



US00RE45157E

(19) **United States**  
(12) **Reissued Patent**  
**Mathurin**

(10) **Patent Number:** **US RE45,157 E**  
(45) **Date of Reissued Patent:** **Sep. 23, 2014**

(54) **VOICE ACTIVATED PORTABLE AUDIO/VIDEO REQUEST, PLAY AND RECORD SYSTEM**

6,606,381 B1 \* 8/2003 Wunsch ..... 379/356.01  
6,621,938 B1 \* 9/2003 Tanaka et al. .... 382/276  
6,654,721 B2 \* 11/2003 Handelman ..... 704/270  
2001/0055978 A1 \* 12/2001 Herrod et al. .... 455/517

(76) Inventor: **Trevor R. Mathurin**, San Ramon, CA (US)

**FOREIGN PATENT DOCUMENTS**

(21) Appl. No.: **11/850,836**

GB 2298552 A \* 9/1996 ..... H04M 1/72

(22) Filed: **Sep. 6, 2007**

\* cited by examiner

**Related U.S. Patent Documents**

*Primary Examiner* — Disler Paul

Reissue of:

(74) *Attorney, Agent, or Firm* — Meister Seelig & Fein LLP

(64) Patent No.: **6,941,181**  
Issued: **Sep. 6, 2005**  
Appl. No.: **09/585,797**  
Filed: **Jun. 3, 2000**

(57) **ABSTRACT**

(51) **Int. Cl.**  
**G06F 17/00** (2006.01)

An audio/video control device for providing audio and/or video signals to a user. The audio/video control device includes a base unit and a portable unit. The base unit includes a housing having a recess extending therein and a first processor for controlling operation of the base unit. A first audio/video storage and reproduction device is positioned within the housing and controlled by the processor to store and reproduce audio and video signals. A device for connection with an external source of audio and video signals is also connected to the first processor. The processor is able to receive control commands for operating the device through a microphone. The portable unit is releasably connected within the recess of the base unit either jointly or separably. The portable unit includes a second processor and a connector for selectively connecting the second processor to the first processor. A touch screen display is connected to the second processor for displaying a menu of operation selections and providing manual control signals to the second processor for controlling operation of the device upon contact of one of the displayed menu operation selections. A device for reproducing and storing audio and video signals on a storage medium as well as a second audio/video storage and reproduction device positioned and a second device for connection with an external source of audio and video signals are connected to the second processor. A user is able to operate the device using either audible and manual control signals.

(52) **U.S. Cl.**  
USPC ..... **700/94; 455/344; 348/839; 348/838; 348/844; 361/683; 361/686; 361/679**

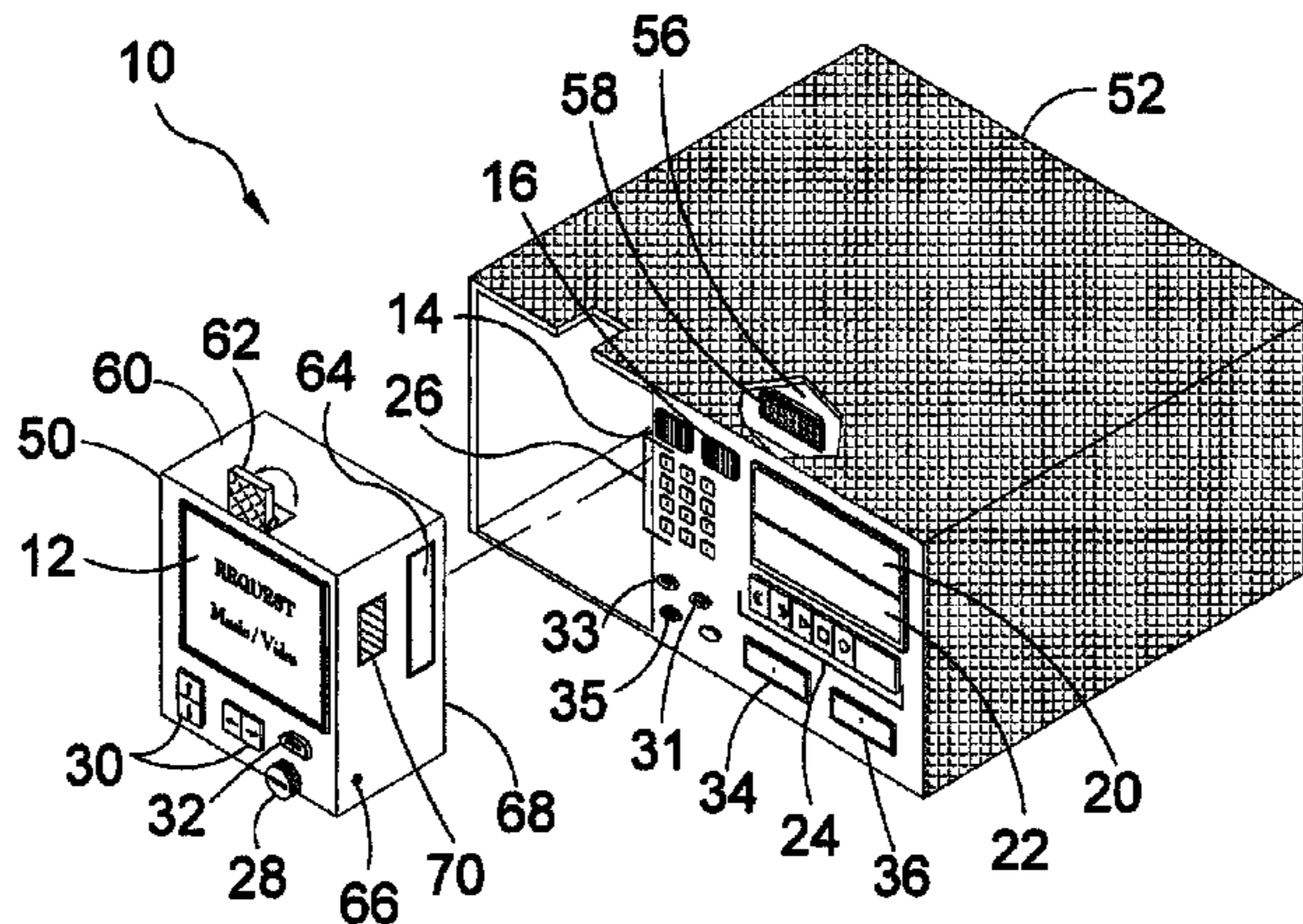
(58) **Field of Classification Search**  
USPC ..... **700/94; 84/517-518; 340/825.24, 340/825.25; 381/77, 79**  
See application file for complete search history.

