be delivered by FTP to the user's computer 108, and a fee for doing so is included next to the displayed delivery method. A shipping pull down menu 2812 allows the user to select a method by which a CD ROM image of the presentation is delivered to the user. This can be either a CD ROM sent by mail, or an image FTP from the multimedia system 100. A presentation generated by the multimedia system 100 can be distributed to its audience not only by the Internet, but also by other distribution media, including TV, cable, broadband, and CD-ROM. Upon selecting an accept button 2816 a payment confirmation screen 2900, as shown in Figure 29 is displayed, allowing the user to enter credit card details for

payment, at step 426. Upon confirming the payment details, the multimedia system 100 generates the requested presentation formats at step 428, and at step 430 the presentations are stored in the database 104 of the system 100 for remote access. A link display screen 3000, as shown in Figure 30 is displayed, providing URIs by which each remotely hosted presentation can be accessed by users of the Internet 110.

In an alternative embodiment, the questions and prompts provided by the parameter modules 210 of the system 100 are used by the template generator 216, as described below, to determine an existing template or to generate a new template from template components. To begin creating a presentation, the user first chooses from the following major presentation categories:

- (a) Product Demonstration
- (b) Business Profile
- 15 (c) Community Announcement
  - (d) Real Estate Advertisement
  - (e) Company NewsFlash
  - (f) Business Services
- Then a series of questions are presented by the parameter modules 210 in order to identify the style of presentation. For example, after selecting "Real Estate Advertisement" from the previous list, the user is asked to choose the target house buyers from the following list:
  - (a) Single Professional Male
  - (b) Young Professional Couple
- 25 (c) One Child Family Professional Home Buyer
  - (d) Retirement Couple
  - (e) Don't care

Next, the user is asked to identify the qualities of the house, for example the following questions are displayed:

WO 02/059799

30

(d)

bedroom

	is your hous	e:	
	(a)	an adventure	
	(b)	an institution	
5	(c)	an escape	
	(d)	an achievement (your pride and joy)	
	Think about	something that happens in your house. Are you thinking about:	
10	(a)	good times you have had in the house	
	(b)	lying in bed in the house	
	(c)	having friends over	
	(d)	daily activity in the house	
	(e)	relaxing in the house	
15			
	Does the tho	oes the thought of prospective purchasers inspecting:	
	(a)	give you a sense of pride	
	(b)	disturb you (an invasion of personal space)	
	(c)	evoke no particular emotion	
20			
	Is your home	e suited to:	
	(a)	parties	
	(b)	people over for dinner	
	(c)	quiet nights at home	
25			
	What room i	s the feature of your house?	
	(a)	living	
	(b)	kitchen	
	(c)	bathroom	

- 20 -

Does your house need:

- (a) a clutter of furniture and knick knacks
- (b) space (minimalism)
- 5 (c) designer furniture
  - (d) no ideal interior design
- The garden is an important part of your house:
  - (a) yes
  - (b) not particularly
  - (c) no, but pot plants are
- 15 Similar additional questions are also presented by the parameter modules 210. Each question and answer have associated scores. After all the questions have been completed, these scores are processed in order to identify at least one candidate presentation template sub-categories for the user, ie the user. For example, the sub-categories include:
- 20 Sub-category 1: Family, stability, conservative, solid, reliable
  - Sub-category 2: Party, wild, enjoy
  - Sub-category 3: Trendy, fashionable, out to impress
  - Sub-category 4: Relaxing, spiritual, peaceful, calm, serene
  - Sub-category 5: Grand, wealthy, show off

25

30

The user is able to proceed with the sub-category identified or is able to select one of the sub-categories identified by the parameter modules 210. The user then chooses from a list of pre-defined presentation durations: 15, 30, 45, or 60 seconds, and indicates whether she wants to use still images, video footage, or both, and whether she wants a voice-over narration. The template generator 216 then generates and/or accesses available presentation

- 21 -

templates based on the above, and the user is presented with a list of the templates and matching samples of background music. The music samples characterise the presentation templates of the system, because the structure of a presentation is based on the structure of the accompanying music. In addition, if the user chooses to structure her own presentation as an alternative to the templates provided, *e.g.*, if she wishes to generate a custom template by removing a particular video sequence, then she can elect for the system 100 to automatically adjust the durations of the remaining presentation components in order to improve the pacing of the presentation and match the selected music. However, this association is not rigid, and although it is not recommended, it is possible to adjust the duration of presentation components independently of the musical accompaniment.

5

10

15

20

Assuming the user chooses a 30 second presentation template with video, image, and voice-over from the generated list, the template generator 216 then accesses the presentation template which specifies the components of the presentation, being: a title, followed by two video sequences, a graphic, a third video sequence, a closing title, and the suggested voice-over text. The system 100 then generates a web page for the user containing instructions for the production of the video and image components. For example, the first component is described as an 8 second video sequence beginning with a wide-angle shot of the front of the house (2 seconds), zooming in to the front door (2 seconds), and opening the door to show the entrance hallway (4 seconds). Above these instructions, corresponding sample images are presented, illustrating the suggested framing of the sequence.

The next step is to capture any video or still images required for the presentation. This step

25 can be executed by the user, and includes recording and submitting images. Also, the

87 system 100 stores a library of graphic, image and video clip art, allowing a user of the

88 system to construct presentations from pre-existing components. The user, however will

89 probably wish to include footage of her particular house, so the user prints out the

89 instructions and, using them as a written guide, videos the appropriate sequences with her

80 camera. She then transfers the recorded video to her computer 108 using a video interface

card of her computer 108. The video data now stored on the user's computer 108 can be edited into individual sequences with the durations specified by the template. The complete video data can then be uploaded to the multimedia system 100 over the Internet 110; however, it is preferable to edit the data into the short sequences prior to uploading them to the system 100. This is done by downloading the local editor 212 to the user's computer 108 at step 416. The local editor 212 is then executed on the user's computer 108 to perform a superset of the functionality available over the Internet 110 from the remote editor 214 of the multimedia system 100, as described below. Specifically, at step 504 the local editor 212 allows the user to view and edit a video sequence locally in order to avoid uploading large video files to the system 100. For example, the user can capture all the video footage in a single large video data file. Using the local editor 212, she loads the video file and clips out a desired sequence, for example, the 8 second video sequence described above. This sequence can then be saved as a relatively small data file. The remaining sequences can be similarly saved as individual files. These small files containing the footage for each sequence are then uploaded to the system 100 over the Internet 110, at step 508, where they can be compiled, i.e., assembled and processed, into the final presentation. Alternatively, one or more complete, unedited video files can be uploaded to the system 100, and the editing steps performed over the Internet 110 using the remote editor 214 of the system 100.

20

25

10

15

The local editor 212 executes a set 418 of component editing steps, as shown in Figure 5, comprising steps 502 to 524, on the computer 108. The local editor 212 provides a user interface for constructing the presentation, as shown in Figure 31. The interface includes a template timeline 3102 that presents the template components in a linear sequence, a viewer window 3104 for displaying the actual presentation components 3106, 3108, 3110, viewer controls 3112 for controlling the viewer window 3104, and a step indicator 3114 for displaying the current step number and the total number of steps required to create the presentation.

- 23 -

The local editor 212 executes in either a "beginner" or an "expert" mode. The beginner mode guides the user through the entire process of "producing" the presentation, from step 502 to step 524, using default values for a number of settings, whereas the expert mode allows the user to manually perform steps 502 to 524 in almost any order. In expert mode, the editing process is performed by selecting one of the components in the template timeline 3102 for editing. This can be done either by double-clicking on the desired component, or by clicking and dragging it to the viewer window 3104. The process of clicking and dragging an element to the viewer window 3104 makes that element "editable," and, in the case of text or still images, opens a new window that allows the editing of that element and its hierarchical elements.

10

15

20

25

The user can begin editing the opening title of the presentation by double-clicking on the opening title component 3106. A title editing window is opened on the screen of the user's computer 108. The title editing window includes editable text 3116, editable background 3118, and text controls 3120, as shown in Figure 32. The title editing window also has the option for a user to choose "beginner" or "expert" modes — this defaults to the mode chosen when the local editor 212 was first "executed". However, a user can change the mode within the title editing window; this only affects the title editing window's mode and not the overall mode of the presentation. In "beginner" mode, the background and number of text fields are fixed as per the template. The text fields 3116 are editable, and the user has control over fonts, drop shadows, etc by using the text controls 3120. In "beginner" mode, suitable fonts are recommended for the chosen template. In "expert" mode, the title editing window allows the user to change the template's background image or gradient colour scheme, or to use an image as the background. If an image is used, the image proportions may need to be adjusted to fit the window, in which case the user may choose to center, tile, or stretch the image to fit the window.

The user creates a suitable title for her presentation and sets font properties and background colours before saving the title as a data file and returning to the main editing

window, as shown in Figure 31. The title data file is automatically associated with the opening title component 3106.

