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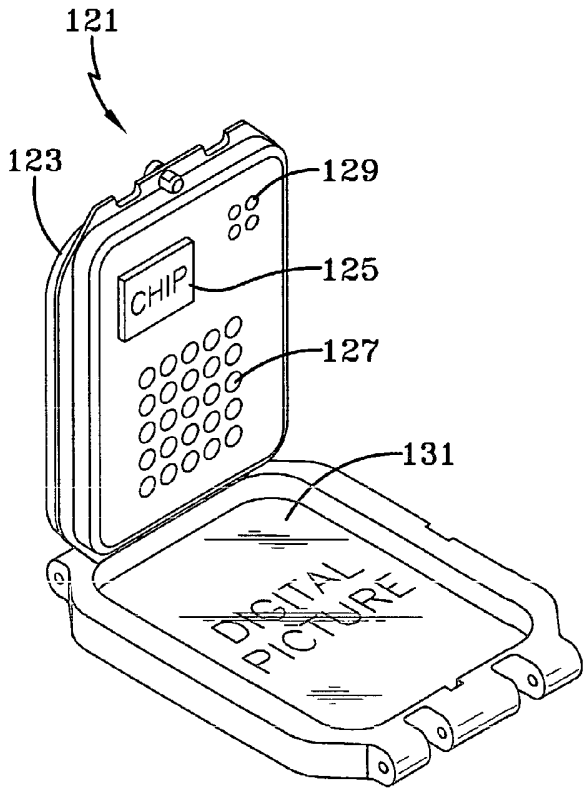
(54) Title: WATCH



(57) Abstract: A timekeeping apparatus (1) having a hidden compartment (17). The compartment (17) can contain permanent or removable psychological messages and/or printed messages (19). The messages (19) can be printed messages, digital messages, recordable audio messages and aromatic messages. The compartment (17) can also contain such items as a mood sensing stone (147) which changes color according to the wearer's mood, magnets or crystals.

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WATCH

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to clocks, timepieces and watches, particularly but not limited to wristwatches having a watch face which is liftable off of a watch back or backing, the watch back having an outwardly facing member for performing a useful function.

Description of the Prior Art

There are many different watches which are on the market or known displaying information other than the time which is shown on the watch face. Such other information includes the date, time lapsed for a period being measured, telephone numbers, a computer output, etc. Many watches perform functions other than indicating the time of day. These include access to data bases in the circuitry of electronic watches such as an electronic directory for telephone numbers, a computer for performing mathematical computations, and the like.

Watches are also known where the watch face is movable. There are "flip-over" watches in which the watch face if lifted off the watch back, and flipped over to reveal some artistic message or the like on the back of the watch face. It is well known to place an inscription on the back of a watch backing (the part of the watch that touches the wrist).

There are many watches having moveable accessories for moving the watch face, for covering the watch face, and for revealing another working component associated with a watch. U.S. Patent No. Des.285,417 (Nakane) shows a wristwatch which can be removed from a backing on the band, and be replaced with a toy aircraft. U.S. Patent No. Des.303,503 discloses a wristwatch with a calculator, the calculator having a hinged cover. Disclosed in U.S. Patent No. Des.339,299 is a wrist band holding a wristwatch, a calculator and a telephone index, these being hinged one on top of the other and accessible for their respective use. In another design patent, U.S. Patent No. Des.380,293, a wristwatch is hinged to provide the cover for a receptacle between the watch backing and the back side of the watch face. A similar device is shown in U.S. Patent No. Des.391,872.

There are a number of patents showing watches having moveable parts, other than the workings of the watch itself. In U.S. Patent No. 1,165,262, a watchband has adjustable spring prongs for holding different sizes of watches. A mounting for a

watchcase is shown in U.S. Patent No. 2,219,277, where a watch face can be removably held in a watchband having a backing for the watch. A hinged arrangement is shown in U.S. Patent No. 4,444,513, where a watch face can be rotated to reveal a different watch. One watch can be analog, and the other digital. U.S. Patent No. 4,903,250 describes a watch having a memo case disposed adjacent the watch. A display face is fixed, and the memo portion is next to it. The memo portion can be replaced with printed cards. Thus, the watch backing is really receptacle for the printed cards.

U.S. Patent No. 5,384,756 discloses a combined identification device and wristwatch. The watch face is hinged over a platform holding a microfilm with the wearer's medical information. If the watch face is lifted up, panels, which are biased upwardly, reveal the microfilm. The microfilm is carried in one of the panels, and another panel has a lens for focusing on the microfilm. The watch backing itself is only, in effect, a receptacle for holding the folded panels.

A modular watch having interchangeable elements is shown in U.S. Patent No. 5,657,298. A rescue watch is described in U.S. Patent No. 5,663,932 where the watch assembly has a container chamber holding pressurized liquid or gas to provide air for inflating a device, or for spraying an assaulter when the rescue watch is used for self defense. Some of the watches described above are flip-over watches. Another flip-over watch which is currently on the market is called the Basculante watch. However, neither this watch nor the others described above, carry any member on the backing of the watch, that is the plate upon which the watch normally sits, for performing a useful function.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a functional member in connection with a wristwatch, where the device is not readily apparent to others but which can be accessed by the wearer of the watch as desired.

Another object is to provide a wristwatch with a backing holding a function and therapeutic member.

It is another object of the present invention to provide a wristwatch having a message which can be viewed at the discretion of the wearer, but is generally not observable by others.

It is another object of the present invention to provide various types of messages on the backing of a watch. Such messages could be in writing, artistic messages, scents, musical messages, or other visual or auditory messages.

Another object of the present invention is to provide on or associated with the backing of a watch, a removable and/or exchangeable functional and/or therapeutic member.

Another object of the invention is to provide a watch for transmitting a signal to a remote place.

A further object is to provide a watch with a secret of hidden compartment.

Yet another object is to provide a watch with a hidden compartment having messages, such as written messages, artistic messages, scents, musical messages, visual messages, therapeutic messages or auditory messages, or to contain items such as magnets, pictures, natural or synthetic stones or the like.

It is still a further object of the present invention to provide a wristwatch having a backing with a functional member for generating signals to help find the wristwatch itself or the wearer of the wristwatch if they are lost or otherwise cannot be found. This would be useful at night, under avalanches, in the water, etc.

It is yet a further object of the present invention to provide a means for lifting a watch face from a watch backing to render a functional and therapeutic member on the watch backing accessible and useable.

The foregoing and other objects of the invention are achieved by means of a wristwatch having a back or backing upon which the watch face (which includes the watch workings) is entirely or partially removable to render a useful device on the watch backing accessible for use. The useful device can be messages which can be permanent, removable, or exchangeable, and could be directly on the watch backing itself or on an appropriate disc for holding the message. The message can be a psychological, therapeutic message as discussed below, olfactory messages generating a particular type of aroma, auditory messages such as those produced by particular electronic chips, certain crystals or stones, pictures and the like. A person wearing a wristwatch of the foregoing type can gain access to the functional and/or therapeutic member easily and often without the observation of others, to obtain the desired purpose of the member.

The watch can have a hidden or secret compartment for containing a variety of messages or for holding a variety of things. The face of the watch can have many shapes, and could be round, square, oval, rectangular, etc.

The invention further involves a functional member mounted on the backing of a watch which can be relayed to a remote place. This would include means for generating a signal such as a visual, auditory, olfactory or electronic signal. Such signals could be observed or otherwise recognized by the wearer of the watch, or else could be useful to third parties and the remote place.

BRIEF DESCRIPTION OF THE DRAWINGS

Figures 1 and 2 are perspective views of one embodiment of the invention showing a watch face in its closed and open positions, respectively.

Figures 3 and 4 are perspective views of another embodiment of the invention showing the watch face in its raised position in a message bearing frame having a message about to be placed in the frame, and the frame being moveable onto the watch backing, respectively.

Figure 7 is a front view of the embodiment shown in Figures 3 and 4.

Figures 5, 6, 8 and 9 show all four sides of the watch shown in Figure 7.

