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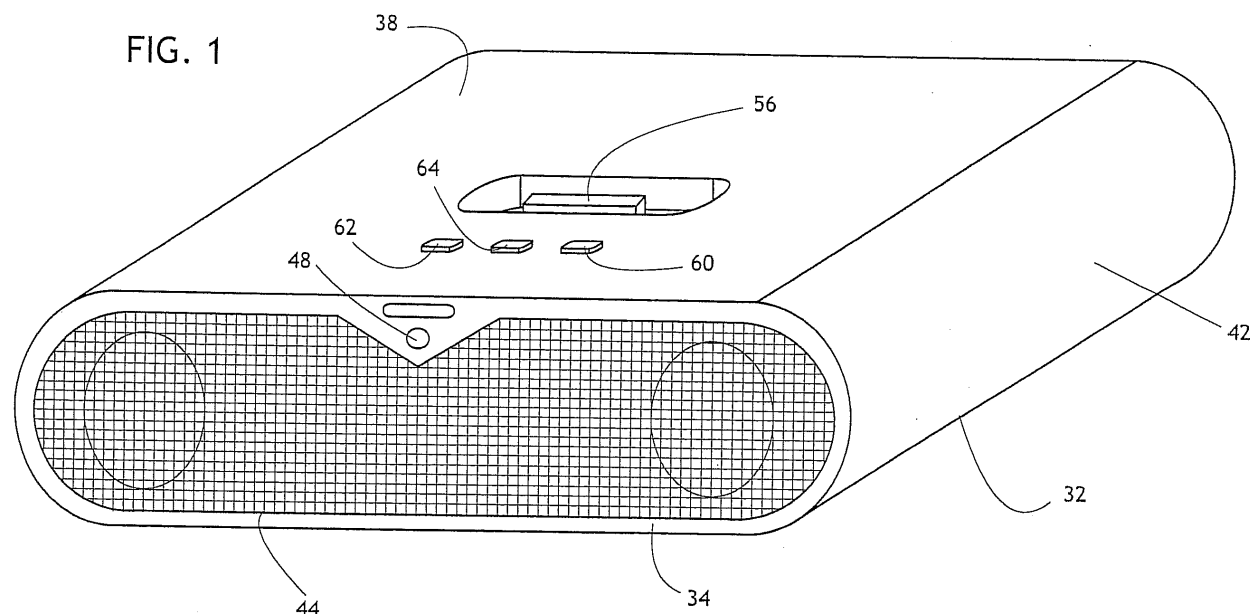
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(54) **Audio/video exercise system**

(57) A housing unit includes a stereo speaker. The housing unit includes a docking station. The docking station is adapted to operatively receive a handheld digital electronic audio/video device. The housing unit also in-

cludes controls for the intensity of the volume of the speaker. The housing unit lastly includes a plurality of ports. The ports include a USB port. The USB port allows for an operative connection between the housing unit and any one of a plurality of exercise machines.



Description**BACKGROUND OF THE INVENTION**

[0001] The present Patent Application is a continuation-in-part of Patent Application Serial Number 11/880,904 filed July 25, 2007, the subject matter of which is incorporated herein by reference.

Field of the Invention

[0002] The present invention relates to an audio/video exercise system and more particularly pertains to enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques.

Description of the Prior Art

[0003] The use of exercise systems of known designs and configurations is known in the prior art. More specifically, exercise systems of known designs and configurations previously devised and utilized for the purpose of enhancing performance of an exerciser through known methods and apparatuses are known to consist basically of familiar, expected, and obvious structural configurations, notwithstanding the myriad of designs encompassed by the crowded prior art which has been developed for the fulfillment of countless objectives and requirements.

[0004] By way of example, U.S. Patent Number 6,942,599 issued September 13, 2005 to Racine relating to a Control Panel for Use While Exercising. U.S. Patent Number 6,626,799 issued September 30, 2003 to Waterson, relating to a System and Methods for Providing an Improved Exercise Device with Motivational Programming. Lastly, U.S. Patent Number 5,591,104 issued January 7, 1997 to Andrus, relating to a Physical Exercise Video System.

[0005] While these devices fulfill their respective, particular objectives and requirements, the aforementioned patents do not describe an audio/video exercise system that allows for enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques.

[0006] In this respect, the audio/video exercise system according to the present invention substantially departs from the conventional concepts and designs of the prior art, and in doing so provides an apparatus primarily developed for the purpose of enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques.

[0007] Therefore, it can be appreciated that there exists a continuing need for a new and improved audio/video exercise system which can be used for enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques. In this regard, the present invention substantially

fulfills this need.

SUMMARY OF THE INVENTION

[0008] In view of the foregoing disadvantages inherent in the known types of exercise systems of known designs and configurations now present in the prior art, the present invention provides an improved audio/video exercise system. As such, the general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new and improved audio/video exercise system and method which has all the advantages of the prior art and none of the disadvantages.

[0009] To attain this, the present invention essentially comprises an audio/video exercise system. First provided is a plurality of different types of exercise machines. Each exercise machine has a reception area. Each exercise machine has first LED lights. Each exercise machine has a first USB port. The first USB port is capable of supplying power to the first LED lights. The first LED lights provide decoration and background lighting. In this manner operating the exercise machines is facilitated. Further in this manner indicating power is being supplied to the exercise machines is facilitated.