The user can also edit imported video footage. To edit the first video sequence, the first video component 3108 is dragged from the template timeline 3102 to the viewer window 3104, or, equivalently, double-clicked. If a video data file has not previously been associated with the first video component 3108, a file selector window 3122 is opened on the screen, as shown in Figure 33. Once the user has selected the appropriate video data file, the video trimming process begins, and a number of components are added to the user interface, as shown in Figure 34. These components include a timeline match indicator 3124 with two timeline limits 3126, a video trimmer 3128, a spooler 3130, and selection buttons 3132. The timeline match indicator 3124 indicates which video segment is being edited and the duration of the segment. The two timeline limits 3126 extending from the timeline match indicator 3124 down over the video trimmer 3128 represent the beginning and end of the video segment as defined by the template, and the frames that are displayed at either end of the video trimmer 3128 correspond to the actual video frames at the times defined by these limits. Generally, the video data loaded for a segment will be longer than the time available for the segment as defined by the template. The segment itself is viewable in the viewer window 3104.

20

25

15

The "Spooler" is a click and drag arrow which "slides" along the video trimmer 3128, providing a preview function for the material contained within the selected clip. The clip is displayed in the viewer window 3104 in relative time (*i.e.*, if the spooler 3130 is dragged quickly, then the video appears to be "spooling" in fast forward, etc). The selection buttons 3132 includes three radio buttons, each with differing options:

(i) Stretch/Compress – This option allows the user to either stretch or compress their video clip.

- 25 -

(ii) From Inpoint – This button allows the user to trim the video clip from the spooler 3130 to the allotted amount of time (e.g., 3.2 seconds of video allowed; spooler = 0 seconds; 3.2 seconds of video after the spooler 3130 is accepted as our trimmed clip). A warning message is given if insufficient video has been selected.

(iii) From Outpoint – This button allows the user to trim the video clip in reverse from the position of the spooler 3130. A warning message is given if insufficient video has been selected.

10

15

20

5

Once the video clip is appropriately trimmed, it is loaded into the template timeline 3102.

If a presentation includes one or more still images – if the user acquires images from a digital camera for example, then an image may be associated with the template component and edited by double-clicking on the corresponding image component 3110, activating an image editing window. This window provides a number of standard image editing techniques. In particular, as the presentation conforms to standard video parameters (*e.g.*, the currently accepted 4:3 aspect ratio), then images should also conform to these sizing proportions. Therefore, the image editor provides options for cropping or stretching the image. In beginner mode, the background of the image automatically contains a "fill" colour, gradient, or image, as specified by the chosen template. This fills any 'white space' not used by the user's selected image. In expert mode, the user has complete control over whether a background image, colour or gradient is used behind the main image.

After all of the components in the template timeline 3102 have been defined and edited, the presentation is ready for recording voice-over narration at step 512. This requires that the user's computer 108 has a microphone and sound card. Alternatively, the user may elect to submit her script to the multimedia system 100 for an additional service whereby the script is professionally recorded and added to the presentation for a fee. If the user decides to record her own voice-over, then a template audio timeline is added to the user

interface just below the template timeline 3102. If the selected template includes music, then this is indicated on the audio timeline. The audio timeline can be dragged to the viewer window 3104 in order to edit it. A new audio editing window then opens, providing several functions:

5

(a) Autocue Window – This window has two modes:

10

(i) Script Mode – this allows the user to create the script, in words, using prompts generated from the template selection questions & answers (i.e. keywords that reflect an appropriate profile, image, etc.) and guiding them on the required number of words per second, etc. The autocue allows them to type in their script either per component, if their voice-over needs to specifically match words to images, or as a single continuous script of the required duration.

15

(ii) Autocue Mode – this mode is activated when the user clicks either the "preview record" or "record" buttons and is essentially a scrolling text representation, in a highly legible typeface, which allows the user to read their script at the required pace, while the recording operation is in progress.

20

25

(b) Audio Record Window – This window allows the user to practice their voiceover prior to recording, and provides access to the recording process itself. It also provides sound card level controls for the recording device. The user is prompted to set their record level for both the practice run/s and/or the record run/s – they are guided as to the requirements for this process – optimum levels, etc.

Once the processes described above have been completed (this assumes all video, titles, graphics, etc. have been added and edited), the completed presentation can be reviewed before creating the final presentation.

The user is presented with three choices at this point: if they are happy with the presentation, they click the "next" button to proceed to the next step; if they wish to make changes to their presentation, they can then step back through all of their actions and make changes; if they are totally dissatisfied with the result, they may choose either "start over from template selection" or "start over from template editing."

10

20

25

30

After the presentation is approved, a compilation process is performed at step 420. This is the process of combining all of the elements previously developed into a complete presentation. At step 428, the presentation is optionally translated into appropriate video formats that can be played back over the Internet 110. Initially, the composition process also adds a "presentation sample" watermark to the presentation, and creates a hidden, encrypted, temporary file, to allow the user to review their presentation in a variety of formats. For example, different versions of the presentation may be compiled for various video formats, such as MPEG and QuickTime; and various internet connections speeds, such as 28.8 or 56kbps modem connections, cable modem, ISDN, ADSL, T1, T3, and so on. This facility allows the user to preview the various versions under appropriate conditions, as required.

The compile process also creates an edit data list (EDL) that contains all of the information required to compile the finished product from the constituent components, including video data files, voice over details, image files, titles, etc. This EDL is stored on the multimedia system 100, along with the relevant files, and either compiled online, or stored as a backup for later reuse or re-editing.

Once the presentation has been accepted in preview form, the user is presented with various hosting options, whereby the completed presentation is made available for viewing

on the multimedia system 100, or alternatively a dedicated server associated with it. The available options include hosting for 0, 1, 3, 6, or 12 months. By choosing 0 months, the user elects to use their own server. Otherwise, the user is forwarded appropriate URLs for their stored presentations.

5

Users can also choose at this point the method in which they would like to display their presentation:

10

- (i) Embedded in a Presentation Frame (a new window pops up when the linking URL is clicked, containing the user's presentation in a frame relevant to their originally selected template
- (ii) Stand-alone media player window (the presentation appears in the standard pop-up window for the relevant media player)

15

(iii) Embedded in my web page (the user utilizes embedding code and their presentation URL to embed the video in a page on their site)

As the user chooses various options, the system 100 updates a dynamic window indicating the cost sub-total and totals so the user knows at any given moment how much their presentation hosting will cost. Once all required options have been selected, the user is taken to another screen where payment details are entered. Once approved, the system 100 produces final versions of the presentation without watermarks, and the presentation files are made available on the multimedia system 100. Alternatively, the files can be made available on a separate, dedicated server associated with the system 100. After these processes have completed, a person using a computer 106 connected to the Internet 110 can access the multimedia system 100 (or an associated server) and view the user's house advertisement.

The multimedia system 100 described above allows unskilled computer users to rapidly develop multimedia presentations based on templates provided in response to user requirements. In particular, the multimedia system 100 embodies business and marketing knowledge that is used to translate the user's needs into a structured presentation template that meets those needs. Thus it is not necessary to engage the services of marketing and/or advertising consultants, providing considerable savings in cost and time. Additionally, the system 100 provides easy to use editing tools that allow inexperienced users to develop their own presentations. These presentations can include almost any combination of text, graphics, image and video. In particular, it is advantageous to provide presentations consisting of a few still images and graphics for viewing over low bandwidth connections, whereas users with high bandwidth connections can take full advantage of full motion video.

10

In yet another alternative embodiment, the parameter modules 210 and the template generator 216 are integrated with third-party editing tools as plug-in software modules. This allows the template generation processes described above to be used with existing software tools for editing image, video, and textual components. The presentation compiler 218 can be subsequently used to generate the final presentation, if required.

Many modifications will be apparent to those skilled in the art without departing from the scope of the present invention as herein described with reference to the accompanying drawings.

#### **CLAIMS:**

- 1. A method for generating a multimedia presentation, including generating queries for a user;
- receiving responses to said queries from said user; and determining at least one multimedia presentation template on the basis of said responses.
- 2. A method as claimed in claim 1, including providing an interface for defining and
   generating components of a multimedia presentation.
  - 3. A method as claimed in claim 2, wherein said interface includes controls for defining and specifying the order of components of said template.
- 15 4. A method as claimed in claim 1, wherein said responses are received from said user over a communications network.
- A method as claimed in claim 1, wherein said step of determining includes receiving presentation specification data for determining components of said presentation
   template.
  - 6. A method as claimed in claim 5, wherein said presentation specification data includes market category data for determining a market category for said presentation.
- 25 7. A method as claimed in claim 5, including generating components for said presentation template on the basis of said market category data.
- A method as claimed in claim 5, wherein said presentation specification data includes presentation type data for determining the duration and number of components of said presentation.

- 31 -

9. A method as claimed in claim 1, wherein said step of determining includes presenting a list of features of said presentation template to said user, and receiving ranking data for ranking said features.

5

- 10. A method as claimed in claim 9, wherein said features include components of said presentation template.
- 11. A method as claimed in claim 9, including receiving selection data for selectingfeatures to be included in said presentation.
  - 12. A method as claimed in claim 1, wherein said step of determining includes presenting a list of keywords describing possible characteristics of said presentation, and receiving keyword selection data for selecting desired characteristics of said presentation.