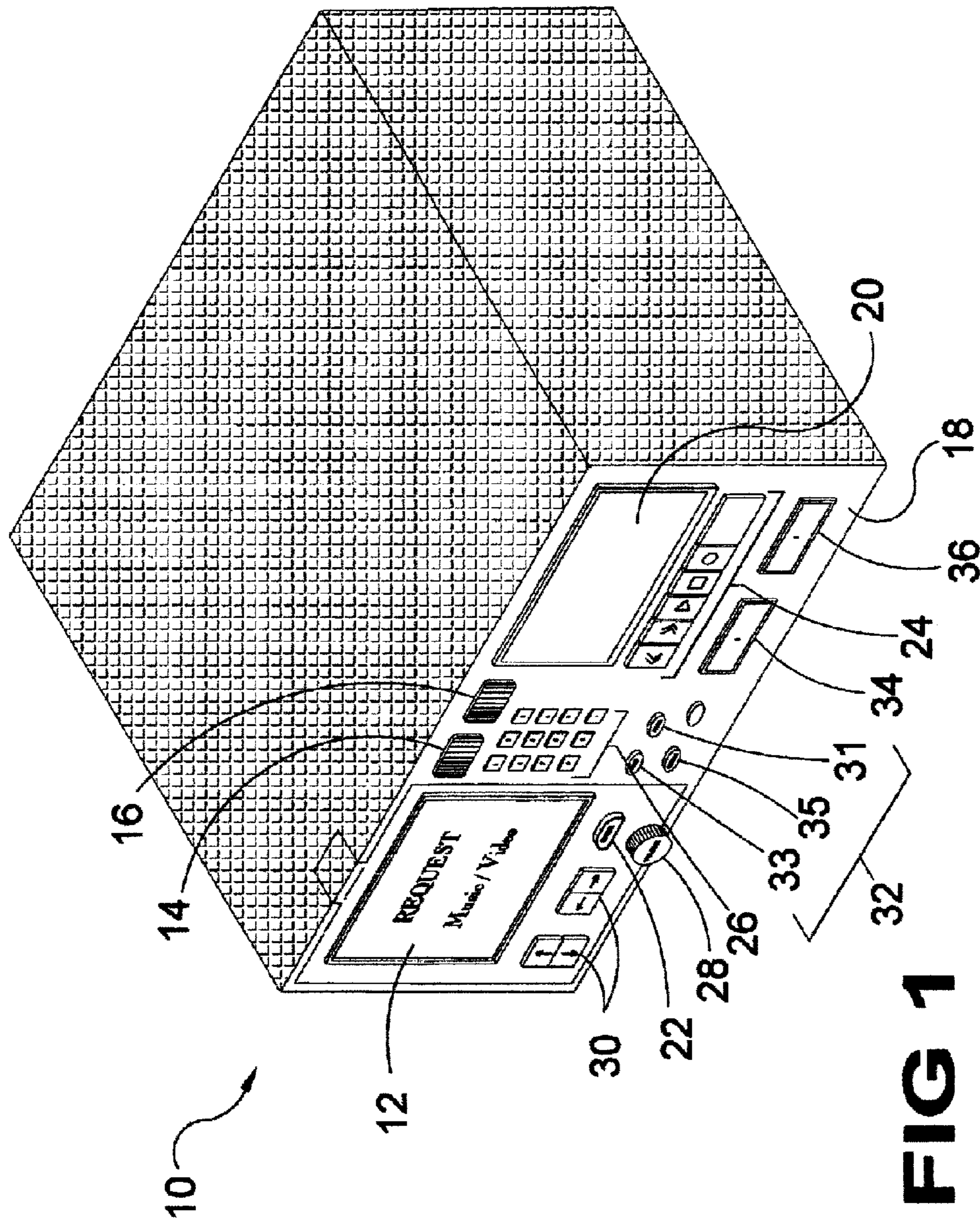
(56) **References Cited**

**U.S. PATENT DOCUMENTS**

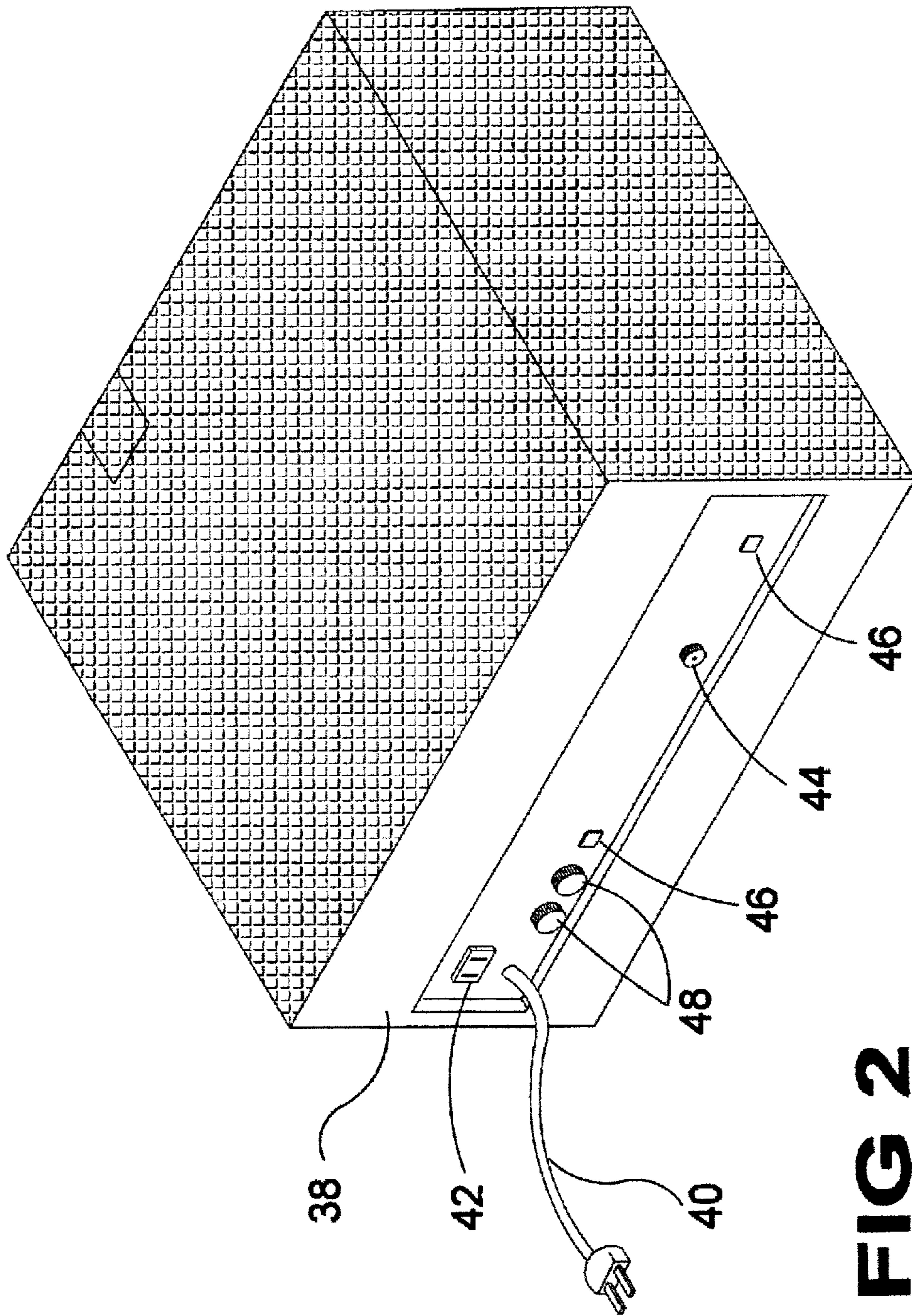
- 4,700,377 A 10/1987 Yasuda et al.
- 4,721,954 A \* 1/1988 Mauch ..... 340/5.54
- 4,797,924 A 1/1989 Schnars et al.
- 5,345,538 A 9/1994 Narayannan et al.
- D358,593 S 5/1995 Oba
- D400,531 S 11/1998 Kokkinis
- D408,412 S 4/1999 Zeitman
- 5,991,637 A 11/1999 Mack, II et al.
- 6,031,795 A \* 2/2000 Wehmeyer ..... 369/30.28
- 6,043,976 A \* 3/2000 Su ..... 361/679.41
- 6,175,356 B1 \* 1/2001 Jung ..... 345/158
- 6,396,531 B1 \* 5/2002 Gerszberg et al. .... 348/14.01
- 6,542,870 B1 \* 4/2003 Matsumoto ..... 705/51

