The present invention in one embodiment is a combination of a personal device with a tether that connects the personal device with items of interest, especially security cards or identity badges, credit cards, lunch cards, library cards, keys, group identifiers, mottos, motivational or inspirational messages, pictures, colorful indicia, designs, pill containers, money clips, pouches, cases, purses, envelopes, pocket protectors, pens, pencils, pictures, loyalty cards, note paper, games, lotions, glasses, business cards or any other object that may be desirable to have on the user's person. In another embodiment, the invention includes the combination of a pedometer with other personal devices. One embodiment of the invention includes a method of using a pedometer-tether combination as part of a health promotion program.
Fig. 21

Step Detector 128
Microprocessor 12
Device Connection 128
Display 20
Memory 18
Retraction Mechanism 20

FIG. 21
FIG. 36
PERSONAL DEVICE WITH TETHER SYSTEM
AND METHOD OF USE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention is directed to personal devices such as pedometers, personal digital assistants (PDA), cellular phones, pagers, personal GPS systems, personal radios and MP3 players and calculators and more particularly to such personal devices combined with tethers connecting the personal device to items of interest, especially security or identity cards or badges, keys, group identifiers, mottes, motivational or inspirational messages, pictures or colorful indicia. The invention is also directed to a method of using such personal devices, especially pedometers, as part of a health improvement program.

[0003] 2. Description of Related Art

[0004] There are a plethora of personal devices available that enrich or make life easier. These personal devices usually assist us in some aspect of our lives such as communication, organization, location, measurement, calculation, information and entertainment. Typically, these personal devices are relatively small and are attached to our bodies or clothing or carried with us. Many personal devices started historically as mechanical devices. Examples of such personal mechanical devices include abacuses (calculating device) and pedometers. Although the mechanical forms of these devices still exist, many mechanical personal devices have been converted to electronic devices. For example, electronic versions of calculators and pedometers now exist along side of their mechanical predecessors.

[0005] Other personal devices have come into existence due to advances in electronic and digital technology. Examples of electronic personal devices include personal digital assistants (PDA), cellular phones, pagers, personal GPS systems, personal radios and MP3 players. Because these personal devices are electronic, they have some degree of sophistication that allows them to combine functionality.

[0006] Although these personal devices are often very useful, it is desirable to add additional functionality to the personal devices to increase their usefulness. As mentioned above, personal devices are usually relatively small and are attached to our bodies or clothing or carried with us. As a result, they are available as a platform for other functional aspects. In this manner, personal devices are continually evolving to meet the needs of the user.

[0007] Also, many people enjoy having multiple personal devices and often carry several separate personal devices with them. This often leads to clutter and the inadvertent loss of or forgetting to bring a particular personal device. It is therefore desirable to combine certain aspects of personal devices together into a single unit if possible.

[0008] Further, many people, including health officials, physicians, educators, employers and parents, are concerned with the amount of physical activity individuals get or, more precisely, the lack of such physical activity. Modern living has, in many cases, resulted in a somewhat sedentary lifestyle for many individuals. Increased physical activity has been directly linked to better health, lower body weight and better psychological health. Consequently, in most cases, it is desirable for individuals to get more physical activity than they currently get. As a result, programs have been set up with incentives or rewards for individuals for being physically active or increasing the level of their physical activity.

[0009] Many of these programs allow the user to participate in these programs while he or she is at work or school by encouraging and measuring physical activity as part of the participant’s normal work or school activity or over breaks including lunch break. These programs typically include some method of tracking the participant’s physical activity. In many of these programs, the individual participant uses a pedometer to measure the amount of activity, in the form of steps taken, performed by the individual.

[0010] Although these programs have been very useful and helpful in getting individuals to be more active, they still require the user to wear the pedometer in order to measure the individual’s activity. Experience has shown that individuals frequently forget to wear their pedometers to the place where they perform their physical activities. For example, if the individual keeps track of the distance they walk while at work, they will often forget to wear their pedometers at work. As a result, it is difficult to accurately track the individual’s physical activity.