[0010] A hand held digital electronic audio/video device, preferably an iPod tm, is provided. iPod is a trademark of Apple Computers, Inc. a California corporation having a place of business in Cupertino, California. iPods are portable and handheld digital electronic devices for recording, organizing, transmitting, manipulating, and reviewing text, data, and audio files; computer software for use in organizing, transmitting, manipulating, and reviewing text, data, and audio files on portable and handheld digital electronic devices. The handheld digital electronic audio/video device has a screen. The screen provides visual aid. The handheld digital electronic audio/video device has an audio output jack. The audio output jack provides connections to a speaker. The speaker includes earphones. The handheld digital electronic audio/video device has an audio/video interface.

[0011] A housing unit is provided next. The housing unit is in a generally rectangular configuration. The housing unit is oriented in an essentially horizontal plane. The housing unit has a front. The housing unit has a back. The housing unit has a top. The housing unit also has a bottom. The housing unit further has two curved lateral sides. The sides connect the front and the back and top and the bottom. The front consists primarily of a rigid mesh material. The rigid mesh material provides for ventilation and sound enhancement.

[0012] The housing unit includes a second LED light. The second LED light is adapted to be illuminated when power is connected to the audio/video exercise system.

[0013] The housing unit also includes a stereo speaker assembly. The stereo speaker assembly is located adjacent to the front. The stereo speaker assembly is protected by the rigid mesh material.

[0014] The housing unit also includes a docking sta-

tion. The docking station is provided on the top of the housing unit. The docking station is adapted to operatively receive the handheld digital electronic audio/video device with its compatible audio/video interface.

[0015] The housing unit also includes a plurality of buttons. The buttons are provided on the top of the housing unit. The buttons include a first button. The buttons include a second button. The first and second buttons control the volume of the speaker. The buttons include a third button. The first button allows for increasing the intensity of the volume of the speaker. The second button allows for decreasing the intensity of the volume of the speaker. The third button is provided between the first and second buttons. The third button allows for turning the audio/visual exercise system on and off.

[0016] The housing unit lastly includes a plurality of ports. The ports include a second USB port. The second USB port is provided on the back of the housing unit. The second USB port allows for an operative connection between any one of the plurality of exercise machines and the housing unit. The second USB port further allows for supplying electricity to the first LED lights on the exercise machine. The ports include a power port. The power port is provided on the back of the housing unit. The power port allows for a connection to an external transformer. The external transformer supplies electricity to the audio/video exercise system with a power input of 100V to 240V. The ports further include an auxiliary port. The auxiliary port is provided on the back of the housing unit. The auxiliary port allows for connecting other portable audio/video devices, other than the iPod.

[0017] The iPod has an audio/video interface capable of transmitting and receiving data whereby the system is adapted to download a workout via internet technology to the iPod.

[0018] The audio/video exercise system thus uses internet technology to enhance training. It also allows the user to download a workout correlated to the exercise machine to which it is coupled. Note for example workouts by well-known, respected and manufacturer-certified trainers from web sites that are operated by manufacturers or channels or representatives or agents. This system also allows downloading to a handheld digital electronic audio/video device so a user is adapted to follow along during exercises. The handheld digital electronic audio/video device thus allows the user to listen to music and watch videos while training.

[0019] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims attached.

[0020] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to

the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of descriptions and should not be regarded as limiting.

[0021] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

[0022] It is therefore an object of the present invention to provide a new and improved audio/video exercise system which has all of the advantages of the prior art exercise systems of known designs and configurations and none of the disadvantages.

[0023] It is another object of the present invention to provide a new and improved audio/video exercise system which may be easily and efficiently manufactured and marketed.

[0024] It is further object of the present invention to provide a new and improved audio/video exercise system which is of durable and reliable constructions.

[0025] An even further object of the present invention is to provide a new and improved audio/video exercise system which is susceptible of a low cost of manufacture with regard to both materials and labor, and which accordingly is then susceptible of low prices of sale to the consuming public, thereby making such audio/video exercise system economically available to the buying public.

[0026] Even still another object of the present invention is to provide an audio/video exercise system for enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques.

[0027] Lastly, it is an object of the present invention to provide a new and improved audio/video exercise system. A housing unit includes a stereo speaker. The housing unit includes a docking station. The docking station is adapted to operatively receive a handheld digital electronic audio/video device. The housing unit also includes controls for the intensity of the volume of the speaker. The housing unit lastly includes a plurality of ports. The ports include a USB port. The USB port allows for an operative connection between the housing unit and any one of a plurality of exercise machines.

[0028] These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained

by its uses, reference should be had to the accompanying drawings and descriptive matter in which there is illustrated preferred embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029] The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

Figure 1 is a perspective view of an audio/video exercise system constructed in accordance with the principles of the present invention.

Figure 2 is a front elevational view of the system coupled with a handheld digital electronic audio/video device.

Figure 3 is a back elevational view of the system coupled with a handheld digital electronic audio/video device.

Figure 4 is a front elevational view of the system placed on the reception area of an exercise machine.

Figure 5 is a perspective view the central reception area of the exercise machine.

Figure 6 is a front elevational view of a handheld digital electronic audio/video device as shown in Figure 2.

Figure 7 is a plan view of the system taken along line 7-7 of Figure 6.