**99 Claims, 7 Drawing Sheets**

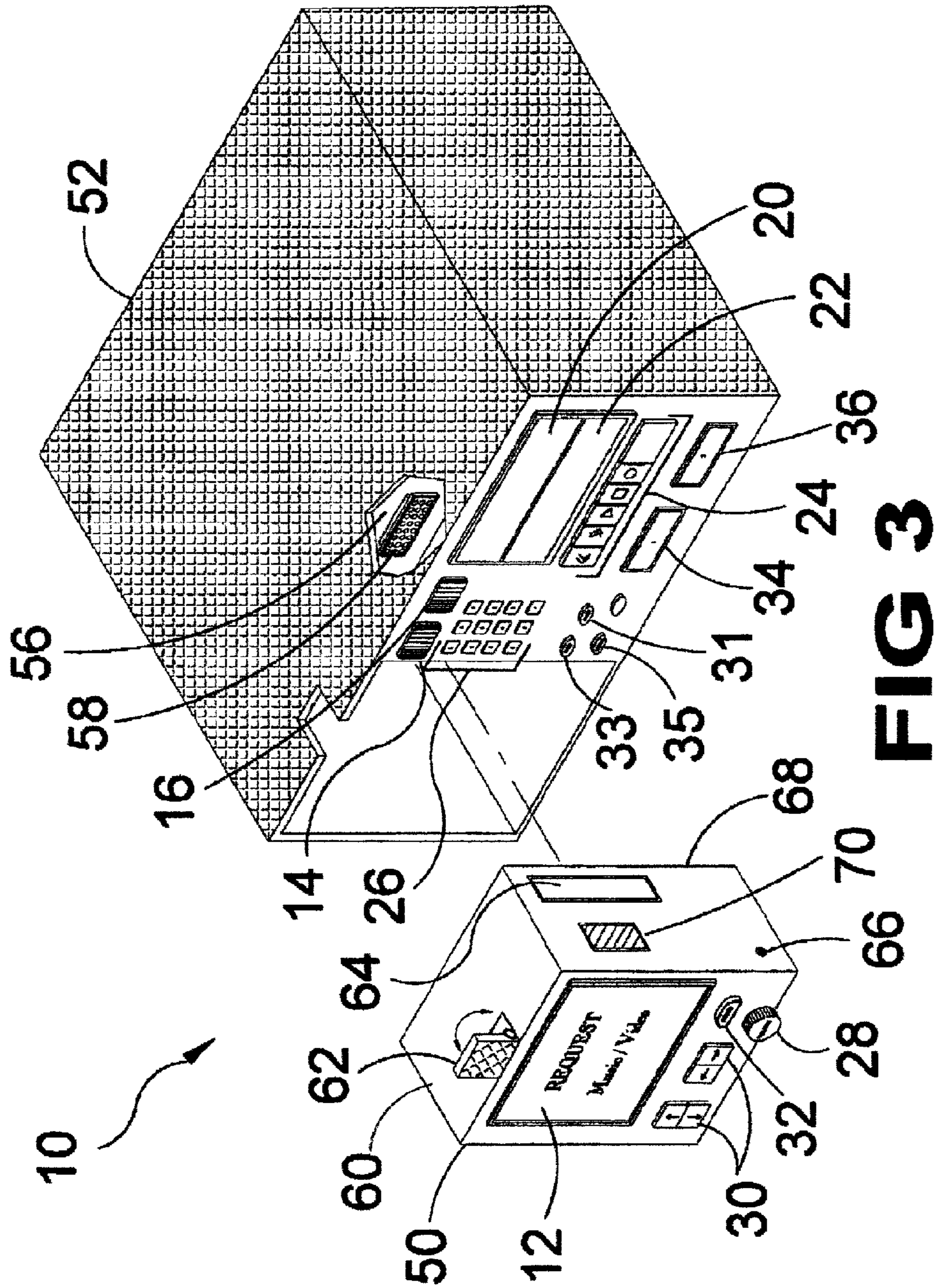


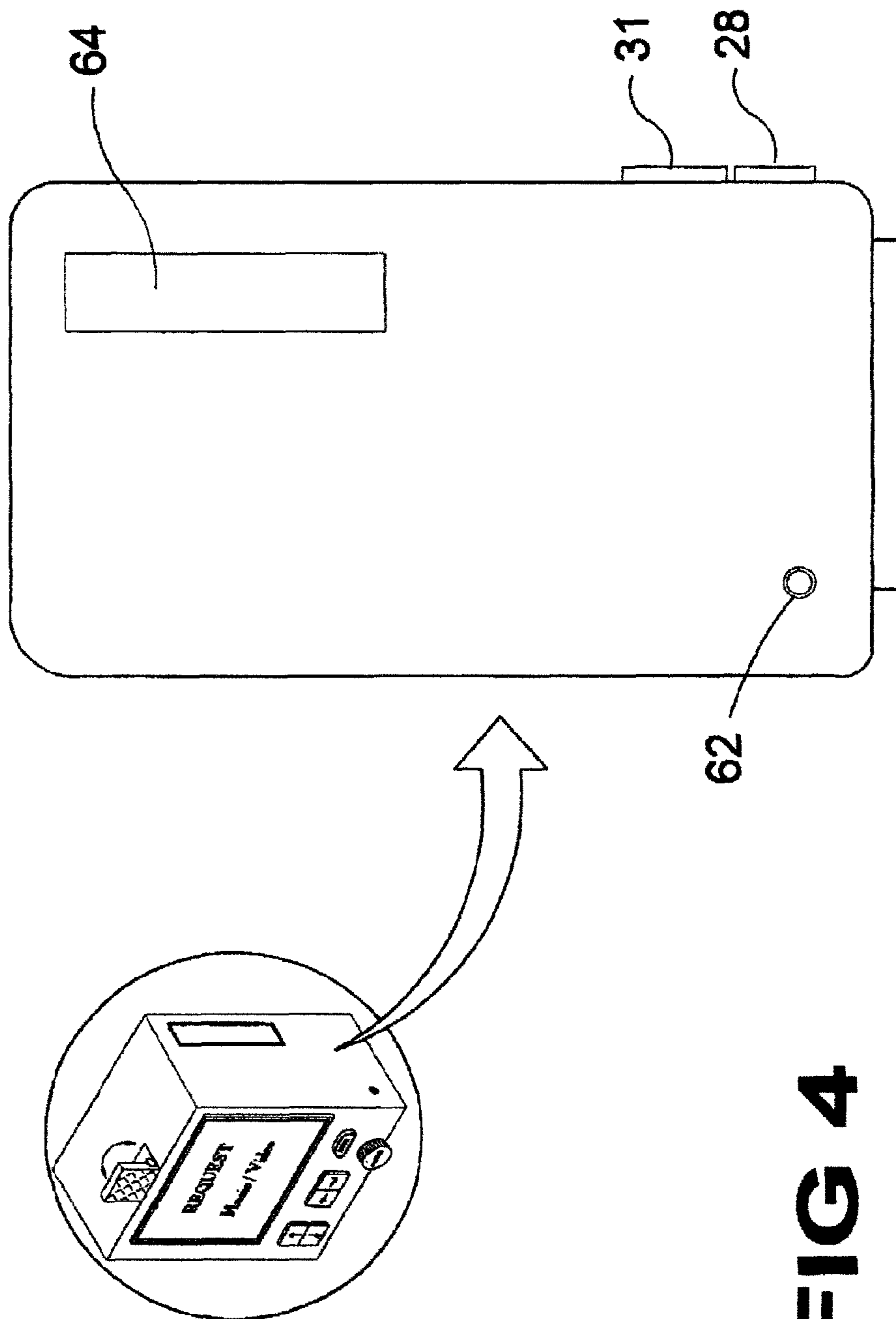


**FIG 1**

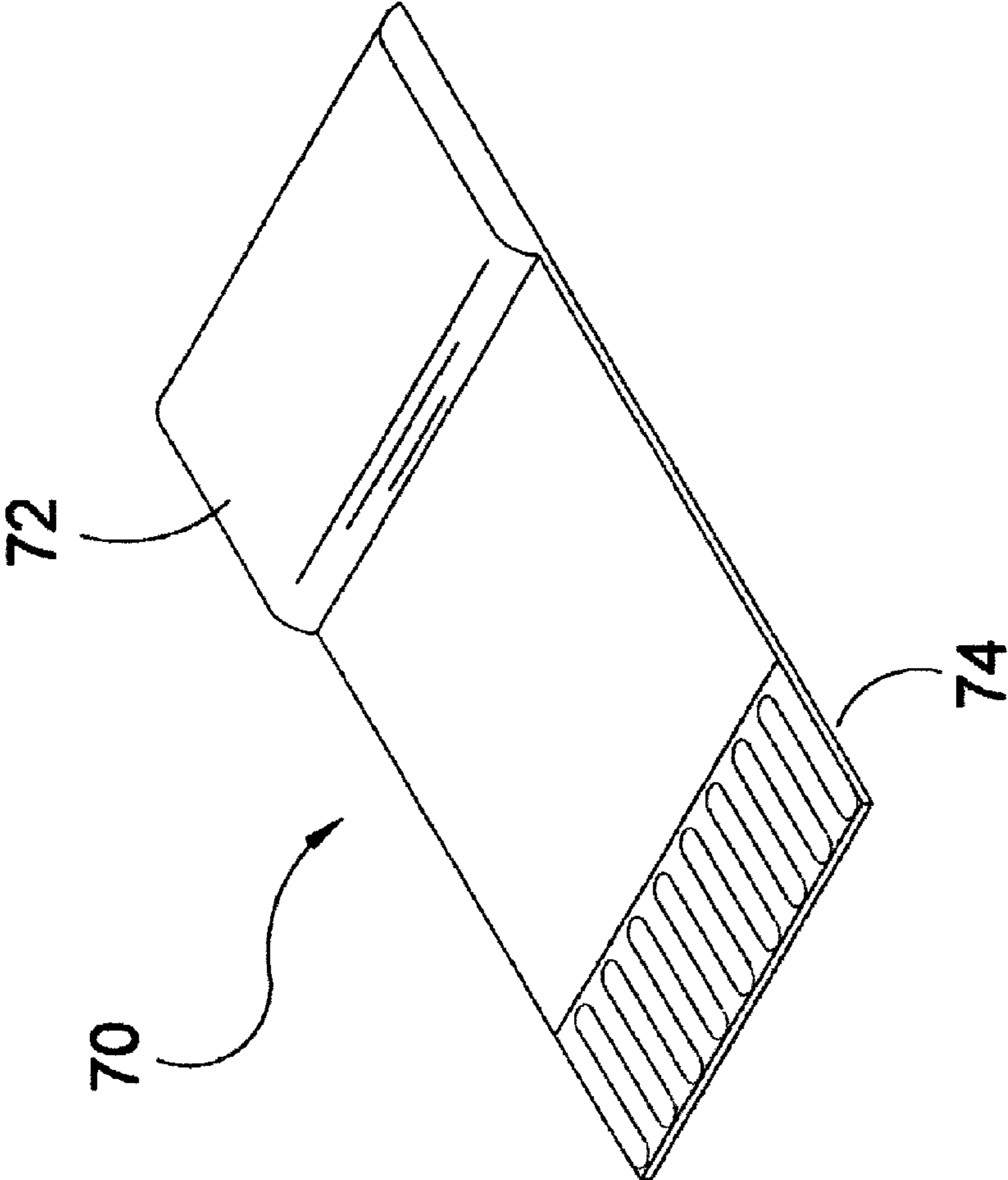


**FIG 2**





**FIG 4**



**FIG 5**

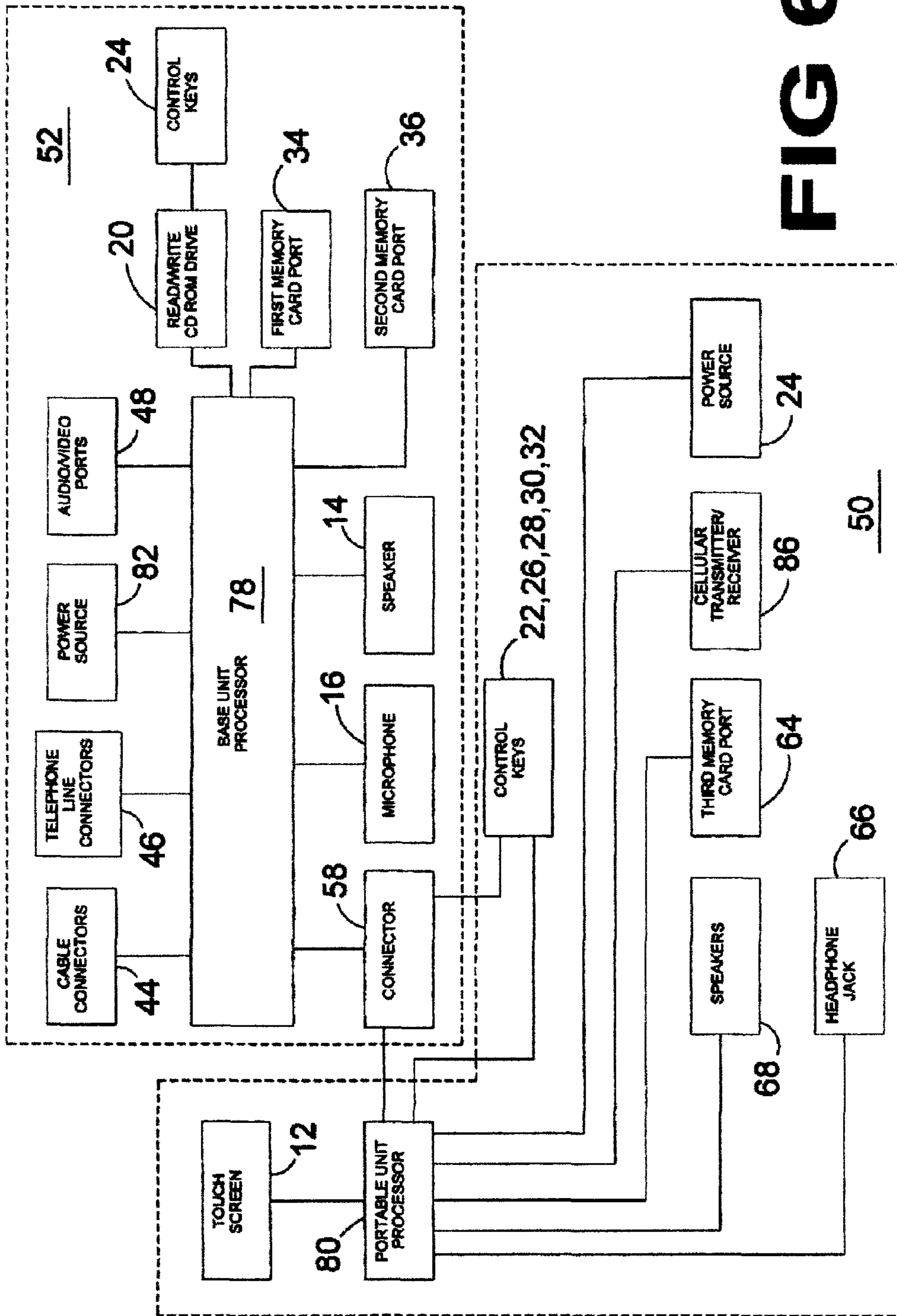
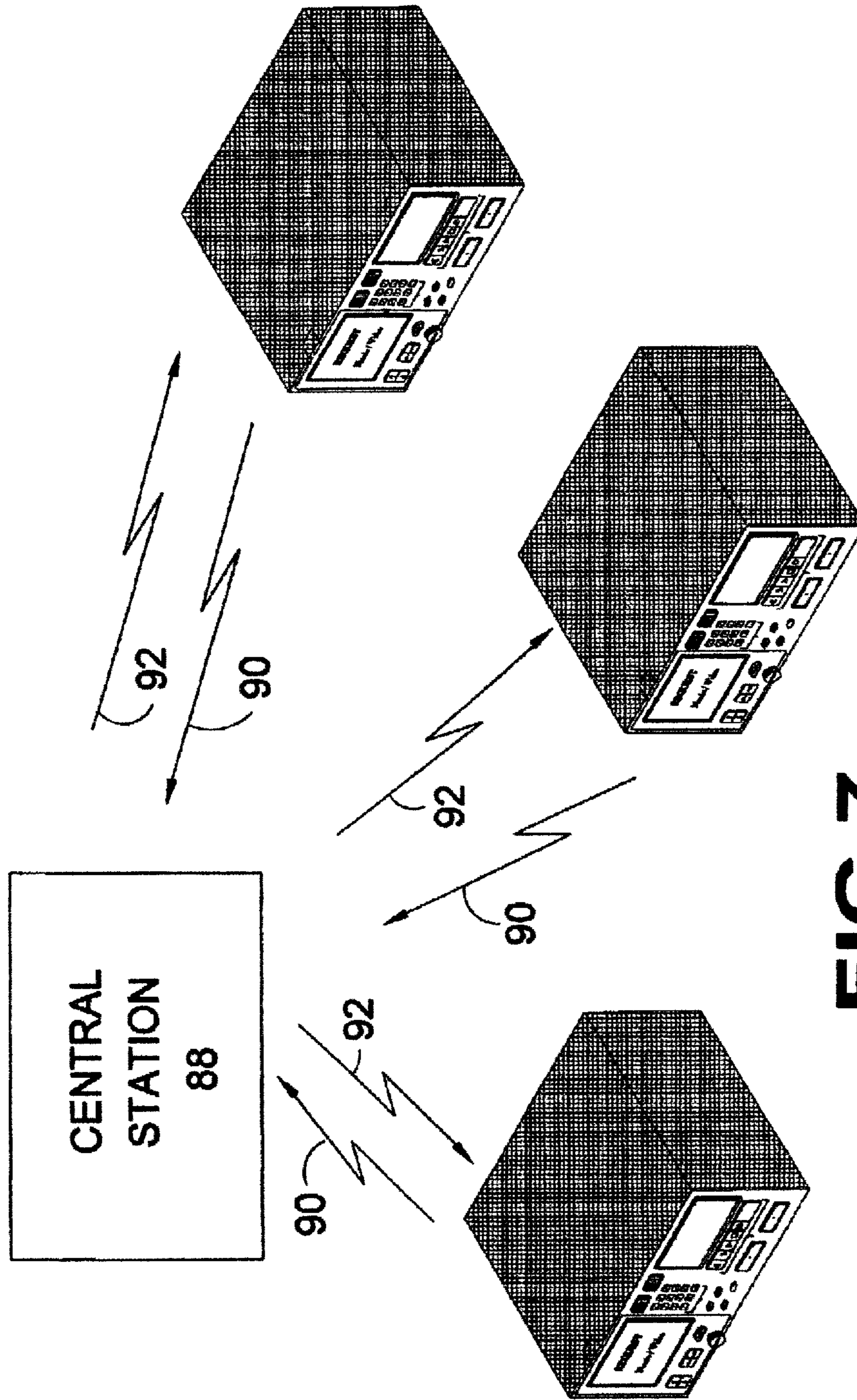