15

- 13. A method as claimed in claim 12, including determining at least one soundtrack for said presentation on the basis of said characteristics.
- 14. A method as claimed in claim 13, including determining duration of components of said presentation on the basis of a soundtrack.
  - 15. A method as claimed in claim 14, including determining the order of said components on the basis of said soundtrack.
- 25 16. A method as claimed in claim 13, wherein said step of determining is executed by an expert system.
  - 17. A method as claimed in claim 16, wherein said expert system includes a decision hierarchy.

- 32 -

- 18. A method as claimed in claim 1, wherein said at least one multimedia presentation template is selected from existing multimedia presentation templates on the basis of said data.
- 5 19. A method as claimed in claim 1, wherein said at least one multimedia presentation template is generated on the basis of said data.
- 20. A method as claimed in claim 1, wherein said method includes receiving template selection data from said user for selecting a presentation template from said at least one
   presentation template.
  - 21. A method as claimed in claim 1, wherein a multimedia presentation template is used to generate said interface.
- 15 22. A method as claimed in claim 2, wherein said components include text, sound, graphic and/or video components.
- 23. A method as claimed in claim 1, including generating a storyboard representing components of said presentation template, said storyboard including instructions for generating components of said presentation.
  - 24. A method as claimed in claim 2, wherein said method includes receiving component data for components of said presentation and compiling said multimedia presentation from said component data.
  - 25. A method as claimed in claim 1, including generating billing data for said user.
  - 26. A method as claimed in any one of the preceding claims, wherein said method is executed over a communications network.

25

- 33 -

- 27. A method as claimed in claim 26, including generating one or more versions of said multimedia presentation in respective formats suitable for transmission over said communications network.
- 5 28. A method as claimed in claim 26, wherein said method further includes hosting said presentation for access over said communications network.
  - 29. A method as claimed in claim 28, wherein said communications network includes the Internet.

10

- 30. An interface for defining components of a multimedia presentation template over a communications network on the basis of data provided by a user of said interface.
- 31. A method for generating a multimedia presentation, including:
- providing a plurality of questions related to desired characteristics of said presentation;

recording responses to said questions;

determining a presentation template that specifies components of said presentation, based on said responses;

receiving components of said presentation based on components of said template; and

compiling said presentation from said presentation components.

- 32. A method as claimed in claim 31, wherein said template is selected from a plurality of pre-existing templates.
  - 33. A method as claimed in claim 31, wherein said template is generated from a plurality of template components.
- 30 34. A method as claimed in claim 31, including:

translating said multimedia presentation into a format suitable for transmission over a communications network; and

storing said multimedia presentation on a server accessible over said communications network.

5

- 35. A system having components for executing the steps of any one of claims 1 to 34.
- 36. Software having program code for executing the steps of any one of claims 1 to 34.
- 10 37. A machine readable storage medium having stored thereon program code for executing the steps of any one of claims 1 to 34.
- 38. A system for generating a multimedia presentation, including:
  an expert system for determining at least one multimedia presentation template on the
  basis of data provided over a communications network by a user of said system;
  an editing module for editing components of said presentation, said editing module for
  execution on computing equipment of said user; and
  a compiling module for compiling said components to generate said presentation.
- 39. A system as claimed in claim 38, including a translation module for generating one or more versions of said presentation corresponding to respective connection bandwidths of said communications network.
- 40. A system as claimed in claim 38, including a hosting module for providing access to said presentation over said communications network.
  - 41. A system for generation of a multimedia presentation, including:

    a characteristic part for querying a user to obtain characteristic data for said
    presentation; and

a template part for providing, on the basis of said characteristic data, a template for said presentation and instructions for developing components of said presentation.

42. A system as claimed in claim 41, including a component part for receiving components of said presentation from a user.

5

43. A system as claimed in claim 42, including a compilation part for compiling said presentation on the basis of said template and the received components.

