US 20100223314A1

(19) **United States**

(12) **Patent Application Publication**

Gadel et al.

(10) **Pub. No.: US 2010/0223314 A1**

(43) **Pub. Date: Sep. 2, 2010**

(54) **APPARATUS AND METHOD FOR CREATING AND TRANSMITTING UNIQUE DYNAMICALLY PERSONALIZED MULTIMEDIA MESSAGES**

(75) Inventors: **Isser Gadel**, Herzliah B (IL); **Nimrod Sabag**, Kiryat Motzkin (IL)

Correspondence Address:
DEBORAH A. GADOR
P.O. BOX 4133
GANEL TIKVA 55900 (IL)

(73) Assignee: **CLIP IN TOUCH INTERNATIONAL LTD**, Natanya (IL)

(21) Appl. No.: **12/161,168**

(22) PCT Filed: **Jan. 4, 2007**

(86) PCT No.: **PCT/IL2007/000010**

§ 371 (c)(1),
(2), (4) Date: **Jul. 17, 2008**

(30) **Foreign Application Priority Data**

Jan. 18, 2006 (IL) 173222

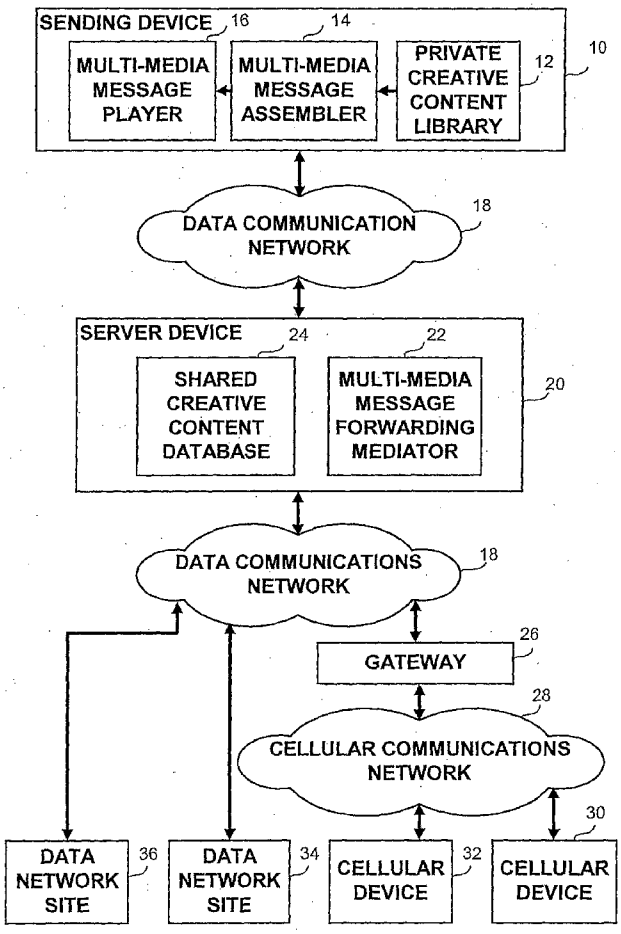
Publication Classification

(51) **Int. Cl.**
G06F 13/00 (2006.01)

(52) **U.S. Cl.** **709/200**

(57) **ABSTRACT**

An apparatus and method for the creation and transmission of dynamically personalized multimedia messages includes a client device running a multimedia message assembler. The client device is linked via a communication network to a server device running server-side software and linked to remote receiver devices. The multimedia messages are sent to the remote receivers via the network and the server device. The server device includes a media-type content type database and a multimedia access and play software.



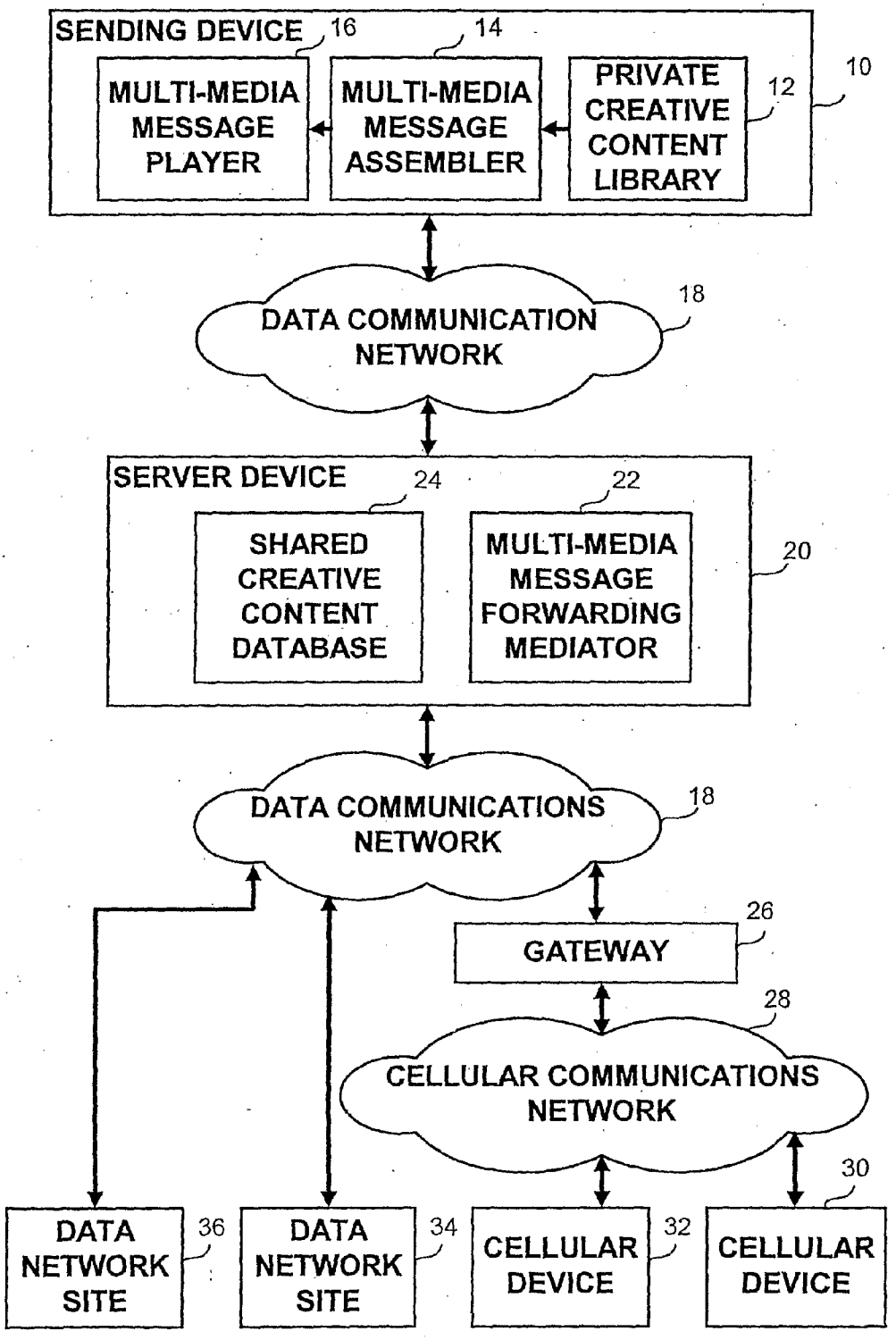

SENDING DEVICE
16
14
MULTI-MEDIA MESSAGE PLAYER
MULTI-MEDIA MESSAGE ASSEMBLER
PRIVATE CREATIVE CONTENT LIBRARY
12
10
DATA COMMUNICATION NETWORK
18
SERVER DEVICE
24
22
SHARED CREATIVE CONTENT DATABASE
MULTI-MEDIA MESSAGE FORWARDING MEDIATOR
20
DATA COMMUNICATIONS NETWORK
18
26
GATEWAY
28
CELLULAR COMMUNICATIONS NETWORK
30
DATA NETWORK SITE
36
DATA NETWORK SITE
34
CELLULAR DEVICE
32
CELLULAR DEVICE

FIG. 1

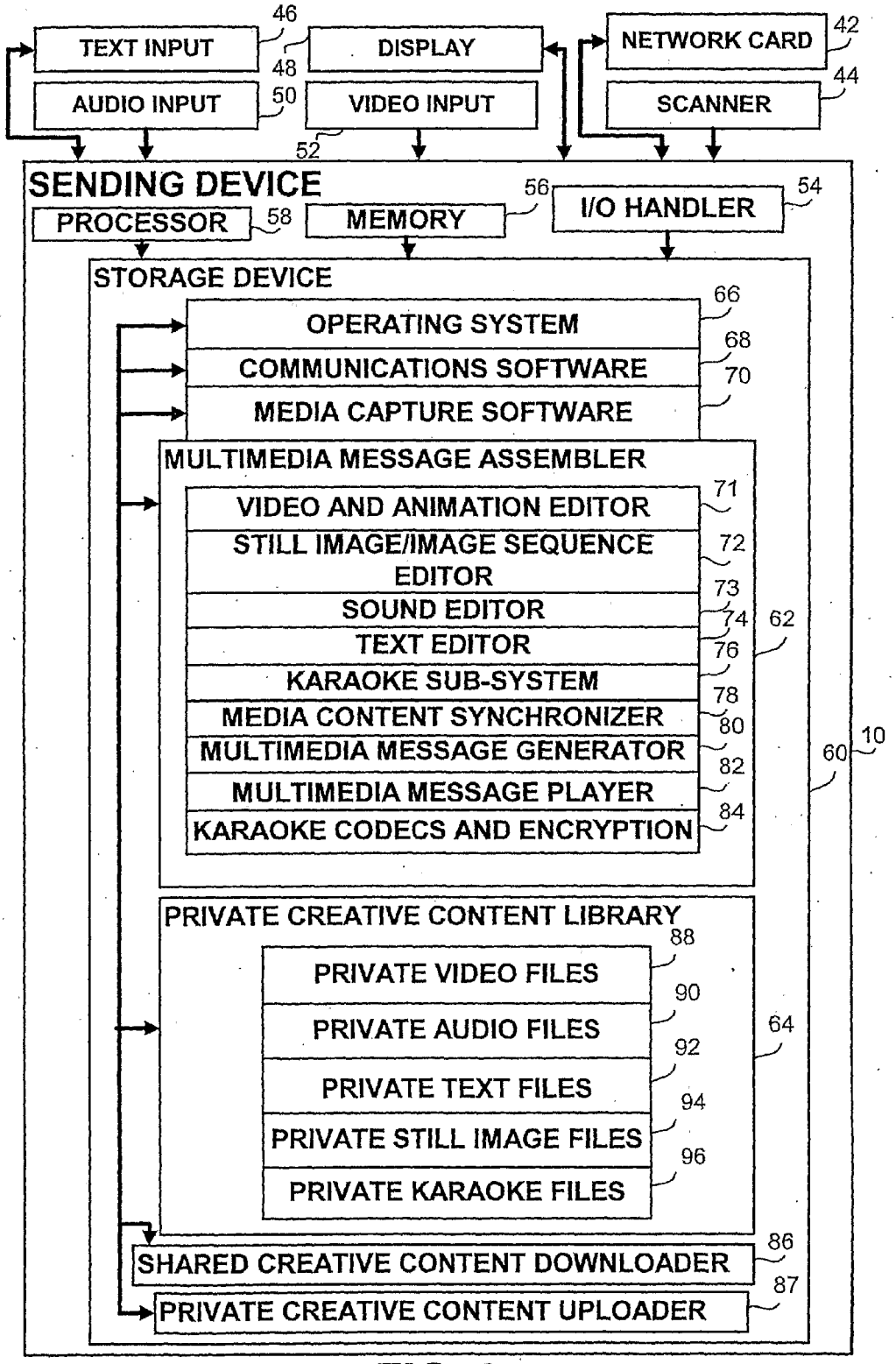

TEXT INPUT
46
DISPLAY
48
NETWORK CARD
42
AUDIO INPUT
50
VIDEO INPUT
52
SCANNER
44
SENDING DEVICE
PROCESSOR
58
MEMORY
56
I/O HANDLER
54
STORAGE DEVICE
OPERATING SYSTEM
66
COMMUNICATIONS SOFTWARE
68
MEDIA CAPTURE SOFTWARE
70
MULTIMEDIA MESSAGE ASSEMBLER
VIDEO AND ANIMATION EDITOR
71
STILL IMAGE/IMAGE SEQUENCE EDITOR
72
SOUND EDITOR
73
TEXT EDITOR
74
KARAOKE SUB-SYSTEM
76
MEDIA CONTENT SYNCHRONIZER
78
MULTIMEDIA MESSAGE GENERATOR
80
MULTIMEDIA MESSAGE PLAYER
82
KARAOKE CODECS AND ENCRYPTION
84
62
PRIVATE CREATIVE CONTENT LIBRARY
PRIVATE VIDEO FILES
88
PRIVATE AUDIO FILES
90
PRIVATE TEXT FILES
92
PRIVATE STILL IMAGE FILES
94
PRIVATE KARAOKE FILES
96
64
SHARED CREATIVE CONTENT DOWNLOADER
86
PRIVATE CREATIVE CONTENT UPLOADER
87
60
10

FIG. 2

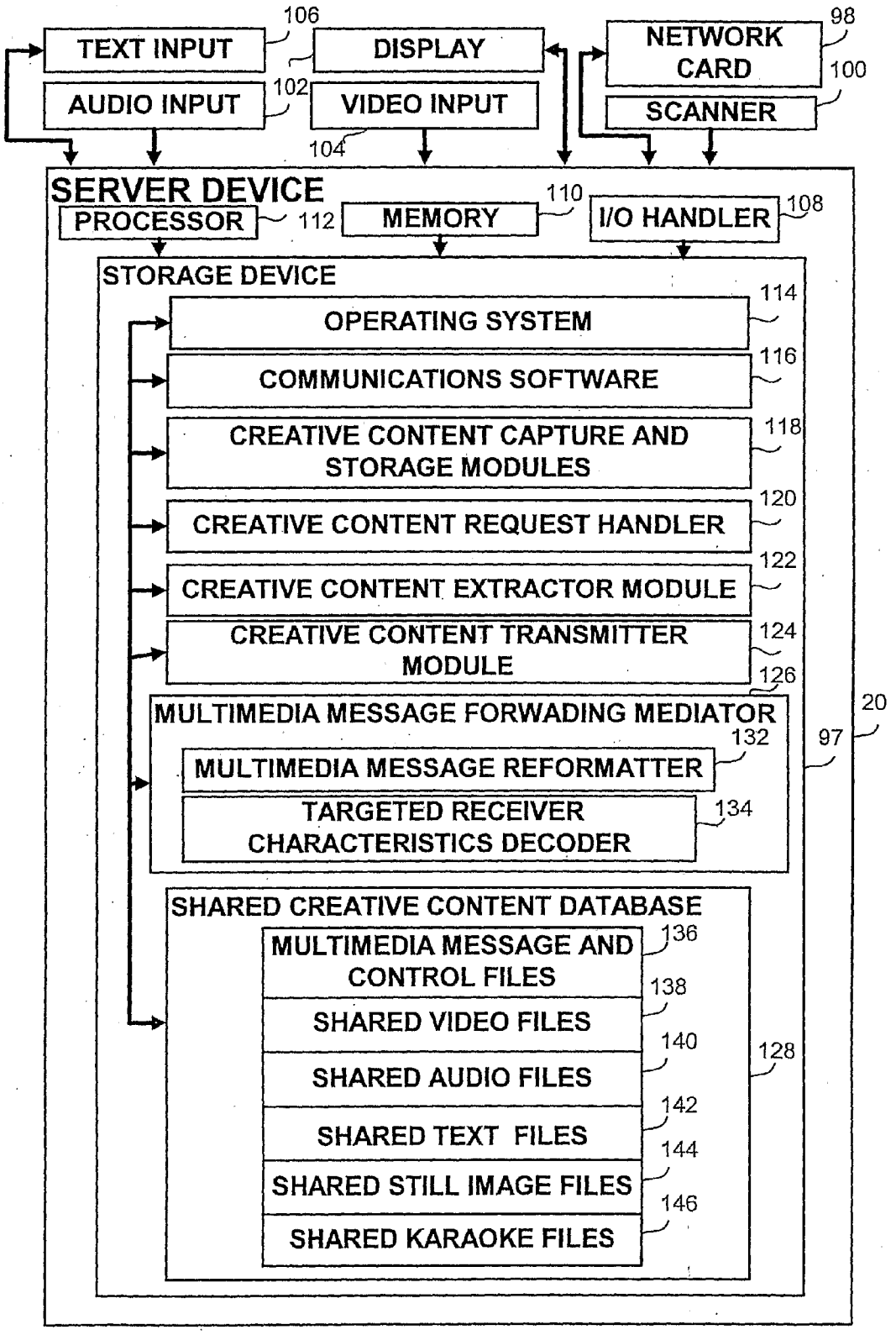

TEXT INPUT
106
DISPLAY
NETWORK CARD
98
100
AUDIO INPUT
102
VIDEO INPUT
SCANNER
104
SERVER DEVICE
PROCESSOR
112
MEMORY
110
I/O HANDLER
108
STORAGE DEVICE
OPERATING SYSTEM
114
COMMUNICATIONS SOFTWARE
116
CREATIVE CONTENT CAPTURE AND STORAGE MODULES
118
CREATIVE CONTENT REQUEST HANDLER
120
CREATIVE CONTENT EXTRACTOR MODULE
122
CREATIVE CONTENT TRANSMITTER MODULE
124
126
MULTIMEDIA MESSAGE FORWADING MEDIATOR
20
97
132
MULTIMEDIA MESSAGE REFORMATTER
TARGETED RECEIVER CHARACTERISTICS DECODER
134
SHARED CREATIVE CONTENT DATABASE
MULTIMEDIA MESSAGE AND CONTROL FILES
136
138
SHARED VIDEO FILES
140
SHARED AUDIO FILES
128
142
SHARED TEXT FILES
144
SHARED STILL IMAGE FILES
146
SHARED KARAOKE FILES