FIG 6



**FIG 7**



1

**VOICE ACTIVATED PORTABLE  
AUDIO/VIDEO REQUEST, PLAY AND  
RECORD SYSTEM**

**Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.**

*Application Ser. No. 11/850,836 is a reissue of application Ser. No. 09/585,797.*

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to audio/video devices and, more specifically, to a voice activated device able to control the playing, recording and receiving of audio and video sources upon receipt of an audible or manually input command signal, the device having a detachable portable section able to replay audio and video recorded thereby.

2. Description of the Prior Art

Numerous types of audio/video control devices have been provided in the prior art. For example, U.S. Pat. Nos. 4,700,377; 4,797,924; 5,345,538; 5,991,637; Des. 358,593; Des. 400,531 and Des. 408,412 all are illustrative of such prior art. While these units may be suitable for the particular purpose to which they address, they would not be as suitable for the purposes of the present invention as heretofore described.

U.S. Pat. No. 4,700,377

Inventor: Hiroshi Yasuda et al.

Issued: Oct. 13, 1987

An electronic apparatus includes a plurality of selectively actuatable selection devices for causing the apparatus to perform a plurality of distinct operations. A first actuation of a selection device establishes a first condition to cause the apparatus to generate an externally detectable identification such as by voice synthesis of the selected operation, and a second actuation of the selection device establishes a second condition to cause the apparatus to perform the selected operation and identify the operation on a display. In a preferred embodiment, the selection devices are each a push button actuatable from a rest position to a first depressed position to establish the first condition by actuating a first switch, and thereafter actuatable from the first depressed position to a second depressed position to establish the second condition by actuating a second switch.

U.S. Pat. No. 4,797,924

Inventor: Michael J. Schnars et al.

Issued: Jan. 10, 1989

A voice actuated control system for a motor vehicle. A microphone mounted to the vehicle senses user commands as well as other noise in the passenger compartment. Analog electrical signals from the microphone are converted into digital form and compared by a high speed microprocessor with a user profile. A correspondence between the profile and the sensed input causes a control function such as raising or

2

lowering a window to be performed. A speech synthesizer in the system prompts the user in the event a command in a command sequence is inappropriate.

U.S. Pat. No. 5,345,538

Inventor: Krishna Narayanan et al.

Issued: Sep. 6, 1994

A system is provided with a voice activated control apparatus which permits precise control of one or more system variables by means of voice commands uttered by the system operator. When a system variable is in a movement or change mode, the movement or change is terminated by any sound exceeding a pre-established acoustic threshold level. Any value of one or more system variables can be identified and appropriate data stored in a memory to permit the one or more system variables to return to an identified value or state with a single voice command. The control apparatus is combined with a screen monitor and/or an acoustic speaker to provide visible and/or acoustic responses to an operator. The control apparatus is practical for retrofitting existing remotely controllable systems.

U.S. Pat. No. 5,991,637

Inventor: Gawins A. Mack II et al.

Issued: Nov. 23, 1999

A combined entertainment and communications system includes a passive communications subsystem such as an Am/FM radio receiver, an active communications subsystem such as a cellular telephone transmitter/receiver or a CB radio transmitter/receiver, and a shared I/O subsystem. The subsystems are integrated into a single portable package and are controlled by a control mechanism capable of automatically or semi-automatically switching control of the shared I/O subsystem between the active and passive communications subsystems. Size and weight of the device are reduced by sharing common input/output (I/O) and control components. Optional voice recognition equipment can be used to control the active or passive communications subsystems. Alternative embodiments provide additional functions such as voice activation, remote monitoring, radio station scanning for pre-selected audio works, caller ID used in conjunction with voice synthesis, folding headsets, and modular function packaging to easily expand or alter a particular system. Voice recognition can also be used in a passive only version of the system.

U.S. Pat. No. Des. 358,593

Inventor: Haruo Oba

Issued: May 23, 1995

An ornamental design for a combined CD player, radio and cassette recorder is disclosed by this design patent.

U.S. Pat. No. Des. 400,531

Inventor: Serge Kokkinis

Issued: Nov. 3, 1998

An ornamental design for a combined CD player and radio system is disclosed by this design patent.

U.S. Pat. No. Des. 408,412

Inventor: Josh Zeitman

Issued: Apr. 20, 1999

An ornamental design for a combined radio, cassette and CD player is disclosed by this design patent.

## SUMMARY OF THE PRESENT INVENTION

The present invention relates generally to audio/video devices and, more specifically, to a voice activated device able to control the playing, recording and receiving of audio and video sources upon receipt of an audible or manually input command signal, the device having a detachable portable section able to replay audio and video recorded thereby.

A primary object of the present invention is to provide an audio/video control device that will overcome the shortcomings of prior art devices.

Another object of the present invention is to provide an audio/video control device which is able to receive audio command signals for controlling operation thereof.

A further object of the present invention is to provide an audio/video control device which is able to receive manually input control signals through a touch screen for controlling operation thereof.

A yet further object of the present invention is to provide an audio/video control device including a portable section removably connected to a main base unit, the base unit being able to store data on a memory card for reproduction by the portable section.

A still further object of the present invention is to provide an audio/video control device including a read/write CD ROM drive, a video screen and control buttons for operating these devices, wherein the video screen is a touch screen through which a user is able to input control commands and is able to display video images such as a movie and interactive video games for entertaining a user.

Another object of the present invention is to provide an audio/video control device including a microphone through which audible control commands are input to the device.

Another object of the present invention is to provide an audio/video control device including a speaker for providing audible interactive commands for a user to aid in operation of the device.

A still further object of the present invention is to provide an audio/video control device including a cellular transmitter/receiver for connecting with a central station for wireless reception of audio and video signals.

An even further object of the present invention is to provide an audio/video control device including connection ports for telephone and cable lines providing alternate sources of audio and video signals.

A yet further object of the present invention is to provide an audio/video control device that is simple and easy to use.

A still further object of the present invention is to provide an audio/video control device that is economical in cost to manufacture.

Additional objects of the present invention will appear as the description proceeds.

An audio/video control device for providing audio and/or video signals to a user. The audio/video control device includes a base unit and a portable unit. The base unit includes a housing having a recess extending therein and a first processor for controlling operation of the base unit. A first audio/video storage and reproduction device is positioned within

the housing and controlled by the processor to store and reproduce audio and video signals. A device for connection with an external source of audio and video signals is also connected to the first processor. The processor is able to receive control commands for operating the device through a microphone. The portable unit is releasably connected within the recess of the base unit either jointly or separably. The portable unit includes a second processor and a connector for selectively connecting the second processor to the first processor. A touch screen display is connected to the second processor for displaying a menu of operation selections and providing manual control signals to the second processor for controlling operation of the device upon contact of one of the displayed menu operation selections. A device for reproducing and storing audio and video signals on a storage medium as well as a second audio/video storage and reproduction device positioned and a second device for connection with an external source of audio and video signals are connected to the second processor. A user is able to operate the device using either audible and manual control signals.

To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

BRIEF DESCRIPTION OF THE DRAWING  
FIGURES

Various other objects, features and attendant advantages of the present invention will become more fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views.