Figure 8 is a schematic illustration of an audio/video exercise system constructed in accordance with an alternate embodiment of the invention.

The same reference numerals refer to the same parts throughout the various Figures.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0030] With reference now to the drawings, and in particular to Figures 4 and 1 thereof, the preferred embodiment of the new and improved audio/video exercise system embodying the principles and concepts of the present invention and generally designated by the reference numeral 10 will be described.

[0031] First provided is a plurality of different types of exercise machines 12. Each exercise machine has a reception area. Each exercise machine has first LED lights 16. Each exercise machine has a first USB port 18. The first USB port is capable of supplying power to the first LED lights. The first LED lights provide decoration and background lighting. In this manner operating the exercise machines is facilitated. Further in this manner indicating power is being supplied to the exercise machines is facilitated.

[0032] A handheld digital electronic audio/video device 22, preferably an iPod, is provided. The handheld digital electronic audio/video device has a screen 24. The screen provides visual aid. The handheld digital electron-

ic audio/video device has an audio output jack 26. The audio output jack provides connections to a speaker component. The speaker component includes earphones. The handheld digital electronic audio/video device has an audio/video interface 28.

[0033] A housing unit 32 is provided next. The housing unit is in a generally rectangular configuration. The housing unit is oriented in an essentially horizontal plane. The housing unit has a front 34. The housing unit has a back 36. The housing unit has a top 38. The housing unit also has a bottom 40. The housing unit further has two curved lateral sides 42. The sides connect the front and the back and top and the bottom. The front consists primarily of a rigid mesh material 44. The rigid mesh material provides for ventilation and sound enhancement.

[0034] The housing unit includes a second LED light 48. The second LED light is adapted to be illuminated when power is connected to the audio/video exercise system.

[0035] The housing unit also includes a stereo speaker assembly 52. The stereo speaker assembly is located adjacent to the front. The stereo speaker assembly is protected by the rigid mesh material.

[0036] The housing unit also includes a docking station 56. The docking station is provided on the top of the housing unit. The docking station is adapted to operatively receive the iPod with its audio/video interface.

[0037] The housing unit also includes a plurality of buttons. The buttons are provided on the top of the housing unit. The buttons include a first button 60. The buttons include a second button 62. The first and second buttons control the volume. The buttons include a third button 64. The first button allows for increasing the intensity of the volume of the speaker. The second button allows for decreasing the intensity of the volume of the speaker. The third button is provided between the first and second buttons. The third button allows for turning the audio/visual exercise system on and off.

[0038] The housing unit lastly includes a plurality of ports. The ports include a second USB port 68. The second USB port is provided on the back of the housing unit. The second USB port allows for an operative connection between any one of the plurality of exercise machines and the housing unit. The second USB port further allows for supplying electricity to the first LED lights on the exercise machine. The ports include a power port 70. The power port is provided on the back of the housing unit. The power port allows for a connection to an external transformer. The external transformer supplies electricity to the audio/video exercise system with a power input of 100V to 240V. The ports further include an auxiliary port 72. The auxiliary port is provided on the back of the housing unit. The auxiliary port allows for connecting various portable audio/video devices other than the iPod.

[0039] The iPod has an audio/video interface capable of transmitting and receiving data whereby the system is adapted to download a workout via internet technology to the iPod. The workout program is preferably selected

from the class of workout programs including informative, motivational and rehab workout programs.

[0040] The audio/video exercise system uses internet technology to enhance training. It also allows the user to download a workout correlated to the particular exercise machine to which it is coupled. Note for example workouts by well-known, respected and manufacturer-certified trainers from web sites that are operated by manufacturers or channels or representatives or agents. This system also allows downloading to a handheld digital electronic audio/video device so a user is adapted to follow along during exercises. The handheld digital electronic audio/video device thus allows the user to listen to music and watch videos while training.

[0041] Figure 8 is a schematic illustration of an audio/video exercise system constructed in accordance with an alternate embodiment of the invention. In such alternate embodiment, the system 100 includes an exercise machine 102. The exercise machine is an exercise machine selected from the class of exercise machines including, but not limited to, functional trainers, traditional home gyms, cardio equipment, treadmills, elliptical machines and bikes. Also included in the system is a handheld digital electronic audio/visual device 104, preferably an iPod. Operatively coupling the exercise machine and the handheld digital electronic audio/visual device is a housing unit 106. The exercise machine and the handheld digital electronic audio/visual device and the housing unit function essentially the same as in the previously described primary embodiment.

[0042] Further included in the alternate embodiment of the invention is a larger screen TV 110. Such larger screen TV is larger than the smaller screen TV normally utilized on handheld devices. An electronic line 112 operatively couples the larger screen TV and the housing unit. The use of the larger screen TV provides for easier viewing by the user while exercising with a program downloaded by a handheld device.

[0043] The utility of the system is enhanced by an adjustable primary support 114 beneath the large screen TV and a similar adjustable secondary support 116 between the housing unit and the exercise machine. Each support is adapted for varying the angular and elevational orientation of the supported object with respect to the supporting object. The supported object for the primary support is the large screen TV. The supported object for the secondary support is the housing unit. The supporting object for the secondary support is the exercise machine. The supporting object for the primary support is a floor, or in an alternate embodiment a table or a wall.