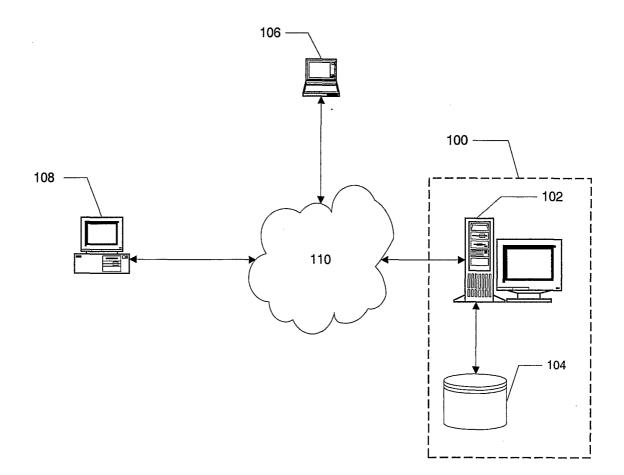


Figure 1

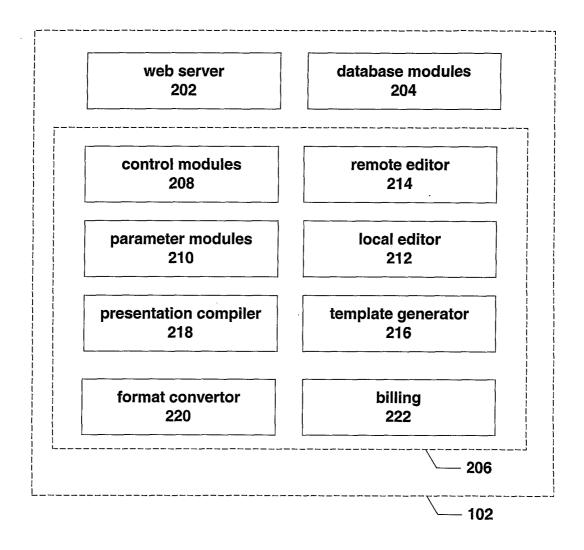


Figure 2

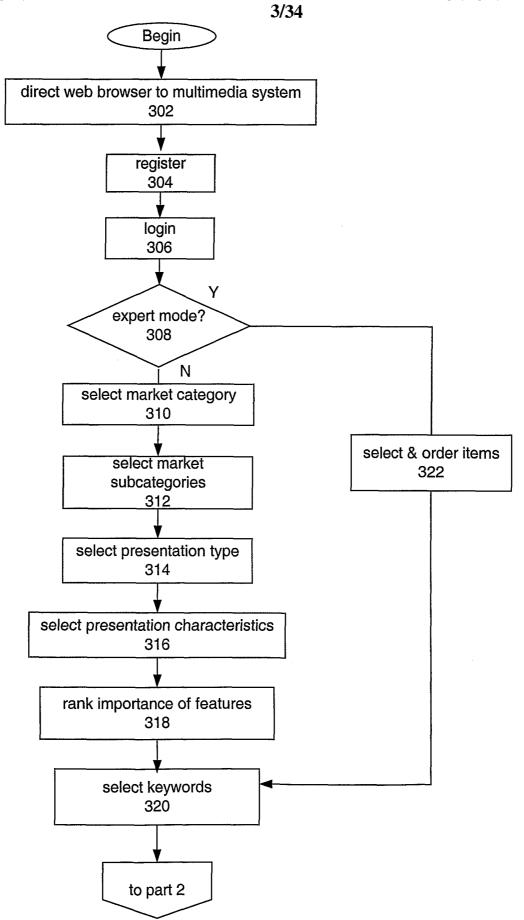


Figure 3

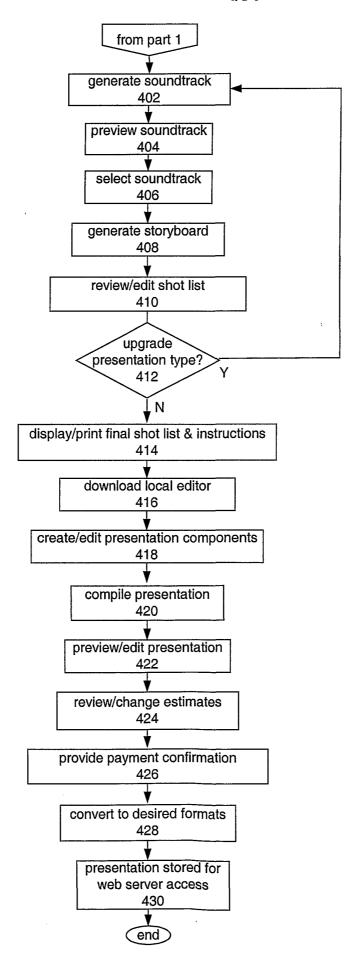


Figure 4

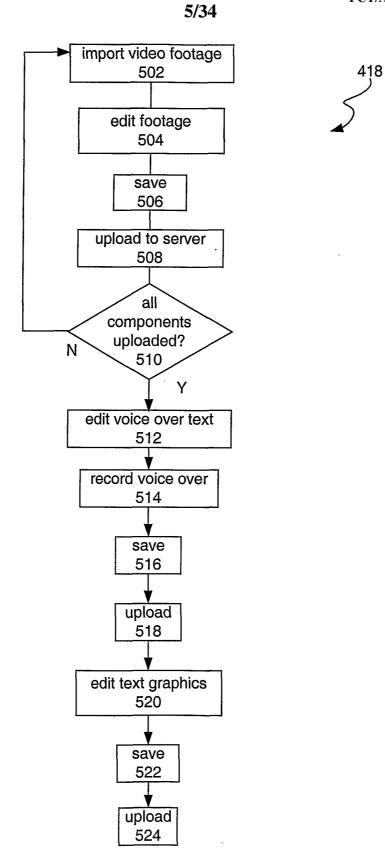


Figure 5

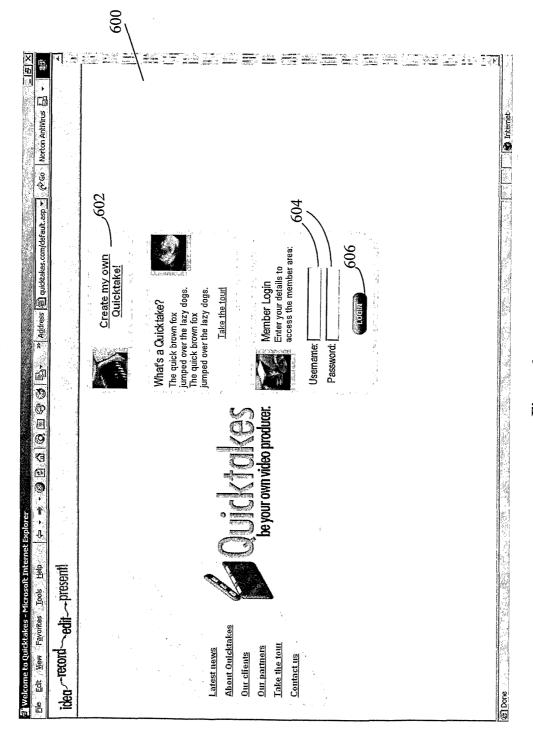
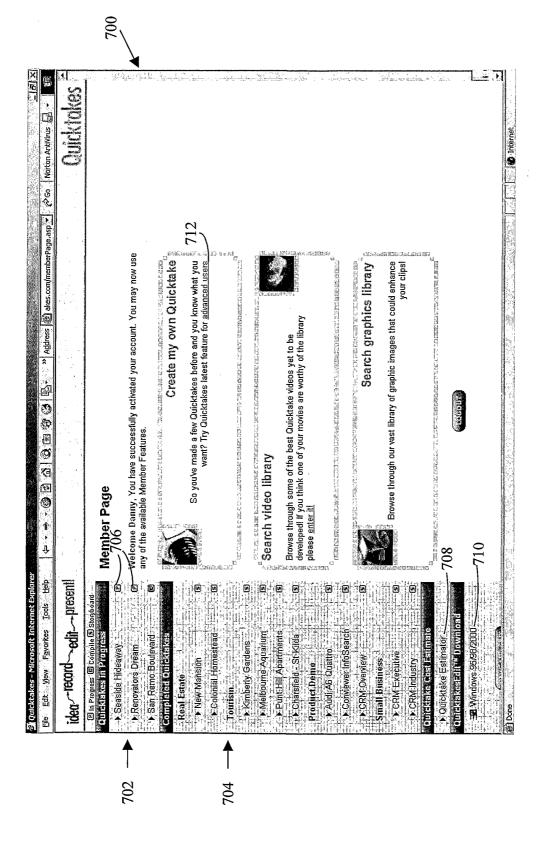