FIG. 3

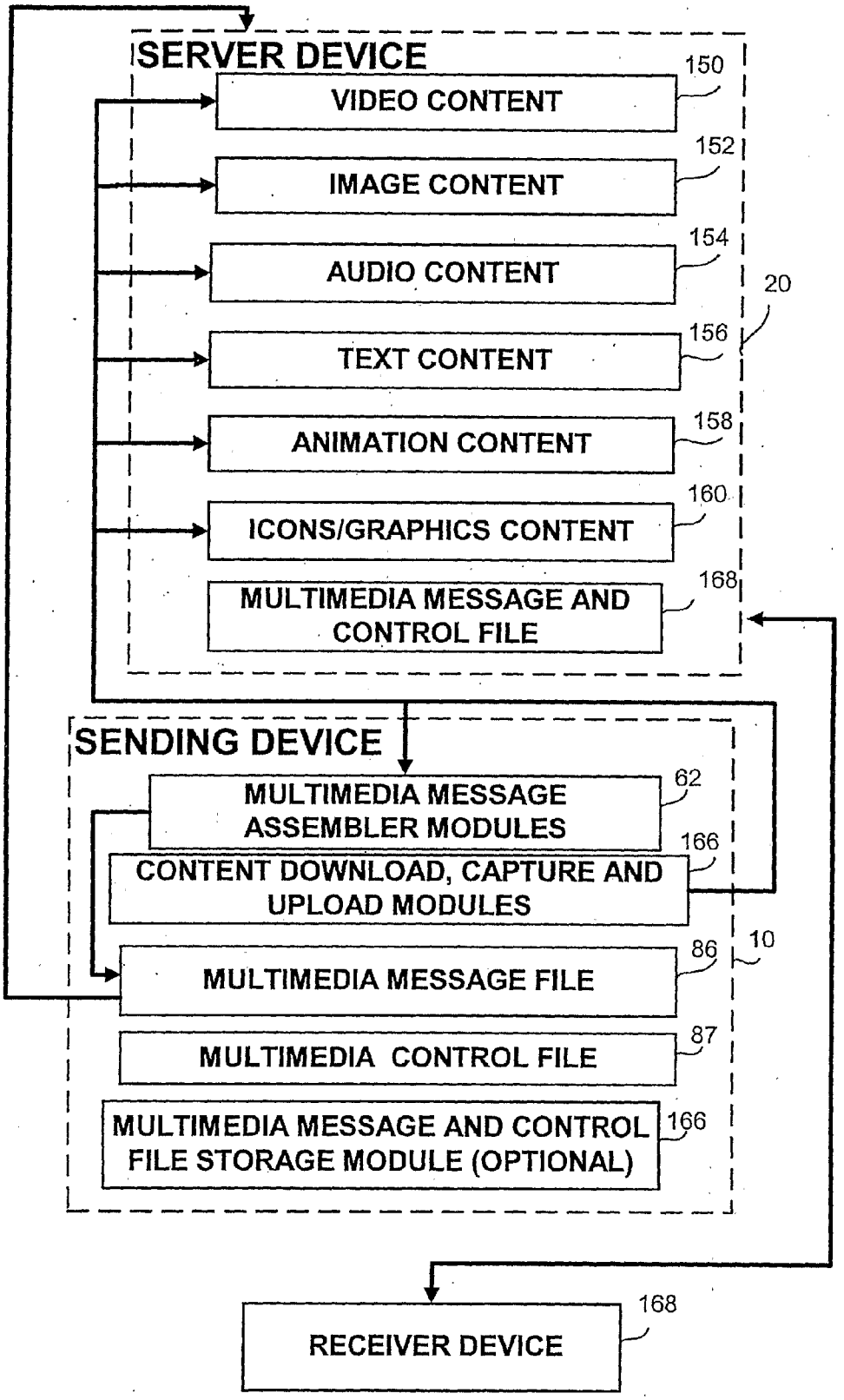

SERVER DEVICE
150
VIDEO CONTENT
152
IMAGE CONTENT
154
AUDIO CONTENT
20
156
TEXT CONTENT
158
ANIMATION CONTENT
160
ICONS/GRAPHICS CONTENT
168
MULTIMEDIA MESSAGE AND CONTROL FILE
SENDING DEVICE
62
MULTIMEDIA MESSAGE ASSEMBLER MODULES
166
CONTENT DOWNLOAD, CAPTURE AND UPLOAD MODULES
10
86
MULTIMEDIA MESSAGE FILE
87
MULTIMEDIA CONTROL FILE
166
MULTIMEDIA MESSAGE AND CONTROL FILE STORAGE MODULE (OPTIONAL)
168
RECEIVER DEVICE

FIG. 4

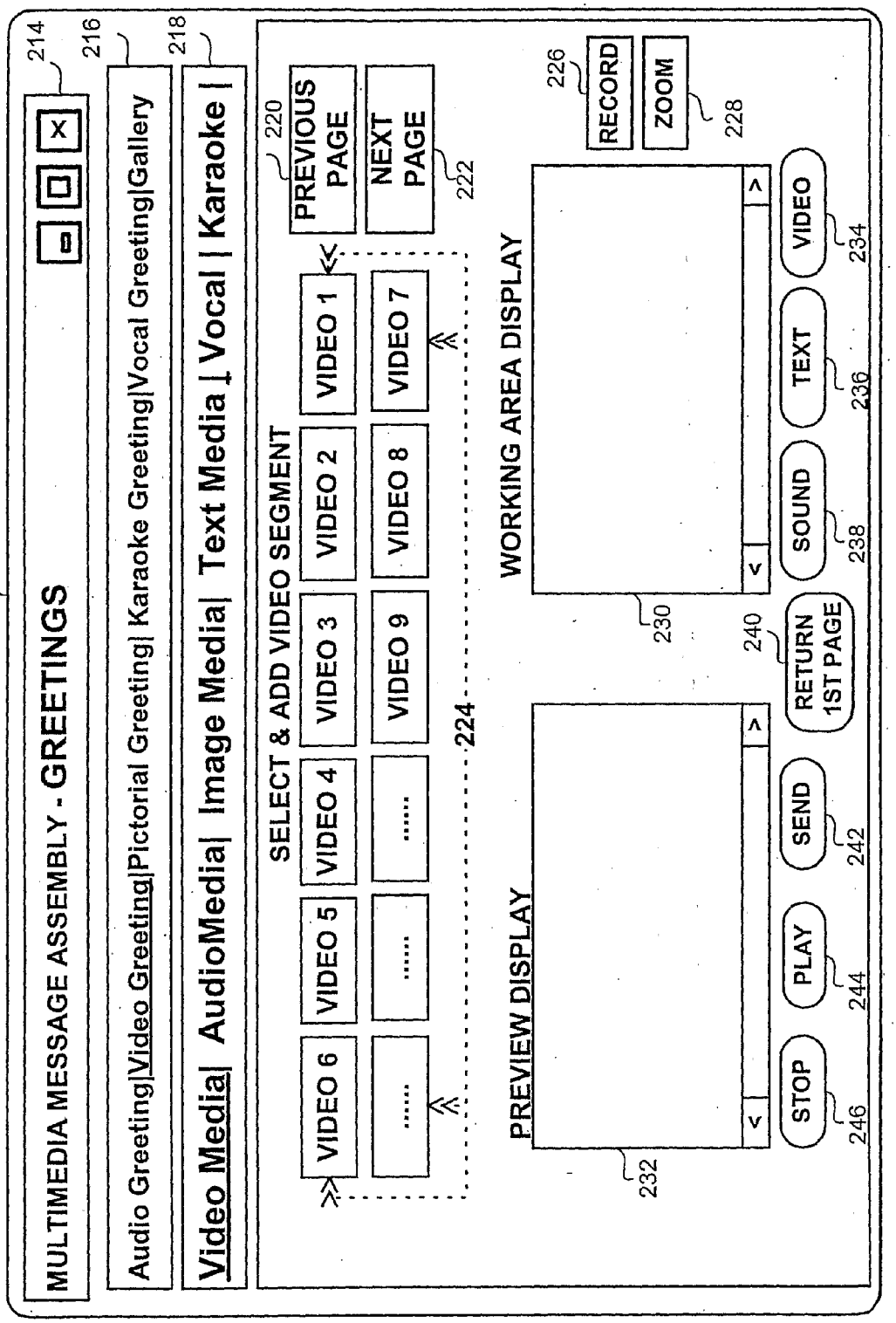

212
MULTIMEDIA MESSAGE ASSEMBLY - GREETINGS
214
216
Audio Greeting|Video Greeting|Pictorial Greeting| Karaoke Greeting|Vocal Greeting|Gallery
218
Video Media| AudioMedia| Image Media| Text Media | Vocal | Karaoke |
SELECT & ADD VIDEO SEGMENT
220
PREVIOUS PAGE
NEXT PAGE
222
VIDEO 6
VIDEO 5
VIDEO 4
VIDEO 3
VIDEO 2
VIDEO 1
VIDEO 7
VIDEO 8
VIDEO 9
224
WORKING AREA DISPLAY
226
RECORD
ZOOM
228
PREVIEW DISPLAY
230
232
240
RETURN 1ST PAGE
SOUND
238
TEXT
236
VIDEO
234
STOP
246
PLAY
244
SEND
242

FIG. 5

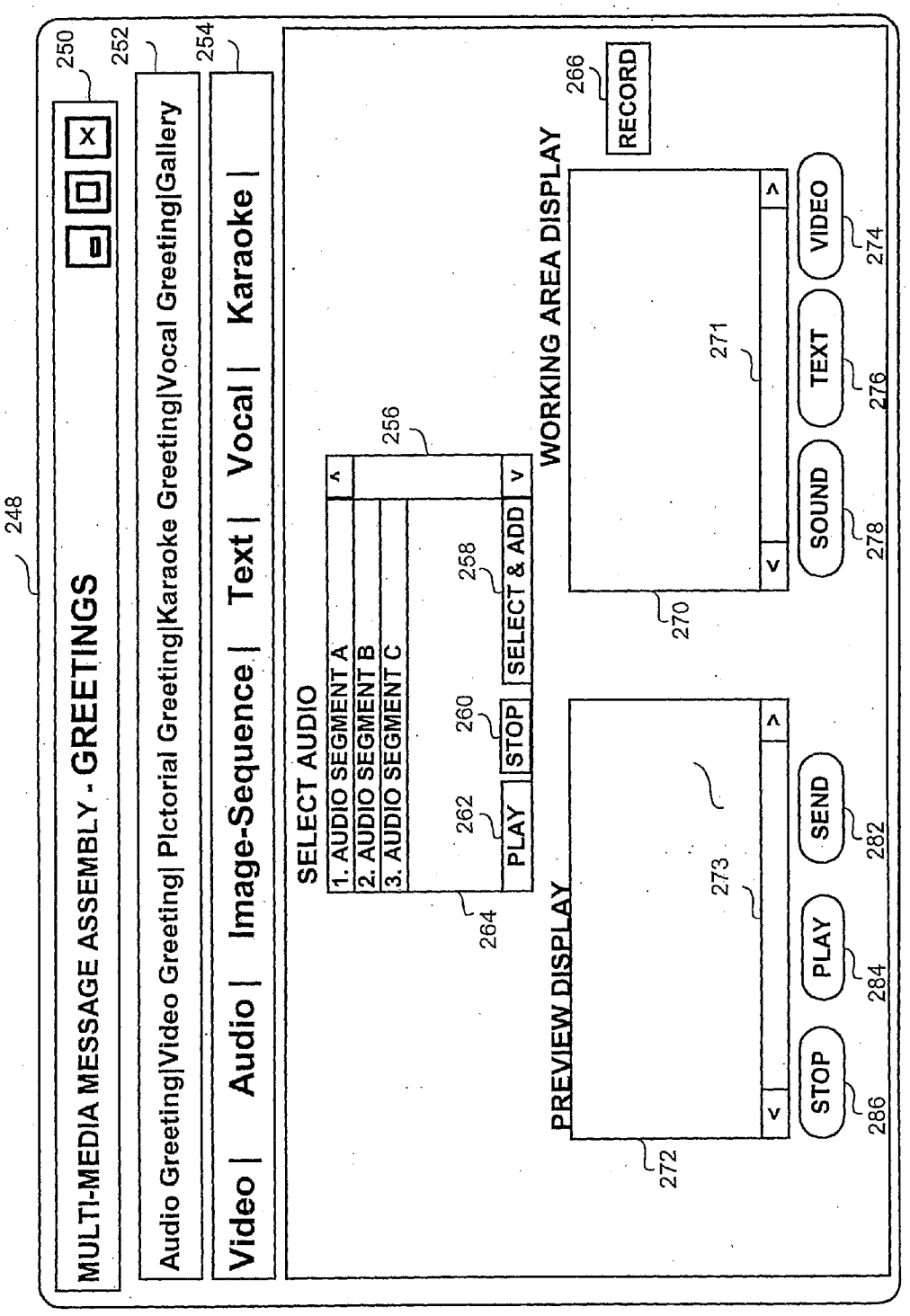

248
MULTI-MEDIA MESSAGE ASSEMBLY - GREETINGS
250
252
Audio Greeting|Video Greeting| Pictorial Greeting|Karaoke Greeting|Vocal Greeting|Gallery
254
Video | Audio | Image-Sequence | Text | Vocal | Karaoke |
SELECT AUDIO
1. AUDIO SEGMENT A
2. AUDIO SEGMENT B
3. AUDIO SEGMENT C
256
258
SELECT & ADD
260
STOP
262
PLAY
264
WORKING AREA DISPLAY
266
RECORD
271
270
SOUND
278
TEXT
276
VIDEO
274
PREVIEW DISPLAY
273
272
STOP
286
PLAY
284
SEND
282

FIG. 6

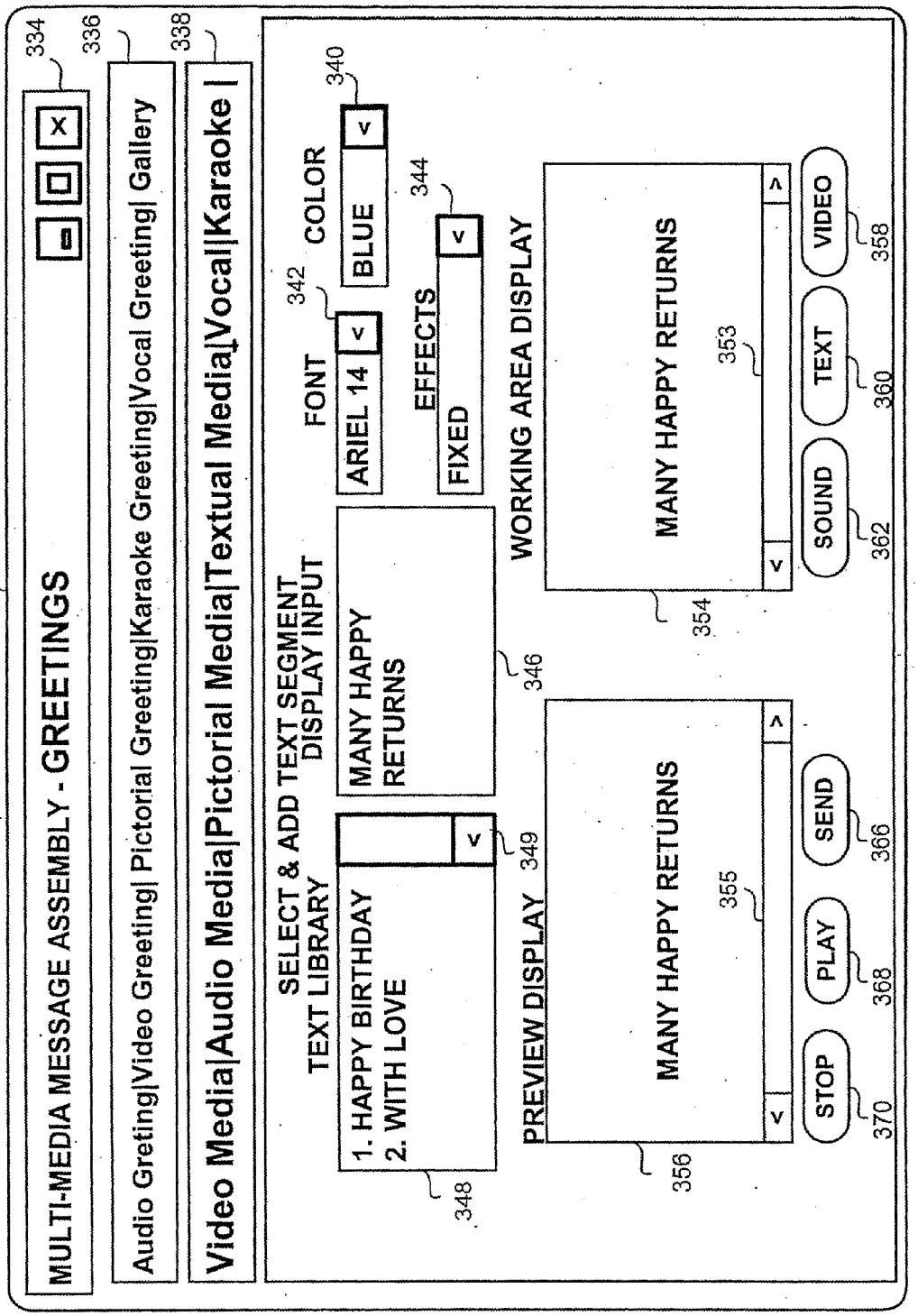

332
MULTI-MEDIA MESSAGE ASSEMBLY - GREETINGS
334
336
Audio Greting|Video Greeting| Pictorial Greeting|Karaoke Greeting|Vocal Greeting| Gallery
338
Video Media|Audio Media|Pictorial Media|Textual Media|Vocal|Karaoke |
SELECT & ADD TEXT SEGMENT
TEXT LIBRARY
1. HAPPY BIRTHDAY
2. WITH LOVE
348
DISPLAY INPUT
MANY HAPPY RETURNS
346
FONT
342
ARIEL 14
COLOR
340
BLUE
EFFECTS
344
FIXED
WORKING AREA DISPLAY
PREVIEW DISPLAY
349
MANY HAPPY RETURNS
356
355
STOP
370
PLAY
368
SEND
366
MANY HAPPY RETURNS
354
353
SOUND
362
TEXT
360
VIDEO
358