[0044] In another alternate embodiment of the present invention, the housing unit is programmed with a plurality of audio/video product feature introductions, basic exercise demonstrations and coaching programs by well known trainers that are relevant to the exercise machine to which it is coupled. <http://www.omnisportstrendandtech.com>

[0045] In operation and use, the housing unit is se-

cured to the exercise machine and handheld digital electronic audio/video device is mounted in the docking station of the housing unit. The housing unit and the exercise machine and the handheld digital electronic audio/video device are each activated. The user will then use the handheld digital electronic audio/video device to select from a list provided by the housing unit the corresponding exercise machine to which it is secured and the specific exercise the user wants to do. The user will then receive information from the housing unit about exercising properly with the specific exercise machine.

[0046] As to the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

[0047] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0048] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

Claims

1. An audio/video exercise system comprising:

a housing unit having a stereo speaker;
the housing unit also including a docking station adapted to operatively receive a handheld digital electronic audio/video device;
the housing unit also including controls for the intensity of the volume of the speaker; and
the housing unit lastly including a plurality of ports including a USB port allowing for an operative connection between the housing unit and any one of a plurality of exercise machines.

2. The system as set forth in claim 1 and further including a plurality of different types of exercise machines, each exercise machine having a reception area for a housing unit.

3. The system as set forth in claim 1 and further including a handheld digital electronic audio/video device which is an iPod with a screen for visual aid purposes

and with an audio output jack for connections to a speaker component.

4. The system as set forth in claim 1 and further including an audio/video interface capable of transmitting and receiving data. 5
5. The system as set forth in claim 1 and further including; a larger screen TV operatively coupled with the housing unit. 10
6. The system as set forth in claim 1 and further including a larger screen TV operatively coupled with the housing unit and an adjustable support between the larger screen TV and a recipient support. 15
7. The system as set forth in claim 1 and further including an adjustable support between the housing unit and a recipient support. 20
8. The system as set forth in claim 1 and further including a handheld digital electronic audio/video device coupled with respect to the housing unit adapted to download a workout via internet technology to the handheld digital electronic audio/video device whereby a user will follow along during exercises. 25
9. The system as set forth in claim 8 wherein the handheld digital electronic audio/video device is adapted to allow the user to listen to music and watch videos while training. 30
10. The system as set forth in claim 1 wherein the housing unit is programmed with a plurality of audio/video product feature introductions, basic exercise demonstrations and coaching programs by well known trainers that are relevant to the exercise machine to which it is coupled. 35
11. An audio/video exercise system for enhancing the performance of a person exercising by supplying motivation and information about proper exercising techniques comprising, in combination: 40
 - a plurality of different types of exercise machines, each exercise machine having a reception area and first LED lights with a first USB port capable of supplying power to first LED lights, the first LED lights providing decoration and background lighting to facilitate operating an exercise machines and to indicate power is being supplied to an exercise machines; 45
 - an iPod with a screen for visual aid purposes and with an audio output jack for connections to a speaker component including earphones; 50
 - a housing unit in a generally rectangular configuration and oriented in an essentially horizontal plane with a front, a back, a top, a bottom and 55

with two curved lateral sides connecting the front and the back and top and the bottom, and the front consisting primarily of a rigid mesh material for ventilation and sound enhancing purposes; the housing unit including a second LED light adapted to be illuminated when power is connected to the audio/video exercise system; the housing unit also including a stereo speaker assembly located adjacent to the front and protected by the rigid mesh material; the housing unit also including a docking station on the top adapted to operatively receive the iPod with its audio/video interface; the housing unit also including a plurality of buttons on the top including a first button and a second button for controlling the volume of the speaker and a third button, the first button for increasing the intensity of the volume of the speaker, the second button for decreasing the intensity of the volume of the speaker, the third button between the first and second buttons for turning the audio/visual exercise system on and off; the housing unit lastly including a plurality of ports including a second USB port on the back allowing for an operative connection between any one of the plurality of exercise machines and the housing unit and for supplying electricity to the first LED lights on the exercise machine, a power port on the back allowing for a connection to an external transformer supplying electricity to the audio/video exercise system with a power input of 100V to 240V, and an auxiliary port on the back for connecting other portable audio/visual devices, other than the iPod; and the iPod having an audio/video interface capable of transmitting and receiving data whereby the system is adapted to download a workout via internet technology to the iPod and whereby a user will follow along during exercises and whereby the iPod also allows the user to listen to music and watch videos while training; and a larger screen TV operatively coupled with the housing unit.