FIG. 1 is a top perspective view of a front side of the audio/video control device of the present invention;

FIG. 2 is a top perspective view of the back side of the audio/video control device of the present invention;

FIG. 3 is a top perspective view of the audio/video control device of the present invention including a main base unit and a portable unit;

FIG. 4 is a side view of the portable unit of the audio/video control device of the present invention;

FIG. 5 is a top perspective view of a memory card for use with the audio/video control device of the present invention;

FIG. 6 is a block diagram of the audio/video control device of the present invention; and

FIG. 7 is an illustration of a plurality of audio/video control devices in accordance with the present invention communicating with a central station.

DESCRIPTION OF THE REFERENCED  
NUMERALS

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, the Figures illustrate the audio/video control device of the present invention. With regard to the reference numerals used, the following numbering is used throughout the various drawing figures.

**10** audio/video control device of the present invention

**12** video monitor

**14** speaker

**16** microphone

**18** face side of audio/video control device

## 5

**20** ad/write CD ROM device  
**22** enter key  
**24** control keys for the CD player  
**26** alpha numeric keypad  
**28** volume knob  
**30** scroll buttons for moving a cursor on the touch screen display  
**31** store key  
**32** additional control keys  
**33** next key  
**34** first memory card port  
**35** source key  
**36** second memory card port  
**38** back side  
**40** power cord  
**42** electrical outlet  
**44** cable connector ports  
**46** telephone access ports  
**48** audio/video ports  
**50** portable section of the audio/video control device  
**52** base unit  
**54** recess  
**56** back side of the recess  
**58** connector port  
**60** top side of portable section  
**62** tab  
**63** nook in top side of portable section  
**64** third memory card port  
**66** headphone connector  
**68** side of portable section  
**70** speaker of portable section  
**72** memory card  
**74** rechargeable battery section of memory card  
**76** connection portion of memory card  
**78** processor of base unit  
**80** processor of portable section  
**82** power source of base unit  
**84** power source of portable section  
**86** cellular transmitter/receiver  
**88** central station  
**90** arrow indicating signal transmitted from control device to central station  
**92** arrow indicating signal transmitted from central station to control device

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1 through 7 illustrate the audio/video control device of the present invention indicated generally by the numeral 10.

The audio/video control device 10 is shown in FIG. 1. As can be seen from this figure, the audio/video control device 10 includes a touch screen display 12, a speaker 14 and a microphone 16 on a face side 18 thereof. The touch screen display 12 is provided for manual input of control commands. The touch screen display 12 is also able to provide video images for viewing by a user such as a movie or allow the user to play interactive video games thereon. The speaker 14 provides audio signals under the control of the audio/video control device 10. The audio signals correspond with the video signal being reproduced or a video game being played on the touch screen display 12. Alternatively, the audio signals may be representative of data signals stored on a storage medium and being reproduced by a component of the audio/video control

## 6

device 10. The speaker 14 also provides interactive audio instructions to a user for aiding in controlling operation of the audio/video control device 10. The microphone 16 is provided for receiving audible command signals from a user in response to operating instructions displayed on the touch screen display 12 and audibilized through the speaker 14. These audible command signals are analyzed by the audio/video control device 10 and act to control operation thereof.

A read/write compact disc (CD) ROM drive 20 is provided in the audio/video control device 10. The CD ROM drive 20 is able to both reproduce audio and video signals stored on a storage medium such as a compact disc under the control of the audio/video control device 10 and burn audio and video signals into the storage medium for storage thereon. The stored audio and video signals may be reproduced by the CD ROM drive 20 at any desired time to provide a replay of the originally recorded audio and video signals. The audio signals will be reproduced through the speaker 14 and the video signals will be displayed on the touch screen display 12. A plurality of control keys 24 for the CD ROM drive 20 are provided on the face side 18 of the audio/video control device 10 along with an alpha numeric keypad 26. The control keys 24 are similar to the control keys on a conventional CD player and provide a user means for controlling the functioning of the CD ROM drive 20. The alpha numeric keypad 26 allows a user to enter information as requested visually on the touch screen display 12 or audibly through the speaker 14. Additional control keys 32 are provided on the face side 18 for controlling operation of the audio/video control device 10. These additional control keys 32 include a store key 31 for providing one touch recording of a video and/or audio signal, a next key 33 for advancing to a next selection of data stored on the storage medium being reproduced and a source key 35 for switching between sources of audio and video signals. Scroll keys 30 are provided for manually moving a cursor on the touch screen display 12 to highlight a desired function for operation. An enter key 22 is provided for entering information input using the control keys 32 and scroll keys 30. A volume knob 28 is provided for manually adjusting the volume of the audible signal generated by the speaker 14. First and second ports 32 and 34, respectively, are provided on the face side 18 for receiving memory cards therein. The memory cards are able to store audio and video data signals being produced and reproduced by the audio/video control device 10 and will be discussed hereinafter with specific reference to FIG. 5.

A view of the back side 38 of the audio/video control device 10 is shown in FIG. 2. A power cord 40 is provided extending from the back side 38 for connection to an external power source (not shown). The power source provides power to the audio/video control device 10 through the power cord 40. An electrical outlet 42 is also provided on the back side 38 for connection with and supplying power to a peripheral component connected thereto. The power may be supplied to the peripheral component from an internal battery of the audio/video control device 10 or from power provided by the power source through the power cord 40. A cable connector port 44 is provided for connecting the audio/video control device 10 to a cable line and receiving audio and video signals therethrough. The cable line may provide direct access to an internet service provider thereby allowing the audio/video control device 10 to receive audio and video signals from the internet such as with a DSL service. Telephone access ports 46 are provided for connection to a telephone line for receiving and transmitting signals along the public switched telephone network. The telephone access ports 46 allow for alternative means for connection with the internet or any other

device utilizing a modem or even to place a conventional telephone call through the device. When placing a conventional telephone call, the speaker **14** and microphone **16** can be used to communicate therethrough. When connecting to the internet, web pages will be displayed on the touch screen display **12**. Audio/video access ports **48** are also provided for connection of the peripheral devices to the audio/video control device **10**.

FIG. **3** shows the audio/video control device **10** including a portable section **50** and a base unit **52**. The portable section **50** of the audio/video control device **10** is shown being separated from the base unit **52**. The base unit **52** includes a recess **54** therein for retaining the portable section **50**. Positioned at a back side **56** of the recess **54** is a connector port **58** for connection with the portable section **50** thereby allowing communication between the portable section **50** and the base unit **52**. Certain ones of the control buttons described with respect to FIG. **1** are positioned on the portable section **50**. When the portable section **50** is positioned within the recess **54** and connected to the base unit **52** through the connector port **58**, the control buttons on the portable section **50** are able to control certain operations and functions of the base unit **52**. On a top side **60** of the portable section **50** is a tab **62**. The tab **62** is used to aid in removal of the portable section **50** from within the recess **54** and returning the portable section **50** to a position within the recess **54**. The tab **62** is pivotally connected to the top side **60** to move as indicated by the arrow labeled with the numeral **61**. The tab **62** is pivoted away from the top side **60** when the portable section **50** is being removed from or replaced in the recess **54**. The tab **62** is pivoted towards the top side **60** when the portable section **50** is within the recess **54** and sits within a nook **63** in the top side **60** so as not to protrude therefrom. Positioned on a side **68** of the portable unit **50** is a third memory card port **64**, a headphone connector **66** and speakers **70**. The memory card port **64** is provided for receiving memory cards including data recorded thereon by the audio/video control device **10**. The data includes both audio and video signals and is recorded on the memory card when received within either of the first and second memory card ports **34** and **36**, respectively. The headphone connector port **66** is provided for connecting headphones (not shown) to the portable section **50** so that the user may listen to audio signals being reproduced by the portable section **50**. The speakers **70** may be provided on a side of the portable section **50** thereby allowing the user to listen to audio signals being reproduced by the portable section **50** without headphones. The portable section **50** is able to detect if headphones are plugged into the headphone jack **66**. Should no headphones be plugged into the headphone jack **66**, any audio signals produced by the portable unit **50** will be audibilized through the speakers **70**. Should headphones be plugged into the headphone jack **66**, any audio signals produced by the portable unit **50** will be audibilized through the headphone jack **66** and the headphones. Preferably, the speakers **70** will be inoperative when headphones are inserted into the headphone jack **66**. A view of a side **68** of the portable section **50** is illustrated in FIG. **4**. The portable section **50** is shown in an inset view with the side **68** thereof enlarged. From this view, the third memory card port **64** is shown positioned on the side **68** along with the headphone jack **66** and the speaker **70**.

FIG. **5** shows a memory card **72** for receipt within one of the memory card ports of the on the audio/video control device **10**. When positioned within a memory card port, data is either written on the memory card **72** or reproduced from the memory card **72**. The memory card **72** includes a rechargeable battery section **74** and a connection portion **76**. The rechargeable battery section **74** includes a rechargeable

power source for providing additional power to aid in compressing data when recording data on the memory card **72** and decompressing the audio and video signals when reproducing the audio and video signals. The rechargeable power source is recharged by the power source internal to the portable section or the power source providing power to the audio/video control device **10** through the power cord **40** when positioned within one of the memory card ports. The connector portion **76** establishes an electrical connection with a connector positioned within the memory card ports. The connector portion **76** includes a plurality of individual connections for mating with respective connectors within the memory card ports. The connection section **76** includes a connector to the power supply of the audio/video control device **10**, a connector to an audio signal output, a connector to an audio signal input, a connector to a video signal output and a connector to a video signal input. The memory card **72** and memory card ports are similar in design to those used with MP3 systems and operate in a similar manner. The memory card **72** is easily positioned within and removed from a desired memory card port. The connection section **76** is positioned with in the memory card port with the battery portion **74** extending from the memory card port. The battery portion **74** is used as a handle for insertion and removal of the memory card **72** from the memory card port. When inserting the memory card **72** into the memory card port, the battery portion **74** is grasped by the user and the connection section **76** is inserted into the port until grasped and held thereon. Upon removal the battery portion **74** is again grasped by the user and a force is applied in a direction opposite to the insertion direction until the memory card **72** is removed.

A block diagram illustrating the audio/video control device **10** is shown in FIG. **6**. As can be seen from this figure, the base unit **52** includes a processor **78**. The power cord or power source is connected to the processor **78** for providing power to the audio/video control device **10**. The cable connectors **44**, telephone line connector **46** and audio/video ports **48** are also connected to the processor **78**. The cable connectors **44** provide a port for connection of the processor **78** to a cable line. The telephone line connectors **46** provide a port for connection of the processor **78** to the public switched telephone network (PSTN). The audio/video ports **48** provide a connection for a peripheral device to provide audio and video signals to the processor **78**.