FIG. 7

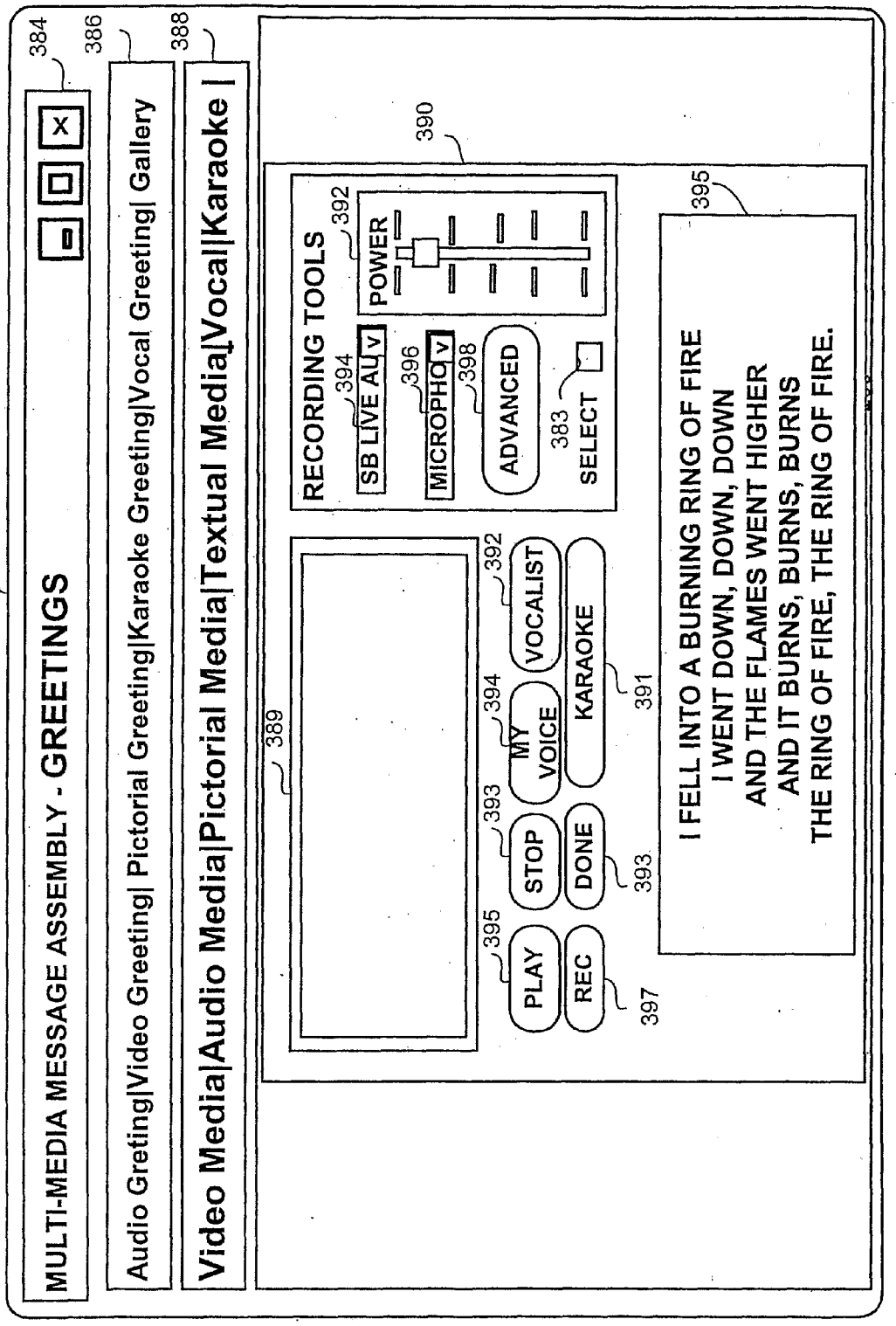

382
MULTI-MEDIA MESSAGE ASSEMBLY - GREETINGS
384
386
Audio Greting|Video Greeting| Pictorial Greeting|Karaoke Greeting|Vocal Greeting| Gallery
388
Video Media|Audio Media|Pictorial Media|Textual Media|Vocal|Karaoke |
389
RECORDING TOOLS
392
SB LIVE AU
394
MICROPHO
396
ADVANCED
398
SELECT
383
POWER
390
PLAY
395
REC
397
STOP
393
DONE
393
MY VOICE
394
VOCALIST
392
KARAOKE
391
I FELL INTO A BURNING RING OF FIRE
I WENT DOWN, DOWN, DOWN
AND THE FLAMES WENT HIGHER
AND IT BURNS, BURNS, BURNS
THE RING OF FIRE, THE RING OF FIRE.
395

FIG. 8

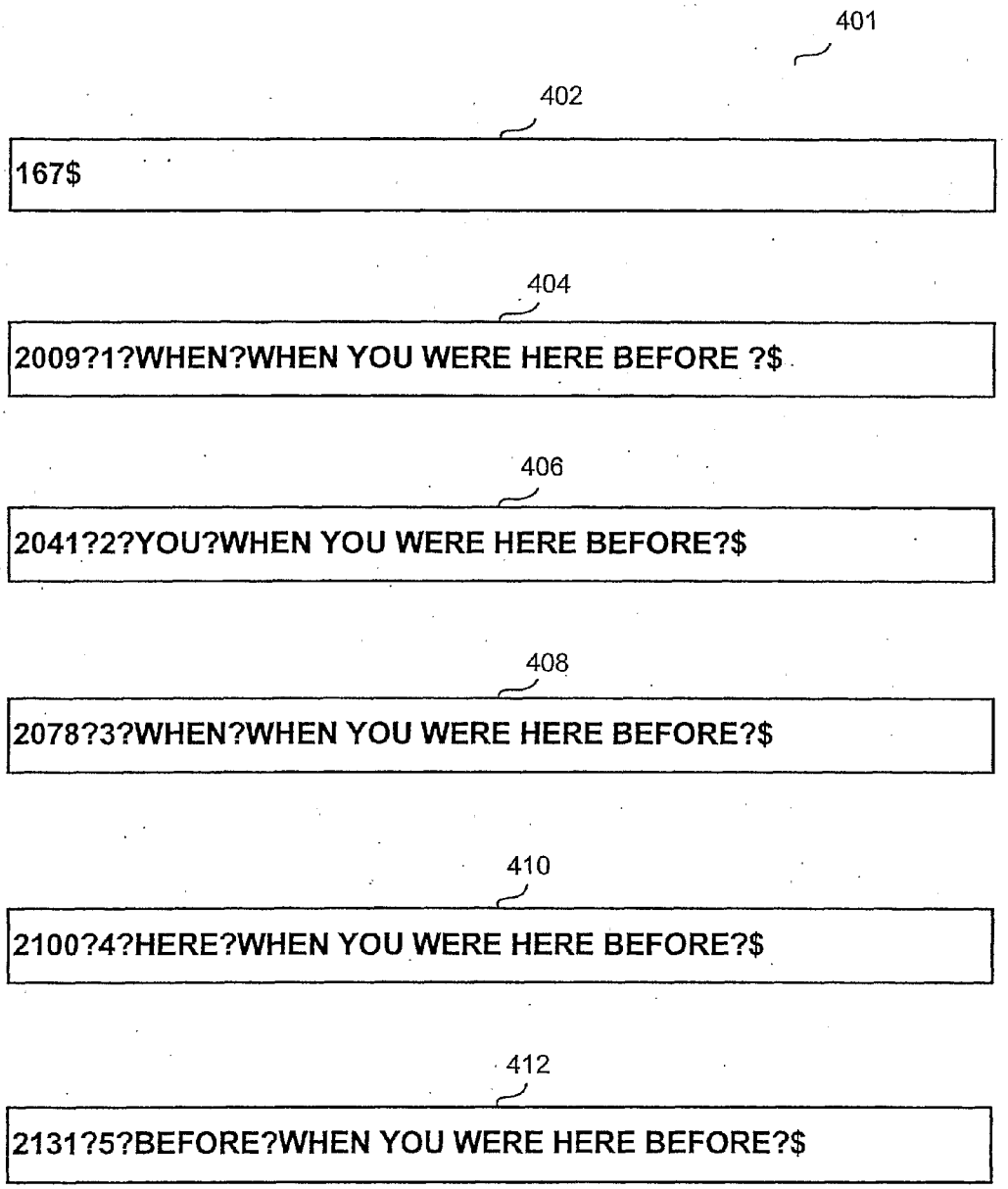

401
402
167$
404
2009?1?WHEN?WHEN YOU WERE HERE BEFORE ?$
406
2041?2?YOU?WHEN YOU WERE HERE BEFORE?$
408
2078?3?WHEN?WHEN YOU WERE HERE BEFORE?$
410
2100?4?HERE?WHEN YOU WERE HERE BEFORE?$
412
2131?5?BEFORE?WHEN YOU WERE HERE BEFORE?$

FIG. 9

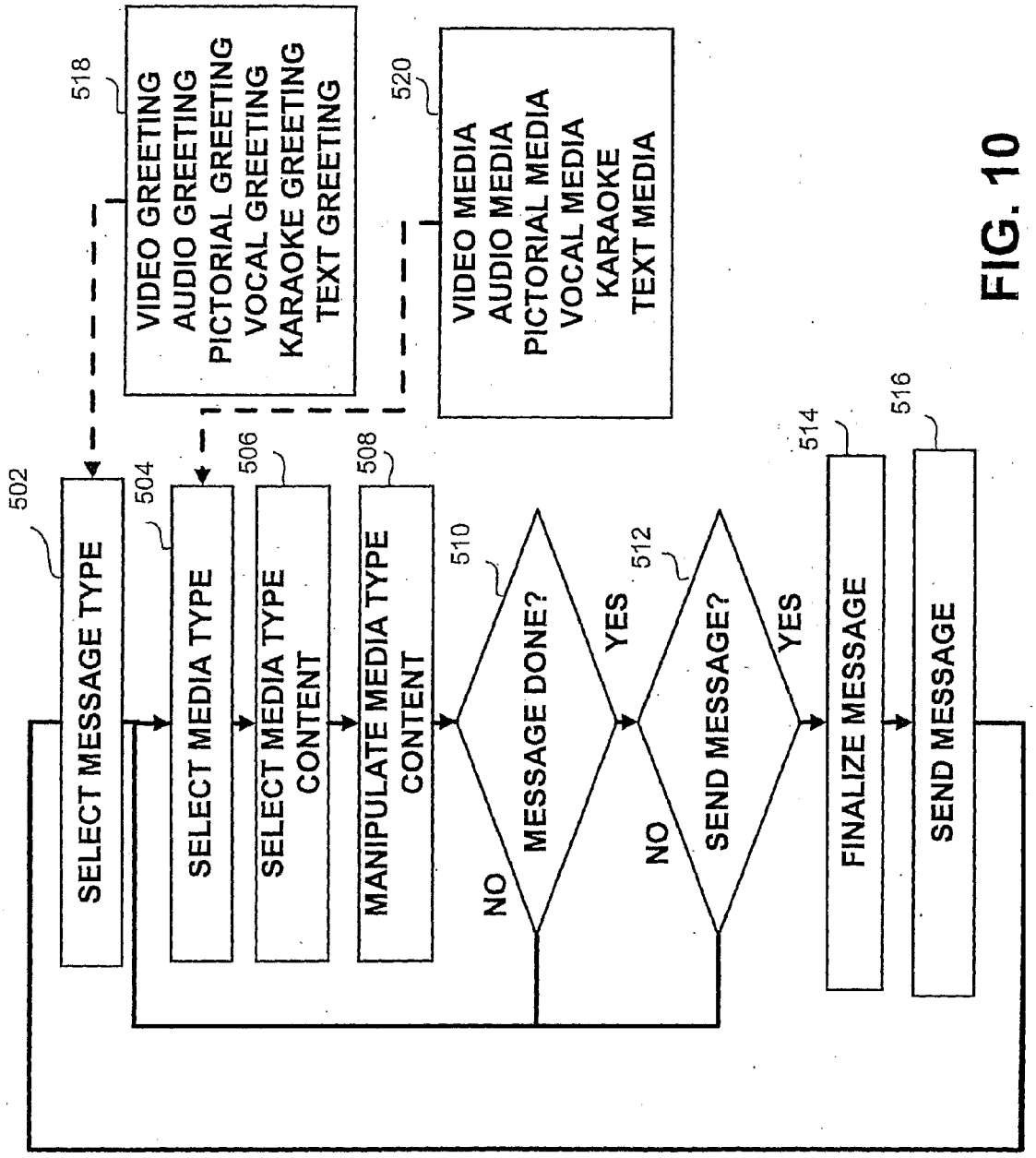

502
SELECT MESSAGE TYPE
504
SELECT MEDIA TYPE
506
SELECT MEDIA TYPE CONTENT
508
MANIPULATE MEDIA TYPE CONTENT
510
MESSAGE DONE?
NO
YES
512
SEND MESSAGE?
NO
YES
514
FINALIZE MESSAGE
516
SEND MESSAGE
518
VIDEO GREETING
AUDIO GREETING
PICTORIAL GREETING
VOCAL GREETING
KARAOKE GREETING
TEXT GREETING
520
VIDEO MEDIA
AUDIO MEDIA
PICTORIAL MEDIA
VOCAL MEDIA
KARAOKE
TEXT MEDIA

FIG. 10

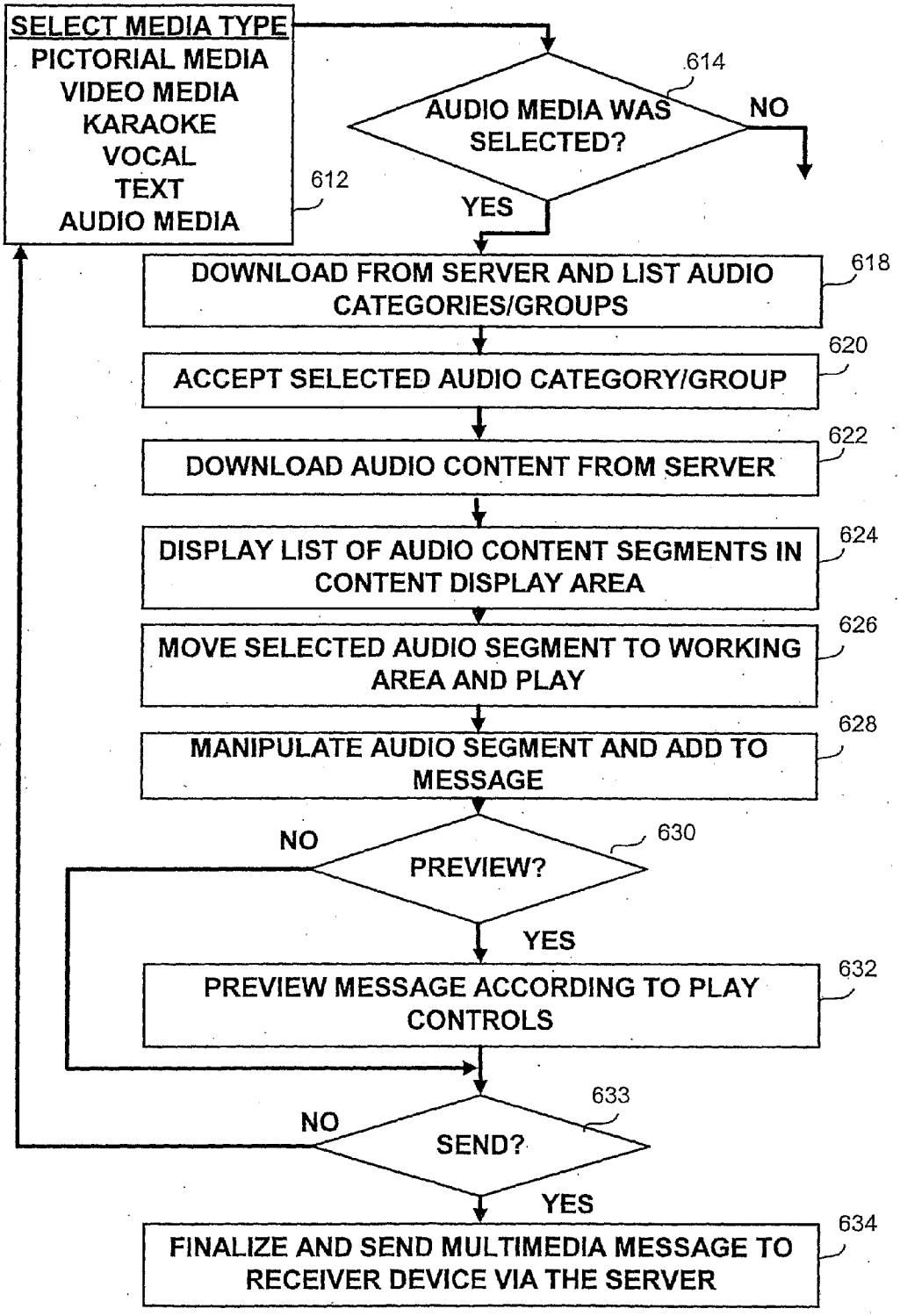

SELECT MEDIA TYPE
PICTORIAL MEDIA
VIDEO MEDIA
KARAOKE
VOCAL
TEXT
AUDIO MEDIA
612
AUDIO MEDIA WAS SELECTED?
614
NO
YES
DOWNLOAD FROM SERVER AND LIST AUDIO CATEGORIES/GROUPS
618
ACCEPT SELECTED AUDIO CATEGORY/GROUP
620
DOWNLOAD AUDIO CONTENT FROM SERVER
622
DISPLAY LIST OF AUDIO CONTENT SEGMENTS IN CONTENT DISPLAY AREA
624
MOVE SELECTED AUDIO SEGMENT TO WORKING AREA AND PLAY
626
MANIPULATE AUDIO SEGMENT AND ADD TO MESSAGE
628
NO
PREVIEW?
630
YES
PREVIEW MESSAGE ACCORDING TO PLAY CONTROLS
632
NO
SEND?
633
YES
FINALIZE AND SEND MULTIMEDIA MESSAGE TO RECEIVER DEVICE VIA THE SERVER
634