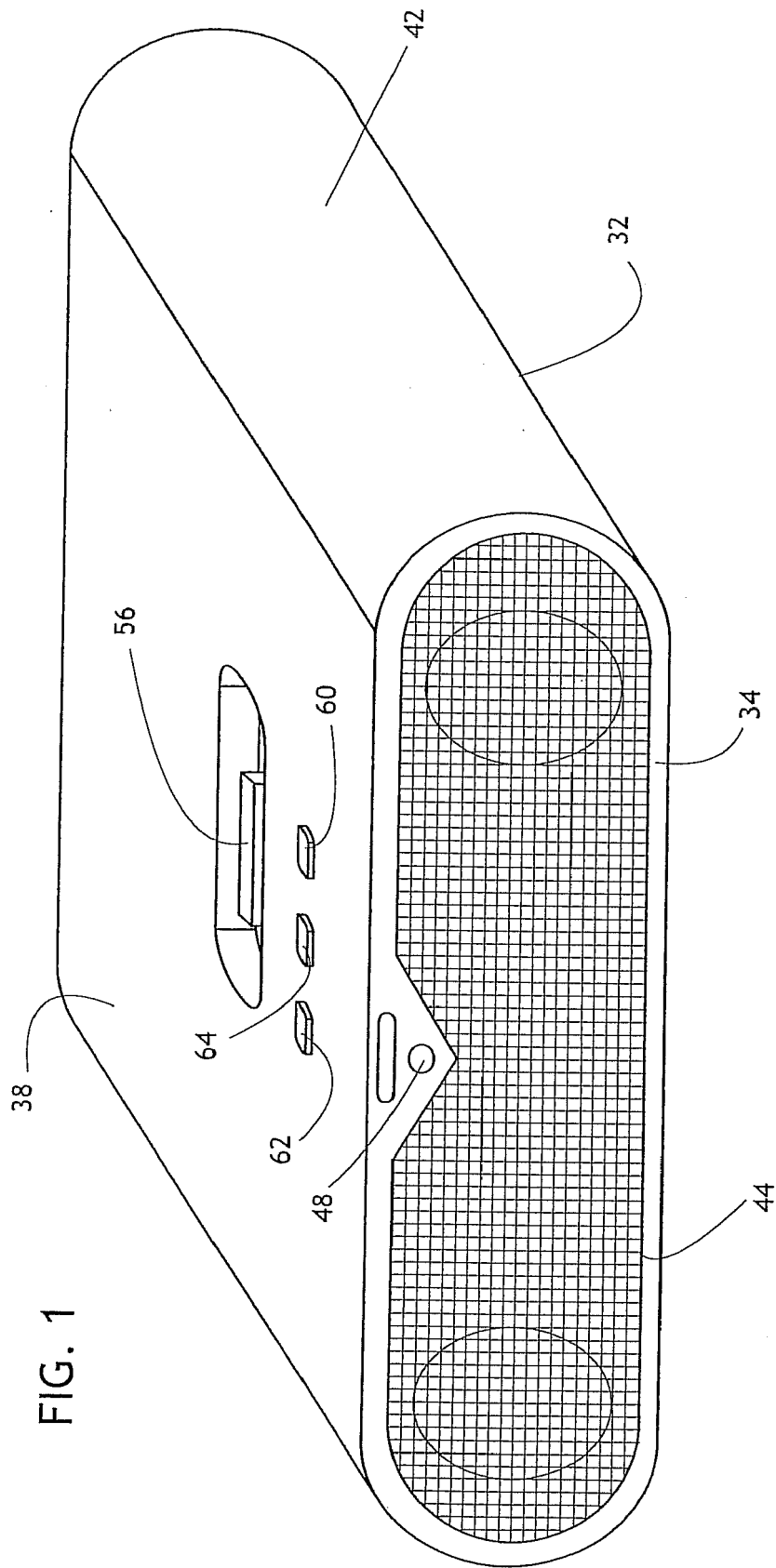


FIG. 2