Figure 10 is a back view of another embodiment of the invention, showing a slidable frame for holding a message, and Figure 11 shows the manner in which the message is inserted into the frame.

Figures 12 and 13 are partially cross-sectional views of an embodiment of the invention showing the watch face in its open and closed positions, respectively.

Figures 14 and 15 show another embodiment of the invention with a means for revealing a message across the backing of the watch.

Figures 16 and 17 show a variation of the embodiment shown in Figures 14 and 15.

Figures 18 and 19 show still another embodiment of the invention with a means for revealing a push-button means for revealing a message on the backing of a watch according to the invention.

Figure 20 shows another embodiment of the invention, where a digital picture is held on the backing of the watch.

Figure 21 shows another embodiment of the invention having a watch face which is hinged to be removed from the watch backing, and a functional member is on the back of the watch. The back of the watch or the backing can be illuminated.

Figure 22 shows a round watch according to another embodiment of the invention where a message bearing unit is inserted as the watch backing or as part of the watch backing.

Figure 23 shows another embodiment of the invention having a stone embedded in the backing of the watch.

Figure 24 shows an elevated rear perspective view of the embodiment of the invention shown in Figure 23 showing the embedded stone protruding through the rear surface of the backing so that when the watch is worn a portion of the stone contacts the wearer's wrist.

Figure 25 shows another embodiment of the invention having a removable disc in the backing of the watch.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The invention involves a watch having a hidden compartment located between the backing of the watch and the face of the watch, the hidden compartment having a variety of functions. The hidden compartment can hold a message-generating item. The message can be a printed psychological message. The messages can be beneficial to the wearer of a watch. Psychological studies have shown that when a person continually provides positive and informative statements to themselves throughout the day, those persons actually unleash energy to provide for change. These studies show outcomes as varied as increased concentration, athletic ability, business achievements, and well-being. When these persons spend time in this positive way, it actually reduces the distractions of daily life which interfere with brain activity. At the same time, it raises a person's level of consciousness around a desired goal. This, in turn, provides a real pathway to accomplish what these persons want. It also provides a way to increase one's feelings of power, thereby, working more intensively and efficiently.

The watch according to some embodiments of the present invention helps people realize their own inner resources and command change.

Most people are very concerned about the time of day throughout the day as well

as the amount of time it takes to do various things in the course of a day. A watch is therefore a very important part of the items which people use. A watch according to some embodiments of the present invention provides a message area on the watch backing which can be hidden from others in a secret compartment, which holds a message such as a psychological message. Whenever a person wants to check the time, or even without checking the time, the person can effect movement of the watch face from the watch backing to view the message and obtain its psychological benefit. The message can be an inner statement which the person can look at and repeat. This message, when viewed, can constantly reinforce its benefit as the message is viewed and repeated. In another embodiment, a mood sensing stone is provided on the watch for contacting with the user's skin. The stone changes color according to the user's mood which the user then can focus on changing.

Turning first to Figure 1, which shows an embodiment of the invention in its closed, and ordinary position. Figure 1 shows a watch assembly 1 having a watch face 3 with a first end 5 and second end 6 configured to receive a watch band. Watch assembly 1 further has a hinge 7 at the second end 6. Watch assembly 1 is shown in the closed position.

Turning next to Figure 2, watch assembly 1 is again shown with its timepiece 9 rotated about hinge 7 to its open position. Timepiece 7 has a rear face 11. Watch assembly 1 has a backing 13 which includes a recess 17. Recess 17 can be a secret compartment, and is bordered by a sidewall 15. A portion of the bottom surface of recess 17 serves as a message bearing area 19. Advantageously, the message can be a psychological message as described above. The message can be in any form, either by means of words, pictures, or, as described later, other means as well. The message can be permanent, or can be removable, or be replaceable with a different message.

Referring next to Figures 3 and 4, another watch assembly 21 is shown. Watch assembly 21 includes a timepiece 23 which is shown pivoted to its open position about a partially shown hinge 25. Watch assembly 21 includes a recess or secret compartment 27 in backing 29. A moveable frame 31, when in its installed position, overlies an area 33 on base 27. Frame 31 includes frame walls 35 in which a sheet, plate or other message bearing object 37 can be inserted. Figure 3 shows member 37 before it is

installed in frame 31, and Figure 4 shows frame 31 with message-bearing member 37 installed and being moved into backing 29. Frame 31 can be moved so that it overlies backing 29, and is then inserted into recess 27 of backing 29. The dimensions of recess 27 and frame 31 should be such that the frame is held tightly in a semi-interference type fit, but preferably so that it can be released without difficulty in order to change member 37. Alternatively, a slot can be formed in the sidewall of base 29 so that frame 31 can be slid into recess 27 of backing 29.

Timepiece 21 is preferably held in its closed position by a releasable latch, and a button or other release mechanism releases the latch. A spring or other biasing means can bias the timepiece to its open position. Figures 5-9 show an embodiment of the invention which can be the same as that shown in Figures 3 and 4, or can be a modification thereof. These figures show that a watch assembly according to the invention can look like an ordinary watch, be it round, oval, square, rectangular (as shown), or other symmetrical or irregular shapes, which does not reveal that it has a backing with a secret compartment for holding a message or other functional member. These figures show a timing apparatus 41 having a watch face 43 which is held in a casing having left side wall 45, right side wall 47, first wall 49 and opposite second wall 51. A watch band 53 is connected by an appropriate mechanism at walls 49 and 51. Walls 45, 47, 49 and 51 form on their inside portion, the walls of the backing which holds a functional member.

Another embodiment of the invention is shown in Figures 10 and 11. A watch assembly 61 has a backing 63 on which a timepiece is mounted. Backing 63 can be configured to receive a watch band at both ends. The view shown could also be the front of watch assembly 61. Watch assembly 61 has a removable panel 65 which is slidable from the closed position shown in Figure 10, to an open position shown in Figure 11. The direction of movement of panel 65 is indicated by the arrow 66. Panel 65 holds a removable message having a display and can be some sort of plaque, and can be made from plastic or metal. Panel 65 can be moved from the closed position to the open position so that a plaque 67 can be selectively added or removed for viewing, or replaced by a different plaque. The plaques bear the types of messages discussed earlier.

A more detailed view of a hinged watch according to the invention is shown in

Figures 12 and 13. A watch assembly 71 has a timepiece 73 with which is pivotable about a hinge 75 and held in place in the closed position shown in Figure 13 by means of a latch assembly composed of a manually operable latch release 77 which cooperates with a locking tooth 79. When timepiece 73 is pivoted about hinge 75 from the open position shown in Figure 12, to the closed position shown in Figure 13, a finger 81 connected to latch release 77 engages locking tooth 79 to releasably hold the latch in its locked position. When latch release 77 is depressed, or slid to one side according to the details of the latch assembly, timepiece 73 can be moved to the open position. A spring can be provided to bias time piece 73 to its open position.

Watch assembly 71 has a message assembly 83 which includes a glass panel 85, a message compartment 87 for holding the plaque with the message and a rear push door 89. In order to install a message, rear push door is opened or removed, and a message plaque is inserted against panel 85. The message is placed so that it can be viewed from above, that is from the direction from timepiece 73. Door 89 is then closed or replaced and watch assembly 71 is ready for use. Secret compartments can be located above door 89 or beneath timepiece 73 as shown in the drawings.

A further embodiment of the invention is shown in Figures 14 and 15. A watch assembly 91 is shown. Figure 14 shows a timepiece 93 installed over and extending into base 95. Timepiece 93 is releasably locked in backing 95. A latch release 97 can be depressed or actuated in some other way, to release timepiece 93 from its locked position. Timepiece 93 is then removed from backing 95 and the message located in backing 95 becomes visible. The compartment between timepiece 93 and backing 95 can be a secret compartment.

A variation on the foregoing embodiment is shown in Figures 16 and 17. In this case, a watch assembly 101 includes a digital display piece 103 and another viewable item located beneath it such as a digital picture 105 shown in Figure 16. However, upon the depression or other actuation of a release member 107, the digital picture 105 is replaced by a message 109. Digital picture 105 can be an electronic image and by actuating member 107, that image is replaced by the message 109.