[0011] A pedometer is a device that counts the number of steps a user takes. Pedometers are typically carried on and attached to the user and determine the number of steps taken by sensing changes in movement that are associated with taking a step. Most pedometers also have a system for then multiplying the number of steps taken by the length of the user’s stride to determine and display the distance the user has traveled. Research has shown that pedometers are typically worn on an average of 10 days and then discarded from use.

[0012] There are two general groups of pedometers: mechanical and electronic. Mechanical pedometers typically use a pawl and ratchet assembly with a weight attached to the pawl. The assembly is under tension by a spring. As the user moves, the weight resists moving due to inertia which causes the pawl to ratchet around the notches of the ratchet assembly. The movement of the pawl around the ratchet assembly corresponds to the number of steps taken. These mechanical devices usually include an adjustment system that the user uses to set the length of the user’s stride. The device in essence mechanically multiplies the number of steps taken by the length of a user’s stride to display the distance the user has traveled. Examples of mechanical pedometers are U.S. Pat. No. 3,818,194 entitled “Pedometer Toy” issued Jun. 18, 1974 to Carl B. Biro, U.S. Pat. No. 4,220,996 entitled “Jogger’s Computational Device” issued Sep. 2, 1980 to Talmadge R. Searcy, U.S. Pat. No. 4,322,609 entitled “Pedometer Assembly” issued Mar. 30, 1982 to Yasuji Kato, U.S. Pat. No. 4,406,823 entitled “Dual Mode Pedometer” issued Jul. 17, 1984 to Gerhard Ruhlemann, U.S. Pat. No. 4,560,861 entitled “Condition Regulating Device for Measuring the Quantity of Motion” issued to Yasuji Kato, Hiroyuki Kobayashi and Yukio Yamamoto, Dec. 24, 1994 and U.S. Pat. No. 4,322,609 entitled “Pedometer assembly” issued on Mar. 30, 1982 to Yasuji Kato, the combined teachings of which are combined herein in their entirety by reference.
Electronic pedometers typically use an electric or integrated circuit as the step detection mechanism. These circuits typically have a small weight attached to an arm that is attached to or part of a strain gauge or that comes into contact with a contact switch. As the user takes a step, the weight resists moving due to inertia which causes strain on the arm or strain gauge or causes the contact switch to close. Electronic circuitry detects this strain or that the contact switch is closed and a counting mechanism, typically a microprocessor, can count the number of steps taken. In electronic pedometers as well, the user inputs his or her stride length. The microprocessor multiplies the number of steps taken by the length of the stride and displays the resulting distance traveled. Because these electronic pedometers typically have microprocessors, many are able to perform other functions such as keeping track of the distance the user has traveled cumulatively or in specific time periods (e.g., daily travels for each day in a week). Further, these devices may also estimate the number of calories the user has burned as a result of the number of steps they have taken, elapsed time, steps per minute and may also function as a stopwatch or an alarm. Examples of electronic pedometers are U.S. Pat. No. 4,371,945 entitled “Electronic Pedometer” issued Feb. 1, 1983 to Lawrence J. Karr, Gary L. Wasserman and George R. Boehme, U.S. Pat. No. 4,741,001 entitled “Pedometer Stop Watch” issued Apr. 26, 1988 to Robert Ma, U.S. Pat. No. 4,846,459 entitled “Exercise measuring device” issued Jul. 11, 1989 to Keith Vivian, U.S. Pat. No. 5,117,444 entitled “High Accuracy Pedometer And Calibration Method” issued May 26, 1992 to William R. Sutton and Scott L. Noble, U.S. Pat. No. 5,446,775 entitled “Motion Detector and Counter” issued Aug. 29, 1995 to Larry A. Wright and Al Muldoon, U.S. Pat. No. 5,485,402 entitled “Gait Activity Monitor” issued Jan. 16, 1996 to Douglas G. Smith, Aaron W. Joseph, David A. Boone, Robert E. Borchers and Ernest Burgess, U.S. Pat. No. 6,175,608 entitled “Pedometer” issued Jan. 16, 2001 to Nathan Pyles, Joel M. Macht and Chen Shui-Jung, U.S. Pat. No. 6,349,126 entitled “Pedometer Capable Of Keeping User Interested In Exercise” issued Feb. 19, 2002 to Hiroshi Ogawa, Munehiro Kitamura, Masazumi Kihira and Koji Maeshashi, U.S. Pat. No. 6,434,212 entitled “Pedometer” issued Aug. 13, 2002 to Nathan Pyles and U.S. Pat. No. 6,473,483 entitled “Pedometer” issued Oct. 29, 2002 to Nathan Pyles, the teachings of which are incorporated herein by reference in their entirety.