Figure 6



Figure

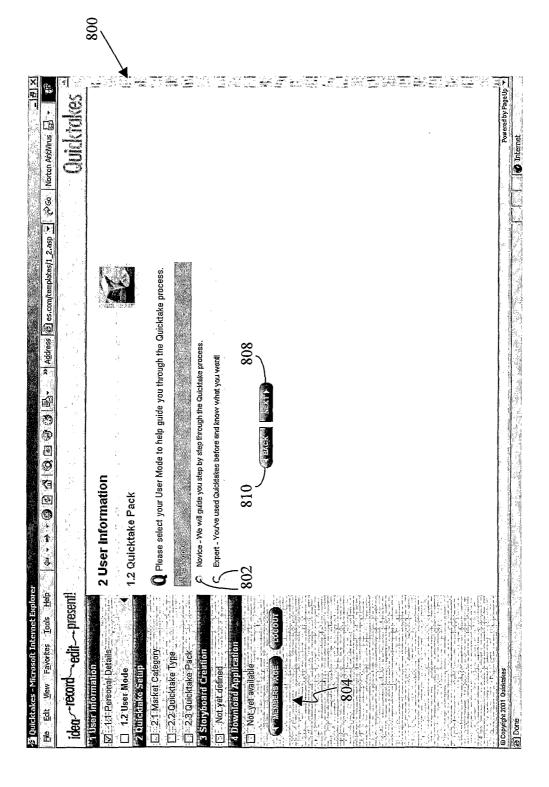


Figure 8

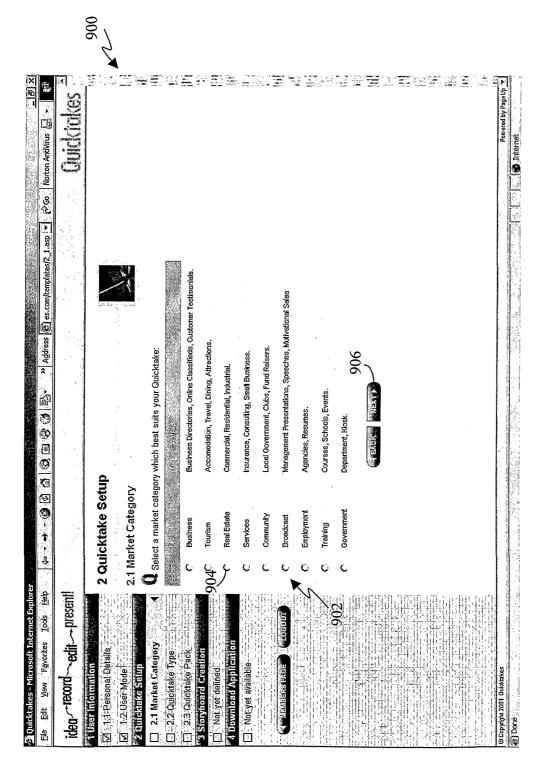


Figure 9



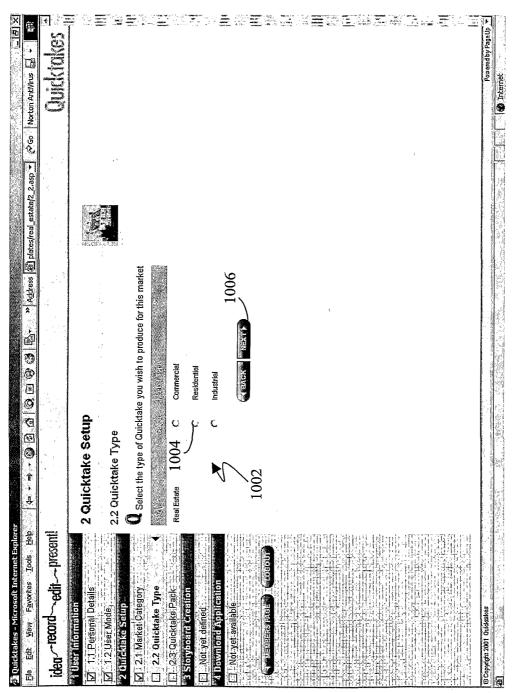


Figure 10

11/34

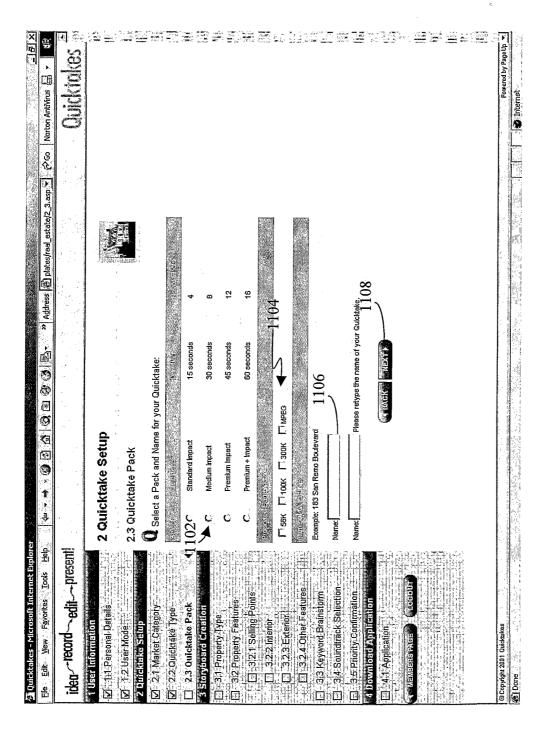


Figure 11



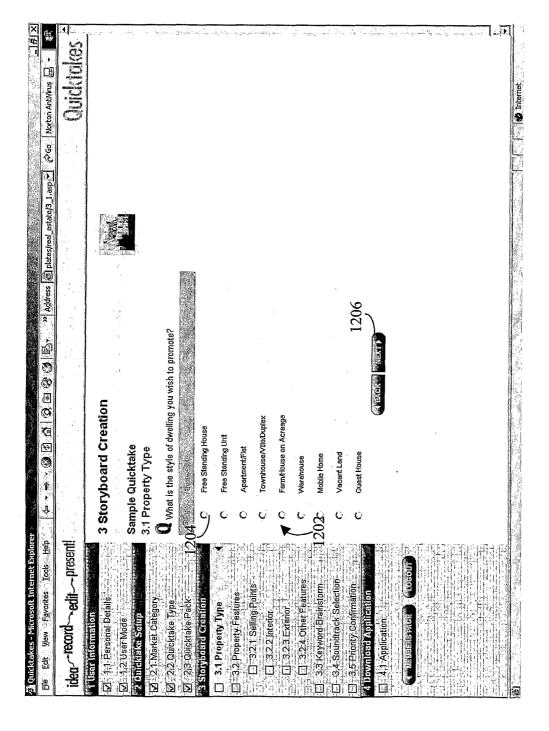


Figure 12

13/34

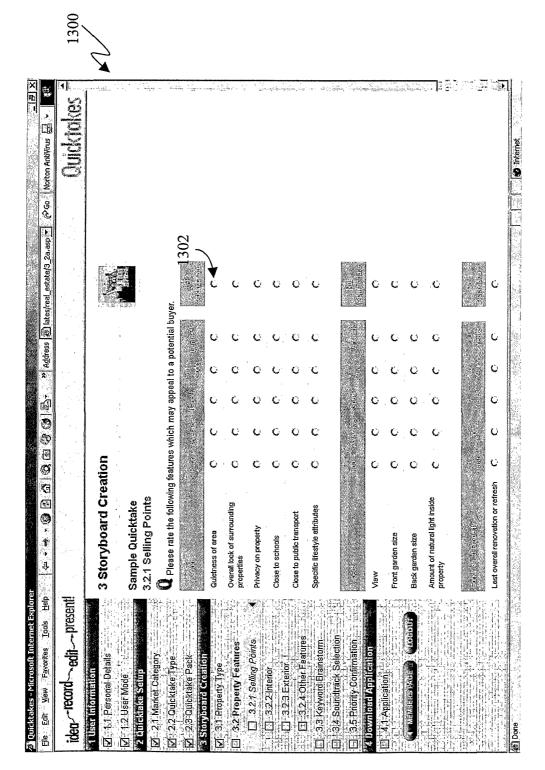


Figure 13

14/34



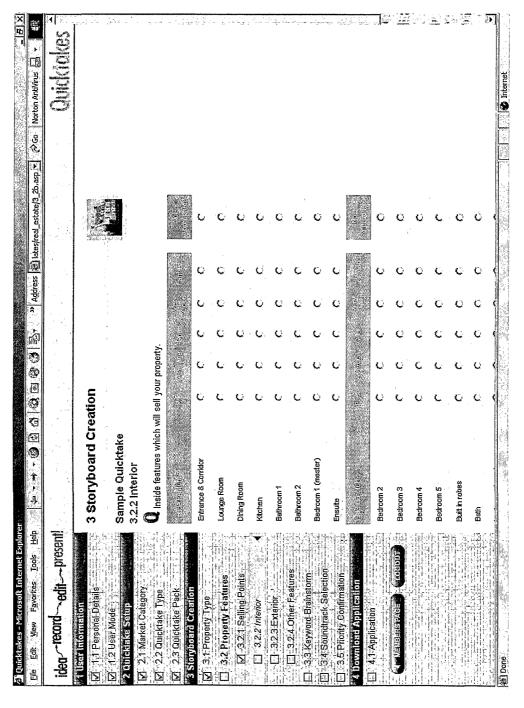


Figure 14



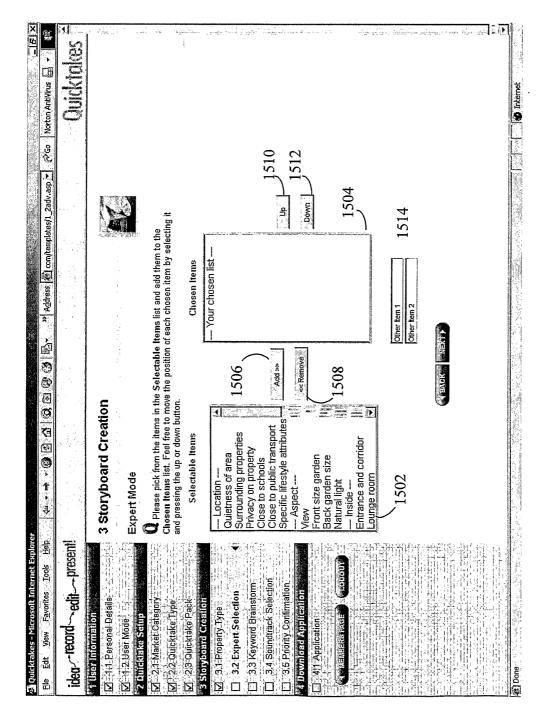