Another embodiment of the invention is shown in Figures 18 and 19. Figure 18 shows a watch assembly 111 with a watch face 113 around the periphery of the front

portion of watch assembly, with hands 115 operating in the normal mode. No message is visible. However, upon the depression of an actuating member 117, watch face 113 changes to an auxiliary mode, wherein a message is revealed inside of watch face 113. This message is not observable until member 117 is actuated as shown in Figure 19. The message is indicated at numeral 119.

Yet another embodiment of the invention is shown in Figure 20. In this case, a watch assembly 121 includes a timepiece 123 which includes on its rear portion and extending into or facing a secret compartment, an electronic voice chip 125 with a speaker 127. Upon the operation of an actuating member, an audible message can be heard through speaker 127. A microphone assembly 129 can be provided in which the user can put his or her own message in the timepiece, and it can be listened to, and changed, as desired. A digital picture or some message can be provided in backing 131 and in the secret compartment. Alternatively, or in addition, other messages besides audio messages can be included in timepiece 123. For example, an aroma generator unit for generating an aroma "message" can be provided for the user.

Alternatively, all of the foregoing items which are included in timepiece 123, can be included in backing 131, as explained earlier. In this case, timepiece 123 would be a cover for the messages and means for emitting the messages, in backing 131.

Figure 21 shows another embodiment of the invention. In this embodiment, a watch assembly 141 is shown having a timepiece 143 which is hinged on a wall of backing 145. Backing 145 has a functional member 147 which is shown in schematic form, located in a secret compartment beneath the timepiece when the latter is in a closed condition. Functional member 147 can show a visual message, can emit an audible message, can emit an aroma message, can be an artistic and/or symbolic device which can be viewed for the therapeutic comfort or other beneficial advantage to the user, can emit signals (electronic, audio, visual, etc.) to indicate the whereabouts of the watch assembly or of the wearer of the watch assembly, etc. In some instances, the back of timepiece 143 can be illuminated as indicated by the term "lit area" 149. Another lit area can be provided in base 145 as indicated by the numeral 151.

Figure 22 shows a watch assembly 161 viewed from its rear direction. A removable plaque 163 bearing a message is shown removed from the rear of the watch,

and can compose the base of the backing of the watch with the message shown on it. It could also be a plaque which is held in place by a removable back wall of the watch. As shown, it can be pushed to place it in its proper position, and can be changed easily. Plaque 163, if forming the base of the watch assembly, is dimensioned so that it is tightly held within the circular walls 165 of watch assembly 161. Other locking means such as a screw type arrangement, or the like can be used as well. A secret compartment can exist between the base and the forward part of the backing.

Another embodiment is shown in Figure 23 and 24. In this embodiment, a watch assembly 171 is shown having a timepiece 173 which is hinged on a wall of backing 175. Backing 175 has a mood sensing stone 177 embedded in the center and located in a secret compartment. The rear of stone 177 protrudes through the bottom of backing 175 such that a portion of stone 177 is pressed against the wearer's skin. Stone 177 will change color according to the emotional state of the user, i.e. calm, angry, sad, irrational, etc. The wearer can check their emotional state by viewing stone 177 by flipping the timepiece 173 upward away from backing 175. The wearer can then alter their behavior if necessary to return to a more normal state of mind. The back of timepiece 173 can be illuminated as indicated by the term "lit area" 179.

Still yet another embodiment of the present invention is shown in Fig. 25. In this embodiment, a watch assembly 180 is shown having a timepiece 182 which is hinged on a wall of a backing 184. Backing 184 includes a disc 186 containing a message, such as a visual message, i.e. a photograph, an audio message, or an aromatic message and indicated by the term "message." Backing 184 includes an inner compartment 188, which can be also be a cavity, and which provides a housing for disc 186. Disc 186 is preferably of the same shape as inner compartment 188 of backing 184. Moreover, a dial portion 192 is included in watch assembly 180 and can alternatively be provided with the inner compartment for housing disc 186. Of course, either or even both backing 184 and dial portion 192 can provide the housing for disc 186. As depicted in Fig. 25, backing 184, and therefore disc 186, has a substantially square shape. It should be appreciated that backing 184 can have a circular, oval, triangular, octagonal, square, rectangular or other polygonal shape and disc 186 would have substantially the same shape. The wearer can open timepiece 182 to reveal the

message therein. Disc 186 is removable and replaceable with an alternative disc 190. If the user so chooses, he or she may remove disc 186 and replace it with disc 190, which is of course just one of any number of alternative discs. It is further appreciated that disc 186 need not necessarily serve as a base for the message as described above, and alternatively the message, such as a photographic message (i.e. a photograph), can be placed directly onto and secured in backing 184.

The foregoing embodiments could also be used for clocks. For example, a free standing clock having a hinged or otherwise moveable clock section can be opened from a closed position to yield a clock back having the message bearing plaques or other functional member. The concept could also be employed in other such horological instruments such as lockets, pendants, rings, etc.

The invention has been described in detail, with particular emphasis being placed on the preferred embodiments thereof, but variations and modifications may occur to those skilled in the art to which the invention pertains.

What is claimed is:

1. A watch assembly comprising:

a timepiece;

a backing for supporting said timepiece;

mounting means for mounting said timepiece on said backing;

a hidden compartment formed between said backing and said timepiece; and

a functional member in said hidden compartment.

2. A watch assembly according to claim 1 wherein said mounting means comprises a hinge interconnecting said timepiece and said backing, said timepiece being rotatable on said backing from a closed position to an open position, and said timepiece revealing said hidden compartment when said timepiece is in the open position.

3. A watch assembly according to claim 1 wherein said functional member comprises a message bearing member.

4. A watch assembly according to claim 3 wherein said message bearing member bears a psychological message

5. A watch assembly according to claim 4 further comprised of:

a moveable frame for receiving and holding said message bearing member, said frame being mounted on said backing for insertion into said hidden compartment wherein said psychological message is printed on said message bearing member.

6. A watch assembly according to claim 1 further comprised of:

a releasable latch for holding said timepiece in the closed position;

a button for releasing said latch; and

a spring for biasing said timepiece to the open position.

7. A watch assembly according to claim 2, further comprised of:

a removable panel for holding said removable message member and being capable of sliding from a closed position to an open position to allow the removable message member to be selectively removed or replaced to allow one to view said psychological message.

8. A watch assembly according to claim 7 wherein said removable message member is a plaque.

9. A watch assembly according to claim 2 wherein said functional member is a plaque located in said hidden compartment holding a message, and said watch assembly further comprises:

a manually operable latch release;

a locking tooth for cooperating with said manually operable latch release for holding said timepiece in the closed position;

a finger connected to said manually operable latch release for engaging said locking tooth to releasably hold said manually operable latch in a locked position;

a spring to bias said timepiece in the open position;

a transparent panel; and

a rear push door for sealing said hidden compartment wherein said plaque is inserted into said hidden compartment by pushing said rear push door open, inserting said plaque, and then closing said rear push door, said plaque being inserted so that said plaque can be viewed from above through said transparent panel.

10. A watch assembly according to claim 3 and further comprising:

a latch release to release said timepiece from a locked position to release said timepiece from said backing for selective viewing of said message.

11. A watch assembly according to claim 1, wherein said functional member is a digitized picture.

12. A watch assembly according to claim 1 and further comprising:

an electronic voice chip;

a speaker for playing an audible psychological message recorded on said electronic voice chip; and

a microphone for recording a personal psychological message on said electronic voice chip.

13. A watch assembly according to claim 1 wherein said functional member is an aroma producing member.

14. A watch assembly according to claim 1 wherein said functional member is a member of the group consisting of a visual message, a member for producing an audible message, a member for producing an aromatic message, a member for producing an artistic device, a symbolic device, a picture and an electronic device.

15. A watch assembly according to claim 1 wherein said timepiece has a rear portion, and wherein said watch assembly further includes means for illumination in said rear portion.