Therefore, it would be useful to have a pedometer, particularly with a variety of useful functions, that a user would be likely to remember to take with them when they are participating in the physical activity of interest and whose use is thought of as being mandatory (e.g., as part of a health program).

SUMMARY OF THE INVENTION

The present invention in one embodiment is a combination of a personal device with a tether that connects the personal device with items of interest, especially security cards or identity badges, credit cards, lunch cards, library cards, keys, group identifiers, mottos, motivational or inspirational messages, pictures, colorful indicia, pill containers, money clips, pouches, cases, purses, envelopes, pocket protectors, pens, pencils, pictures, loyalty cards, note paper, games, lotions, glasses, business cards or any other object that may be desirable to have on the user’s person. In another embodiment, the invention includes the combination of a pedometer with other personal devices. One embodiment of the invention includes a method of using a pedometer-tether combination as part of a health promotion program.

It is therefore an object of the invention in one embodiment to add functionality to personal devices.

It is also an object of the invention in one embodiment to combine certain aspects of personal devices together into a single unit.

It is also an object of the invention in one embodiment to facilitate a health improvement program.

These and other objects of the invention will be clear from the description contained herein and particularly with reference to the following Detailed Description of the Invention and the associated Drawings.

FIG. 1 is a perspective view of one embodiment of the present invention in a closed configuration and with the tether retracted.

FIG. 2 is a perspective view of the embodiment of FIG. 1 in a closed configuration and with the tether extended.

FIG. 3 is a perspective view of the embodiment of FIG. 1 in an open configuration.

FIG. 4 is a front view of the invention of FIG. 1 in a closed configuration with a key as an item of interest.

FIG. 5 is a front view of the invention of FIG. 1 with a security card as an item of interest.

FIG. 6 is a front view of the invention of FIG. 1 in an open configuration.

FIG. 7 is a back view of the invention of FIG. 1 in a closed configuration.

FIG. 8 is a bottom view of the invention of FIG. 1 in an open configuration.

FIG. 9 is a bottom view of the invention of FIG. 1 in a closed configuration.

FIG. 10 is a side view of the invention of FIG. 1 in a closed configuration with one embodiment of a fastening clip.

FIG. 11 is a side view of the invention of FIG. 1 in a closed configuration with an alternate embodiment of a fastening clip.

FIG. 12 is a side view of the invention of FIG. 1 in one embodiment of an open configuration.

FIG. 13 is a side view of the invention of FIG. 1 in another embodiment of an open configuration.

FIG. 14 is a side view of the invention of FIG. 1 in a closed configuration with an alternate embodiment of a fastening clip.

FIG. 15 is a perspective view of the invention of FIG. 1 with a non-retractable tether.

FIG. 16 is a cross-sectional view of the head of one embodiment of the device.
FIG. 17 is a perspective view of an alternate embodiment of the present invention in a closed configuration.

FIG. 18 is a perspective view of the embodiment of FIG. 17 in an open configuration.

FIG. 19 is a perspective view of an alternate embodiment of the present invention in a closed configuration.

FIG. 20 is a perspective view of the embodiment of FIG. 19 in an open configuration.

FIG. 21 is a schematic diagram of one embodiment of the invention.