Figure 15

0001

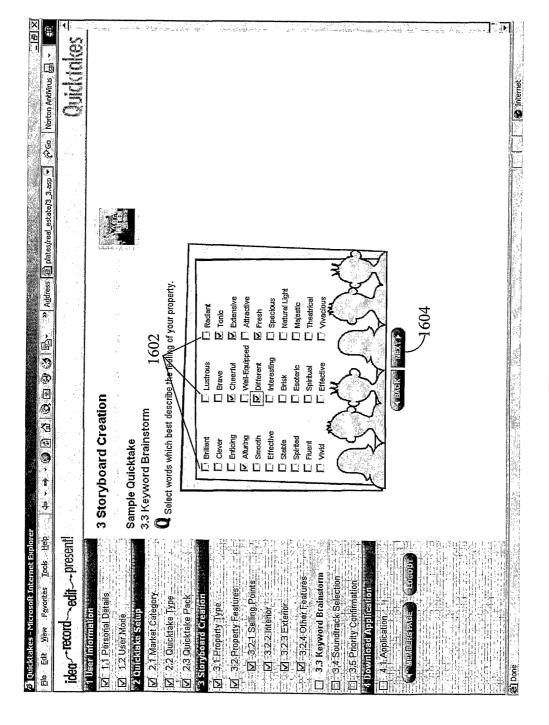


Figure 16

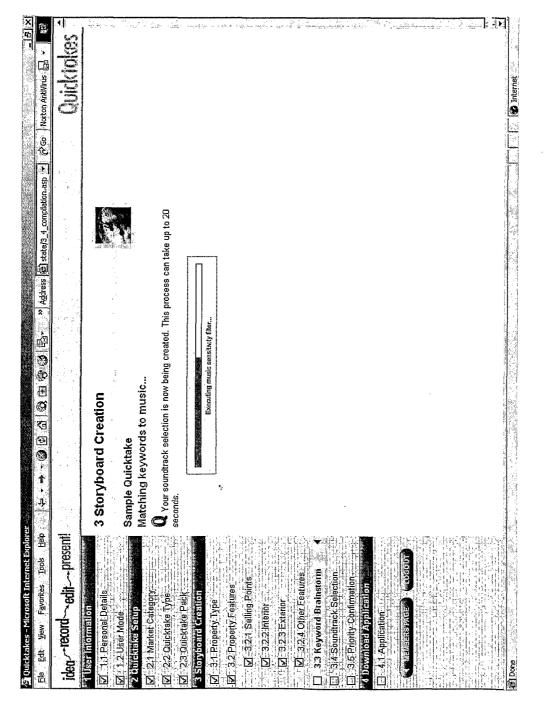


Figure 17

18/34

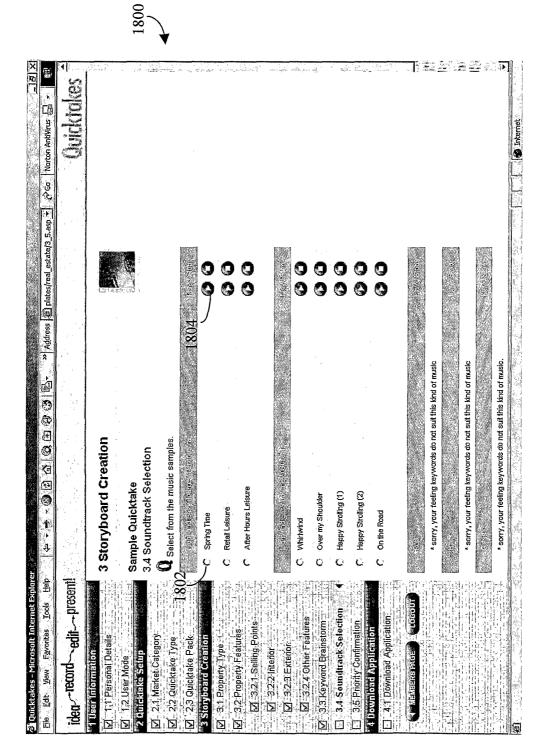


Figure 18

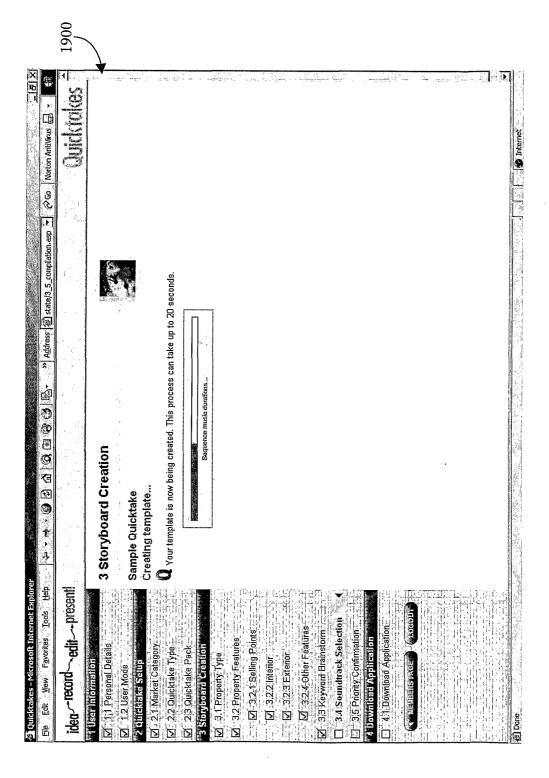


Figure 19

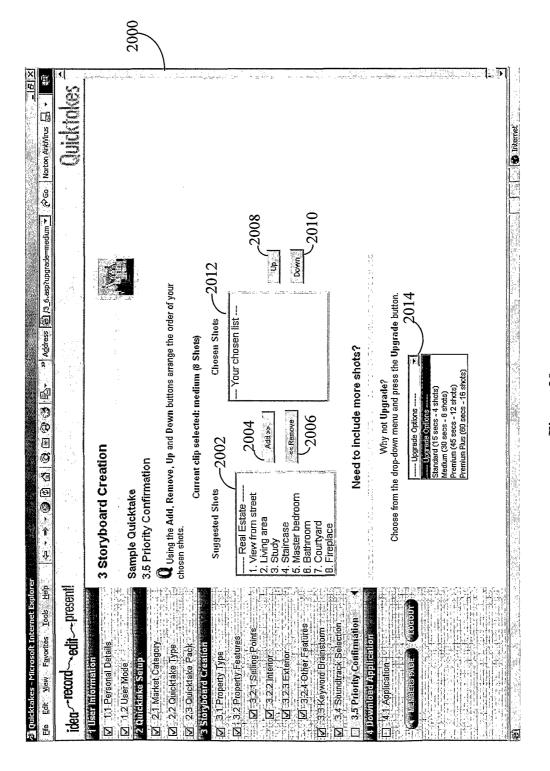


Figure 20

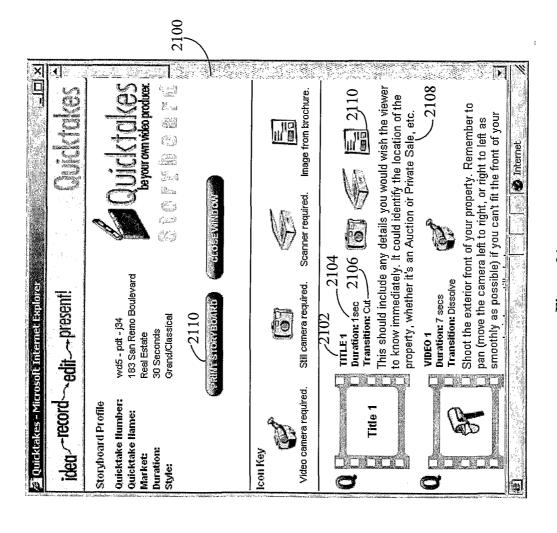


Figure 21

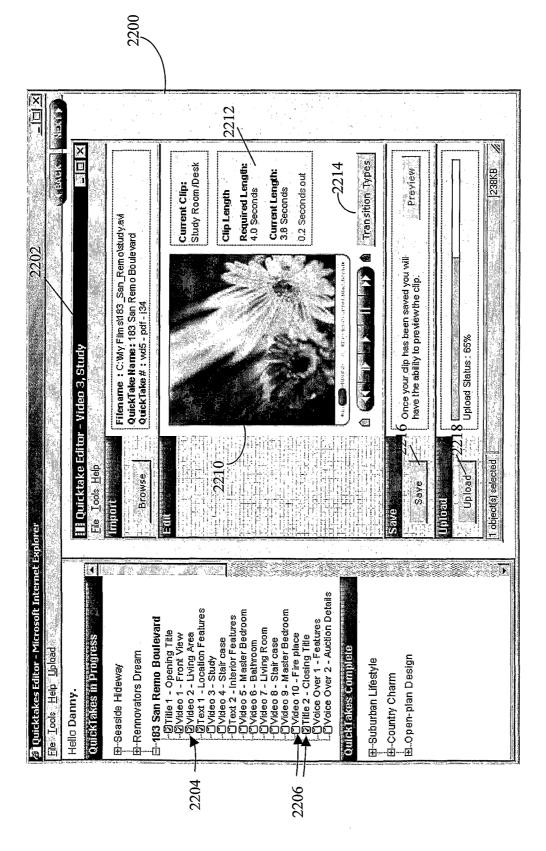


Figure 22

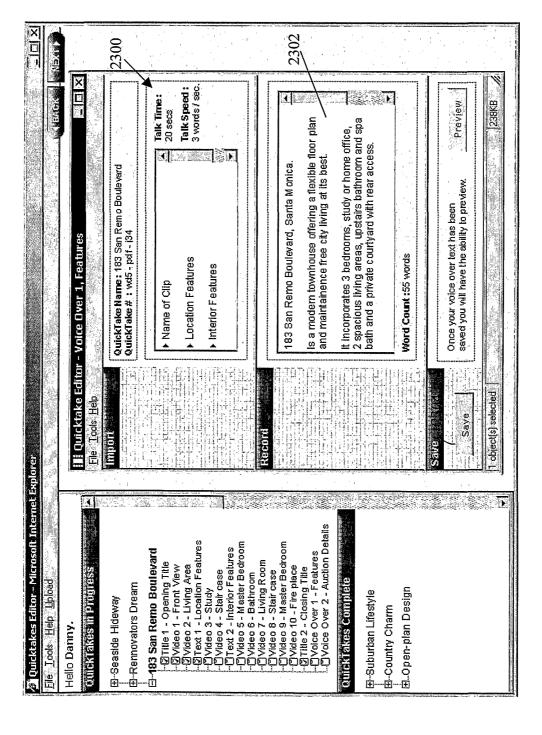