FIG. 11

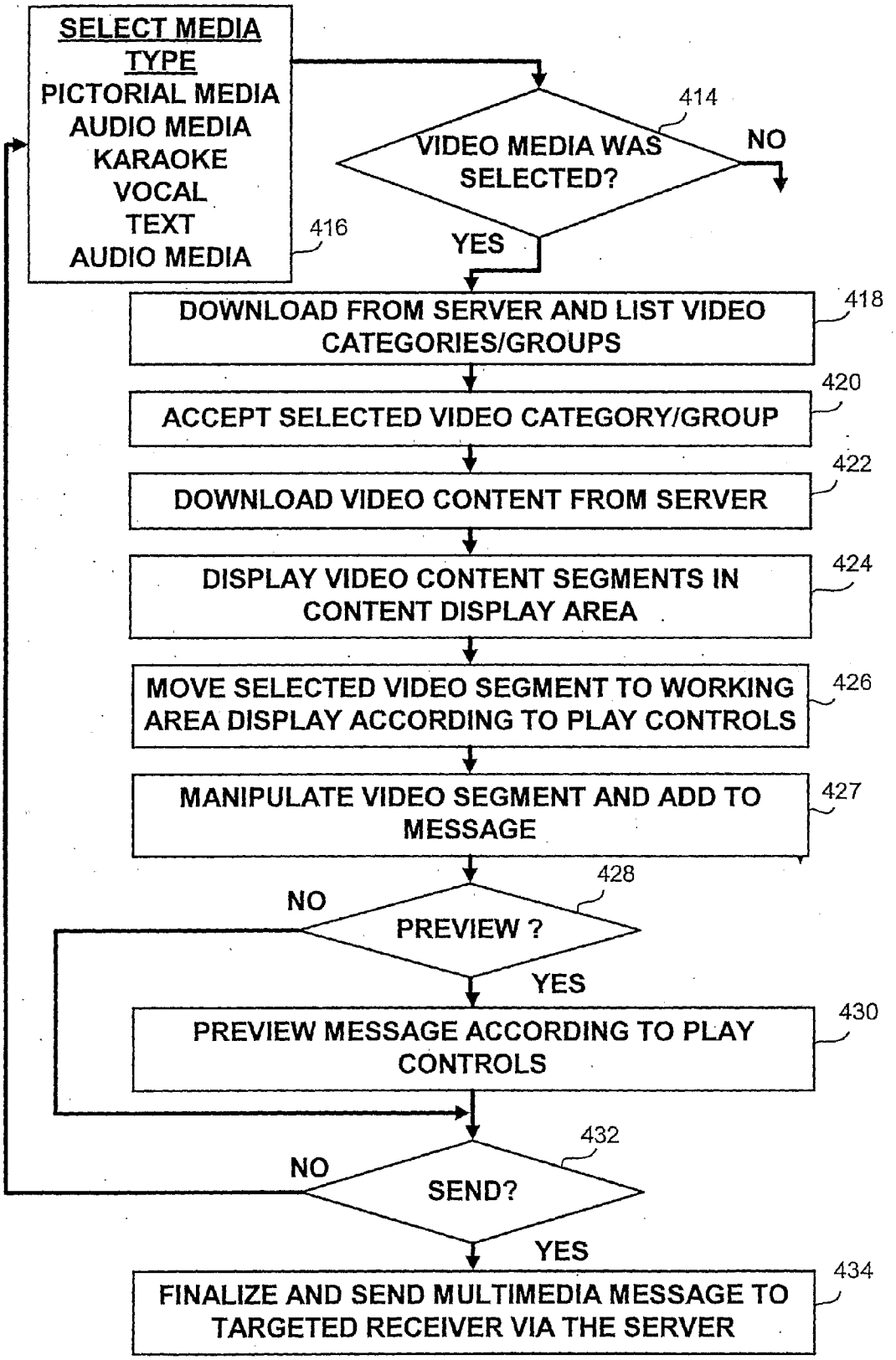

SELECT MEDIA TYPE
PICTORIAL MEDIA
AUDIO MEDIA
KARAOKE
VOCAL
TEXT
AUDIO MEDIA
416
414
VIDEO MEDIA WAS SELECTED?
NO
YES
DOWNLOAD FROM SERVER AND LIST VIDEO CATEGORIES/GROUPS
418
ACCEPT SELECTED VIDEO CATEGORY/GROUP
420
DOWNLOAD VIDEO CONTENT FROM SERVER
422
DISPLAY VIDEO CONTENT SEGMENTS IN CONTENT DISPLAY AREA
424
MOVE SELECTED VIDEO SEGMENT TO WORKING AREA DISPLAY ACCORDING TO PLAY CONTROLS
426
MANIPULATE VIDEO SEGMENT AND ADD TO MESSAGE
427
428
NO
PREVIEW ?
YES
PREVIEW MESSAGE ACCORDING TO PLAY CONTROLS
430
432
NO
SEND?
YES
FINALIZE AND SEND MULTIMEDIA MESSAGE TO TARGETED RECEIVER VIA THE SERVER
434

FIG. 12

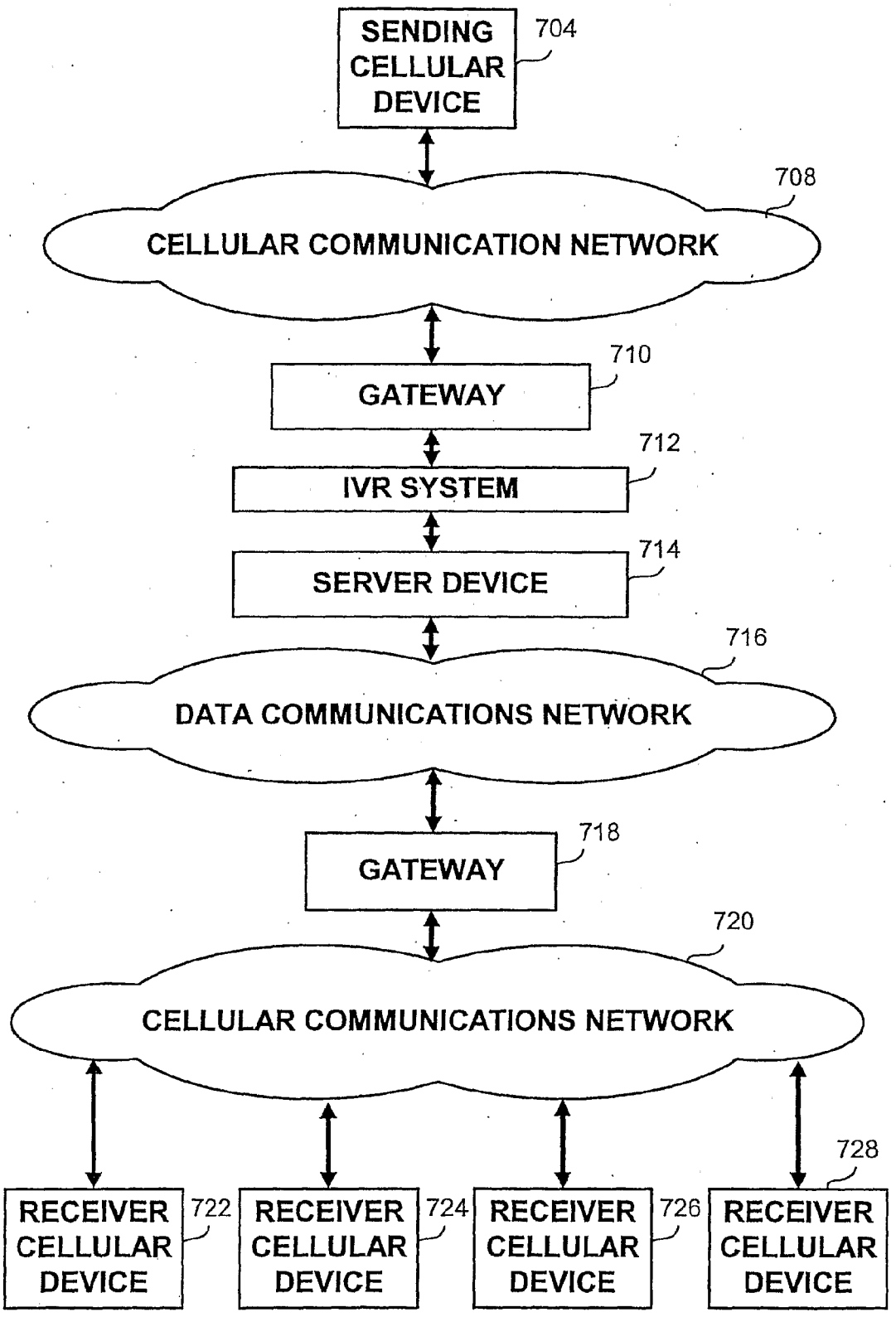

SENDING CELLULAR DEVICE
704
CELLULAR COMMUNICATION NETWORK
708
GATEWAY
710
IVR SYSTEM
712
SERVER DEVICE
714
DATA COMMUNICATIONS NETWORK
716
GATEWAY
718
CELLULAR COMMUNICATIONS NETWORK
720
RECEIVER CELLULAR DEVICE
722
RECEIVER CELLULAR DEVICE
724
RECEIVER CELLULAR DEVICE
726
RECEIVER CELLULAR DEVICE
728

FIG. 13

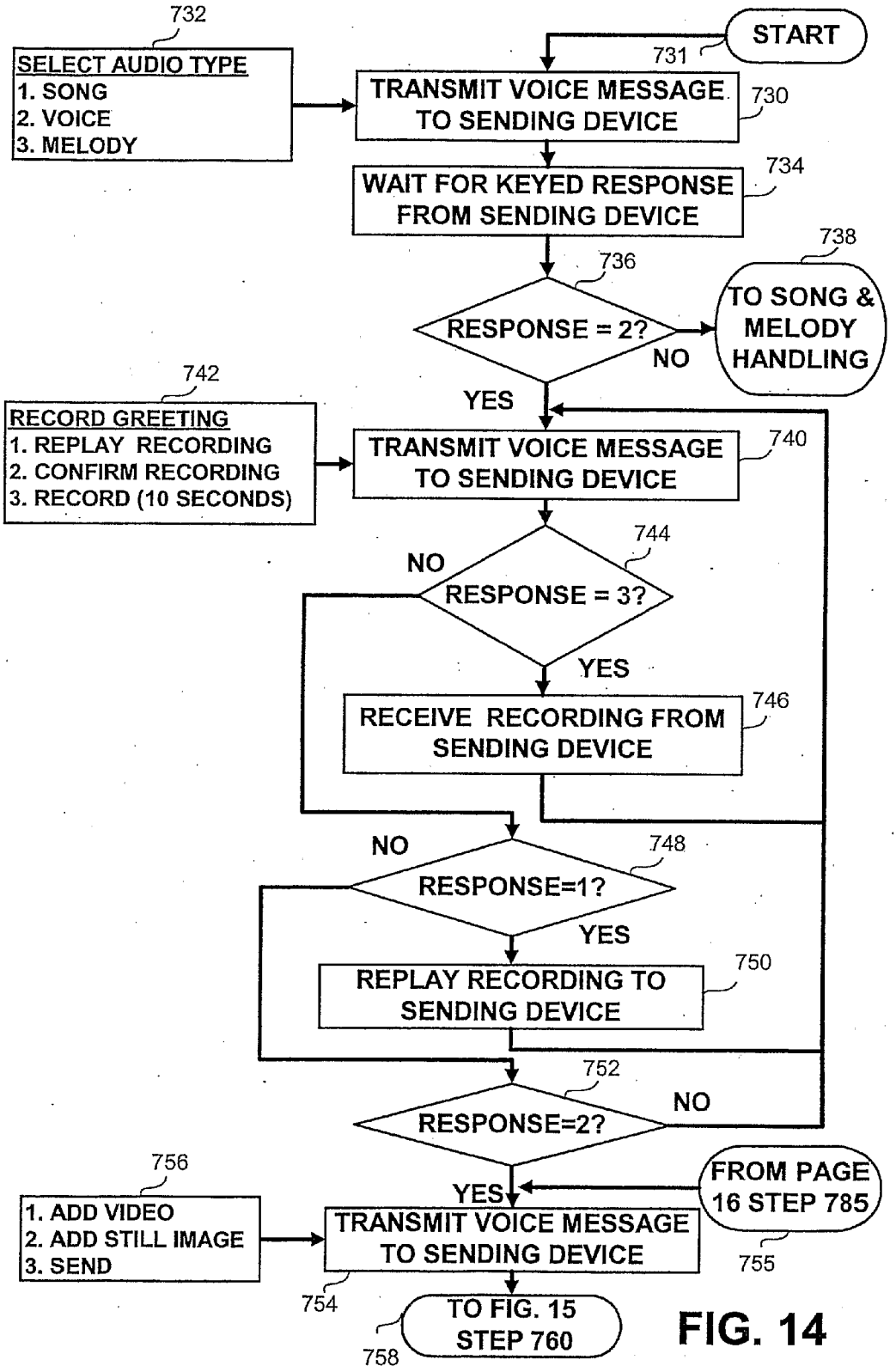

732
SELECT AUDIO TYPE
1. SONG
2. VOICE
3. MELODY
START
731
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
730
WAIT FOR KEYED RESPONSE FROM SENDING DEVICE
734
738
736
RESPONSE = 2?
NO
TO SONG & MELODY HANDLING
YES
742
RECORD GREETING
1. REPLAY RECORDING
2. CONFIRM RECORDING
3. RECORD (10 SECONDS)
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
740
744
NO
RESPONSE = 3?
YES
RECEIVE RECORDING FROM SENDING DEVICE
746
NO
748
RESPONSE=1?
YES
REPLAY RECORDING TO SENDING DEVICE
750
752
NO
RESPONSE=2?
FROM PAGE 16 STEP 785
YES
756
1. ADD VIDEO
2. ADD STILL IMAGE
3. SEND
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
755
754
TO FIG. 15 STEP 760
758

FIG. 14

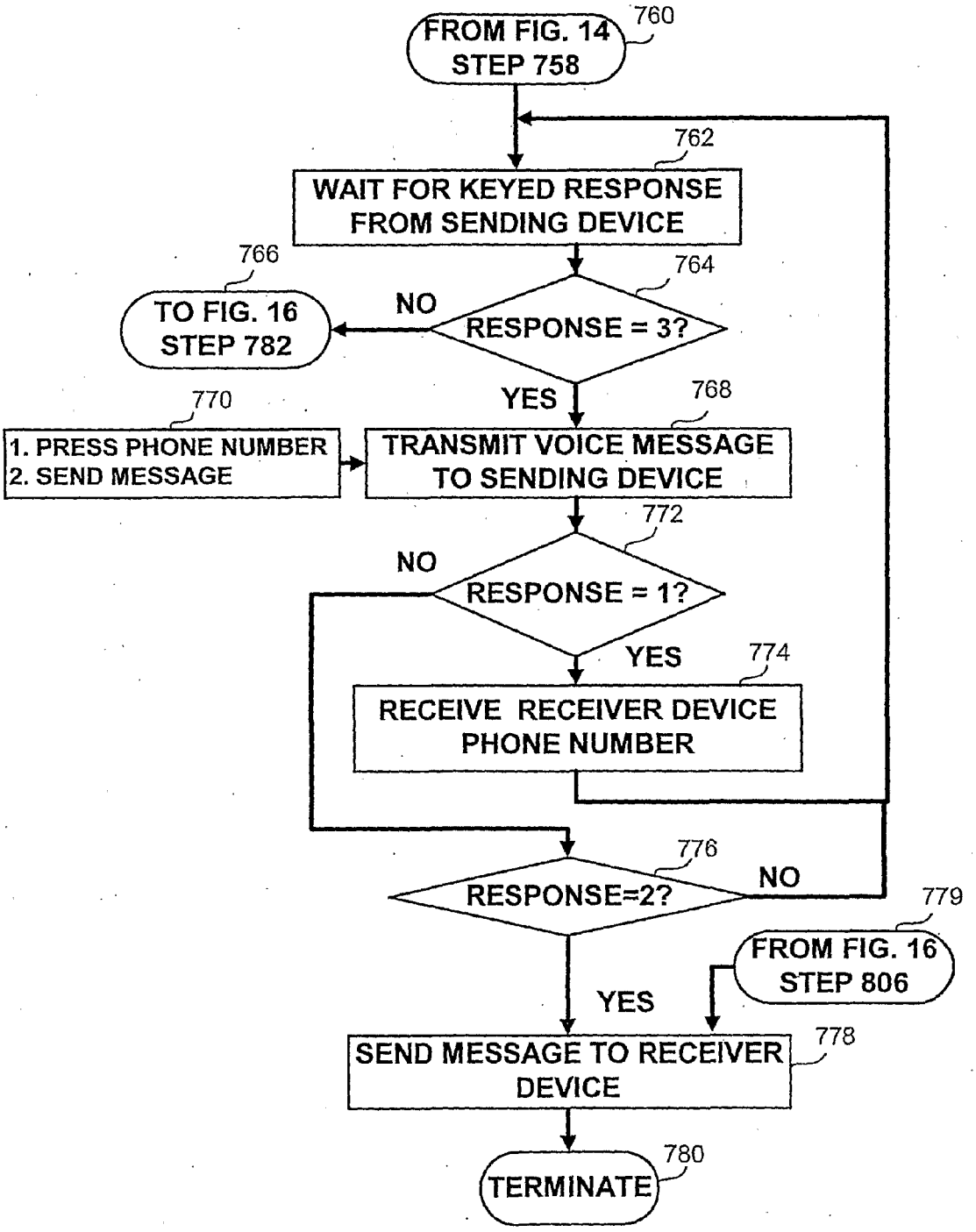

FROM FIG. 14
STEP 758
760
762
WAIT FOR KEYED RESPONSE
FROM SENDING DEVICE
766
TO FIG. 16
STEP 782
NO
764
RESPONSE = 3?
YES
770
1. PRESS PHONE NUMBER
2. SEND MESSAGE
768
TRANSMIT VOICE MESSAGE
TO SENDING DEVICE
772
NO
RESPONSE = 1?
YES
774
RECEIVE RECEIVER DEVICE
PHONE NUMBER
776
RESPONSE=2?
NO
779
FROM FIG. 16
STEP 806
YES
778
SEND MESSAGE TO RECEIVER
DEVICE
780
TERMINATE