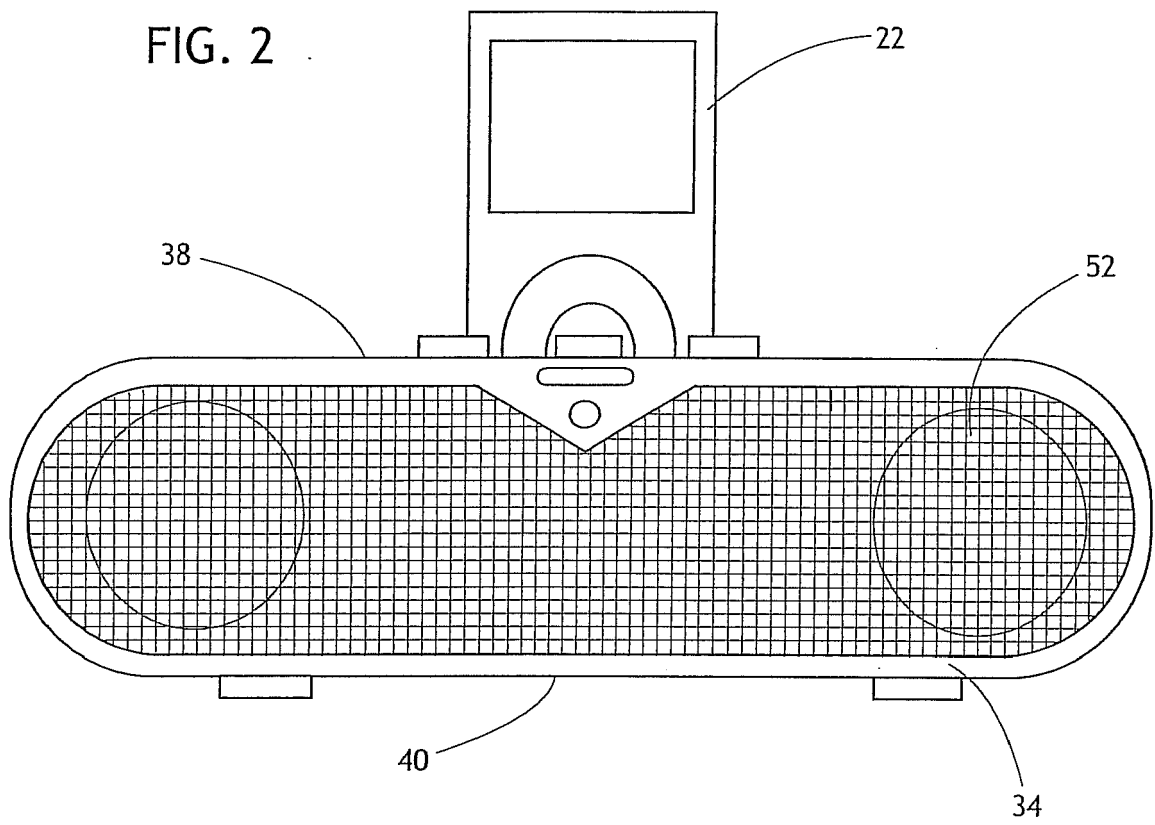


FIG. 3

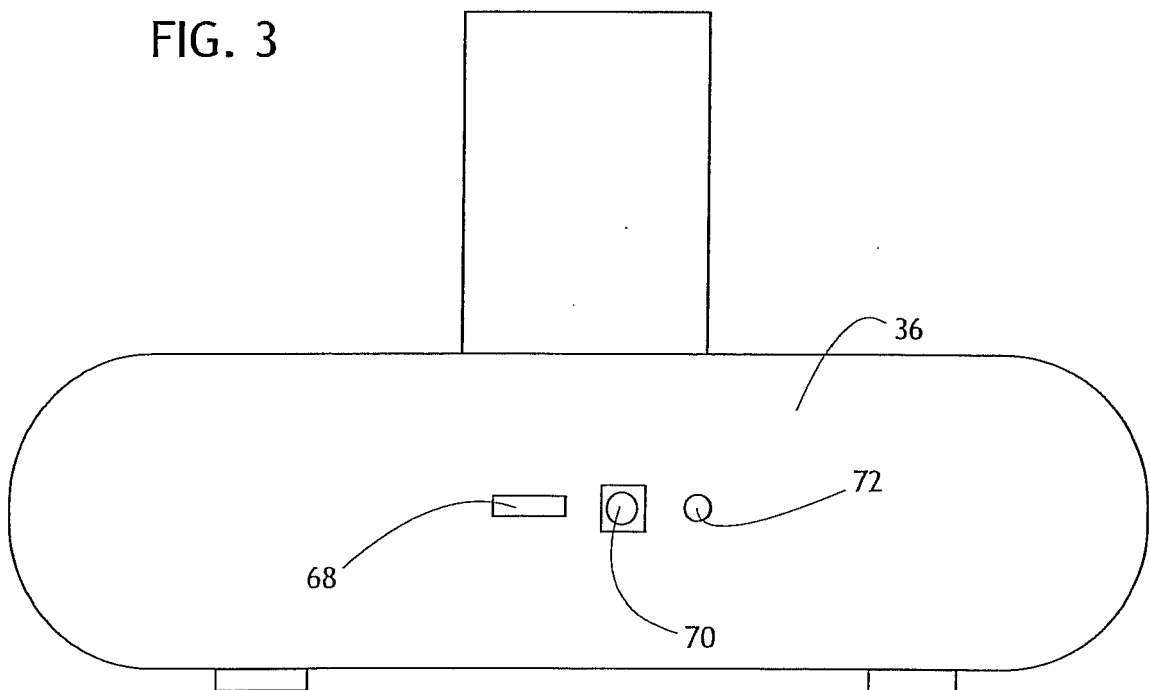