Figure 23

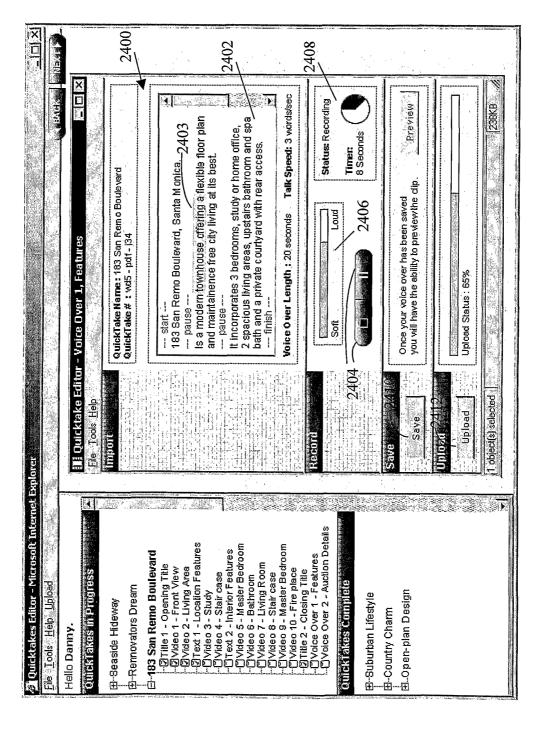


Figure 24

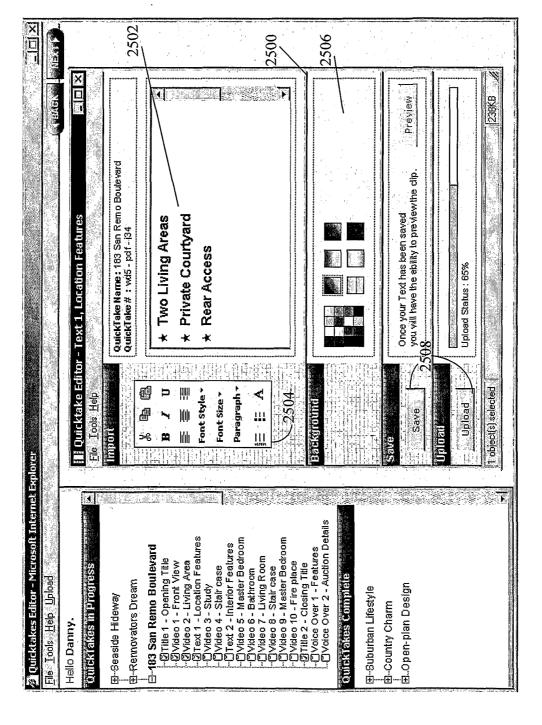


Figure 25

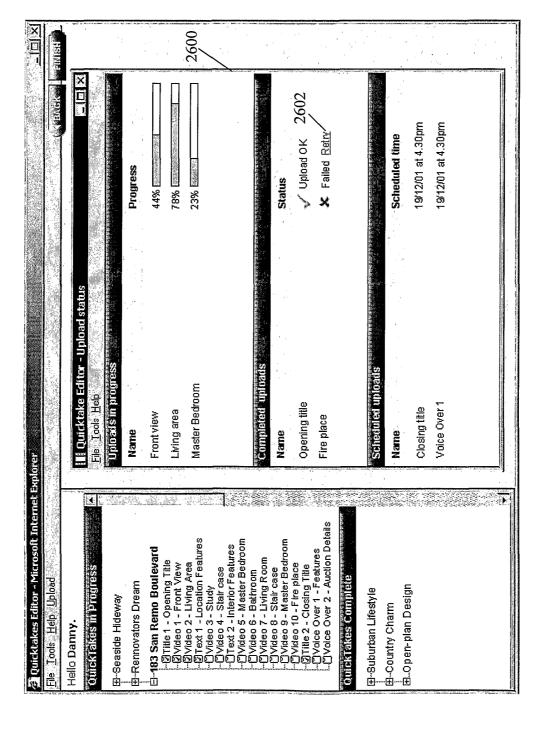


Figure 26

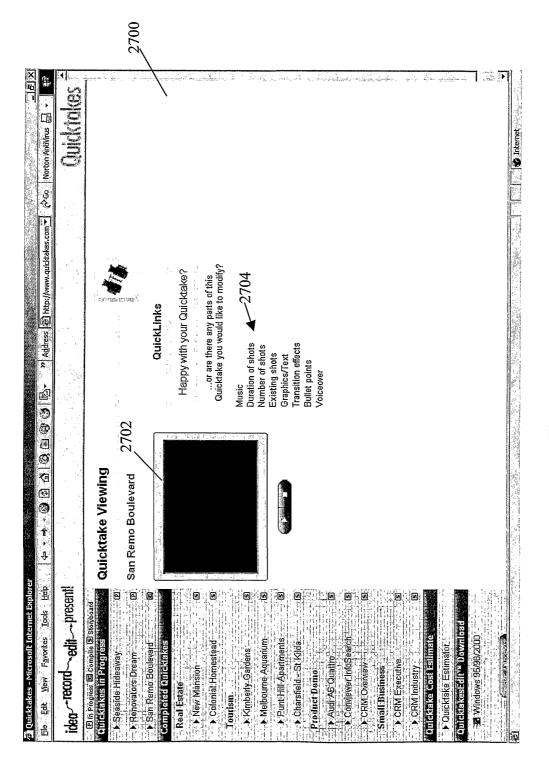


Figure 27

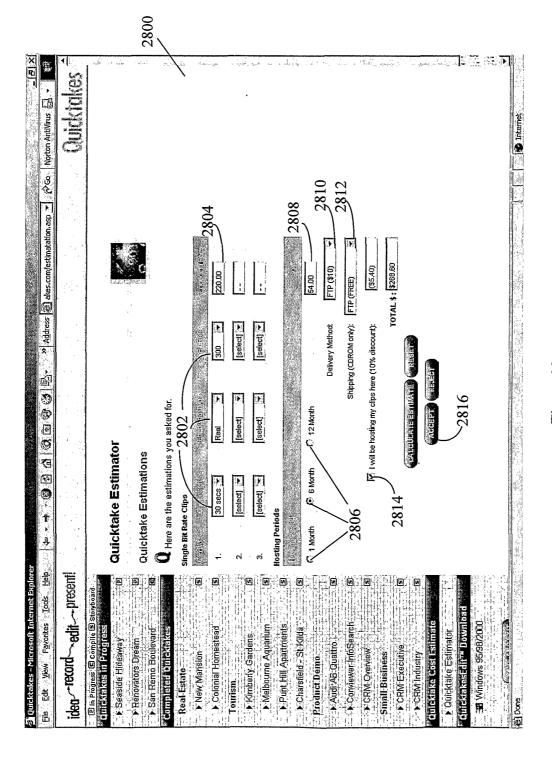


Figure 28

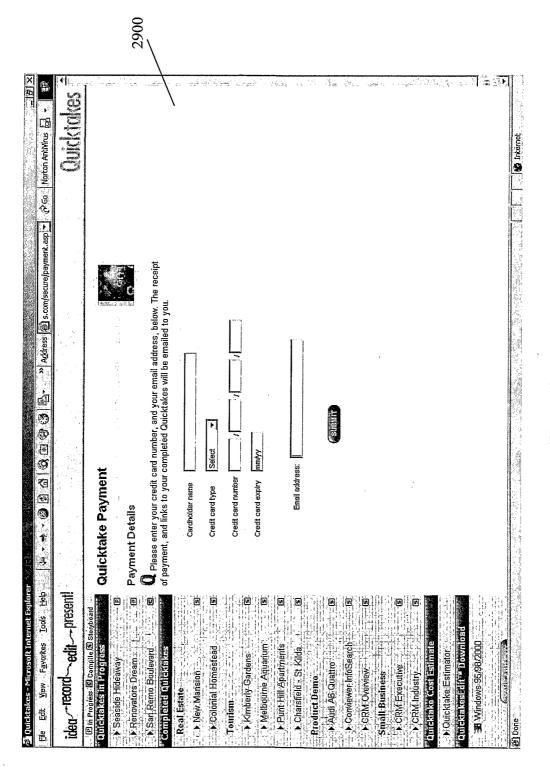


Figure 29

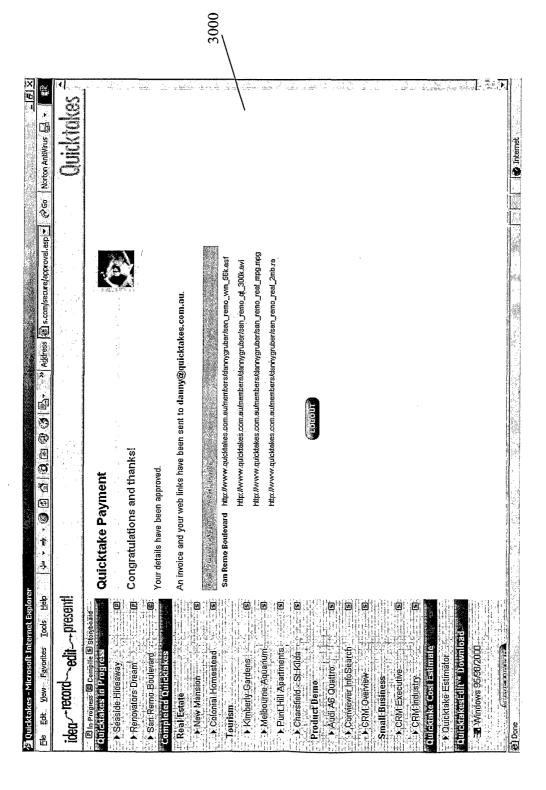
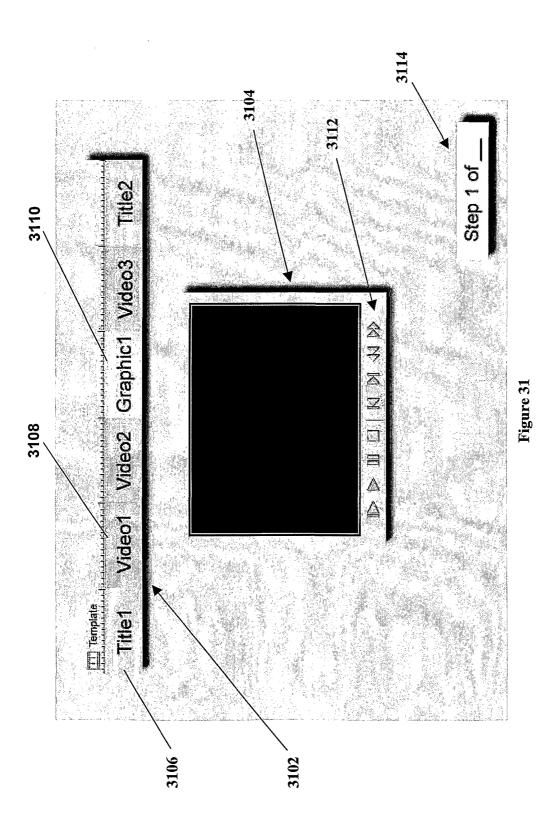
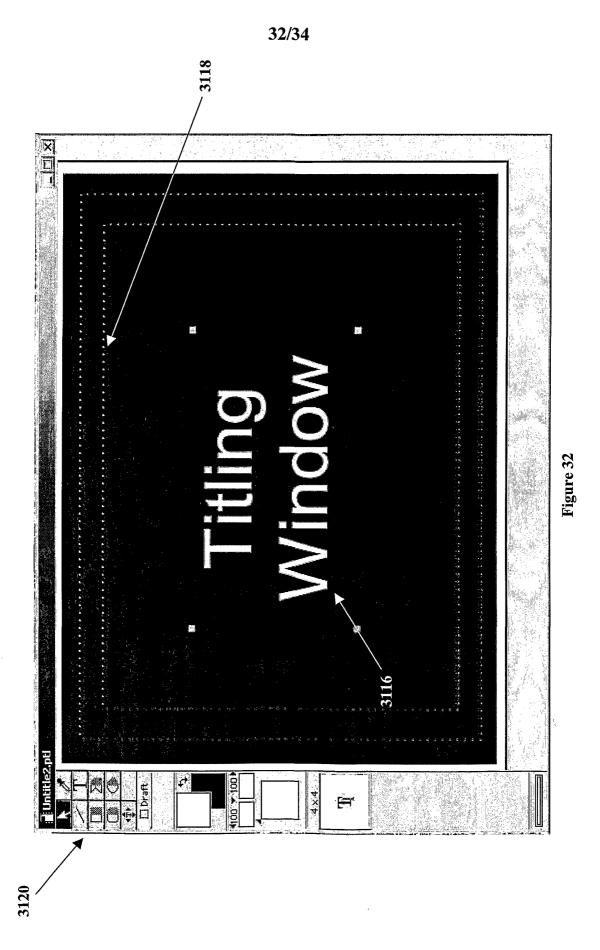