FIG. 15

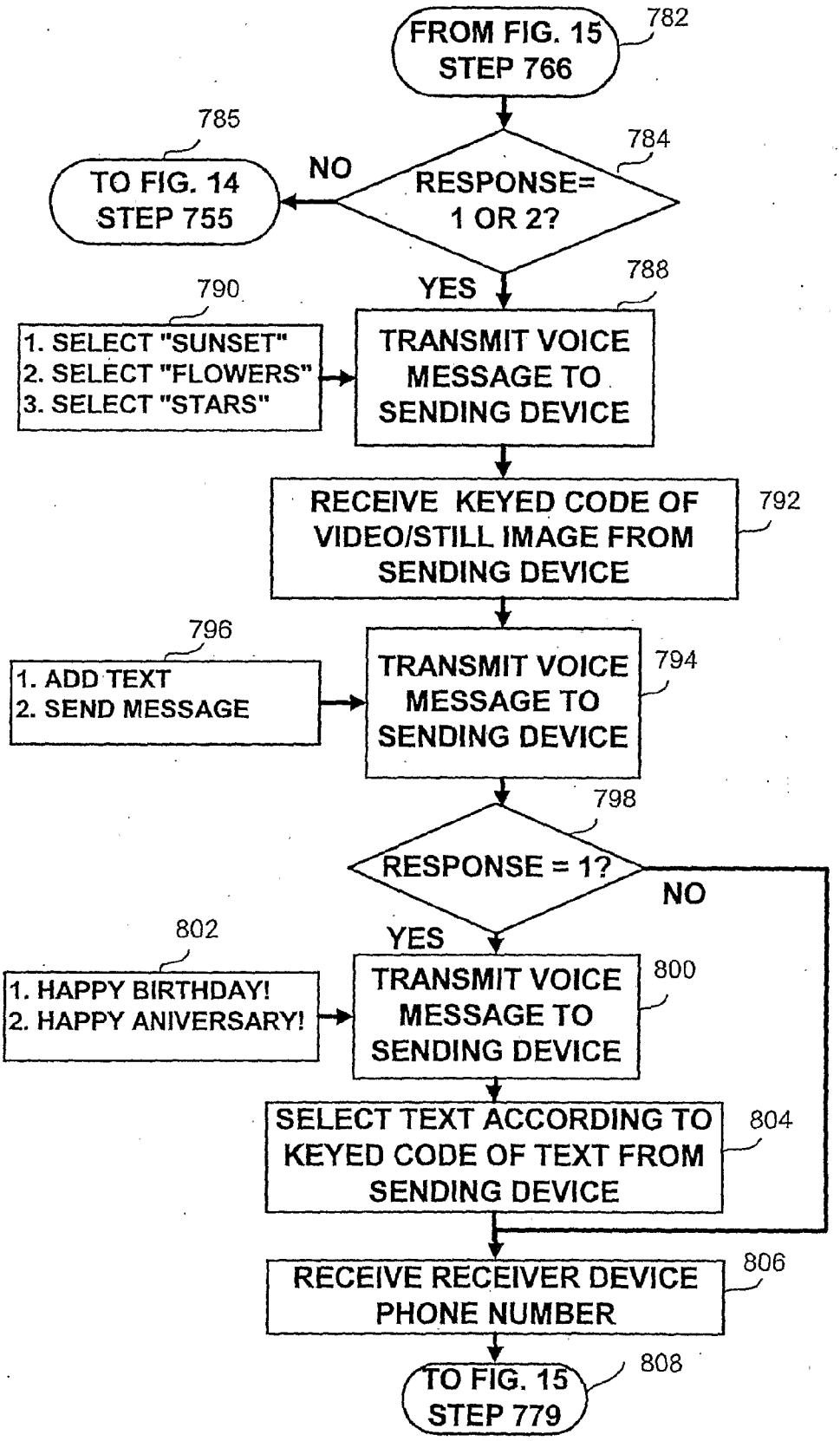

FROM FIG. 15 STEP 766
782
RESPONSE= 1 OR 2?
784
NO
TO FIG. 14 STEP 755
785
YES
788
1. SELECT "SUNSET"
2. SELECT "FLOWERS"
3. SELECT "STARS"
790
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
RECEIVE KEYED CODE OF VIDEO/STILL IMAGE FROM SENDING DEVICE
792
1. ADD TEXT
2. SEND MESSAGE
796
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
794
RESPONSE = 1?
798
NO
YES
1. HAPPY BIRTHDAY!
2. HAPPY ANIVERSARY!
802
TRANSMIT VOICE MESSAGE TO SENDING DEVICE
800
SELECT TEXT ACCORDING TO KEYED CODE OF TEXT FROM SENDING DEVICE
804
RECEIVE RECEIVER DEVICE PHONE NUMBER
806
TO FIG. 15 STEP 779
808

FIG. 16

APPARATUS AND METHOD FOR CREATING AND TRANSMITTING UNIQUE DYNAMICALLY PERSONALIZED MULTIMEDIA MESSAGES

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to an apparatus and method for creating and sending unique dynamically personalized multimedia messages to a remote receiver in general and more particularly, to an apparatus and method for generating, capturing, selecting, recording, and assembling input media segments into a unique dynamically personalized multimedia message file and transmitting the personalized multimedia message file for access and display to a remote receiver operating a multimedia access and display device.

[0003] 2. Discussion of the Related Art

[0004] Multimedia is a general term used to describe any application or technology that can be used to manipulate text, audio, images, graphics, and video. Multimedia provides a level interactivity with each of these elements separately, as well as through combinations of different multimedia mediums. In business, there is a plurality of ways in which the application of multimedia technology may be desired, whether for means of efficiency or increased productivity. Multimedia is typically includes one of the following: a) text and sound b) text, sound, and still or animated graphic images c) text, sound, and video images, d) video and sound, and e) multiple display areas, images, or presentations presented concurrently. Multimedia has found major users in the fields of advertising, web design, electronic publishing, technical documentation, information and asset management, and education.

[0005] Multimedia software is used typically in computers to present text, graphics, video, animation, and sound in an integrated way. Multimedia software is typically built of two basic components: a multimedia generator or multimedia assembler with which multimedia applications are created, and a multimedia access which enables access to the information gathered in the applications.

[0006] Recently electronic mail-based and cellular telephone-based multimedia messaging became basic communication tools the use of which has become widespread. Multimedia communication provides the advantage of an enriched medium in which expression, feeling, emotion and mood as well as content can be conveyed. Today, electronic mail systems and cellular telephone systems in which the user is able to create, store, send, forward and attach multimedia messages to regular e-mail messages are well known and are part of the communication tools used by many on a daily basis.

[0007] Multimedia messaging is a communications technology that allows users to exchange multimedia communications between capable mobile phones and other devices, such as personal computers. Multimedia messaging defines a way to send and receive, almost instantaneously, wireless messages that include images, audio, and video clips in addition to text. A common current application of multimedia messaging is picture messaging or the use of camera phones to take photos for immediate delivery to a mobile recipient. Other possibilities include animations and graphic presentations of stock quotes, sports news, and weather reports. One problem associated with such mail and cellular systems is that they do not provide for advanced media types, such as for example streaming video. Another problem is that the existing systems provide only for multimedia messaging based on pre-prepared and pre-stored non-flexible media forms. The options for choosing one of the media forms and the personalization of the standard forms are fairly limited. Typically, a user desiring to send a multimedia message is given the option to select a pre-prepared and pre-stored multimedia message out of a set of pre-prepared messages that are stored in the system and are arranged by categories and sub-categories or groups to provide for a limited variety in respect of the expression and the moods sought by the user. For example, if the user desires to send a greeting card, he could select one of several categories, such as greeting cards, one of several sub-categories, such as birthday cards, wedding anniversary cards, seasonal greeting cards or the like. Once a certain pre-prepared message is selected by the user, the message can be personalized only in a substantially limited manner, such as for example, by generating an accompanying text by keying in a text segment to be inserted in a pre-determined format into a pre-determined space in the body of the message. The existing systems do not allow for enhanced and advanced personalization of the messages, such as enabling the selection of the visual elements, such as introducing one or more still images, enabling the addition of desired audio elements, such as specific songs including vocals and/or instrumental music, enabling the selection and insertion of specific text in a variety of formats, and locations, enabling the addition of personally recorded or personally captured media types and the like.

[0008] It would be readily perceived by one with ordinary skills in the art that there is a need for an advanced apparatus and a user-friendly method that will provide for enhanced and advanced personalization of multimedia messages, such as enabling the selection of the visual elements, enabling the addition of desired audio elements, enabling the selection and insertion of specific text elements in a variety of formats, and locations, and enabling the addition of personally recorded or personally captured media types.

SUMMARY OF THE PRESENT INVENTION

[0009] One aspect of the present invention regards an apparatus for the creation and transmission of personalized multimedia messages. The apparatus comprises: a multimedia message assembler for creating a multimedia message by assembling and manipulating diverse media type content segments, a shared creative content database to store diverse media type content segments and to provide the diverse media type content segments to the multimedia message assembler in response to a request; and a multimedia message forwarding mediator to receive multimedia messages and receivers addresses associated therewith, to communicate with a receiver device, to reformat the multimedia message according to the multimedia capabilities of the receiver device, and to forward the multimedia message to the receiver device.

[0010] A second aspect of the present invention regards a method for the creation and transmission of unique personalized multimedia messages from a sending device to a receiver device. The method comprises obtaining media type content segments from a shared creative content database, creating a multimedia message by assembling and manipulating the diverse media type content segments, and forwarding the multimedia message to the receiver device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The present invention will be understood and appreciated more fully from the following detailed description taken in conjunction with the drawings in which:

[0012] FIG. **1** is a schematic illustration of a computing and communication environment in which the proposed apparatus could operate, in accordance with a first preferred embodiment of the present invention;

[0013] FIG. **2** is a simplified block diagram of the sending device, in accordance with the first preferred embodiment of the present invention;

[0014] FIG. **3** is a simplified block diagram of the server device, in accordance with the first preferred embodiment of the present invention;

[0015] FIG. **4** is a simplified block diagram of the operative modules of the sending and the server devices, in accordance with the first preferred embodiment of the present invention;

[0016] FIG. **5** is a schematic representation of the user interface display providing for the selection and manipulation of the video segment, in accordance with the first preferred embodiment of the present invention;

[0017] FIG. **6** is a schematic representation of the user interface display providing for the selection and manipulation of the audio segment, in accordance with the first preferred embodiment of the present invention;

[0018] FIG. **7** is a schematic representation of the user interface display providing for the selection and manipulation of the text segment, in accordance with the first preferred embodiment of the present invention;

[0019] FIG. **8** is a schematic representation of the user interface display associated with a karaoke sub-system, in accordance with the first preferred embodiment of the present invention;

[0020] FIG. **9** is a simplified view of the novel and unique karaoke text and control file, in accordance with the first preferred embodiment of the present invention;

[0021] FIG. **10** is a simplified flow chart of main logic of the proposed method, in accordance with the first preferred embodiment of the present invention;

[0022] FIG. **11** is a simplified flow chart of the audio media handling associated with the proposed method, in accordance with the first preferred embodiment of the present invention;

[0023] FIG. **12** is a simplified flow chart of the video media handling associated with the proposed method, in accordance with the first preferred embodiment of the present invention;

[0024] FIG. **13** is a schematic illustration of a computing and communication environment in which the proposed apparatus could operate, in accordance with a second preferred embodiment of the present invention; and

[0025] FIGS. **14**, **15** and **16** are simplified flow charts presenting the operation of the proposed method, in accordance with the second preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0026] An apparatus and method for the creation and transmission of unique dynamically personalized multimedia messages is disclosed. The apparatus includes a sending device, such as a cellular telephone with enhanced computing and multimedia display capabilities or a personal computer, running client-side software. The sending device is linked communicatively via a data communication network, such as the Internet, or via a cellular communications network, to a computing machine utilized as a server device running server-side software. The server device is linked communicatively to remote receiver devices such as client devices across the data communications network and/or cellular telephones via a gateway device between the data communications network and a cellular telephone network. The sending device could include private libraries of media-types content, media-types content capturing (recording), media-type content input and media-type content temporary storage devices while the server device includes a media-type content type database, multimedia access and multimedia play software. The apparatus may further include specific development tools for generating, synchronizing, coding, and encrypting a novel karaoke text and control file format.

[0027] In the preferred embodiments of the present invention the content of the multi-media message is a unique dynamically personalized greeting message. The greeting message is a social expression that includes the sending of salutations, regards, respects, remembrance, felicitations, well-wishing, compliments, or best wishes created from one individual and delivered to one or more other individuals. In other preferred embodiments of the invention the content and the purpose of the multi-media message could be different, such as unique targeted advertising content for commercial purposes, unique personalized musical/audio clips or gaming content for professional or amateur entertainment purposes, and the like.

[0028] In the preferred embodiments of the present invention the multi-media message is created from multiple media-type content inputs having diverse formats within digitally stored libraries and provide for the creation and transmission of unique dynamically personalized multimedia messages. The media-type content inputs include stored video, stored audio, stored still images, stored still image sequences, stored text, and stored karaoke. The media-type inputs could be digitally stored in specific libraries on the sending device or on the server device or could be captured from various, magnetic media or optic media, such as magnetic disks or DVDs. The media-type content inputs could be further captured from recording devices connected to the sending device, such as a camcorder, a microphone, a keyboard, and the like. In other preferred embodiments the media-type contents could further include animation segments, icons, graphics either digitally stored in specific media-type content libraries or captured from various media sources, such as downloading from a data communications network, and the like.

[0029] Referring now to FIG. **1** which is a schematic illustration of a computing and communication environment in which the proposed apparatus could operate, in accordance with a first preferred embodiment of the present invention. Sending device **10** is a computing device with communications capabilities, such as a personal desktop computer, a network computer, a mainframe computer, or any other computing device operated by a user. Device **10** is communicatively linked to a data communication network **18**, such as the Internet. Device **10** includes a multimedia message assembler **14** to create a unique dynamically personalized multimedia message, a multimedia message player **16** to preview the multimedia message, and a private creative content library **12** to store temporarily downloaded, captured and recorded media-type content segments and to hold multimedia message output and control files. Multimedia message assembler **14** is a set of inter-related software programs the functionality of which is to manipulate the media-type content segments in order create, to compose, to assemble, to produce and to transmit the unique dynamically personalized multimedia output message. Multimedia message player **16** is a set of logically inter-related software programs the functionality of

which is to allow for the playing of the unique multimedia output message in all the stages of the production in order to provide for previewing of the multimedia message. Private creative content library **12** is a database installed on a memory device (not shown) of sending device **10**. Library **12** stores media-type content input for multimedia message assembler **14** to operate upon and other temporary files needed for the running of multimedia message assembler **14**. The multimedia message is provided with a suitable target address, transmission scheduling parameters, and transmitted via diverse communication software, hardware and lines to server device **20** via data communications network **18**. Server device **20** is a computing device the functionality of which is: a) to provide requested media-type content segments as input to sending device **10** via data communication network **18**, b) to receive the unique multimedia message from sending device **10** and to transmit the message to one or more target devices **30**, **32**, **34**, **36** via data communications network **18** or via an internetwork gateway device **26** and consequently to a cellular communications network **28**. The receiver devices **30**, **32** are linked to cellular communications network **28**. The receiver devices **30**, **32** are cellular communications devices, such as cellular telephones. The receiver devices **34** and **36** are linked communicatively to data communications network **18**. Devices **34** and **36** are computing devices with communication capabilities and with multimedia content playing capabilities. Multimedia message is received by receiver devices **30**, **32**, **34** and **36** are replayed by the user of devices **30**, **32**, **34** and **36** in order to perceive the content of the message. Server device **20** includes a shared creative content database **24** and a multimedia message forwarding mediator **22**. Database **24** is a data structure for storing media type content segments. In response to requests of the user of sending device **10** specific media-type content segments are transmitted to sending device **10** in order to supply the user of device **10** with the media elements for the creation of the multimedia message. Multimedia message forwarding mediator **22** is a software program for the handling of the received multimedia messages, such as receiving the messages, communicating with the receiver devices, responding to the capabilities of the receiver devices, optionally re-formatting the messages in accordance with the characteristics of the receiver devices and forwarding the message to the receiver devices. Server **20** is further responsible for generating and transmitting error messages or other feedback messages to sending device **10** concerning the results of the message delivery process.

[0030] Still referring to FIG. **1** note should be taken that although on the drawing under discussion only a single sending device, a single server device and a few target devices are shown, in a realistic environment a plurality of sending devices could create a plurality of multimedia output messages and transmit the messages to a plurality of target devices via a plurality of server devices. Further note should be taken that in other preferred embodiments of the present invention, diverse other communications network could be used, such as a local area network, a satellite communication network, a landline telephone network, a cable communications network or the combinations thereof. In yet other preferred embodiments of the invention, the server device **20** could be dispensed with and the entire message transmission process could be performed by sending device **10** and receiver devices **30**, **32**, **34** and **36**. In such a case the shared creative content database **24** could be installed in the sending device **10** while the multimedia message handling, such as message reception, message re-formatting, error processing, and feedback generation and transmission could be performed by the receiver devices **30**, **32**, **34** and **36**. It would be easily perceived by one with ordinary skills in the art that subject to the installed software, sending device **10** is capable of functioning as a receiver device or a sending/receiver while receiver devices **30**, **32**, **34**, **36** subject to the installed software could be functioning as sending devices or receiver/sending devices.