FIG. 22 is a schematic diagram of an alternate embodiment of the present invention including a personal digital assistant (PDA).

FIG. 23 is a perspective view of the embodiment of FIG. 22.

FIG. 24 is a schematic diagram of an alternate embodiment of the present invention including a cellular phone.

FIG. 25 is a perspective view of the embodiment of FIG. 24.

FIG. 26 is a schematic diagram of an alternate embodiment of the present invention including a pager.

FIG. 27 is a perspective view of the embodiment of FIG. 26.

FIG. 28 is a schematic diagram of an alternate embodiment of the present invention including a GPS system.

FIG. 29 is a perspective view of the embodiment of FIG. 28.

FIG. 30 is a schematic diagram of an alternate embodiment of the present invention including a radio.

FIG. 31 is a perspective view of the embodiment of FIG. 30.

FIG. 32 is a schematic diagram of an alternate embodiment of the present invention including a MP3 player.

FIG. 33 is a perspective view of the embodiment of FIG. 32.

FIG. 34 is a schematic diagram of an alternate embodiment of the present invention including a calculator.

FIG. 35 is a perspective view of the embodiment of FIG. 34.

FIG. 36 is a schematic diagram of an embodiment of the present invention including wireless communication to a central or remote system.

FIG. 37 is a front view of an item of interest of the present invention in the form of a pouch.

FIG. 38 is a side view of the pouch of FIG. 37.

FIG. 39 is a front view of a particular form of a pouch as an item of interest.

DETAILED DESCRIPTION OF THE INVENTION

Throughout the description, like members, elements or parts, wherever referenced or described, are referred to by like reference numbers. Unless otherwise described, the description and functioning of an element set out in one portion of the application, including the description of the prior art, applies to the element referred to by the same reference number in another portion of the description including in this Detailed Description of the Invention. Further, the present description includes description of several embodiments of the invention. Again, unless specifically stated otherwise, reference to or description of an element in connection with one embodiment refers to the physical attributes, characteristics or function of an element wherever set forth in the description.

The device of the invention is shown in the Figures generally labeled 10. One representative embodiment of the invention is shown in FIGS. 1-15. As shown in the drawings and described hereafter, the device 10 in this embodiment includes a pedometer 12 and a tether 14. Although a pedometer 12 is the personal device described in detail as the representative example of a personal device in connection with this embodiment, it is intended that any personal device may be combined with a tether 14 according to the description and principles given herein and shown in the accompanying drawings.

Pedometer 12, whether mechanical or electronic, records the number of steps the user takes. Consequently, pedometer 12 can take any form well understood in the art to detect and record the number of steps taken. By way of example only, and not for the purpose of limiting the invention, pedometer 12 can be of the type disclosed above or others as will be well understood by those skilled in the art.

In whatever embodiment the pedometer 12 takes, whether mechanical or electronic, as shown schematically in FIG. 20, the pedometer 12 includes a step detector 16 that determines that a step has been taken by the user, a memory 18 for storing relevant information, particularly the number of steps the user has taken in the relevant time period and a display 20 to display information relevant to the use of the device 10.

Where pedometer 12 is a mechanical device, memory 18 may take the form of the ratchet and pawl mechanism described above. Where pedometer 12 is an electronic pedometer, the memory 18 may be a memory chip such as is commonly used in electronic circuits for storing information. In either the mechanical or electronic versions of the pedometer 12, the memory 18 is connected to the step detector 16 so that the number of steps the step detector 16 has detected that the user has taken is recorded in the fashion appropriate for the memory. In the simplest form, the memory 18 just records the number of steps taken since it has last been reset. In more sophisticated forms, the memory 18 stores the number of steps taken over different time periods. For example, memory 18 could store the number of steps the user has taken this week or over any other time period, or in total or both. In this way, the device 10 itself contains information in the memory 18 that allows the device 10 to manipulate or display a variety of data related...
to the user’s activity over any desired time period including statistical data and a comparison of the user’s activity over different time periods.