Figure 30

## 31/34



SUBSTITUTE SHEET (RULE 26) ISA/AU



SUBSTITUTE SHEET (RULE 26) ISA/AU

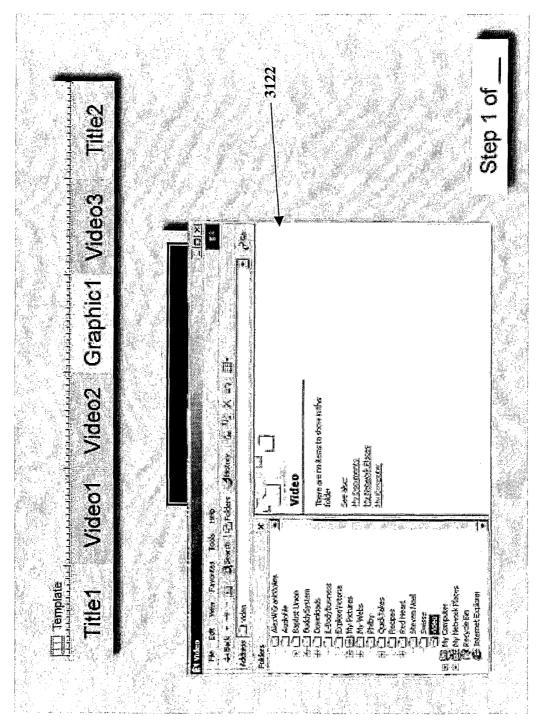
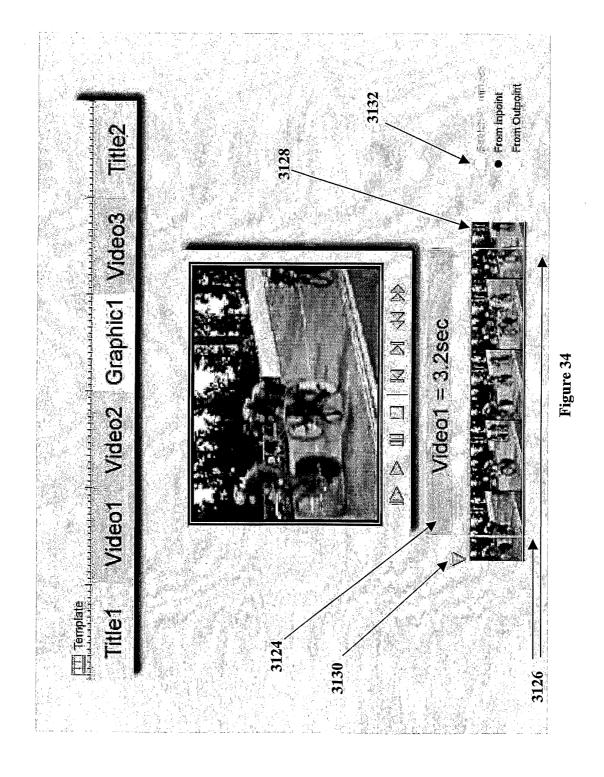


Figure 33



SUBSTITUTE SHEET (RULE 26) ISA/AU

## INTERNATIONAL SEARCH REPORT

International application No.

			PCT/AU02/00079					
<b>A.</b>	CLASSIFICATION OF SUBJECT MATTER							
Int. Cl. 7:	G06F 17/50, 17/60							
According to International Patent Classification (IPC) or to both national classification and IPC								
В.	FIELDS SEARCHED							
Minimum documentation searched (classification system followed by classification symbols)								
Documentation	Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched							
1	base consulted during the international search (name of	<del>-</del>	· ·					
design, ques	PTO Web Patent Database, Esp@cenet, Canac stions etc"	lian Patent Database, "mult	imedia presentation, tempiate,					
C.	DOCUMENTS CONSIDERED TO BE RELEVANT	r						
Category*	Citation of document, with indication, where app	propriate, of the relevant passa	ges Relevant to claim No.					
x	US 6032156 A (MARCUS) 29 February 20 Column 8 lines 59-63, column 9 lines 1-21	tc. 1-3,5-13,16-22,35-37						
Y	In view of any of the following documents.	4,23-34,38-43						
	WO 01/35056 A (INTERCONTINENTAL	2.)						
P,X	17 May 2001. Figure 2, page 7 lines 32-33, page 18 line 30	30						
1,21	page 15 lines 7-29 in particular.							
	WO 98/25231 A (PHILIPS ELECTRONICS							
X	Page 3 lines 29-31,15-18 and page 4 line 28 In view of US 6032156.	-page 5 line 2 etc.	30 4,23,26,28,29,41,42					
•	III view of ob observe.		1,20,20,20,25, 11, 12					
X	Further documents are listed in the continuati	on of Box C X See par	tent family annex					
· ·	al categories of cited documents:		ter the international filing date or					
	ment defining the general state of the art which is onsidered to be of particular relevance	understand the principle or	flict with the application but cited to theory underlying the invention					
	r application or patent but published on or after "> ternational filing date		vance; the claimed invention cannot not be considered to involve an					
"L" docui	ment which may throw doubts on priority claim(s) ich is cited to establish the publication date of	inventive step when the doc document of particular relevant	sument is taken alone vance; the claimed invention cannot					
anoth	another citation or other special reason (as specified) be considered to involve an inventive step when the document is							
or oth	or other means combination being obvious to a person skilled in the art							
but later than the priority date claimed								
i	ual completion of the international search	Date of mailing of the international search report 2 9 APR 2002						
Name and mai	JZ ling address of the ISA/AU	Authorized officer						
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA								
E-mail address	s: pct@ipaustralia.gov.au	P. THONG Telephone No. (02) 6283 2128						
Facsimile No. (02) 6285 3929 Telephone No : (02) 6283 2128								

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU02/00079

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT							
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
X	US 5890175 A (WONG et al.) 30 March 1999 Column 3 lines 34-42 and column 3 line 61-column 4 line 2 for example. In view of US 6032156.	30 4,25,28,29,40					
X Y	US 5864338 A (NESTOR et al.) 26 January 1999 Column 7 lines 11 to 37 for example In view of US 6032156.	30 24,31-33,38,43					
Y	CA 2147164 A (SHAW et al.) 28 April 1994 Page 50 line 8-page 56 line 5 and in view of the above citations.	27,34,39					
Y	CA 2284797 A (BROADBAND ASSOCIATES) 8 October 1998 Page 4 lines 8-17 and in view of the above citations.	27,34,39					
A	EP 663639 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 19 July 1995. Column 11 lines 6-10 for example.	1-43					
A	WO 94/28480 A (IMAGINE MULTIMEDIA, INC) 8 December 1994 Whole document.	1-43					
	,						

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. **PCT/AU02/00079** 

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member						
US	6032156	AU	68756/98	WO	98/44717			
US	5864338	NONE						
WO	94/28480	AU	70933/94					
US	5890175	NONE						
WO	98/25231	EP	882354	US	5995093	US	6191783	
EP	663639	JP	7219736	US	5613057			
WO	01/35056	AU	200115982					
CA	2147164	WO	9409595					
CA	2284797	WO	9844733	AU	68829/98	EP	1021917	
							END OF ANNEX	