[0031] Referring now to FIG. **2** in the first preferred embodiment of the invention, sending device **10** is a computing device, such as a personal computer, network computer, mainframe computer or the like with communications capabilities. Sending device **10** includes a processor device **58**, a memory device **56**, such as a RAM, a ROM, a PROM, or an EPROM, an I/O handler device **54** and a storage device **60**, such as a magnetic disk or an optical disk. Several peripheral devices are attached to sending device **10**. The peripheral devices include a text input device **46**, such as a keyboard, a mouse, a display device **48**, such as an LCD screen or a plasma screen, a network interface card **42**, an audio input device **50**, such as a microphone, a video input device **52**, such as a camcorder or a Web camera, and a scanner device **44**. Processor **58** is the logic circuitry that responds to and processes the basic instructions that drive a computer. Processor **58** when installed in a personal computer or embedded in small devices is typically a microprocessor. Memory **56** is the electronic holding place for instructions and data that the computer's processor can reach quickly. Memory **58** is distinguished from storage device **60** that holds the much larger amounts of data that would not fit into RAM and may not be immediately needed there. Storage devices include hard disks, magnetic disks, optical disks, floppy disks, CD-ROM, and tape backup systems. I/O handler **54** is the program a computer's processor uses to get the computer system started after it is turned on and manages data flow between the computer's operating system and attached devices such as the hard disk, video adapter, keyboard, mouse, and printer. The primary text input device **46** is a keyboard. Scanner **44** is a device that captures images from photographic prints, posters, magazine pages, and similar sources for computer editing, display and storage. Scanner **44** typically comes with software, such as Adobe's Photoshop product. Primary audio input device **50** is a microphone which is a transducer that converts sound into electrical signal. Primary video input device **52** is a camcorder which is an electronic device (typically a digital camera) containing both a camera and a recorder in one emit for recording video images and audio onto storage device **60**. Network interface card **42** (also called network adapter, MC and the like) is a piece of computer hardware designed to allow computers to communicate over a data communications network.

[0032] Still referring to FIG. **2** storage device **60** includes an operating system **66**, a communications software **68**, a media capture software **70**, a multimedia message assembler **62**, a private creative content library **64**, a shared creative content downloader module **86**, and a private creative content uploader module **87**. Operating system **66** is the system software responsible for the direct control and management of hardware and basic system operations and it provides a foundation upon which to run application software such as word processing programs, web browsers and others. Media capture software **70** is logically coupled to peripheral devices and is responsible for capturing media-type content input from all

the suitable sources, such as the Internet, private library, recording input devices, portable storage devices and the like. Communications software **68** is responsible for the performance of communications in association with the network interface card **42**. Multimedia message assembler **62** is the primary client-side software. The functionality of assembler **62** is to provide the user with the option of selecting, creating, assembling, playing and transmitting a multimedia message file. Assembler **62** is capable of respond to the user's requests regarding: a) obtaining media-type content segments, b) editing, mixing, layering, combining, manipulating, joining, replacing, separating media-type content segments, such as to create a multimedia output message file, c) obtaining transmission parameters, such as date of transmission, target address, and the like, d) storing a multimedia output control file, e) capturing and recording media-type segments, and f) sending captured media-type content segments for storage in a shared remote database or a local library for later use. Multimedia message assembler **62** is a set of logically interrelated software programs. Assembler **62** includes a video and animation editor module **71** for manipulating video and animation segments; a still image/image sequence editor module **72** for manipulating still image segments; a sound editor module **73** for manipulating audio segments; a text editor module **74** for manipulating text segments; a karaoke sub-system **76** for recording customized vocals on pre-defined instrumental music segments; a media-type synchronizer module **78** to synchronize audio input, video input, text input, animation input and recorded input; a multimedia output message generator module **80** to create a multimedia output message from the synchronized media-type segments; a multimedia message player module **82** for previewing the multimedia output message; and a karaoke coder-decoder and encryption/decryption module **84** for generating novel unique karaoke text/controls file. Private creative content library **64** stores private media-type segments that include private video files **88**, private audio files **90**, private text files **92**, private still image files **94**, and private karaoke files **96**. Shared creative content downloader module **86** receives requests from the user concerning a required media type content input, locates the requested media-type content input on the server device **20** of FIG. **1** and downloads media-type content input from the server device **20** to the sending device **10**. Private creative content uploader module **87** receives requests from the user concerning the transmission of the media-type content input from the private creative content library **64** on the sending device **10** and uploads the media-type content input from the sending device **10** to the shared creative content database **24** on the server device **10** of FIG. **1**.

[0033] Referring now to FIG. **3** server device **20** is a computing device, such as a personal computer, network computer, mainframe computer or the like with communications capabilities. Server device **20** includes a processor device **112**, a memory device **110**, such as a RAM, a ROM, a PROM, or an EPROM, an I/O handler device **108** and a storage device **97**, such as a magnetic disk or an optical disk. Several peripheral devices are attached to server device **20**. The peripheral devices include a text input device **106**, such as a keyboard or a mouse, a display device **102**, such as an LCD screen or a plasma screen, a network interface card **98**, an audio input device **102**, such as a microphone, a video input device **104**, such as a camcorder or a Web camera, and a scanner device **100**. Storage device **97** includes an operating system **114**, communications software **116**, creative content capture and storage module **118**, a creative content request handler **120**, a creative content extractor module **122**, a creative content transmitter **124**, a multimedia message forwarding mediator **126** and a shared creative content database **128**. Multimedia message forwarding mediator **126** includes a multimedia message reformatter **132**, and a receiver device characteristics decoder **134**. Shared creative content database **128** includes multimedia control files **136**, shared video files **138**, shared audio files **140**, shared text files **142**, shared still image files **144** and shared karaoke files **146**. The functionality of creative content capture and storage modules **118** is to capture media-type content segments via the appropriate peripheral devices, such as network interface card **98**, scanner **100**, video input **104**, audio input **102**, and the like. The captured media-type content segments are suitably categorized, grouped, indexed, structured, encoded, encrypted and digitally stored in the shared creative content database **128**. Note should be taken that the source of the media-type content segments could be the private creative content library **64** of sending device **10** of FIG. **2**. Further sources could be any other site across the data communications network, such as regular content provider sites. Yet further sources could be portable storage devices, such as magnetic or optical disks, scanned text documents, scanned graphics, and the like. Creative content request handler **120** is responsible for responding to request of the user of sending device **10** of FIG. **2** via shared creative content downloader module **86**. Handler **120** will respond to the request by passing the identification of the shared file to the creative content extractor module **122** that will obtain the requested file from database **128** and will transmit the file via creative content transmitter **124** to sending device **10** of FIG. **2**. Creative content transmitter module **124** is responsible for: a) transmitting the requested shared creative content files to the sending device **10** of FIG. **1** and b) forwarding the multimedia message received from sending device **10** to receiver devices **30**, **32**, **34** and **36** of FIG. **1**. Multimedia message forwarding mediator **126** receives the multimedia message from sending device **10** via data communications network **18** and extracts the transmission scheduling parameters and the targeted address from the message. Mediator **126** will generate a Short Message Service (SMS) message to the receivers **30**, **32**, **34** and **36** in order to obtain the multimedia-related capabilities of the receivers **30**, **32**, **34** and **36** via the receiver characteristics decoder module **134**. In accordance with the obtained results the multimedia message could be handled in one of three alternative ways: a) if the multimedia playing capabilities of the receiver entirely match the formats of the multimedia message then the message is forwarded to the receiver in the original format according to the transmission scheduling parameters, b) if the multimedia playing capabilities of the receiver partially match the formats of the multimedia message then the message is reformatted to match the playing capabilities of the receiver and transmitted according to the transmission scheduling parameters, and c) if the multimedia playing capabilities of the receiver do not match the formats of the multimedia message then the message the multimedia message output and an associated multimedia control file are stored on the server device **20** while simultaneously a feedback message indicating multimedia player incompatibility is sent to the sending device **10** of FIG. **2** and a text message is forwarded to the receiver indicating the lack of capability for the playing the multimedia message on the receiver device **30**, **32**, **34** and **36**, the address of the sending device, such as sending device **10**,

and the options for the receiver regarding the appropriate display of the multimedia message, such as accessing the server device **20** directly and submitting a request for the playing of the multimedia message stored on the server device **20**. The function of shared creative content database **128** is storing the shared media-type content segments, such as shared video files **138**, shared audio files **140**, shared text files **142**, shared still image files **144**, and shared karaoke files **146**. The files **138**, **140**, **142**, **144** and **146** could be accessed and obtained by the user of sending device **10** for downloading to sending device **10** in order to be manipulated such as to create a multimedia message output file. The user of sending device **10** could also upload private media-type content files **88**, **90**, **92** and **96** from sending device **10** in order to insert the private files into shared creative content database **128** and mark them as either shared files or private files. Optionally, shared creative content database **128** further stores unique personalized multimedia message and control files **136** received from sending device **10**.

[0034] Referring now to FIG. **4** when a user operating sending device **10** desires to create and send a multimedia message, such as a multimedia greeting message, the multimedia message assembler modules **62** are activated. Assembler **62** enables the user to select a greeting message type, such as a text message, a voice recording, a still image sequence with text or overlaid thereon. In accordance with the selected greeting message type the assembler **62** allows the user of sending device **10** to select one of the media-type categories and media-type groups that the user desires to be a part of the multimedia greeting message. In accordance with selected media-type, media-type category and media-type group the assembler **62** downloads via the Internet from server device **20** one or more media-type content segments stored in the suitably ordered data records, such as video content **150**, image content **152**, audio content **154**, text content **156**, animation content **158**, and icons/graphics content **160**. The sending device could further capture media-type content segments and upload the captured segments to the server device **20** via the content download, capture and upload modules **166**. The downloaded media-type, media-category, and media-group content segments are displayed to the user for selection, editing, joining, mixing, deleting, replacing, previewing or otherwise manipulating. When the user completes the manipulation of a selected content segment assembler **62** enables the selection of a media-type that matches the logical combination of the media-types constituting the multimedia greeting message. Thus, a greeting in the image-sequence format could include the selection and manipulation of one or more still images, audio segments and text segments, while a greeting in audio format could include one or more audio segments overlaid by text segments. When the user completes the creation of a multimedia greeting message a multimedia message output file **86** and a multimedia message control file **87** are generated and optionally saved by the multimedia message and control file storage module **166**. When the user wishes to transmit the multimedia greeting message file then a set of required parameters is submitted, such as one or more receiver address, transmission scheduling data and the like. The message is transmitted to the receiver device **168** via a data communications network or via a cellular communications network via the server device **20** for replay by the user of the receiver device **168**.

[0035] Referring to FIG. **5** in the first preferred embodiment of the present invention, the user interface designed for the apparatus and method is a Graphical User Interface (GUI). A graphical user interface is a method of interacting with a computer through a metaphor of direct manipulation of graphical structures in addition to text. GUIs display visual elements such as icons, windows, and the like. GUIs consists of graphical structures such as windows, menus, radio buttons, check boxes, list boxes and icons and employs a pointing device (such as a mouse, trackball, or touch screen) in addition to a keyboard. The window **212** is one out of a plurality of windows designed to interact with and guide a user of the sending device **10** of FIG. **1** in the creation and transmission of a multimedia message containing a multimedia greeting. The window **212** is one of a logically interconnected set of windows that appear either by user selection or in a substantially pre-defined manner following the selection for a multimedia message type and for a media type. The function of window **212** (and all the other windows participating in the creation and transmission of the multimedia message) is to interact dynamically with the user and enable the user a) to display one or more video segments that could be part of the multimedia greeting, b) to select one or more video segments that could be part of the multimedia message, b) to manipulate the video segments, c) to preview the multimedia message containing a multimedia greeting, d) to record a video segment via a recording device, and e) to create and send a composite multimedia greeting that includes either the manipulated video segments only or includes previously created multimedia greeting that were manipulated in other windows. Window **212** includes a window header **214**, a greeting message type window **216**, a media-type window **218**, a preview display **232**, a working area display **230**, a set of media-type segments displays page **224**, displays pages manipulator buttons **220**, **222** and **240**, a set of preview manipulation buttons **246**, **244** and **242**, a set of working area manipulation buttons **238**, **236** and **234**, and other special purpose buttons **226** and **238**. Window header **214** includes the description of the program name, and various window-manipulation buttons (hide, maximize, minimize) Greeting message type window **216** includes several menu items associated with greeting message types, such as audio format greeting, video format greeting, image-sequence format greeting, text format greeting, vocal format greeting, and karaoke format greeting. Pointing at one of the menu items and clicking the pointing device will affect the selection of a greeting message type. According to the selected greeting message type in window **216** one or more menu items are displayed in window **218** corresponding to specific media-types potentially assembled into the multimedia message containing the multimedia greeting are either enabled or disabled for selection. Thus, for example when the menu item "Video Greeting" corresponding to the creation of a video greeting message type is selected then in window **218** the menu items "Video Media", "Audio Media", "Text Media" are enabled. The selection of one of the menu items "Video Media", "Audio Media", and "Text Media" will display windows designed for the manipulation of the corresponding video, audio or text media-types that could be assembled into the multimedia message. Window **212** is designed for the manipulation of video media-type. Thus, when greeting type "Video Greeting" and the media-type "Video Media" is selected then a window (not shown) for the selection of video media content categories and optionally of video media content groups stored in the shared creative content database **64** of FIG. **1** on the server device **20** of FIG. **1** will be displayed

to allow the user to select the suitable video content category and video content group. Consequent to the selection, the window **212** will be displayed and within the video display windows **244** the video segments stored under the selected video content category and video content group, downloaded from the server device **20** to the sending device **10** will be played. The functionality of windows **244** is to display video segments Thus, in the drawing under discussion about twelve video display windows are shown. If the number of the relevant video segments is greater than the number of video display windows displayed then two or more pages containing about twelve video segments will be generated and user will be able to scan the pages by utilizing the "Previous page" **220**, "Next page" **222** and "Return to first page" **240** buttons. Next, the user could affect the moving of the displayed content of one of the video windows **224** to the working area display **230**, by dragging the video content from the video display pages **224** to the working area display **230** or alternatively by pointing and clicking on the selected video content. Control buttons "Sound" **238**, "Text" **236** and "Video" **234** allow for the separate display of the diverse media-type contents already assembled into the multimedia message at each stage of the manipulation. When the user wishes to inspect the entire multimedia message that is assembled at a specific point in time then the "Play" button **244** is activated and in the preview display window **232** the created multimedia message including all the media-types assembled at that specific point in time will be played. The preview could be paused by the "Stop" button **246**. When subsequent to the preview of the assembled multimedia message the user determines that the creation of the greeting message is completed then the "Send" button **242** is activated and one or more specific windows will be displayed a) for the submission of the transmission parameters, b) for receiver device's address, and c) for confirmation of the storing of the multimedia control file either on the sending device or the server device, and d) for the confirmation of the transmission of the completed multimedia greeting. In order to record a private video content segment the user activates the "Record" button **226** that will activate a video input device, such as a camcorder. The video input device will capture a video clip of a pre-determined length and will display it in the working area display **230** for suitable manipulation. The recorded video clip could be captured, recorded, stored and transmitted to the server device **20** by the interaction with a different window (not shown). In order to manipulate the video content segment in depth the "Zoom" button **228** is activated in order to zoom into a specific detail of the video frame.

[0036] Still referring to FIG. **5** the message type window **216**, includes an additional menu item indicated as "Gallery" The "Gallery" menu item will generate a window (not shown) that will display either the shared video files or the private video files. Note should be taken that the above-described interactive display window is exemplary only. In other preferred embodiments of the present invention, the visual structure of the window, the constituent graphical elements, the functionalities of the graphical elements and the pre-defined interactions among the graphical elements could be entirely different as long as the proposed functionality of the apparatus and method is maintained. In other preferred embodiments, for example, the preview display window **232** could be merged into the working area display **230**, the number of buttons and the functionality thereof could be modified, the menu items could be replaced by graphical structures, such as icons, the descriptions and the functionality of the menu items could differ, and the like.