[0064] As noted above, pedometer 12, in whatever form it takes also preferably includes a display 20. The function of display 20 is to display information relevant to the use of the device 10. For example, display 20 could display the number of times the user has taken in a given time period (e.g., since the last time the device 10 was reset, in the last 24 hour period, in total, etc.). Alternately, display 20 could display processed information. An example of such processed information is the distance the user has traveled in the relevant time period. This distance traveled information could be determined by multiplying, either mechanically or electronically, the number of steps the user has taken in the relevant time period by the length of the user’s stride, a figure inputted into the device 10. Display 20 can be any of a number of types including analog and digital displays as is well understood in the art.

[0065] In the preferred embodiment of the pedometer 12, the pedometer 12 is electronic and includes a microprocessor 22 or other electronic circuitry such as application specific integrated circuits (ASICs) or discrete analog or digital components. Because the display 20 in the preferred embodiment is connected to electronic circuitry such as a microprocessor 22, the display 20 will be able to display a variety of outputs as directed by the microprocessor 22 or other electronic circuitry.

[0066] For example, it is particularly useful for the pedometer 12 to determine and display through the display 20 the distance the user has traveled in a relevant time period. As mentioned, this is typically done by multiplying the number of steps taken by the user by length of the user’s stride. As a result, the length of the user’s stride must be inputted to the pedometer 12. This is accomplished through input buttons 24 or through the interconnectivity of the device 12 with a local or remote site as will be explained hereafter. With these two bits of information, it is relatively straightforward for the device 10 to calculate, either mechanically or electronically, the distance the user has traveled in the relevant time period. But, microprocessor 22 or other electronic circuitry may also calculate and display useful or interesting information such as statistical data, elapsed time, warnings, messages uploaded or inputted into the microprocessor 22 and stored in the memory 18. It may be useful to the device 10 to include an audio speaker 26 that allows the microprocessor to sound alarms or to give audible messages including motivational messages or audible reports on the user’s progress or give reports on the status of the device including a low battery warning.

[0067] As far as the physical structure of the device 10, many different configurations are possible and will occur to those skilled in the art. In a representative embodiment shown in FIGS. 1-15, the device 10 has a clamshell case configuration having an outer shell 28 and an inner shell 30 that are connected by a hinge 32. Outer shell 28 includes an outer shell edge 34 and inner shell 30 includes an inner shell edge 36. Outer shell 28 also has an outer shell bottom edge 38, outer shell top edge 40, outer shell side edges 42, outer shell front face 44 and an outer shell back face 46. Inner shell 30 has an inner shell bottom edge 48, inner shell top edge 50, inner shell side edges 52, inner shell front face 54 and an inner shell back face 56. In the embodiment shown, outer shell 28 includes the pedometer 12 including the display 20 and input buttons 24.

[0068] Outer shell 28 and inner shell 30 may take many forms. For example, in the embodiment shown in FIGS. 1-15, outer shell 28 and inner shell 30 are relatively box-like with relatively sharp edges between the outer shell back face 46 and outer shell bottom edge 38, outer shell top edge 40, outer shell side edges 42 and inner shell back face 56 and inner shell bottom edge 48, inner shell top edge 50, inner shell side edges 52. However, outer shell 28 and inner shell 30 may take on an almost infinite number of shapes. For example, in the embodiment shown in FIGS. 16-17, outer shell 28 and inner shell 30 have rounded edges between the outer shell back face 46 and outer shell bottom edge 38, outer shell top edge 40, outer shell side edges 42 and inner shell back face 56 and inner shell bottom edge 48, inner shell top edge 50, inner shell side edges 52 and outer shell back face 46 and inner shell back face 56 have an oval configuration.

[0069] In the embodiment of FIGS. 18-19, outer shell back face 46 and inner shell back face 56 have the configuration of a foot. It is clear the outer shell back face 46 and inner shell back face 56 could have virtually any shape include trademark shapes such as Nike’s Swoosh or Nickelodeon’s Splat, shapes of states, corporate logos, sports icons like footballs, baseballs, basketballs, hockey pucks, free form shapes, geometric shapes, shapes of recognizable objects or cartoon characters to name but a few examples.