16. A watch assembly according to claim 1 wherein said backing has a rear portion, and wherein said watch assembly further comprises;

a removable plaque bearing a message and forming a base of said backing; and,

a locking means for holding said removable plaque to said backing.

17. A watch assembly according to claim 1 wherein said functional member includes a mood sensing stone protruding through said backing member for contacting the wearer's skin in order to sense the wearer's mood, said stone changing color according to the wearer's mood so that the wearer can alter behavior to return to a normal state of mind.

18. A watch assembly comprising:

a backing;

a timepiece mounted on said backing selectively located on said backing against said timepiece;

an actuating member for selectively rendering said selectively viewable item viewable or not viewable.

19. The watch assembly according to claim 18 wherein said selectively viewable item is a digital picture.

20. A watch assembly comprising:

a watch dial;

a selectively viewable message bearing member in said dial; and

an actuating member operatively connected to said message bearing member upon actuation of said actuating member.

21. A watch assembly comprising:

a timepiece;

a backing for supporting said timepiece;

a mounting member for mounting said timepiece on said backing; and

a hidden compartment formed between said backing and said timepiece for receiving a message bearing member.

22. A watch assembly according to claim 21 wherein said mounting member comprises a hinge interconnecting said timepiece and said backing, said timepiece being rotatable on said backing from a closed position to an open position, and said timepiece revealing said hidden compartment when said timepiece is in the open position.

23. A watch assembly according to claim 21 and further comprised of:

a stationary frame mounted on said backing for receiving and holding the message bearing member.

24. A watch assembly according to claim 21 further comprised of:

a releasable latch for holding said timepiece in the closed position; and

a button for releasing said latch;

said timepiece being held in the open position when released by said button.

25. A watch assembly comprising:

a timepiece including a watch dial;

a backing for supporting said timepiece, said backing including a housing for containing a hidden, removable disc containing a message; and

a mounting for mounting said timepiece on said backing.

26. A watch according to claim 25 and further including a hidden, removable disc.

27. A watch assembly according to claim 25 wherein said disc and said housing have substantially the same shape.

28. A watch assembly according to claim 27 wherein said disc and said housing have a shape selected from the group consisting of triangular, square, circular, oval, octagonal, rectangular and polygonal.

29. A watch assembly according to claim 25 wherein said mounting comprises a hinge interconnected said timepiece and said backing, said timepiece being rotatable about said hinge on said backing from a closed position to an open position, and said timepiece revealing said disc when said timepiece is in the open position.

30. A watch assembly according to claim 25 wherein said message is selected from the group consisting of a visual message, a member for producing an audible message, a member for producing an aromatic message, a member for producing an artistic device, a symbolic device, a picture and an electronic device.

31. A watch assembly according to claim 25 and further comprised of:
a stationary frame mounted on said backing for receiving and holding said disc.

32. A watch assembly according to claim 25 further comprised of:
a releasable latch for holding said timepiece in the closed position; and
a button for releasing said latch;
said timepiece being held in the open position when released by said button.

33. A watch assembly comprising:
a timepiece;
a watch dial comprising a housing for holding said timepiece and for containing a hidden, removable disc;
a backing for supporting said timepiece; and
a mounting means for mounting said timepiece on said backing.

34. A watch according to claim 33 and further including a hidden, removable disc.

35. A watch according to claim 34 wherein said disc comprises a photograph.

36. A watch according to claim 34 wherein said disc contains a message.

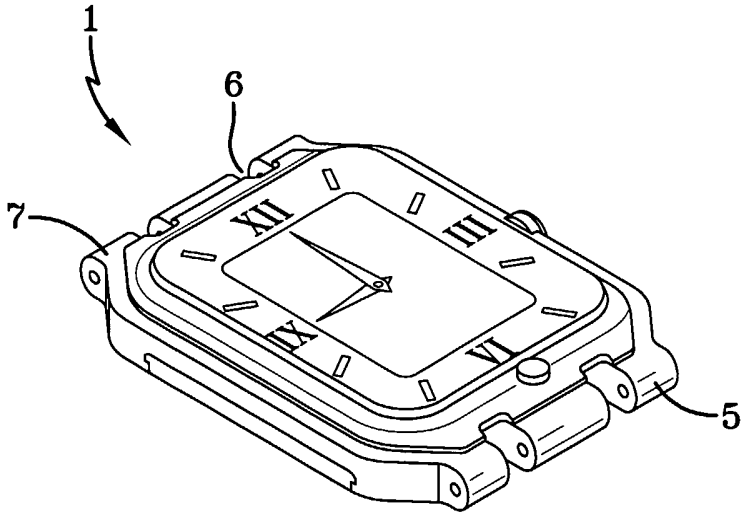


FIG-1

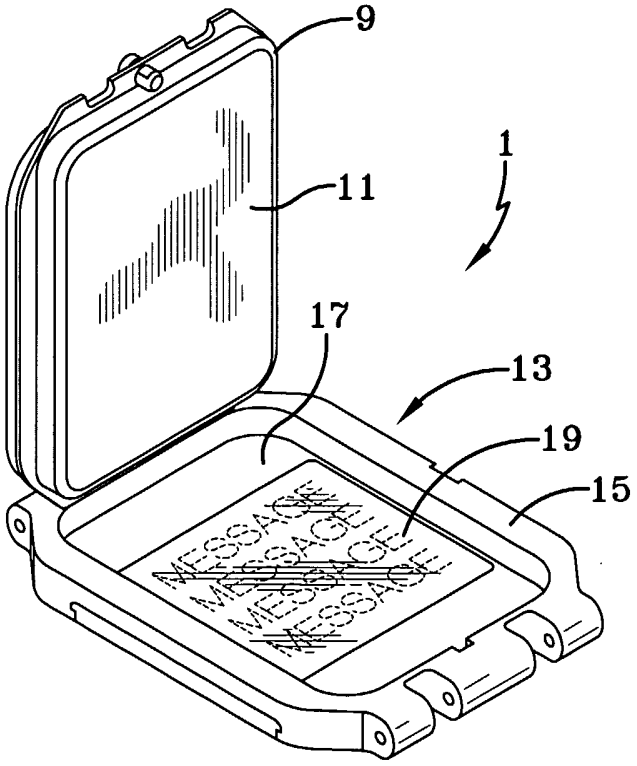
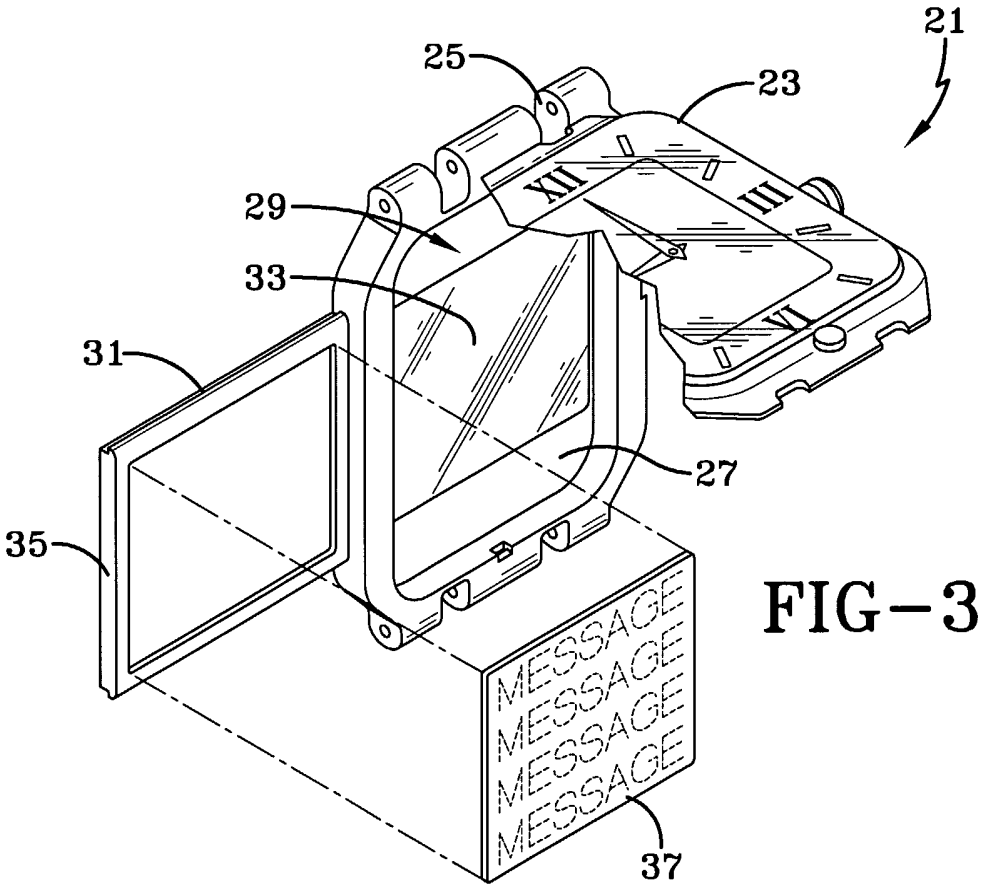