[0037] Referring to FIG. **6** window **248** is one out of a plurality of windows designed to interact with and guide a user of the sending device in the creation and transmission of a multimedia message containing a multimedia greeting. The window **248** is one of a logically interconnected set of windows that appear either by user selection or in a substantially pre-defined manner following the selection for a multimedia message type. The function of window **248** (and all the other windows participating in the creation and transmission of the multimedia message) is to interact with the user and enable the user a) to display a list of audio segments that could be part of the multimedia greeting, b) to select one or more audio segments from the list that could be part of the multimedia message, b) to manipulate the audio segments, c) to preview the multimedia message containing the multimedia greeting segments, d) to record an audio segment via a recording device, e) to create and send a composite multimedia greeting that includes either the manipulated audio segments only or includes previously created multimedia greeting that were manipulated in other windows. Window **248** includes a window header **250**, a greeting message type window **252**, a audio list text box **264** a preview display **272** a working area display **270**, a set of audio list manipulator buttons **262**, **260**, **258**, a set of preview manipulation buttons **286**, **284** and **282**, a set of working area manipulation buttons **278**, **276** and **274**, and a "Record" button **266**. Window header **248** includes the description of the program name, and various window-manipulation buttons, such as the hide, maximize, and minimize buttons. Greeting message type window **252** includes several menu items associated with greeting message types, such as audio greeting, video greeting, pictorial greeting, text greeting, vocal greeting, and karaoke greeting. Pointing at one of the menu items and clicking the pointing device will affect the selection of a greeting message type. According to the selected greeting message type in window **248** one or more menu items are displayed in window **254** corresponding to specific media-types potentially assembled into the multimedia message containing the multimedia greeting are enabled or disabled for selection. Thus, for example when the menu item "Audio Greeting" corresponding to the creation of an audio greeting message type is selected then in window **248** the menu items "Audio Media", and "Text Media" are enabled. The selection of one of the menu items "Audio Media", and "Text Media" will display windows designed for the manipulation of the corresponding audio or text media-types that could be assembled into the multimedia message. Window **248** is designed for the manipulation of audio media-type. Thus, when greeting type "Audio Greeting" and the media-type "Audio Media" is selected then a window (not shown) for the selection of audio content categories and optionally of audio content groups stored in the shared creative content database on the server device will be displayed to allow the user to select the suitable audio category and audio content group. Consequent to the selection, window **248** will be displayed and within the audio list box **264** the identification of the audio segments (such as a title of a song) and stored under the selected audio category and audio group, download from the server device to the sending device will be displayed. The audio list box **264** is scrollable via the scroll bar and scroll buttons **256**. Next, the user could affect the moving of the video segment the description of which is

displayed in the audio list text box **264** to the working area display **270**, by pointing and clicking on the description of the selected audio content. Control buttons "Sound" **278**, "Text" **276** and "Video" **274** allow for the separate display of the diverse media-type contents already assembled into the multimedia message at each stage of the manipulation. When the user wishes to inspect the entire multimedia message assembled until a specific point in time then the "Play" button **284** is activated and in the preview display window **272** the created multimedia message including all the media-types assembled until a specific point in time. The preview could be paused by the "Stop" button **286** When subsequent to the preview of the assembled multimedia message the user determines that the creation of the greeting message is completed then the "Send" button **282** is activated and one or more specific windows will be displayed a) for the submission of the transmission parameters, b) for receiver device's address, and c) for confirmation of the storing of the multimedia control file either on the sending device or the server device, and d) for the confirmation of the transmission of the completed multimedia greeting. In order to record a private video content segment the user activates the "Record" button **266** that will activate an audio input device, such as a microphone. The audio input device will capture an audio clip of a pre-determined length and will display it in the working area display **270** for suitable manipulation. The recorded audio clip could be captured, recorded, stored and transmitted to the server device **20** by the interaction with a different window (not shown). Note should be taken that the above-described interactive display window is exemplary only. In other preferred embodiments of the present invention, the visual structure of the window, the constituent graphical elements, the functionalities of the graphical elements and the pre-defined interactions among the graphical elements could be entirely different as long as the proposed functionality of the apparatus and method is maintained. In other preferred embodiments, for example, the preview display window **272** could be merged into the working area display **270**, the number of buttons and the functionality thereof could be modified, the descriptions and the functionality of the menu items could differ, and the like.

[0038] Referring to FIG. **7** window **332** is one out of a plurality of windows designed to interact with and guide a user of the sending device in the creation and transmission of a multimedia message containing a multimedia greeting. The window **332** is one of a logically interconnected set of windows that appear either by user selection or in a substantially pre-defined manner following the selection for a multimedia message type. The function of window **332** (and all the other windows participating in the creation and transmission of the multimedia message) is to interact with the user and enable the user a) to display a list of text segments that could be part of the multimedia greeting, b) to select one or more text segments from the list that could be part of the multimedia message, c) to receive customized text segments introduced by the user via a text input device, d) to manipulate the text segments, e) to preview the multimedia message containing the multimedia greeting segments, f) to create and send a composite multimedia greeting that includes either the manipulated texts segments only or includes previously created multimedia greeting that were manipulated in other windows. Window **332** includes a window header **334**, a greeting message type window **336**, a text segment list box **348**, a text input box **346**, a text library display box **348**, a preview display **356**, a working area display **354**, a set of preview manipulation buttons **366**, **368** and **370**, a set of working area manipulation buttons **358**, **360** and **362**, a set of text format controls **342**, **340** and **344**, and a set of text format selection boxes **340**, **342** and **344**. Window header **334** includes the description of the program name, and various window-manipulation buttons, such as the hide, maximize, and minimize buttons. Greeting message type window **336** includes several menu items associated with greeting message types, such as audio greeting, video greeting, pictorial greeting, text greeting, vocal greeting, and karaoke greeting. Pointing at one of the menu items and clicking the pointing device will affect the selection of a greeting message type. According to the selected greeting message type in window **336** one or more menu items are displayed in window **338** corresponding to specific media-types potentially assembled into the multimedia message containing the multimedia greeting are enabled or disabled for selection. Thus, for example when the menu item "Text Greeting" corresponding to the creation of a text greeting message type is selected then in window **336** the menu item "Text Media" is enabled. The selection of one of the menu items "Text Greeting" and Text Media" will display windows designed for the manipulation of the corresponding text media-types that could be assembled into the multimedia message. Window **332** is designed for the manipulation of text media-type. Thus, when greeting type "Text Greeting" and the media-type "Text Media" is selected then a window (not shown) for the selection of text content categories and optionally of text content groups stored in the shared creative content database on the server device will be displayed in the text segments list box **348** to allow the user to select the suitable text category and text content group. Consequent to the selection, window **332** will be displayed and within the text segment list box **348** a list of text segments display box **348** segments stored under the selected text category and text group, download from the server device to the sending device will be displayed. The text segment list box **348** is scrollable via the scroll bar and scroll buttons **349**. Next, the user could affect the moving of the text segment the description of which is displayed in the text segment list box **348** to the working area display **354**, by pointing and clicking on the selected text segment. Control buttons "Sound" **362**, "Text" **360** and "Video" **358** allow for the separate display of the diverse media-type contents already assembled into the multimedia message at each stage of the manipulation. The user could introduce manually a text segment into the display input box **346** by typing the text using a keyboard or other text input devices. When the user wishes to inspect the entire multimedia message assembled until a specific point in time then the "Play" button **368** is activated and in the preview display window **358** the created multimedia message including all the media-types assembled until a specific point in time. The preview could be paused by the "Stop" button **370** When subsequent to the preview of the assembled multimedia message the user determines that the creation of the greeting message is completed then the "Send" button **366** is activated and one or more specific windows will be displayed a) for the submission of the transmission parameters, b) for receiver device's address, and c) for confirmation of the storing of the multimedia control file either on the sending device or the server device, and d) for the confirmation of the transmission of the completed multimedia greeting. Text format selection boxes **342**, **340** and **344** provide for the formatting of the displayed text, such as font **342**, color **340**, and effects **344**.

[0039] Referring to FIG. **8** window **382** is one out of a plurality of windows designed to interact with and guide a user of the sending device in the creation and transmission of a multimedia message containing a multimedia greeting. The window **382** is one of a logically interconnected set of windows that appear either by user selection or substantially sequentially following the selection for a multimedia message format. The function of window **382** (and all the other windows participating in the creation and transmission of the multimedia message) is to interact with the user and enable the user to perform and execute a karaoke sub-system. Karaoke is a form of entertainment where recorded music accompanies an amateur singer who sings along with the accompaniment on microphone. The music is typically a well-known song in which the voice of the original singer is absent or reduced in volume. Lyrics are usually also displayed as text, sometimes including color changes synchronized with the music, on music video to help with the sing-along. The manipulation of a karaoke segment involves a) to play a karaoke segment, that could be part of the multimedia greeting, b) to select a karaoke segment from the list that could be part of the multimedia message, c) to play karaoke vocals by an original vocalist synchronized with the karaoke video d) to record the karaoke lyrics performed by a user via an audio input device in order to create a karaoke segment with the original video, and the original music but with the recorded voice of the user, e) preview the multimedia message containing all the multimedia greeting segments, f) to create and send a composite multimedia greeting that includes either the manipulated karaoke segments only or includes previously created multimedia greeting that were manipulated in other windows.

[0040] Still referring to FIG. **8** window **382** includes a window header **384**, a greeting message type window **386**, and a karaoke panel **390**. Panel **390** includes a karaoke display window **389**, a lyrics display window **395** a set of karaoke control buttons **395**, **393**, **394**, **392**, **397**, **393**, and **391**, recording tools list boxes **394**, **396**, a check box **383**, a volume control box **392**, and a control button **398**. Window header **382** includes the description of the program name, and various window-manipulation buttons, such as the hide, maximize, and minimize buttons. Greeting message type window **386** includes several menu items associated with greeting message types, such as audio greeting, video greeting, pictorial greeting, text greeting, vocal greeting, and karaoke greeting. Pointing at one of the menu items and clicking the pointing device will affect the selection of a greeting message type. According to the selected greeting message type in window **386** one or more menu items are displayed in window **388** corresponding to specific media-types potentially assembled into the multimedia message containing the multimedia greeting are enabled or disabled for selection. Thus, for example when the menu item "Karaoke Greeting" corresponding to the creation of a karaoke greeting message type is selected then in window **388** the menu items "Video Media", "Pictorial Media", "Karaoke" and "Text Media" are enabled. The selection of one of the menu items "Karaoke Greeting" and "Karaoke" will display windows designed for the manipulation of the corresponding karaoke files that could be assembled into the multimedia message. Window **382** is designed for the manipulation of karaoke media-type. Thus, when greeting type "Karaoke Greeting" and the media-type "Karaoke" is selected then a window (not shown) for the selection of karaoke content categories and optionally of karaoke content groups stored in the shared creative content database on the server device will be displayed to allow the user to select the suitable karaoke category and karaoke content group. Consequent to the selection, window **382** will be displayed and within the karaoke play window **346** the selected karaoke segment downloaded from the server device to the sending device will be played. When the user wishes to inspect the karaoke file at any point in time the "Play" button **395** is activated and in the karaoke play window **389** the Karaoke file will be previewed. "Vocalist" button **392** will affect the playing of the karaoke segment with the lyrics sung by the original vocalist. "My Voice" button **394** will affect the playing of the karaoke segment with the lyrics sung by the user. The preview could be paused by the "Stop" button **393**. When subsequent to the preview of the assembled multimedia message the user determines that the creation of the greeting message is completed then the "Done" button **393** is activated and the various pre-transmission interactive windows described herein above are activated. For the recording parameters of the recording of the lyrics during the playing of the karaoke segment recording tools panel **390** is utilized. For example, power **385** controls the volume of the recording, and list box **396** enables the selection of the audio input device.

[0041] Referring now to FIG. **9** the proposed apparatus and method utilizes a novel unique karaoke text and control file synchronized with the karaoke main files. During the manipulation of the karaoke text and control file **401** the file is suitably encoded and encrypted. File **401** includes a plurality of records of specific functionality where each record is digitally encoded and encrypted. The drawing under discussion shows a header record **402** and a set of work records **404**, **406**, **408**, **410**, **412**. Every record is terminated by a specific terminator character. In the preferred embodiment of the invention the terminator character is "$". In other preferred embodiments other characters could be used as record terminators. The header record **402** holds the number of words of the lyrics appearing in a karaoke segment, such as a song. Each word record **404**, **406**, **408**, **410** and **412** stores several fields that characterize a single word of the lyrics associated with the record **404**, **406**, **408**, **410** and **412**. The fields are separated by a specific separator character. In the preferred embodiment of the invention the separator character is "?". In other preferred embodiments other characters could be used as field separators. The first field signifies the point in time in $\frac{1}{100}^{th}$ of a second where a word sounds audibly. The second field signifies the sequential location of the word in a sentence. The third field holds the word itself. The fourth field holds the entire sentence in which the specific word appears. Thus, for example, record **404** stores "2009" as the point in time in which the word sounds audibly, "1" signifies the sequential location of the word, "when" is the word itself, and "when you where here before, couldn't you look in the eye" is the entire sequence in which the word "when" appears. Note should be taken that in other preferred embodiments of the invention, the structure of the karaoke text and control file could be different.

[0042] Referring now to FIG. **10** the execution of the multimedia message assembler begins at block **502** where the user is given the option of selecting a message type. In the preferred embodiment of the present invention, the multimedia message is a multimedia format greeting. The message types **518** include a) video greeting, b) audio greeting, c) pictorial greeting, d) vocal greeting, e) text greeting and f) karaoke greeting. It would be easily perceived that in other

preferred embodiments additional message types could be provided for selection, such as animated greeting, graphics greeting and the like. At block **502** the message types are displayed on an interactive window as menu items, icons or the like. Consequent to the selection of the message type **518** at block **504** the user is given a message type-specific option to select a media type. In the preferred embodiment of the invention the media types **520** include a) video media, audio media, pictorial media, vocal media, text media and karaoke. The selectable media types displayed to the user are in accordance with the previous selection of the message type. Thus, for example, the selection of "Audio Greeting" as message type will enable the selection of "Audio Media", "Vocal Media" and "Text Media". During the creation of the "Audio Greeting" type multimedia message the specific media types, such as audio, vocal, and text, could be selected and manipulated one after the other where the completion of each manipulation affects the addition of the completed media type to the multimedia message. At block **506** the media type content is selected by the user. The media type content is typically organized by media type categories and media type groups. The media type selection involves the user choosing the desired category, the desired group, the downloading of the relevant media type content segments, and the display of the media type content segments or the descriptions of the media type content segments for the user and accepting the selection of the user. At block **508** the selected media type content segment is manipulated by the user in order to characterize the appearance of the segment and subsequently to allow for the addition of the media type content to the multimedia message. At block **510** it is determined whether the multimedia message is completed. If the result of block **510** is negative then logic control proceeds to block **504** and performs a loop across blocks **504** through **510** where the loop is traversed for each media type selected and for each media type content segment selected and manipulated. Where the result of block **510** is positive logic control exits the loop and at block **512** it is determined whether the user wishes to transmit the multimedia message to a receiver device. If the result of block **512** is negative then logic control proceeds to block **504** to perform a loop across blocks **504** through **512**. If the result of block **512** is positive then at block **514** a multimedia greeting message is finalized and at block **516** the completed multimedia greeting message is sent to the receiver device. Consequently, logic control returns to block **502** for the preparation of another multimedia message.

[0043] Referring now to FIG. **11** the audio media manipulation is a module of the multimedia message assembler **62** running on the sending device **10**. When the module is entered at block **612** the media type is selected by the user. At block **614** it is determined whether the selected media type is audio media. If the result is positive then at **618** a list of audio media categories and audio media groups is downloaded from the server device. Next, at block **620** the selected audio media category and audio media group is accepted, at, block **622** the relevant audio media content segments are downloaded from the server device and, at block **624** the list of descriptions of the audio media segments is displayed to the user. Next, at block **626** the selected audio media segment is moved into a working area display and played in accordance with working area display controls. At block **628** the selected audio media segment and the characteristics thereof are manipulated add assembled into the multimedia message. At block **630** it is determined whether the user desires to preview the multimedia message. If the result of block **630** is positive then at block **632** the multimedia message is previewed according to the preview area display controls. Next, at block **633** it is determined whether the user wishes to send the multimedia message to a receiver device. If the result of block **633** is positive then at block **634** the multimedia message is finalized and sent to the receiver device. If the result of block **630** is negative then logic control proceeds directly to block **633**. If the result of block **633** is negative then logic control returns to block **612** to enable the user to select a media type for further manipulation of a selected media type and for the assembling the manipulated media type into the multimedia message. If the result of block **614** is negative then logic control proceeds to determine if any other media types were selected (not shown).

[0044] Referring now to FIG. **12** the video media manipulation module is a module of the multimedia message assembler running on the sending device. When the module is entered at block **416** the media type is selected by the user. At block **414** it is determined whether the selected media type is video media. If the result is positive then at **418** a list of video media categories and video media groups is downloaded from the server device. Next, at block **420** the selected video media category and audio media group is accepted, at block **422** the relevant video media content segments are downloaded from the server device and at block **424** the video media content segments is displayed to the user in the video content display area. Next, at block **426** the selected video media content segment is moved into a working area display and played in accordance with working area display controls. At block **427** the selected video media segment and the characteristics thereof are manipulated add assembled into the multimedia message. At block **428** it is determined whether the user desires to preview the multimedia message. If the result of block **428** is positive then at block **430** the multimedia message is previewed according to the preview area display controls. Next, at block **432** it is determined whether the user wishes to send the multimedia message to a receiver device. If the result of block **432** is positive then at block **434** the multimedia message is finalized and sent to the receiver device. If the result of block **428** is negative then logic control proceeds directly to block **432**. If the result of block **432** is negative then logic control returns to block **416** to enable the user to select another media type for further manipulation of the selected media type and for the assembling the manipulated media type into the multimedia message. If the result of block **414** is negative then logic control proceeds to determine whether any other media types were selected (not shown).

[0045] Next a description of the options for the manipulation of the various media types that are supported by the proposed apparatus and method will be provided, in accordance with the first preferred embodiment of the present invention. The media types supported are a) audio, b) video, c) text, d) still images, and e) karaoke. In other preferred embodiments of the invention additional media types could be supported, such as animation, graphics, icons, and the like.

[0046] Audio media content segments could be added to any selected video media content segment, such as video clip, still image or still image sequences, and visually displayed text. The audio media content segments supported by the proposed apparatus and method could be divided into four categories: a) songs (instrumental music and vocals performed by a singer, b) music without vocals (instrumental music), c) greeting songs (a musical segment with vocals at

the start of the segment and at the end of segment where between the vocal parts a space exists to allow for the insertion of a congratulatory message, and d) audio media content segments containing special effects. Audio media content segments could be obtained from a shared creative content database installed on the server machine or from a private content library installed on the sending machine or from direct recording via audio capturing devices. The proposed apparatus and method provides the options of: a) modifying the soundtrack accompanying a video media content segment by the user by selecting a different audio media content segment, b) recording the voice of a user, c) replacing the original sound with a vocal recording, d) combining the original recording with the vocal recording by mixing the audio media content segments dynamically and with synchronized timing to the vocals or the instrumental music of the original segment, and e) mixing by overlaying the recorded voice of the user on a segment selected by the user. The method is capable to lower the sound volume of the original segment during the mixing of the user's voice into the original segment.

[0047] The video media content segments and still image content segments supported by the proposed apparatus and method could be obtained from the shared creative content database installed on the server machine or from a private content library installed on the sending machine or from direct recording via video/image capturing devices connected to the sending device. Several still images could be selected to generate a still image sequence, such as in image set-based presentations where the display of the image sequence could be enhanced by special effects, such as dissolve type, and the like.