[0070] Outer shell back face 46, in whatever configuration, may also be configured to include printed, imprinted or molded designs or information. Examples of such information include, but are not limited to, a trademark, company name or logo, a picture, motivational, inspirational or uplifting message or group identification insignia (e.g., the “A” engineering team). It is also within the scope of the invention for any of the surfaces of the device 10, including the outer shell edge 34, outer shell bottom edge 38, outer shell top edge 40, outer shell side edges 42, outer shell front face 44, outer shell back face 46, inner shell edge 36, inner shell bottom edge 48, inner shell top edge 50, inner shell side edges 52, inner shell front face 54 and inner shell back face 56, to have the various configurations or shapes listed above. Further, it is also within the scope of the invention for any surface of the device 10, including the outer shell edge 34, outer shell bottom edge 38, outer shell top edge 40, outer shell side edges 42, outer shell front face 44, outer shell back face 46, inner shell edge 36, inner shell bottom edge 48, inner shell top edge 50, inner shell side edges 52, inner shell front face 54 and inner shell back face 56, to include printed, imprinted or molded information. It is clear that with some of these configurations or printings, imprints or moldings, not only may others be able to see the configurations or printings, imprints or moldings but the user of the device 10 may as well also or in the alternative be able see the configurations or printings, imprints or moldings (e.g., where a message is printed or imprinted on the outer shell top edge 40 or inner shell top edge 50 and the user simply looks down to see such printed or imprinted message.)

[0071] In the embodiment of the device 10 shown in FIGS. 1-6 and 9-15, the outer shell front face 44 contains the
The inner shell 30 is essentially hollow and allows the pedometer 12, especially the inner shell front face 42 to be folded into and contained within the inner shell 30. In this way, the device 10 can be opened by outer shell 28 being moved away from inner shell 30 by pivoting outer shell 28 away from inner shell 30 around hinge 32 as shown in FIGS. 3, 6, 12 and 13. In this configuration, the user may read the display 20 or input information or control the workings of the pedometer 12 through input buttons 24. When it is desirable to close the device 10, the user pivots the outer shell 28 around the hinge 32 so that the inner shell front face 42 moves within the inner shell 30 and the outer shell 28 and inner shell 30 are in close contact along outer shell edge 34 and inner shell edge 36 (FIGS. 1-2, 4-5, 9-11 and 14-15).

Hinge 32 may allow the outer shell 28 to move from the closed configuration shown in FIGS. 1-2, 4-5, 7-11 and 14-15 90° or to any other angle as desired. As stated, in this embodiment, the display 20 and input buttons 24 and located on the inner shell front face 42 of the outer shell 28. As a result, when the outer shell 28 is in its closed configuration as shown in FIGS. 1-2, 4-5, 7-11 and 14-15, the display 20 and input buttons 24 are enclosed within the device 10 and unavailable for viewing by the user or others. Because display 20 is hidden within the device 10 when the device 10 is closed, any information displayed on display 20 will also be hidden. This may be a desirable feature for the embodiment of the device 10 where the display 20 displays information continuously for many users who are shy about having a self-determined too high or too low number displayed. In the closed configuration, the input buttons 24 are also unavailable for inadvertent touching or manipulation of the input buttons 24. Further, in this closed configuration the display 20 and input buttons 24 are unavailable for inadvertent contact and possible damage to display 20 and input buttons 24.

When it is desired to view the display 20 or input information through the input buttons 24, the user may “open” the device 10 by pivoting the outer shell 28 away from the inner shell 30 around hinge 32 so that the display 20 and input buttons 24 are viewable and accessible as shown in FIGS. 12 and 13.