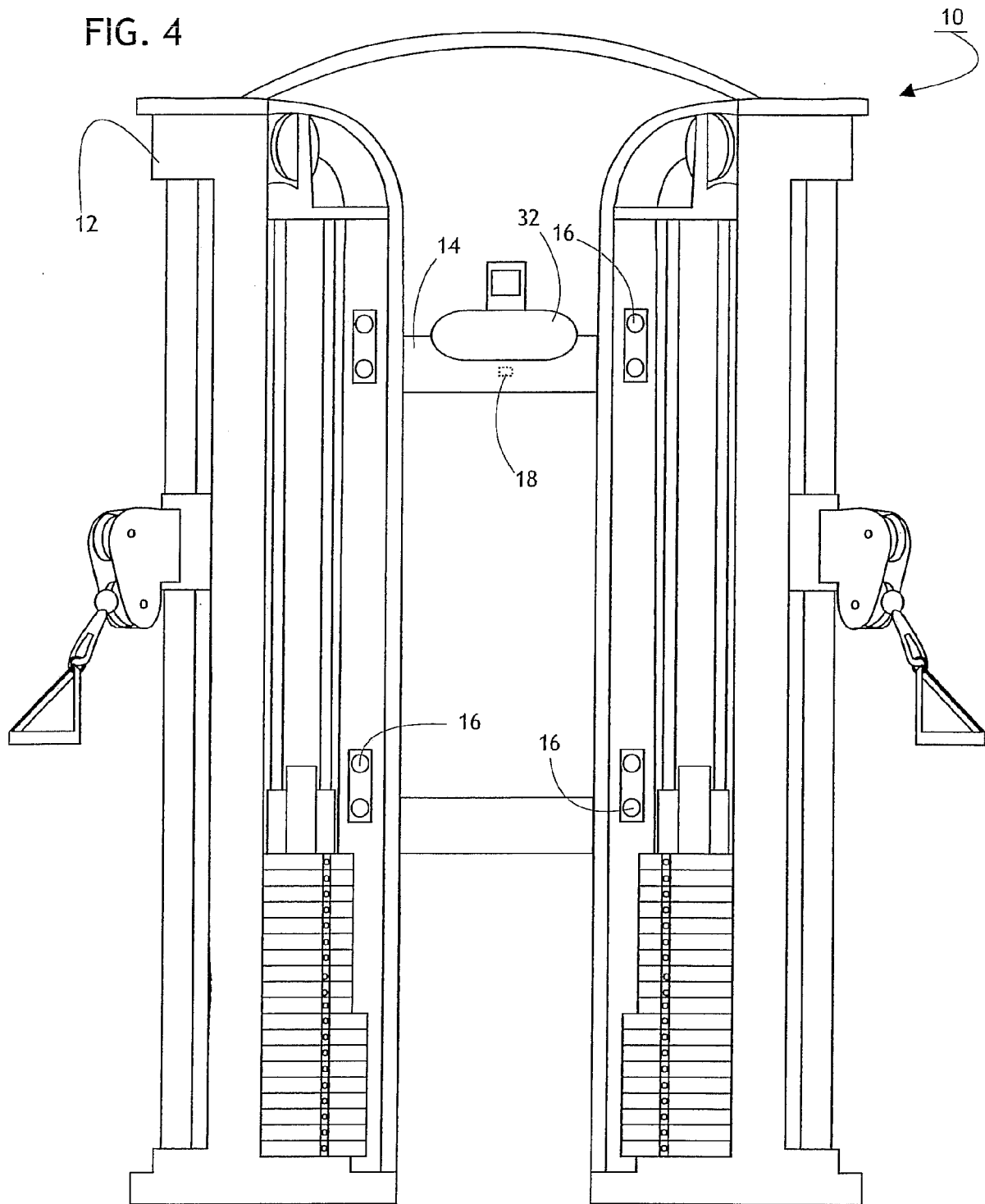