[0048] Text content segments could be added to any selected video media content segment, still image, and still image sequences. Text segments could be selected from the shared creative content database on the server device from a private library on the sending device or could be introduced into the apparatus via text input devices connected to the sending device. The text segment visual characteristics, such as font, color, letter size, and the like could be manipulated. The location of the text segment on the visual background and the direction and type of movements of the letters/words/sentences of the text segment on the visual background could be controlled. The entry point in time and the exit point in time of the text could be manipulated by the user.

[0049] The on-line karaoke sub-system provides the option to the user to record his voice on a selected audio segment. The resulting playback will be received as a song performed by the user. The song could be used as a selected audio content segment and could be overlaid on any selected video media content segment, still image sequence, and visually displayed text. Operation of the karaoke sub-system includes the following steps: a) selecting a audio media content segment containing a song the user desires to perform, b) full playback of the selected song (vocal and instrumental) where the text of the lyrics of the song are displayed in full synchronization with the rhythm and the timing of the music in order to provide for guided "rehearsals" by the user, c) recording the voice of the user during the playback of the instrumental part of the song while being assisted by the displayed text of the lyrics, d) replaying the video media segment including the song recorded by the user and the original instrumental part, and 5) optionally assembling the recorded song (user's voice, instrumentals, text of lyrics) into a multimedia message, such as a video media content or a still image sequence.

[0050] The multimedia message is typically modified during the manipulation of the different media types by the assembling of the media types into the message. The user is given the option of previewing the multimedia message at any point in time during the multimedia message assembly process. Transmission parameters, such as target address and transmission scheduling (day and time of the desired transmission) are inserted into the completed multimedia message. The message could be sent in different formats to different types of receiver devices, such as to computing device via e-mail or to a cellular telephone by using Multi Media Messaging (MMM). The completed multimedia message is transmitted from the sending device to the server device. The server software determines the type of the device associated with the receiver address and checks the multimedia capabilities of the device. In accordance with the obtained multimedia characteristics the server software a) forwards the original multimedia message, or b) reformats and forwards the multimedia message or c) saves the message and generates an SMS message to notify the receiver device concerning the manner in which the multimedia message can be viewed.

[0051] Referring now to FIG. **13** which is a schematic illustration of a computing and communication environment in which the proposed apparatus could operate, in accordance with a second preferred embodiment of the present so invention. Sending cellular device **704** is a wireless cellular communication device with enhanced computing and multimedia play capabilities, such as an advanced type of smart-phone. The term smart-phone is typically used to characterize a wireless telephone set with special computer-enabled features not previously associated with telephones. Sending cellular device **704** is linked to a cellular communication network **708** via an air interface. In the second preferred embodiment of the invention a user of the sending cellular device **704** dials a specific (typically shortened) phone number through which the wireless linking of the device **704** via the cellular communications network and a gateway device **710** to an Interactive Voice Response (IVR) system **712** is accomplished. An Interactive Voice Response (IVR) system is a software application that accepts a combination of voice telephone input and touch-tone keypad selection and provides appropriate responses in the form of voice, fax, callback, e-mail and other media. IVR is usually part of a larger application that includes database access. IVR system **712** operates on-line and works in synchronization with the server device **714**. The user of sending cellular device **704** controls the operation of the server device **714** via an IVR interface associated with the IRV system **712** by suitably responding to a dynamic voice menu provided the IRV system **712**. The suitable responses include the pressing of the appropriate keys installed on the faceplate of the sending cellular device **704** for the selection of multimedia generation options and the recording of vocal messages, such as short lyrics, personal identification, or spoken word sequences for the enhancement of the multimedia message. In the second preferred embodiment of the invention, the server device **714** includes a user request handler to respond to the requests of a user of the sending cellular device **704**, a multimedia message assembler to create a unique dynamically personalized multimedia message in accordance with the requests of the user, and a shared creative content database to store media-type content segments and to hold multimedia message output and control files. As in the first preferred embodiment of the invention, the multimedia message assembler is a set of inter-related soft-

ware programs the functionality of which is to manipulate the media-type content segments in order create, to compose, to assemble, to produce and to transmit the unique dynamically personalized multimedia output message. The multimedia message is provided by the user of the sending cellular device **704** with a suitable receiver cellular device dialing number. Consequently, the multimedia message is transmitted from server device **714** via a data communications network **716**, a gateway device **718** and a cellular communications network **720** to the receiver cellular devices **722**, **724**, **726** and **728**. Server device **714** is a computing device the functionality of which is: a) interactive manner via the IVR interface requests from the sending receiving in an cellular device **704** regarding the assembly of a multimedia message on the server device **714** b) assembling the multimedia messages for the sending cellular device **704**, c) providing the multimedia message for the sending cellular device **704** for playback and review, and d) transmitting the multimedia message to one or more receiver cellular devices **722**, **724**, **726** and **728** via gateway **718** and cellular communications network **720**. The receiver cellular devices **722**, **724**, **726** and **728** are cellular telephone devices with multimedia content playing capabilities. The multimedia message is received by the receiver cellular devices **722**, **724**, **726** and **728** and is replayed by the users of devices **722**, **724**, **726** and **728** in order to perceive the content of the message. As in the first preferred embodiment of the invention, server device **714** includes a multimedia message forwarding mediator. In response to requests of the user of the sending cellular device **704** via the IVR system **712** specific media-type content segments are fetched from the shared creative content database in order to supply the multimedia message assembler with the media elements for the creation of the multimedia message. Multimedia message forwarding mediator is a software program for the handling of the received multimedia messages, such as receiving the messages from the assembler, communicating with the receiver cellular devices, responding to the capabilities of the receiver cellular devices, optionally re-formatting the messages in accordance with the characteristics of the receiver cellular devices and forwarding the messages to the receiver cellular devices. Note should be taken that although on the drawing under discussion only a single sending cellular device, a single server device and several receiver cellular devices are shown, in a realistic environment a plurality of sending cellular devices could request the assembly of a plurality of multimedia output messages from a plurality of server devices and could request the transmission of the messages to a plurality of receiver cellular devices via the plurality of the server devices.

[0052] The media types supported by the proposed apparatus and method, in accordance with the second preferred embodiment of the present invention is a) audio, b) video and c) text. The audio includes pre-pre-prepared and pre-stored greeting songs, instrumental music, lyrics accompanied by instrumental music, recorded vocal greetings that could be combined dynamically with the music, and the like. The addition of text is accomplished by obtaining a pre-prepared text segment from the shared creative content database based on the selection of the sending cellular device. The text could be specifically customized by the insertion of lyrics, and spoken words that are recorded on-line by the user of the sending cellular device. The addition of video is accomplished by obtaining a pre-prepared and pre-stored video segment from the shared creative content database based on the selection of video segment category and video segment group by the user of the sending cellular device.

[0053] Referring to FIGS. **14**, **15** and **16** in the second preferred embodiment of the present invention, the user interface designed for the apparatus and method is an Interactive Voice Response (IRV) interface. IVR is a computerized system that allows a person, typically a telephone caller, to select an option from a voice menu and otherwise interface with a computer system. Generally the system plays pre-recorded voice prompts to which the person presses a number on a telephone keypad to select the option chosen, or speaks simple answers such as "yes", "no", or numbers in answer to the voice prompts. Referring specifically to FIG. **14** at step **731** the method is initiated and at action step **730**, in response to an identified call from a user of a sending cellular device and the subsequent identification of the service required, the server device activates the IRV system. The IRV system utilizes a pre-recorded voice menu file **732** that includes application-specific selectable options that the user of the sending cellular device could choose in order to begin the assembly of a multimedia message, such as a multimedia greeting. Further, at action step **730** the file **732** is transmitted to the sending cellular device and replayed as a vocal message for the user. At action step **734** the server device in association with the IRV system waits for a keyed response from the sending device until the response is received. At determination step **736** the keyed-in response is examined in order to determine which of the options detailed in the file **732**, the user of the sending device have selected. If the result of determination step **736** is "2" then the user selected the "Voice" option from the file **732**. The "Voice" option allows the user to record a personal vocal greeting message to be included in the multimedia message file. At action step **740** a recording controlling audio file **742** is obtained and transmitted to the user of the sending cellular device for replay. Audio file **742** includes a list of selectable options the selection thereof would control the performance of the recording by the user. At determination step **744** it is determined whether the user responded by pressing the "3" key that indicates that the user wishes to record a vocal message or a lyrics of a song. If the result of determination step **744** is positive then at action step **746** the server receives the recording from the sender cellular device and subsequently logic control proceeds to action step **740**. If the result of determination step **744** is negative then it is determined at determination step **748** whether the user responded by pressing the "1" key that indicates that the user desires to listen to the recorded message or lyrics. If the result of step **748** is positive then at action step **750** the recording is sent to the sending cellular device in order to be replayed to the user and logic control proceeds to step **740**. If the result of determination step **744** is negative that at determination step **752** it is determined whether the user pressed the "2" key indicates the request of the user to confirm the recording. If the result of step **752** is negative then logic control proceeds to step **740**. If the result of step **752** is positive then at action step **754** an audio file **756** including options for the addition of visual elements to the multimedia message is obtained and transmitted to the sending cellular device in order to replay it to the user. Consequently logic control proceeds to FIG. **15** step **760** through page connector indicator **758**.

[0054] Still referring to FIG. **14** if at determination step **736** is determined that the result of the step is negative then logic control proceeds via page connector selector **738** to a specific

"Song and Melody handling" module. Song and Melody handling module will provide the user with the audio menus and the appropriate operations that allow for the insertion of specifically selected songs (with lyrics and instrumental music) or melodies (instrumental music). The flow charts describing the operation of the Song and Melody handling module will not be shown and detailed in the present application since the operation thereof is in principle similar to the Video and Image handling module that is going to be described hereinafter in association with the following drawings.

[0055] Referring specifically to FIG. **15** logic control proceeds through page connector indicator **760** to action step **762**. At action step **762** the server waits for a keyed response from the sending cellular device. At determination step **764** it is determined whether the response of the user of the sending cellular device includes a pressing of the "3" key. Pressing the "3" key indicates that the user wishes to transmit the multimedia message to a receiver cellular device. If the result of step **764** is positive then at step **768** the audio file **770** used for obtaining the options associated with the control of the message transmission is obtained and sent to the user of the sending cellular device for replay. At determination step **772** it is determined whether the keyed response is "1". By pressing the "1" key the user indicates that a cellular phone number identifying the receiver cellular device will follow. If the result of step **772** is positive then at step **774** the receiver cellular device phone number is received and logic control returns to step **762**. If the result of step **772** is negative then at step **776** it is determined whether the "2" key was pressed by the user of the sending cellular device. Since the "2" key indicates a request of the user for message transmission at step **778** the multimedia message is transmitted to the receiver cellular device and at **780** the operation is terminated. If the result of step is negative then logic control proceeds to FIG. **16** step **782** via page connector indicator **766** for Video and Image handling.

[0056] Referring specifically to FIG. **16** logic control proceeds to determination step **784** through page connector indicator **782**. At step **784** it is determined whether the response of the user of the sending cellular device was a) pressing of the "1" key or b) pressing of the "2" key. Pressing key 1 indicates that user desires to insert a video clip into the multimedia message for assembly. Pressing key 2 indicates that user desires to insert a still image into the multimedia message for assembly. If the result of step **784** is positive then at step **788** a video/image selection menu file **790** is obtained and sent for display to the user of the sending cellular device. Menu file **790** includes a list of selectable video clips or still images with associated codes that enable the user to select there from for assembly into the multimedia message. At action step **792** the code identifying the video clips/images is received from the user. At action step **794** a text addition control menu file **796** is obtained, transmitted to the sending device and displayed to the user of the sending device. The file **794** includes a) a text addition menu item and a b) message sending menu item. At determination step **798** it is determined whether the user selected the text addition option by pressing the "1" key. If the result of step **798** is positive then at step **800** a text segments list audio file **802** is obtained and transmitted to the sending cellular device in order to replay it to the user. At step **804** the text segment selected by the user is obtained and assembled into the multimedia message and at action step **806** the phone number identifying the receiver cellular device is received from the user. Consequently, logic control proceeds to FIG. **15** step **779** through page connector indicator **808** for the transmission of the multimedia message to the receiver device. If the result of determination step **784** is negative then logic control proceeds to FIG. **14** step **755** via page connector indicator **785** to replay audio file **756** and repeatedly perform of the handling of Video and Image selection module.

[0057] Note should be taken that the above-described logical flow is exemplary only. In other preferred embodiments of the present invention, the method of operation, the structure of the audio menu files, the menu items appearing within the audio menu files, the logical sequence of the menu replays, and the type of responses allowed for the replayed menus, the type of responses, the descriptions and the functionality of the menu items and the like, could be entirely different as long as the proposed functionality of the apparatus and method is maintained. In other preferred embodiments, for example, the a voice-to-text option could be used in lieu of pressing keys on a keypad number of buttons or other advanced features could be used. In addition, the vocally replayed menus and menu items could be replaced by the display of graphical structures, such as icons, could differ, and the like. In such a case the selection of menu items could be performed by a touch-screen device or the like.

[0058] It will be appreciated by persons skilled in the art that the present invention is not limited to what has been particularly shown and described hereinabove. Rather the scope of the present invention is defined only by the claims which follow.

1. An apparatus for the creation and transmission of personalized multimedia messages, the apparatus comprising:
- a multimedia message assembler for creating a multimedia message by assembling and manipulating diverse media type content segments;
- a shared creative content database to store diverse media type content segments and to provide the diverse media type content segments to the multimedia message assembler in response to a request; and
- a multimedia message forwarding mediator to receive multimedia messages and receivers addresses associated therewith, to communicate with a receiver device, to reformat the multimedia message according to the multimedia capabilities of the receiver device, and to forward the multimedia message to the receiver device.

2. The apparatus of claim **1** wherein the multimedia message assembler comprises tools for selecting, recording, joining, editing and composing diverse media type content segments and a user interface for allowing a user to select one of said tools.

3. The apparatus of claim **1** wherein the diverse media type content segments include audio segments, video segments, text segments and still images.

4. The apparatus of claim **1** further comprising a multimedia message player to play a multimedia message.

5. The apparatus of claim **1** further comprising a shared creative content downloader to obtain media type content segments from a data communication network.

6. The apparatus of claim **1** further comprising media type content capture software to capture media-type content segments.

7. The apparatus of claim **1** further comprising:
- a private creative content library to store private media type content files; and

a private creative content uploader to transmit private media type content segments to a data communications network for storage and subsequent utilization.

8. The apparatus of claim **1** wherein the multimedia message assembler comprises a media content synchronizer to synchronize the media type segments in the multimedia message; and

a multimedia message generator to generate an assembled multimedia message out of diverse manipulated media type content segments.

9. The apparatus of claim **1** wherein the multimedia message assembler comprises:

a video and animation editor to manipulate video media and animation media segments;

a still image and image sequence editor to manipulate still image segments;

a sound editor to manipulate audio media segments; and

a text editor to manipulate text media segments.

10. (canceled)

11. (canceled)

12. The apparatus of claim **1** wherein the shared creative content database comprises:

a shared video files for providing requested video content segments to the multimedia message assembler;

shared audio files for providing requested audio media content segments to the multimedia message assembler;

shared still image files for providing requested still image media content segments to the multimedia message assembler; and

shared karaoke files for providing requested karaoke content segments to the multimedia message assembler.

13. (canceled)

14. The apparatus of claim **1** further comprising:

a creative content request handler to respond to requests for media type content segments stored in the shared creative database by the multimedia message assembler;

a creative content extractor module to obtain requested media type content segments from the shared creative content database; and

a creative content transmitter module to send the requested and obtained media type content segments to the multimedia message assembler.

15. (canceled)

16. (canceled)

17. The apparatus of claim **1** further comprising a multimedia message control file for subsequent structural and contextual reconstruction of a multimedia message file associated with the multimedia message to be transmitted to the receiver device.

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (canceled)

26. (canceled)

27. (canceled)

28. (canceled)

29. (canceled)

30. The apparatus of claim **1** wherein the media type content segments comprise:

audio media content segments for being assembled into the multimedia message;

video media content segments for being assembled into the multimedia message;

text media content segments for being assembled into the multimedia message;

Image media content segments for being assembled into the multimedia message; and

karaoke media content segments for being assembled into the multimedia message.

31. (canceled)

32. (canceled)

33. (canceled)

34. A method for the creation and transmission of unique personalized multimedia messages from a sending device to a receiver device, the method comprising:

obtaining media type content segments from a shared creative content database;

creating a multimedia message by assembling and manipulating the diverse media type content segments; and

forwarding the multimedia message to the receiver device.

35. The method of claim **34** wherein said assembling and manipulating is performed by means of a user interface provided at the sending device.

36. (canceled)

37. The method of claim **34** wherein said assembling and manipulating include selecting, recording, editing and joining the diverse media type content segments.

38. The method of claim **34** further comprising:

selecting a message type for the creation of a multimedia message;

selecting a media type for manipulation and assembly into the multimedia message submitting requests for media type contents to a shared or private creative content database;

selecting a media type content segment from the obtained media type content segments;

manipulating the selected media type content segment and adding the manipulated media type content to the multimedia message;

finalizing the multimedia message; and

transmitting the finalized multimedia message to a multimedia message forwarding mediator.

39. The method of claim **34** further comprising:

inserting the address of the receiver device into the multimedia message;

inserting transmission scheduling parameters into the multimedia message;

transmitting the multimedia message in accordance with the transmission scheduling parameters.

40. The method of claim **34** further comprising:

communicating with the receiver device for obtaining the multimedia capabilities of the receiver device;

reformatting the multimedia message in accordance with the obtained multimedia capabilities of the receiver device.

41. The method of claim **40** further comprising the step of notifying the receiver device regarding the display options of the multimedia message.

42. The method of claim **34** further comprising:

capturing media type content segments through media capture devices; and

recording media type content segments through recording devices.

43. (canceled)

44. (canceled)

45. The method of claim **34** further comprising:

uploading media type content segments from the private creative content library to the shared creative content library; and

downloading media type content segments from the shared creative content library to the private creative content library.

46. (canceled)

47. (canceled)

48. (canceled)

49. (canceled)

50. (canceled)

51. (canceled)

52. (canceled)

53. (canceled)

* * * * *