The configuration described heretofore has the pedometer 12 located in the outer shell 28. But, the pedometer 12 could also be located in the inner shell 30 or portions of the pedometer could be located in the outer shell 28 while other portions could be located in the inner shell 30. For example, the step detector mechanism 20, memory 18 and microprocessor 22 might be located in the inner shell 30 while the display 20 and input buttons 24 might be located on the outer shell back face 46 of the outer shell 28 (FIG. 8). Other permutations and combinations of components will occur to those skilled in the art and are all intended to be included within the scope of the present invention.

Further, the pedometer 12 may not have discrete outer shell 28 and inner shell 30 with a hinge 32 connecting the two. Instead, the pedometer 12 may be in a single unit. In this embodiment, the device 10 still contains an inner shell back face 56 and an outer shell back face 46. However, the outer shell 28 and inner shell 30 are combined so that the outer shell top edge 40 is merged with the inner shell top edge 50, the outer shell side edges 42 are merged with the inner shell side edges 52, the outer shell bottom edge 38 is merged with the inner shell bottom edge 48 and there is no inner shell front face 54 or outer shell front face 44. Because there is no outer shell front face 44 to hold the display 20 or input buttons 24, the display and input buttons must be located elsewhere, preferably on the outer shell back face 46.

As stated, it is desirable to attach the device 10 to the user’s body, preferably by attaching the device 10 to an article of the user’s clothing such as a belt, pocket, pant band, skirt band or worn around the neck. This is preferably accomplished through a fastening clip 58 having a clip end 60 and a clip base 62. Several representative examples of fastening clips 58 are shown in FIGS. 1-3, 10-14. FIGS. 1-3 and 10 shows a fastening clip 58 made of essentially the same material as and integrally formed with the inner shell 30. In this embodiment, the fastening clip 58 is formed with a bias to close the clip end 60 to the clip base 62.

In the embodiment of FIG. 11, the fastening clip 58 is made of a metal such as spring steel or other material, including non-metallic material, that has a bias to hold clip end 60 close to or in contact with clip base 62. An example of such a clip is shown in U.S. Pat. No. 5,488,759, entitled “Detachable Clip for a Portable Electronic Device, issued on Feb. 6, 1996 to Kim Y. Lim, Poh C. Tan and Moo H. Han. In this embodiment, clip base 62 is attached to the inner shell back face 56 by means well understood in the art including, but not limited to, molding the clip base 62 into the material of the inner shell back face 56, sliding the clip base 62 into a slot cut or molded into the inner shell back face 56, riveting or screwing the clip base 62 into the inner shell back face 56 or attaching the clip base 62 to the inner shell back face 56 by adhesives or glues.

In the embodiment of FIG. 14, the fastening clip 58 is made in two pieces, clip end 60 and clip base 62, that are connected through a clip hinge 64. In this embodiment, a clip spring 66 located at clip hinge 64 biases the clip end 60 toward and into contact with the clip base 62. Clip base 62 may be integrally formed and with with the inner shell back face 56 or may also be attached to the inner shell back face 56 by means well understood in the art including, but not limited to, molding the clip base 62 into the material of the inner shell back face 56, sliding the clip base 62 into a slot cut or molded into the inner shell back face 56, riveting or screwing the clip base 62 into the inner shell back face 56 or attaching the clip base 62 to the inner shell back face 56 by adhesives or glues. Examples of such a fastening clip 58 is disclosed in U.S. Pat. No. 4,083,481 entitled “Detachable Mounting Clip Arrangement for a miniature portable apparatus of the Like”, issued on Apr. 11, 1978 to George Joseph Selinko and U.S. Pat. No. 5,081,709 entitled “Interchangeable Belt Clip for a Selective Call Receiver Housing and Carrying Case” issued Jan. 14, 1992 to John R. Benyo, Henry Wandt and Fernando Gomez, the collective teachings of which are incorporated herein in their entirety by reference.

A further embodiment for fastening clip 58 (not shown) has the fastening clip 58 again in two pieces, clip end and clip base, but the clip base has a post that fits into a slot or groove in the clip end that is in turn connected to the user
for example on the user's belt. An example of this type of fastening clip 58 is shown in U.S. Pat. No. 4,419,794 entitled "Portable Fastening Device" issued Dec. 13, 1983 to Harold O. Horton, Jr. and William B. Thompson, the collective teachings of which are incorporated herein in their entirety by reference.