FIG-2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27
35
XII
III
VI
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MESSAGE
37

FIG-3

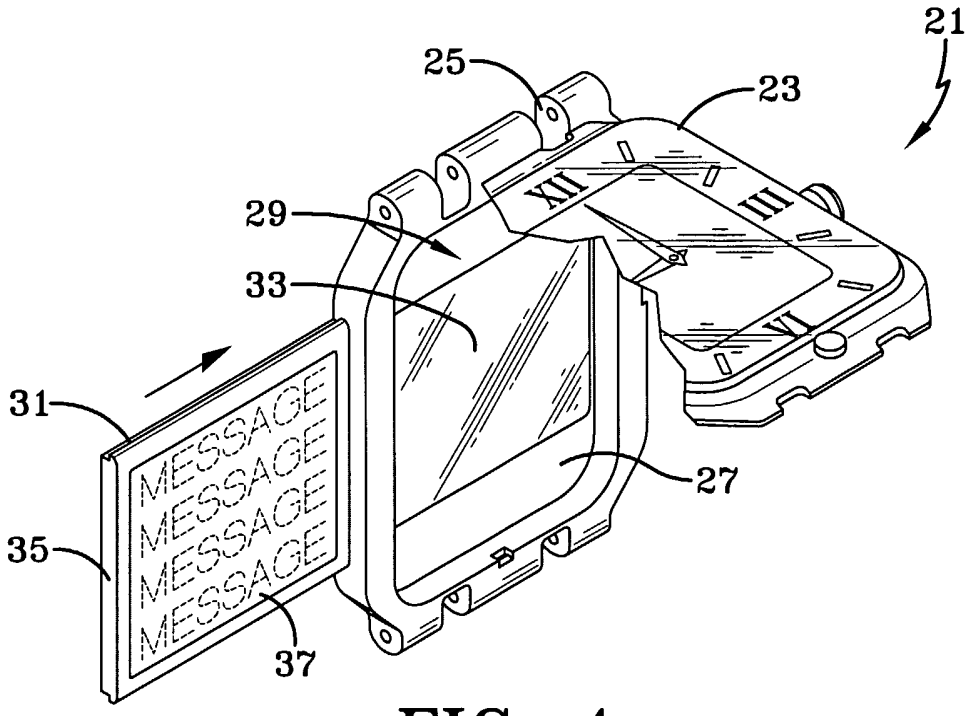
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FIG-4