The read/write CD ROM drive **20** is connected to the processor **78** for reproducing audio signals from a storage medium inserted into the read/write CD ROM drive **20**. The read/write CD ROM drive **20** is also able to store audio and video signals received by the audio/video control device **10** on a storage medium for reproduction at a later time. A plurality of control keys **24** are provided for controlling operation of the read/write CD ROM drive **20**. The control keys **24** are similar to control keys found on conventional CD players. The read/write CD ROM drive **20** may also be controlled through audio signals provided to the processor and manual commands provided through the touch screen display **12** found in the portable section **50** as will be further discussed hereinafter. The first and second memory card ports **34** and **36**, respectively, are provided for storing information on memory cards and reproducing audio and video signals previously stored on memory cards. The speaker **14** is connected to the processor **78** and provides audible instructions for aiding the user in controlling the operation of the audio/video control device **10**. The speaker **14** makes the audio/video control device **10** an interactive system by audibly prompting the user to either audibly or manually input control commands. The speaker also provides an output for audio signals

reproduced by the audio/video control device **10**. The microphone **16** is connected to the processor **78** for receiving audible command signals from a user and providing the command signals to the processor **78** for analysis. The processor **78** controls the audio/video control device **10** based upon the analysis of the control signals received by the microphone **16**.

A connection port **58** is provided in the base unit **52** for connection with the portable section **50**. The portable section **50** includes a processor **80** which connects with the connection port **58** when the portable section **50** is placed within the recess **58** of the base unit **52**. The processor **80** is thus connected with the processor **78** of the base unit **52**. The touch screen display **12** is provided for displaying menu commands under the control of the processor **80** of the portable section **50**. Upon contact with the touch screen display **12**, command signals for control of the operation of the audio/video control device **10** are provided to the processor **80**. The touch screen display **12** is also controlled by the processor **80** to display video signals being reproduced by the audio/video control device **10**. When the portable unit **50** is connected to the base unit via the connection port **58**, data provided to the processor **80** of the portable unit **50** is also provided to the processor **78** of the base unit **52** for analysis via the connection port **58**. Control of the components of the audio/video control device **10** positioned in the base unit **52** via the touch screen display **12** is thus possible when the portable section **50** is positioned within the recess **54** and connected to the base unit **52** via the connection port **58**. A plurality of control keys **22**, **26**, **28**, **30** and **32** are also connected to the processor **80** of the portable section **50** and via the connection port **58** to the processor **78** of the base unit **52**. Also connected to the processor **80** is the headphone jack **66** and speakers **70**. The headphone jack **66** is provided with audio signals by the processor **80** thereby allowing a user to listen to audio signals generated by the portable unit **50** through headphones. When headphones are not connected to the headphone jack **66** any audio signals generated by the portable unit **50** are provided through the speakers **70**. The third memory card port **64** is connected to the processor **80** of the portable section **50**. The third memory card port **64** is able to receive a memory card **72** as discussed hereinbefore for reproducing audio and video signals stored on the memory card **72**. The video signals will be displayed on the touch screen display **12** and the audio signals will be produced through one of the headphone jack **66** and speakers **70**.

A cellular transmitter/receiver **86** is connected to the processor **80** for providing a wireless telephone connection through the portable section **50**. The cellular transmitter/receiver **86** is also connected to the processor **78** of the base unit **52** via the processor **80** of the portable section **50** and the connection port **58**. The cellular transmitter/receiver **86** is able to connect to a global computer network such as the internet through an internet service provider or with a central station which is able to provide audio and video signals to the audio/video control device **10**. A power source **84** is also connected to the processor **80** for supplying power to the portable section **50**.

An illustration of the audio/video control device **10** communicating with the central station **88** is shown in FIG. 7. The central station **88** is able to provide a desired type of entertainment for reproduction on the audio/video control device **10** and thereby cater to the tastes of a user. The central station **88** is preferably a subscriber service for which a user must register. Upon registration the user will be provided an access number which will establish an account for the user. The account number is stored within the audio/video control device **10**. When the user dials a predetermined telephone

number on the alphanumeric keypad **26**, a signal indicated by the arrow labeled with the numeral **90** is transmitted to the central station **88**. This signal includes data indicative of the access number for the particular audio/video control device **10** transmitting the signal. Upon receipt of the signal by the central station **88**, the user access number is checked by the central station **88** against a data base of acceptable access numbers. If the activation code matches a stored activation code for an account in good standing, the user is granted access to the service. A notification signal indicated by the arrow labeled with the numeral **92** is transmitted by the central station **88** back to the audio/video control device **10** indicating whether the access number has been accepted by the system. The user can now select any type of entertainment provided by the central station through audio or manual commands provided to the audio/video control device **10**. The audio/video control device will transmit these commands to the central station **88**. In response to the command signals the central station **88** transmits audio and/or video signals back to the audio/video control device for the entertainment of the user.

The operation of the audio/video control device **10** will now be described with reference to the figures. In operation, the audio/video control device **10** is used by a person to reproduce audio and video signals as well as to store audio and video signals on a tangible medium. The audio/video control device **10** can further be used to establish either a hardwired or wireless connection with a peripheral device, the internet or a central station to receive audio and video signals for entertaining the user of the audio/video control device **10**. The audio/video control device **10** includes a base unit **52** and a portable section **50**. The portable section **50** is releasably connected to the base unit **52** and may be used remotely from the base unit **52** as desired. In order to use the portable section remotely, the user must disconnect the portable section **50** from the connector port **58** by pulling the portable section **50** out from within the recess **54** in the base unit **52**. Alternatively, the portable section **50** and base unit **52** may be operated together in a connected state.

The audio/video control device **10** is able to receive both audible and manual control signals from a user to operate. The audible signals are entered through the microphone **16** and the manual signals are entered through use of a touch screen display **12** and a plurality of control buttons. Menus of operating functions are displayed on the touch screen display **12** under the control of the processor **80**. The speaker **14** provides audible interactive instructions for operating the audio/video control device **10**. The audible interactive instructions are based upon the menu presently displayed by the touch screen display **12**. When the user is prompted via the touch screen display **12** or through the speaker **14** to enter a control command, the user will either speak a command into the microphone or touch the appropriate selection on the touch screen display **12**. The user may then activate one of the control keys to further control the operation of the audio/video control device **10**.

If the user wishes to operate the read/write CD ROM drive **20**, the user will activate a desired control key **24**. These control keys **24** allow a user to either play or record data on a compact disk and function as control keys of a conventional compact disk player. When the user selects to play a disk, the audio signals stored on the disk will be reproduced through the speakers **14** and video signals stored on the disk will be viewable on the touch screen display **12**. When a user desires to record audio and/or video signals on a disk, the user must select the appropriate command by activating a command key. In order to store audio and video signals on a disk, it is

## 11

necessary for another component of the audio/video control device **10** to be operating and thus provide audio and video signals to the read/write CD ROM drive **20**. Audio and video signals may be provided from a peripheral device connected through the audio and video input ports **48**, an audio and/or video source connected through the cable connectors or telephone line connectors, an audio and/or video source connected through the cellular transmitter/receiver **88** or from a memory card **72** received within one of the memory card ports **34**, **36** and **64**.

When a user wishes to store data on a memory card or reproduce data previously stored on a memory card, the appropriate commands must be entered either audibly or manually by pressing the appropriate selection(s) on the touch screen display **12**. The user may scroll through the possible selections on the touch screen display **12** using the scroll keys **30**, highlighting a different selected option each time the scroll key is activated. When the desired option for reproduction of audio and/or video signals on a memory card **72** is highlighted, the user will activate the enter key **22**. When a user desires to record audio and/or video signals on a memory card **72**, the user must select the appropriate command by activating a command key. In order to store audio and video signals on a memory card **72**, it is necessary for another component of the audio/video control device **10** to be operating and thus provide audio and video signals to the desired memory card port **34**, **36** or **64**. Audio and video signals may be provided from a peripheral device connected through the audio and video input ports **48**, an audio and/or video source connected through the cable connectors or telephone line connectors, an audio and/or video source connected through the cellular transmitter/receiver **88** or from a disk received within the read/write CD ROM drive **20**.

Options for operation of the audio/video control device **10** also include utilizing a wired connection to the PSTN for placing a telephone call, a cable connection to connect to an ISP for internet connection, a cellular receiver/transmitter for placing a cellular telephone call to a desired person, an ISP or to the central station **88**. Each of these options may be selected through the touch screen display **12** or via an audible signal into the microphone **16**. Operation of the connection with the central station is described above with reference to the description of FIG. **7**. The speaker **14** also provides audible guidance for the user to operate the audio/video control device **10**. The speaker **14** provides audio messages instructing the user through the operation procedure for the audio/video control device **10** and describing the different options available to the user. Upon selecting the desired option, the audio/video control device **10** will perform the selected function until the user requests that the operation halt.

When performing a manual entry of operating commands, the processor **80** within the portable section **50** will analyze the command input on the touch screen display **12**. Should the command be directed to the operation of components controlled by the processor **78** within the base unit **52**, a signal indicative of such will be transmitted from the processor **80** thereto through the connection port **58**. The processor **78** will then control the operation of the proper component to perform the desired function. When using the cellular transmitter/receiver **86**, the cellular transmitter/receiver **84** will be controlled by the processor **80** in the portable section **50** to place a wireless telephone call to a desired party, e.g. an ISP, an individual, etc. . . . If the command signal to use the cellular transmitter/receiver **86** was received through the touch screen display **12** or other control keys, the processor **80** will directly control the operation thereof. If the command signal was input using an audible signal using the microphone **16**, the

## 12

processor **78** of the base unit **52** will provide a command signal to the processor **80** through the connection port **58** to control the cellular transmitter/receiver **86**.

The portable section **50** can also be used separately from the base unit **52**. The portable section **50** is preferably of a size and shape which is easily carried by a user and unobtrusive. The portable section **50** is removed from its connection to the base unit **52** by lifting a tab **62** thereatop and applying a pulling force to remove the portable section **50** from within its recess **58** in the base unit **52**. The pulling force on the tab **62** causes the portable section **50** to be disconnected from the connection port **58** and removed from within the recess **54**. The portable section **50** can now be used separately from the base unit **52**. In order to operate the portable section **50**, the user must enter a command on the control keys or on the touch screen display **12**. The user will use the control keys and the touch screen display **12** in the same manner as described before. When reproducing an audio signal, the audio signal will be provided by the processor **80** to the headphone jack **66** for listening through headphones connected thereto. Should headphones not be connected to the headphone jack **66**, the audio signals will be provided to speakers **70**. Reproduction and storage of audio and video signals on a memory card **72** are performed similarly to that described above with respect to the base unit **52**.