FIG. 4



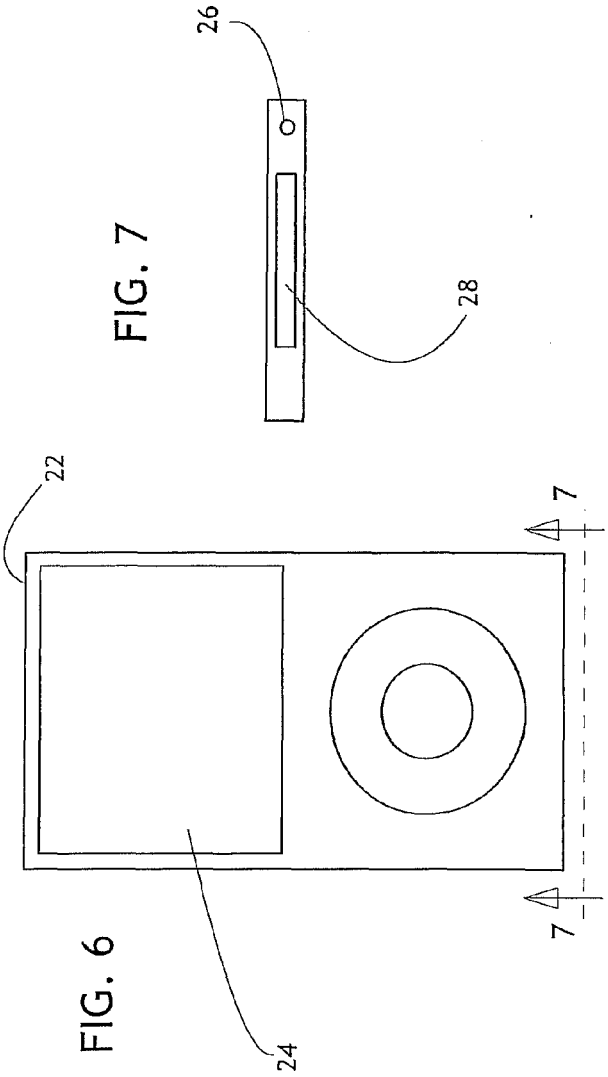
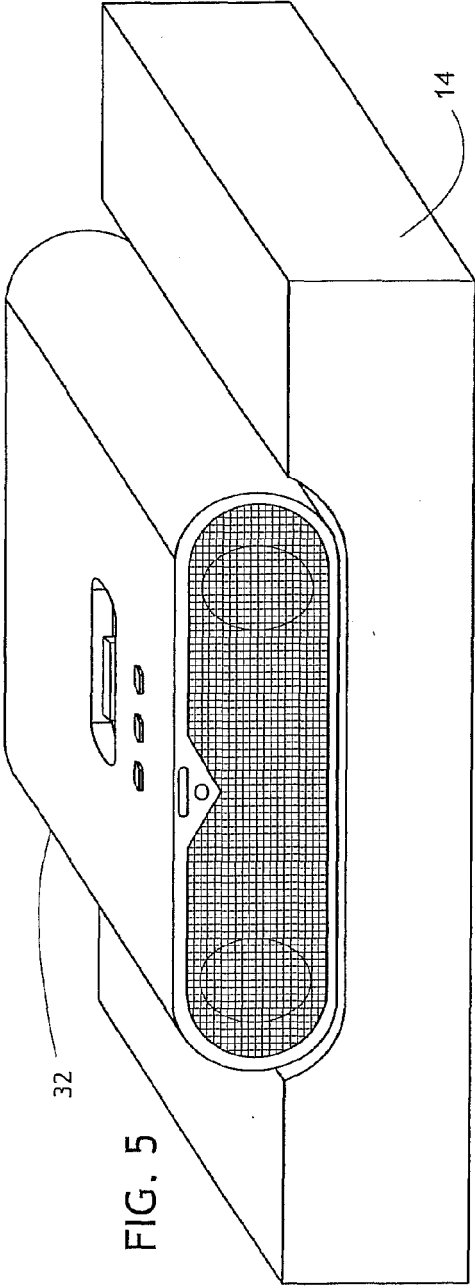
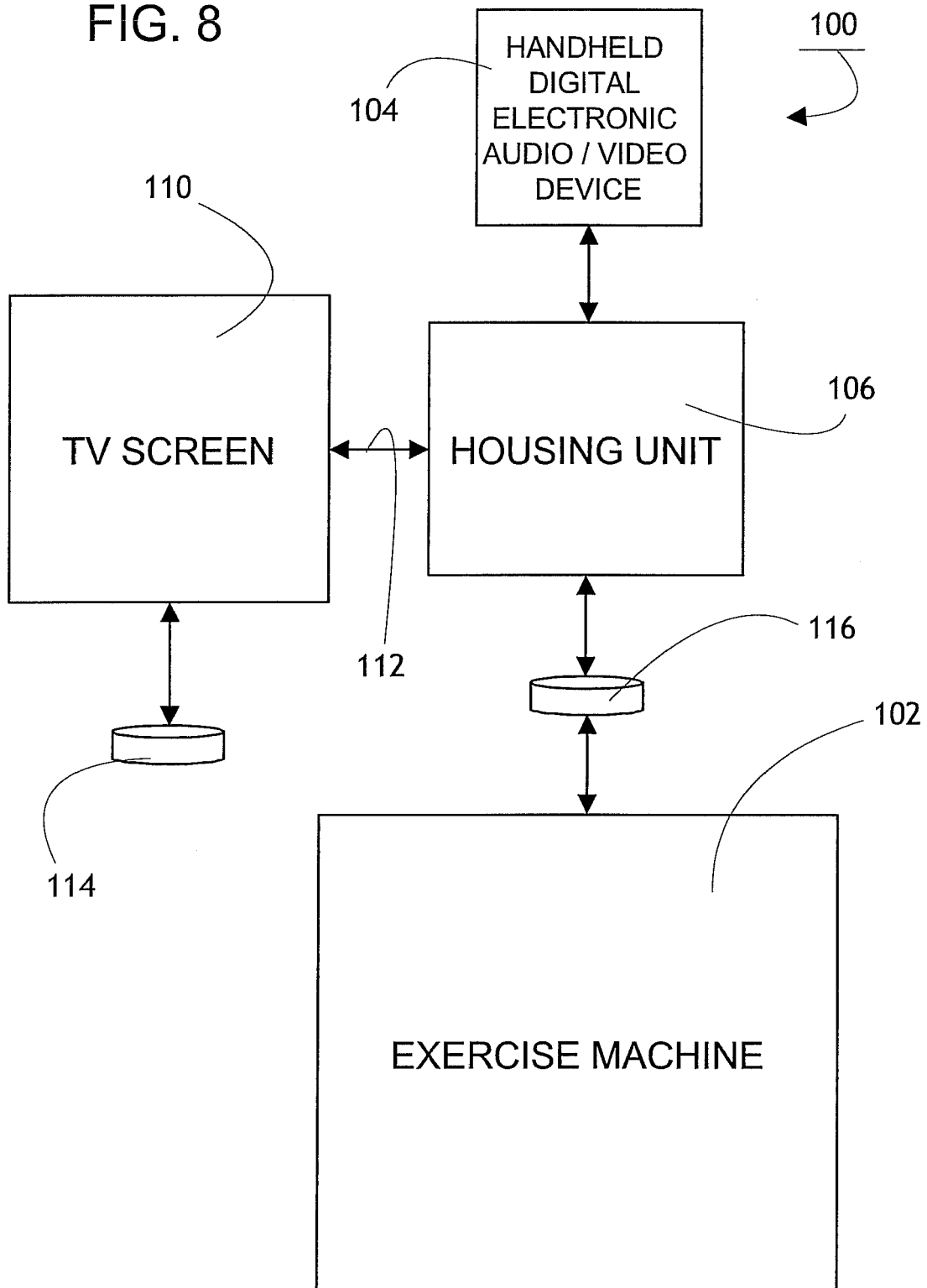


FIG. 8



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 11880904 B [0001]
- US 6942599 B, Racine [0004]
- US 6626799 B, Watterson [0004]
- US 5591104 A, Andrus [0004]