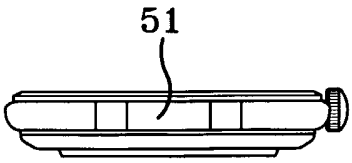

FIG-6

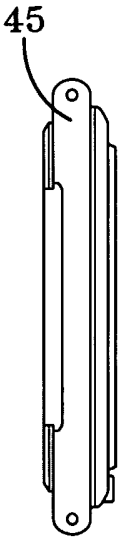

FIG-5

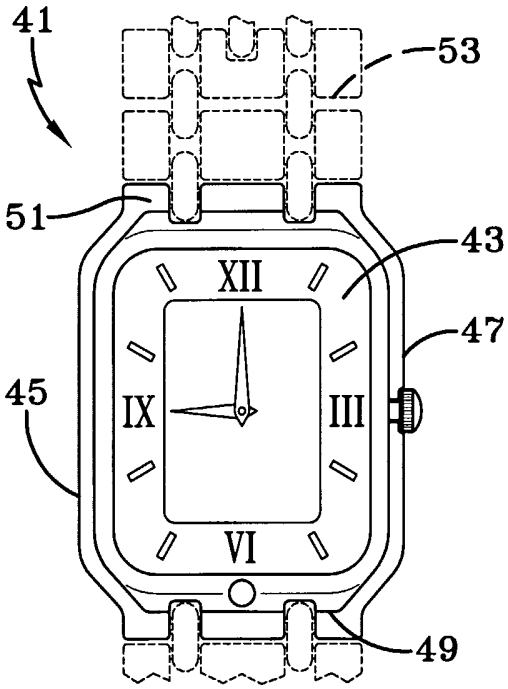

FIG-7

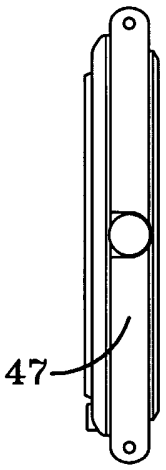

FIG-9

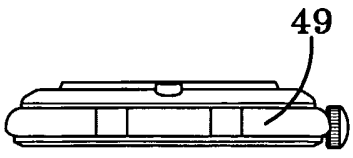

FIG-8

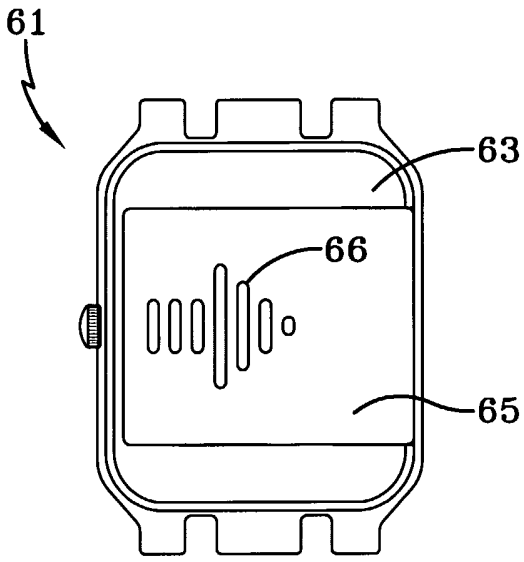

FIG-10

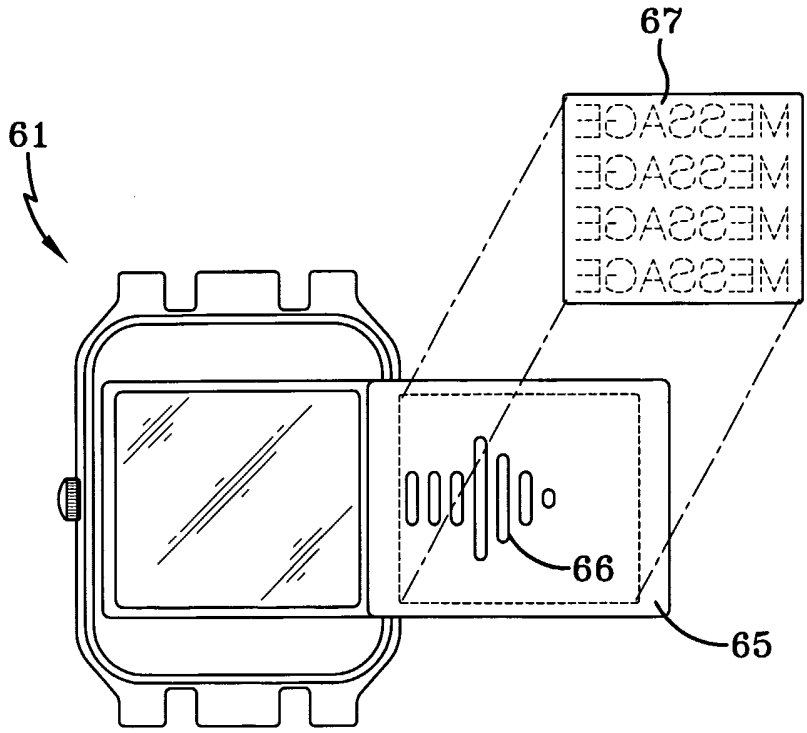

FIG-11

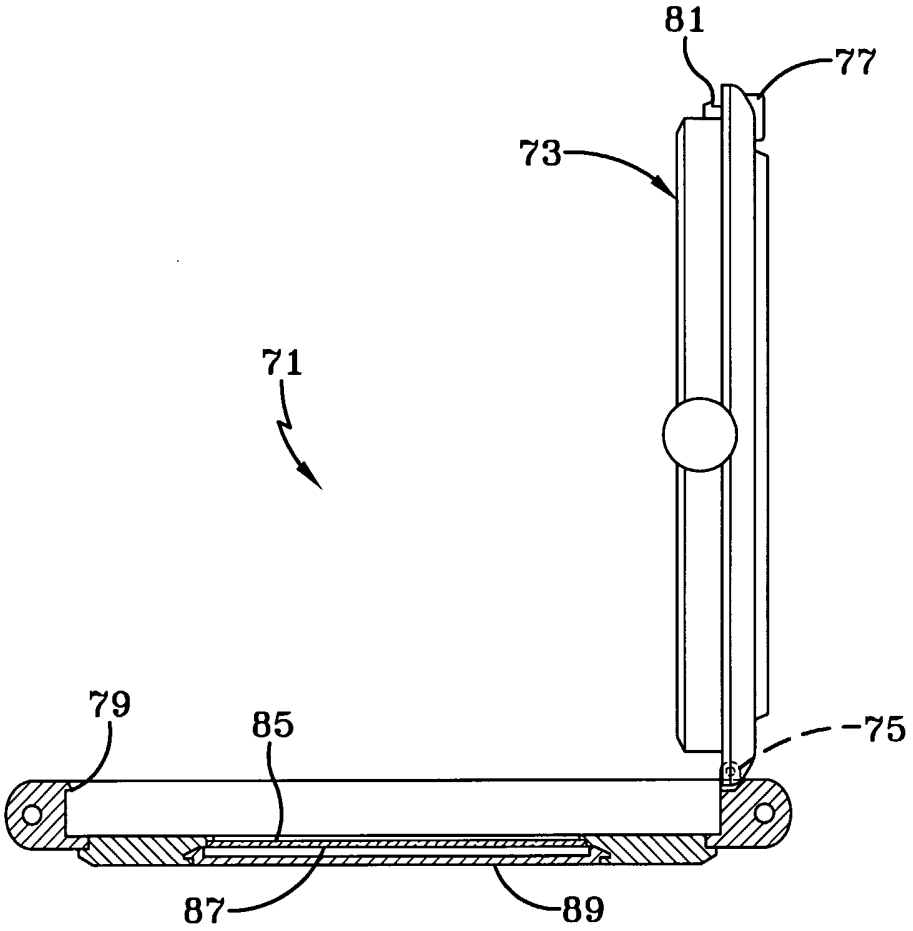

FIG-12

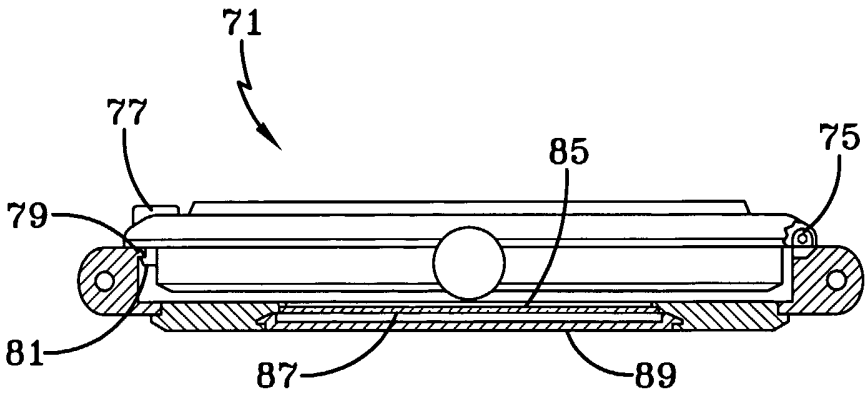

FIG-13

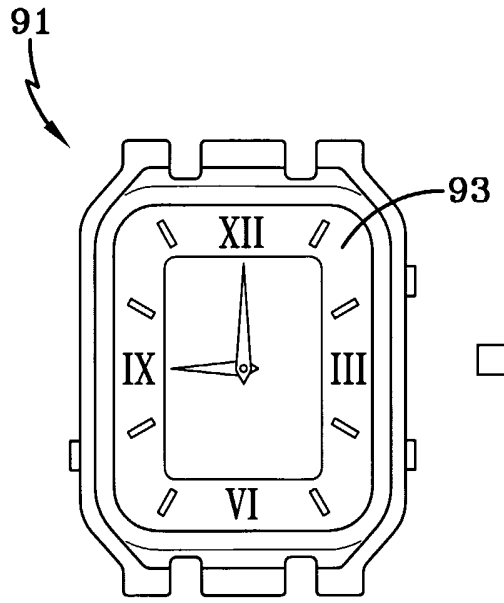

FIG-14

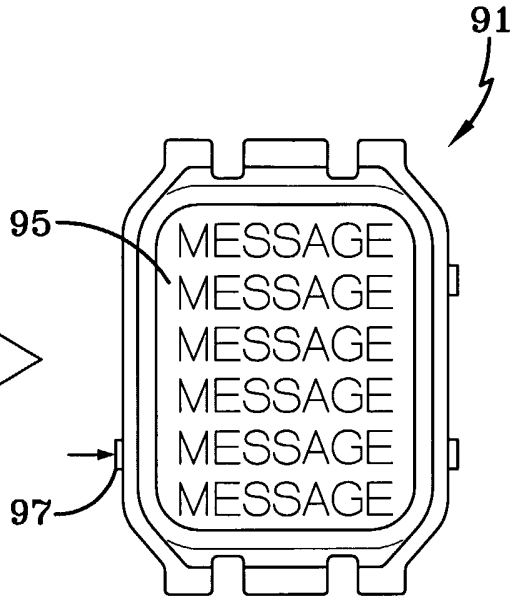

FIG-15

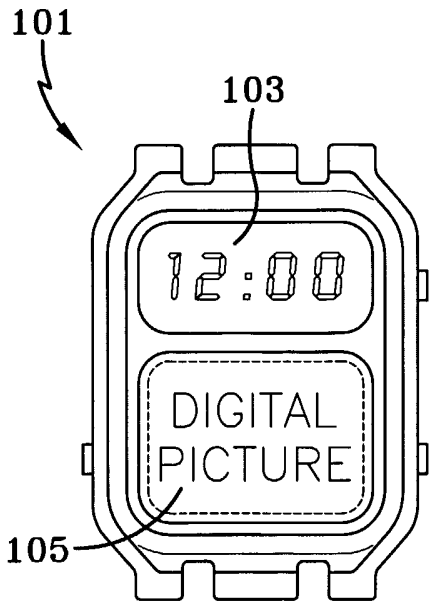

FIG-16

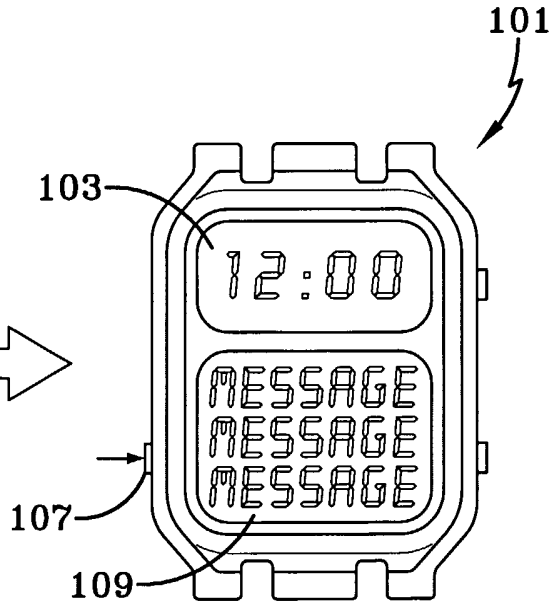

FIG-17

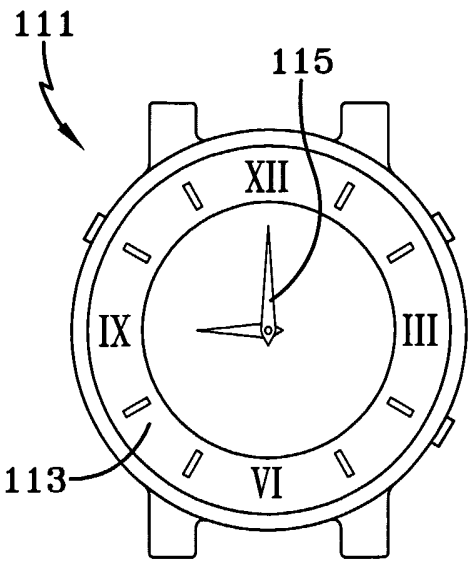

FIG-18

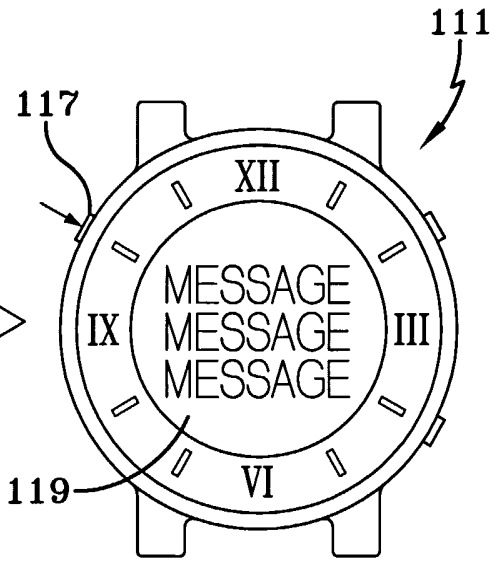

FIG-19

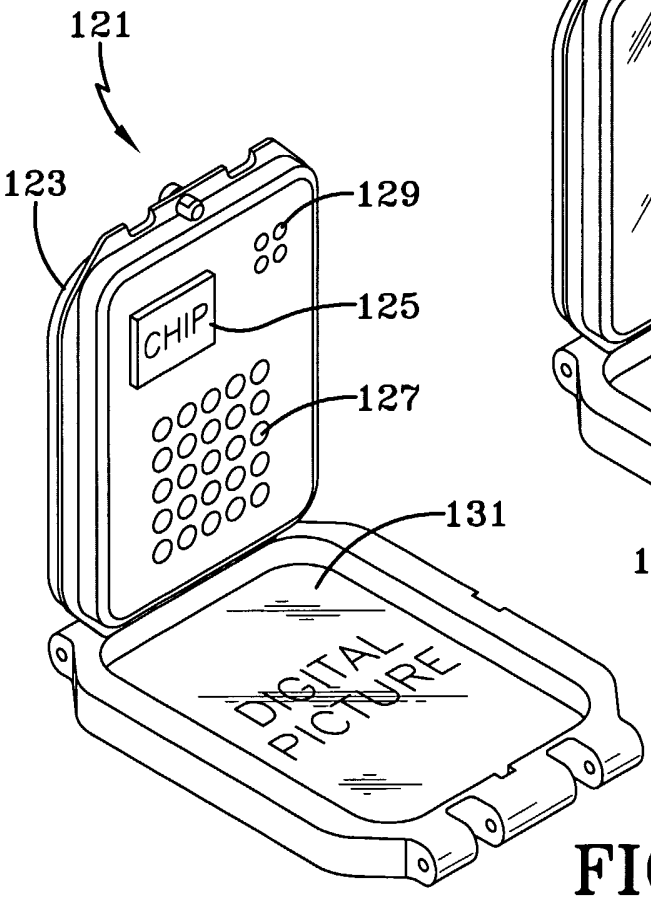