When it is desired to contact the central station via the cellular transmitter/receiver **86**, the user must select the appropriate options on the touch screen display **12**. Upon selection of the desired option, the processor **80** will control the cellular transmitter/receiver to place a wireless telephone call to the central unit to establish a connection therewith. Upon establishment of the connection, the user must select the desired option as indicated on a menu on the touch screen display **12** to receive the desired type of entertainment from the central station.

The audio/video control device **10** of the present invention is a completely user interactive system providing for audio and manual input of control commands for operation thereof. This device provides numerous different options for reproduction and storage of audio and video signals and a user friendly procedure for operation. A portable section of the device allows the user to carry along an unobtrusive device to provide entertainment while traveling. The manual input of commands for [oOperation] *operation* is a menu driven system including audio signals which accompany the menu to provide added ease of operation. Furthermore, the user is able to input audible signals through a microphone which are analyzed by the audio/video control device **10** for control of the operation thereof.

From the above description it can be seen that the audio/video control device of the present invention is able to overcome the shortcomings of prior art devices by providing an audio/video control device which is able to receive both audio command signals and manually input control signals through a touch screen for controlling operation thereof. The audio/video control device includes a portable section removably connected to a main base unit, the base unit being able to store data on a memory card for reproduction by the portable section. The audio/video control device also includes a read/write CD ROM drive, a video screen and control buttons for operating these devices, wherein the video screen is able to display video images such as a movie and interactive video games for entertaining a user. The audio/video control device further includes a cellular transmitter/receiver for connecting with a central station for wireless reception of audio and video signals and connection ports for telephone and cable lines providing alternate sources of audio and video signals. Fur-

## 13

thermore, the audio/video control device of the present invention is simple and easy to use and economical in cost to manufacture.

It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of methods differing from the type described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claims, it is not intended to be limited to the details above, since it will be understood that various omissions, modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed is:

1. [Au] An audio/video control device comprising:
  - a) a base unit including:
    - i) a housing having a recess extending therein;
    - ii) a first processor for controlling operation of said base unit;
    - iii) a first audio/video storage and reproduction device positioned within said housing and controlled by said *first* processor to one of store and reproduce at least one of audio and video signals thereon;
    - iv) first means for connection with an external source of audio and video signals for at least one of reproduction and storage by said base unit; and
    - v) means connected to said first processor for receiving audible control signals in response to which said first processor controls operation of said *first audio/video storage and reproduction* device; and
  - b) a portable unit releasably connected to said base unit, said portable unit being operable jointly and separably within said recess in said housing of said base unit, said portable unit including:
    - i) a second processor;
    - ii) means for selectively connecting said second processor to said first processor;
    - iii) a touch screen display connected to said second processor for displaying a menu of operation selections and providing manual control signals to said second processor for controlling operation of said *first audio/video storage and reproduction* device upon contact by a user of one of said operation selections in said displayed menu;
    - iv) means for reproducing and storing audio and video signals on a storage medium;
    - v) a second audio/video storage and reproduction device positioned within said housing and controlled by said *second* processor;
    - vi) second means for connection with an external source of audio and video signals for reproduction and storage by said base unit, wherein a user is able to operate said base unit and said portable unit either jointly or separably through at least one of audible and manual control signals; and
    - vii) said touch screen display in said portable unit functioning as sole interactive display for said base unit

## 14

both when said portable unit is connected to said base unit and when said portable unit is removed from said base unit.

2. The audio/video control device as recited in claim 1, wherein said base unit further includes means for connecting said first processor with said second processor positioned within said recess.

3. The audio/video control device as recited in claim 2, wherein said base unit further includes a speaker connected to said first processor for audibly providing operating instructions to a user for controlling operation of said *first audio/video storage and reproduction* device.

4. The audio/video control device as recited in claim 1, wherein said first audio/video storage and reproduction device is a read/write CD ROM drive.

5. The audio/video control device as recited in claim 1, wherein said first audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon and a rechargeable battery, wherein said memory card is connected to said first [microprocessor] *processor* upon insertion into said memory port.

6. The audio/video control device as recited in claim 1, wherein said second audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon and a rechargeable battery, wherein said memory card is connected to said first [microprocessor] *processor* upon insertion into said memory port.

7. The audio/video control device as recited in claim 3, wherein said base unit further includes a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon and a rechargeable battery, wherein said memory card is connected to said first [microprocessor] *processor* upon insertion into said memory port.

8. The audio/video control device as recited in claim 1, wherein said first means for connection with an external source of audio and video signals is one of a cable connection port, a telephone line connection port or an audio/video connector.

9. The audio/video control device as recited in claim 8, wherein said cable connection port provides a direct connection of said first processor to a global communications network.

10. The audio/video control device as recited in claim 1, wherein said first processor displays video reproduced from one of said first audio/video storage and reproduction device and said means for connection with an external source of audio and video signals on said touch screen display when said portable device is positioned in said recess.

11. The audio/video control device as recited in claim 1, wherein said portable unit further includes control keys for manually providing control signals to said second processor.

12. The audio/video control device as recited in claim 1, wherein said second means for connection with an external source of audio and video signals is a cellular transmitter/receiver.

13. The audio/video control device as recited in claim 1, wherein said base unit [farther] *further* includes a second memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon and a rechargeable battery, wherein said memory card is connected to said first [microprocessor] *processor* upon insertion into said memory port.

## 15

14. The audio/video control device as recited in claim 1, wherein said means for receiving audible control signals is a microphone.

15. The audio/video control device as recited in claim 1, wherein said portable unit further includes a headphone jack connected to said second processor for audibilizing reproduced audio signals.

16. The audio/video control device as recited in claim 1, wherein the recess for said portable unit is located on a front face of said base unit, a top surface of said portable unit having a tab extending through a top surface of said base unit for permitting convenient release of said portable unit from said base unit, said tab rotatable between a position flush with said top surface of said base unit and a pop up position for removal of said portable unit.

17. The audio/video control device as recited in claim 16, wherein said portable unit further includes a speaker connected to said second processor for audibilizing reproduced audio signals, the speaker on said portable unit being disconnected and hidden when said portable unit is in said recess of said base unit.

18. A system for providing audio and/or video signals to a remote user, said system comprising:

- a) a central station including:
  - i) a data base for storing acceptable access numbers;
  - ii) a first processor connected to said data base;
  - iii) a first receiver; and
  - iv) a first transmitter for transmitting audio and/or video signals; and
- b) an audio/video control device located remotely from said central station, said audio/video control device including:
  - i) a memory for storing an access number;
  - ii) a second transmitter for transmitting the access number to said central unit;
  - iii) a second receiver for receiving audio and/or video signals from said central unit;
  - iv) a second processor;
  - v) control keys for generating control signals and controlling said processor to activate said second transmitter to transmit said access number and control signals to said central station;
  - vi) a speaker for reproducing audio signals received from said central station; and
  - vii) a removable portable unit within said control device containing a display for reproducing video signals received from said central station, wherein the display functions as sole interactive display for said control device when said portable unit is connected to said control device and when said portable unit is removed from said control device, and wherein when a user desires to listen to audio signals and/or view video signals transmitted by said central unit, the user activates said control keys causing said second transmitter to transmit said access number to said central station whereupon said first processor checks the access number against said data base of acceptable access numbers and upon determination said access number is acceptable said first transmitter transmits audio and/or video signals to said audio/video control device for reproduction thereby.

19. The system as claimed in claim 18, further comprising a plurality of audio/video control devices, each of said audio/video control devices having a unique access number stored in said memory and being authorized to receive audio and/or video signals from said central station.

## 16

20. The system as claimed in claim 18, wherein said central station is able to transmit any of a selection of audio and video signals to said audio/video control device and said control keys each generate a respective control signal for transmission to said central station upon activation, wherein each control signal is indicative of a respective selection of audio and video signals to be transmitted by said central station.

21. The system as claimed in claim 20, wherein said transmitter within said audio/video control device is a cellular transmitter.

22. The system as claimed in claim 21, wherein said control keys include an alphanumeric keypad for dialing an access telephone number for said central station to establish communication therewith.

23. The system as claimed in claim 22, wherein said audio/video control device further includes a microphone for receiving audible control commands from the user and provides the audible control commands to said second processor for analysis and transmission to said central station.

24. The system as claimed in claim 18, wherein said central station transmits a signal indicative of transmission of an unauthorized access number by said audio/video control unit upon determining the access number is not acceptable.

25. *An audio/video control device comprising:*
- i) *a base unit configured to receive an audio/video storage and reproduction device and including a means for connection with an external source of audio and video signals for at least one of reproduction and storage by the audio/video storage and reproduction device;*
  - ii) *a portable unit releasably connected, hardwired or wirelessly, to said base unit and having a touch screen display displaying a menu of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of said operation selections in said displayed menu, said portable unit enables a user to control operation of the audio/video storage and reproduction device and the means for connection with the external source of audio and video signals, and wherein the touch screen display functions as the sole interactive touch screen operational control display for said base unit.*

26. *The audio/video control device as recited in claim 25, further comprising means for voice activation.*

27. *The audio/video control device as recited in claim 25, further comprising means for audible interaction.*

28. *The audio/video control device as recited in claim 25, wherein said audio/video storage and reproduction device comprises a read/write CD ROM drive.*

29. *The audio/video control device as recited in claim 25, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon and a rechargeable battery, wherein said memory card is connected to a microprocessor upon insertion into said memory port.*

30. *The audio/video control device as recited in claim 25, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon, wherein said memory card is connected to a microprocessor upon insertion into said memory port.*

31. *The audio/video control device as recited in claim 25, further comprising a microphone.*

32. *The audio/video control device as recited in claim 25, further comprising an alphanumeric keypad for manually providing control signals.*



33. The audio/video control device as recited in claim 25, further comprising additional control keys for manually providing control signals.

34. The audio/video control device as recited in claim 25, further comprising an internal battery for supplying power.

35. The audio/video control device as recited in claim 25, further comprising means for wireless communication.

36. The audio/video control device as recited in claim 25, further comprising means for playing interactive video games.

37. The audio/video control device as recited in claim 25, further comprising means for placing and receiving a cellular telephone call.