FIG-20

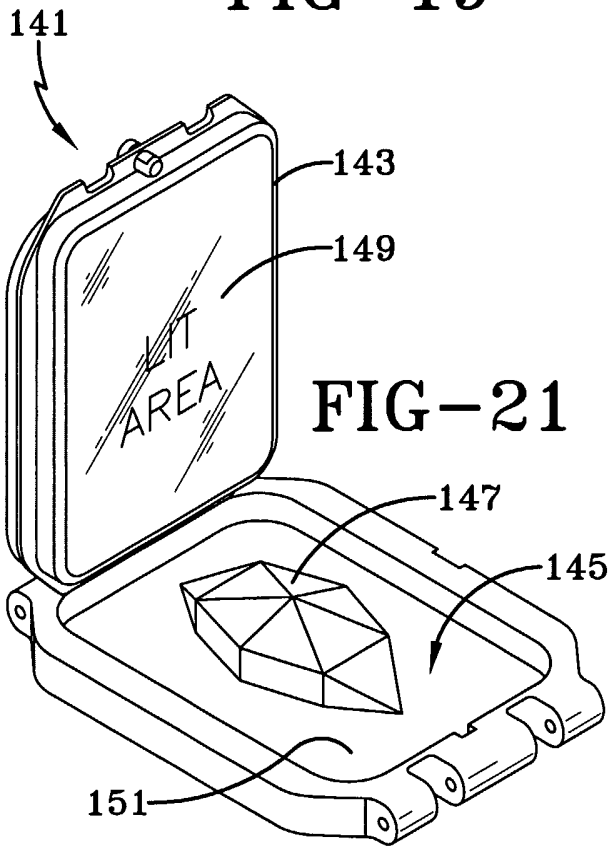

FIG-21

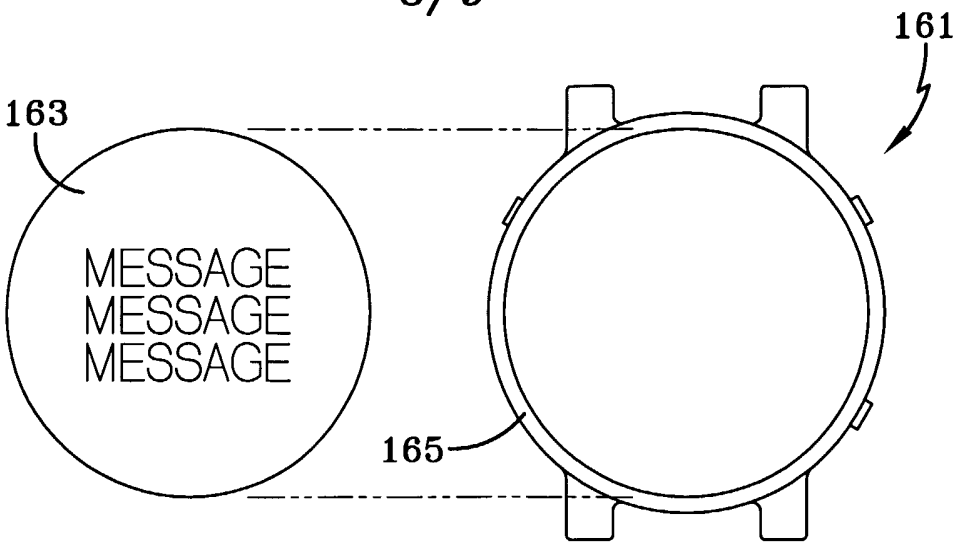

FIG-22

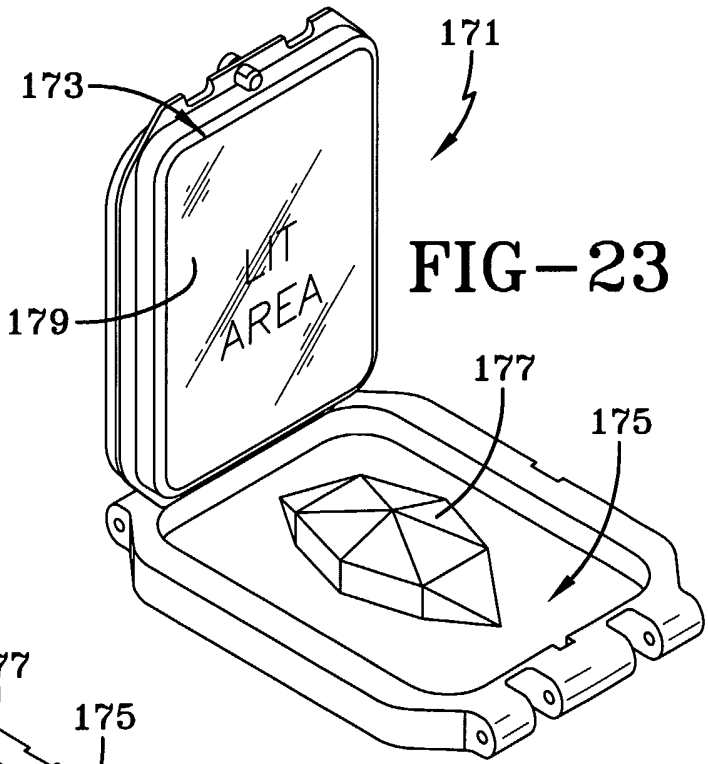

FIG-23

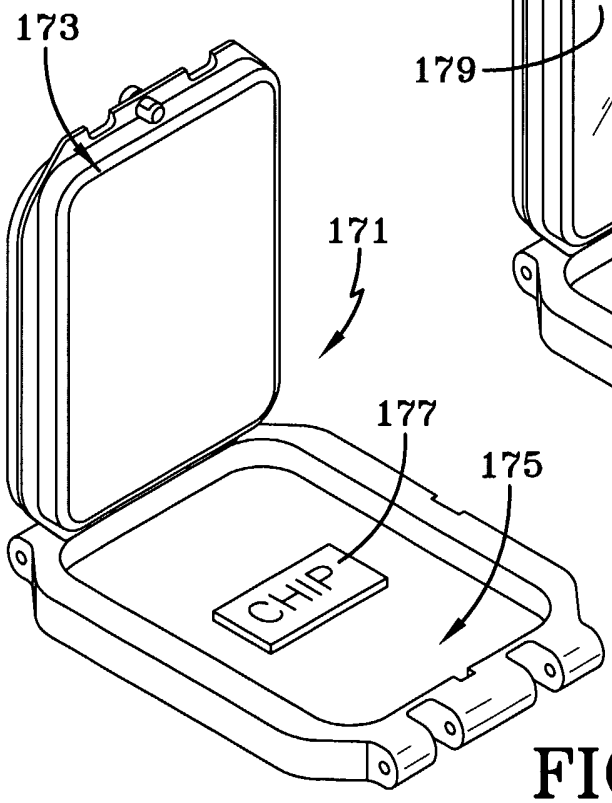

FIG-24

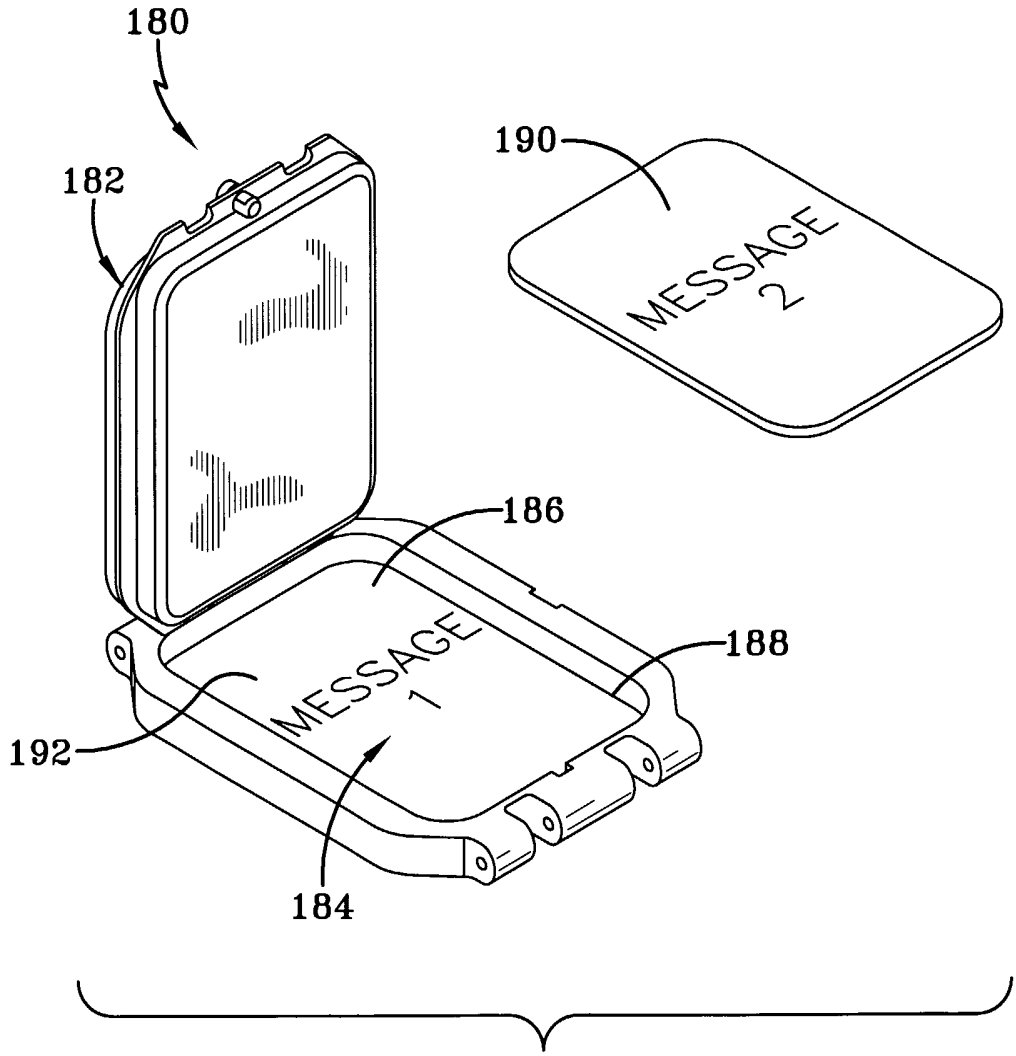

FIG-25

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/17063

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : G04C 17/00; G04B 37/00
US CL : 368/223, 242, 280-282
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 368/223, 242, 280-282

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,262,763 A (OKUYAMA et al) 16 November 1993 (16.11.1993), see entire document.	1-5,7,8,11,14-16,18-23,25-31,33-36 --- 6,9,10,12,13,17,24,32
Y	US 6,340,242 B1 (SANDIDGE) 22 January 2002 (22.01.2002), see entire document.	6,9,10,24,32
Y	JP 58-205884 A (YAJIMA) 30 November 1983 (30.11.8193), see entire document.	13
Y	US 6,164,815 A (DEGONDA) 26 December 2000 (26.12.2000), see entire document.	17
Y	US 6,158,884 A (LEBBY et al) 12 December 2000 (12.12.2000), see entire document.	12
X	US 4,444,513 A (PROELLOCHS et al) 24 April 1984 (24.04.1984), see entire document.	1-5,7,8,11,14-16,18-23,25-31,33-36
X	US 5,138,590 A (MASUDA et al) 11 August 1992 (11.08.1992), see entire document.	1-5,7,8,11,14-16,18-23,25-31,33-36

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
11 July 2002 (11.07.2002)	02 OCT 2002
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer MICHAEL LINDINGER Telephone No. (703) 308-0956

Form PCT/ISA/210 (second sheet) (July 1998)