38. The audio/video control device as recited in claim 25, further comprising means for placing and receiving a telephone line connection call.

39. The audio/video control device as recited in claim 25, comprising the means to establish either a hardwired or wireless connection with a peripheral device, the Internet, or a central station to receive audio and video signals for entertaining the user of said audio/video control device.

40. The audio/video control device as recited in claim 25, further comprising a speaker for reproducing audio signals.

41. The audio/video control device as recited in claim 40, wherein said portable unit enables the user to control speaker operation both when said portable unit is connected to said base unit and when said portable unit is removed from said base unit.

42. The audio/video control device as recited in claim 25, wherein the touch screen display functions as the sole interactive touch screen operational control display for said base unit control device when said portable unit is connected to said base unit control device and when said portable unit is removed from said base unit control device.

43. An audio/video control device comprising:  
a base unit housing a speaker for reproducing audio signals; and  
a portable unit releasably connected, by hardwired or wireless connection, to said base unit and having a touch screen display displaying a menu of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of said operation selections in said displayed menu, wherein said portable unit enables a user to control operation of said speaker housed in said base unit, the portable unit is able to be releasably connected to said base unit, and the touch screen display functions as the sole interactive touch screen operational control display for said base unit.

44. The audio/video control device as recited in claim 43, further comprising means for voice activation.

45. The audio/video control device as recited in claim 43, further comprising a microphone for receiving voice commands.

46. The audio/video control device as recited in claim 43, further comprising an alphanumeric keypad for providing manual control signals.

47. The audio/video control device as recited in claim 43, further comprising additional control keys for providing manual control signals.

48. The audio/video control device as recited in claim 43, further comprising a read/write CD ROM drive for providing audio/video storage and reproduction.

49. The audio/video control device as recited in claim 43, further comprising a memory card port for receiving a memory card for providing audio/video storage and reproduction; said memory card including means for storing audio

and video data thereon and a rechargeable battery; wherein said memory card is connected to a microprocessor upon insertion into said memory card port.

50. The audio/video control device as recited in claim 43, further comprising a memory card port for receiving a memory card for providing audio/video storage and reproduction; said memory card including means for storing audio and video data thereon; wherein said memory card is connected to a microprocessor upon insertion into said memory card port.

51. The audio/video control device as recited in claim 43, further comprising means for rechargeable power.

52. The audio/video control device as recited in claim 43, further comprising means for playing interactive video games.

53. The audio/video control device as recited in claim 43, further comprising a wireless transmitter and receiver for connecting with an external source of audio and video signals.

54. The audio/video control device as recited in claim 43, further comprising a cable connector port for connecting with an external source of audio and video signals.

55. The audio/video control device as recited in claim 43, further comprising a telephone line connector port for connecting with an external source of audio and video signals.

56. The audio/video control device as recited in claim 43, further comprising an audio/video connector port for connecting with an external source of audio and video signals.

57. The audio/video control device as recited in claim 43, further comprising a wireless transmitter and receiver, or a cable connector port, or a telephone line connector port to connect to a subscriber service central station as an external source of audio and video signals.

58. The audio/video control device as recited in claim 43, further comprising a wireless transmitter and receiver, or a cable connector port, or a telephone line connector port to connect to the Internet as an external source of audio and video signals.

59. The audio/video control device as recited in claim 43, further comprising a wireless transmitter and receiver, or a cable connector port, or a telephone line connector port to connect to a peripheral device as an external source of audio and video signals.

60. The audio/video control device as recited in claim 43, further comprising means to establish a hardwired and/or wireless connection with a peripheral device, or the Internet, or a subscriber service central station to receive audio and video signals for entertaining the user of said audio/video control device.

61. The audio/video control device as recited in claim 43, further comprising a wireless transmitter and receiver for placing and receiving a cellular telephone call.

62. The audio/video control device as recited in claim 43, further comprising a cable connector port and/or a telephone line connector port for placing and receiving a telephone line connection call.

63. An audio/video control device as recited in claim 43, wherein said portable unit enables the user to control operation of said speaker housed in said base unit both when said portable unit is connected to said base unit control device and when said portable unit is removed from said base unit control device.

64. An audio/video control device as recited in claim 43, wherein the touch screen display functions as the sole interactive touch screen operational control display for said base unit when said portable unit is connected to said base unit and when said portable unit is removed from said base unit.

65. A system for providing audio and/or video signals to a remote user, said system comprising:

a central station including a receiver and a transmitter for transmitting audio and/or video signals, and for connecting with an audio/video control device located remotely from the central station:

said audio/video control device including a receiver and a transmitter for connecting with said central station,

said audio/video control device comprising a base unit housing a speaker for reproducing audio signals and

a portable unit having a touch screen video display for displaying video, displaying a menu of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of said operation selections in said displayed menu,

wherein the portable unit is able to be releasably connected to the base unit and the touch screen video display functions as the sole interactive touch screen video display for the base unit when said portable unit is connected to said base unit and when said portable unit is removed from said base unit.

66. The system as claimed in claim 65, further comprising a plurality of audio/video control devices, each of the audio/video control devices having a unique access number stored in memory and being authorized to receive audio and/or video signals from the central station.

67. The system as claimed in claim 65, wherein the central station is a subscriber service.

68. The system as claimed in claim 65, further comprising a wireless transmitter and receiver for connecting the central station with a remotely located audio/video control device.

69. The system as claimed in claim 65, further comprising a cable line connection for connecting the central station with a remotely located audio/video control device.

70. The system as claimed in claim 65, further comprising a telephone line connection for connecting the central station with a remotely located audio/video control device.

71. The system as claimed in claim 65, wherein the central station can establish a hardwired and/or wireless connection with a remotely located audio/video control device.

72. The system as claimed in claim 65, further comprising means for voice activation.

73. The system as claimed in claim 65, wherein the audio/video control device further comprises a microphone for receiving voice commands.

74. An audio/video control device comprising:

a portable unit having a touch screen display for displaying a graphical user interface of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of said operation selections in said user interface, wherein said portable unit enables a user to control speaker operation of a base unit device having means to receive audio or audiovisual content, the portable unit being configured to releasably connect to the base unit device, and wherein the touch screen display of one or more of the portable units functions as the sole interactive touch screen operational control display for the base unit.

75. The audio/video control device as recited in claim 74, further comprising means for voice activation.

76. The audio/video control device as recited in claim 74, further comprising means for audible interaction.

77. The audio/video control device as recited in claim 74, wherein the base unit is operable to receive an audio/video storage and reproduction device.

78. The audio/video control device as recited in claim 77, wherein said audio/video storage and reproduction device comprises a read/write CD ROM drive.

79. The audio/video control device as recited in claim 77, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon, wherein said memory card is connected to a microprocessor upon insertion into said memory port.

80. The audio/video control device as recited in claim 74, further comprising means for wireless communication.

81. An audio/video control device comprising:

a base unit device configured to receive and present audio or audiovisual content, the base unit configured to be controlled by a portable unit comprising a touch screen display for displaying a graphical user interface of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of the operation selections in the displayed user interface, wherein presentation of said audio or audiovisual content is controllable by the portable unit, the base unit device being configured to releasably connect to said portable unit, and wherein the presentation of said audio or audiovisual content through said base unit device is configured to be controlled solely through the touch screen display functions of one or more of said portable units.

82. The audio/video control device as recited in claim 81, further comprising means for voice activation.

83. The audio/video control device as recited in claim 81, further comprising means for audible interaction.

84. The audio/video control device as recited in claim 81, further comprising an audio/video storage and reproduction device.

85. The audio/video control device as recited in claim 84, wherein said audio/video storage and reproduction device comprises a read/write CD ROM drive.

86. The audio/video control device as recited in claim 84, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon, wherein said memory card is connected to a microprocessor upon insertion into said memory port.

87. The audio/video control device as recited in claim 81, further comprising means for wireless communication.

88. An audio/video control device comprising:

a portable unit having a touch screen display for displaying a graphical user interface of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a user of one of said operation selections in said user interface, wherein said portable unit enables a user to control operation of a base unit for reproduction of audio or audiovisual content, the operation of the base unit including operation of an audio/video storage and reproduction device configured to be received by the base unit and operation of a means for connection of the base unit with an external source of audio and video signals, the portable unit being configured to releasably connect to the base unit device, and wherein the touch screen display of one or more of the portable units functions as the sole interactive touch screen operational control display for the base unit.

89. The audio/video control device as recited in claim 88, further comprising means for voice activation.

90. The audio/video control device as recited in claim 88, further comprising means for audible interaction.

## 21

91. The audio/video control device as recited in claim 88, wherein said audio/video storage and reproduction device comprises a read/write CD ROM drive.

92. The audio/video control device as recited in claim 88, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon, wherein said memory card is connected to a microprocessor upon insertion into said memory port.

93. The audio/video control device as recited in claim 88, further comprising means for wireless communication.

94. An audio/video control device comprising:

a base unit device configured to receive and present audio or audiovisual content, receive an audio/video storage and reproduction device, and including a means for connection with an external source of audio and video signals for at least one of reproduction and storage by the audio/video storage and reproduction device, the audio/video storage and reproduction device and the means for connection with the external source of audio and video signals configured to be controlled by a portable unit for reproduction of audio or audiovisual content, the portable unit comprising a touch screen display for displaying a graphical user interface of operation selections and providing manual control signals for controlling operation of the portable unit upon contact by a

## 22

user of one of the operation selections in the displayed user interface, wherein presentation of said audio or audiovisual content is controllable by the portable unit, the base unit device being configured to releasably connect to said portable unit, and wherein the presentation of said audio or audiovisual content through said base unit device is configured to be controlled solely through the touch screen display functions of one or more of said portable units.

95. The audio/video control device as recited in claim 94, further comprising means for voice activation.

96. The audio/video control device as recited in claim 94, further comprising means for audible interaction.

97. The audio/video control device as recited in claim 94, wherein said audio/video storage and reproduction device comprises a read/write CD ROM drive.

98. The audio/video control device as recited in claim 94, wherein said audio/video storage and reproduction device is a memory card port for receiving a memory card, said memory card including means for storing audio and video data thereon, wherein said memory card is connected to a microprocessor upon insertion into said memory port.

99. The audio/video control device as recited in claim 94, further comprising means for wireless communication.

\* \* \* \* \*