[0080] As stated above, the device 10 includes a tether 14. The function of the tether is to allow the personal device, in this case a pedometer 12, to be connected to an item of interest through the tether 14. Examples of items of interest include, but are not limited to, security cards or identity badges, credit cards, lunch cards, library cards, keys, group identifiers, motos, motivational or inspirational messages, pictures, designs, colorful indicia, pill containers, money clips, pens, cash, passes, envelopes, pocket protectors, pencils, pictures, loyalty cards, note paper, games, lotions, glasses, business cards or any other object that may be desirable to have on the user's person (collectively, "Items of Interest"). For illustrative but not limiting purposes, the items of interest shown in the Figures are a security card 68 (FIGS. 1-3, 5-7 and 10-15), a key 70 (FIG. 4) and a pouch 148 (FIGS. 37-39). Security card 68 may be such as many companies use to identify their employees. As such, many security cards have a face side 72 where the user's picture or other identifying information is displayed. Further, certain embodiments of the security card 68 contain passive or active electronic components that allow the employees to interact with various devices to, for example, open or lock electronic doors when the interaction device determines that the security card 68 qualifies to perform the desired task. As stated, the item of interest could also be a key 70 or any of the items of Interest listed above. The common feature of these items of interest is that it is desirable to have the item of interest on the person of the user.

[0081] In one embodiment shown in FIGS. 1-4, 7 the tether 14 is string-like so that tether 14 has essentially a circular or oval cross-section. In another embodiment shown in FIGS. 5 and 15, tether 14 is ribbon-like meaning that tether 14 is relatively flat and wide. In any embodiment for tether 14, tether 14 has a proximal end 74 and a distal end 76. The proximal end 74 is preferably connected to the inner shell bottom edge 48 of the inner shell 30 but could also be connected to the outer shell bottom edge 38 of outer shell 28. The distal end 48 of tether 14 is connected to the security card 68, key 70 or other item of interest through an attachment clip 78 located at the distal end 76 of the tether 14. The attachment clip 78 allows the distal end 76 of the tether 14 to be connected to the security card 68, key 70 or other item of interest. The function of the attachment clip 78 is to allow the security card 68, key 70 or other item of interest to be securely attached to the distal end 76 of the tether 14. Attachment clip 78 may allow the security card 68, key 70 or other item of interest to be securely attached to the distal end 76 of the tether 14. Attachment clip 78 may take many forms as is well understood in the art but representative examples of such an attachment clip 78 is riveted connection, mechanical snap or spring-loaded clip.

[0082] A removable connector 80 is preferably located along the tether 14 between the proximal end 74 and the distal end 76 of the tether 14. The removable connector 80 allows the distal end 76 of the tether 14 to be selectively attached or unattached from the proximal end 74 of the tether 14. Removable clip 80 may take many forms well understood in the art so long as it performs the function of allowing the proximal end 74 to be separated from and reconnected to the distal end 76 of tether 14. Although it is desirable to have a removable connector 80, it is not required in the invention.

[0083] In the preferred embodiment, the tether 14 has a retraction mechanism 82 that allows the tether 14 to be extended and retracted away from either the inner shell 30 or the outer shell 28. This is particularly useful where the user has the device 10 attached to his or her person and needs to hold the security card 68, key 70 or other item of interest near to the device 10 for most purposes, including usual work activities or walking, but needs to move the security card 68, key 70 or other item of interest close to a device for another purpose.

[0084] For example, many employees are required to exhibit their corporate issued ID security card 68 while at work. So, if the device 10 is attached to the user at, for example, the user's shirt pocket or worn around the neck, it is desirable to have the security card 68 displayed relatively close to the device 10 (FIG. 1) attached to the user's shirt pocket. However, many security cards 68 have active or passive electronics that allow the security card 68 to interact with circuitry to, for example, allow the user access to the employment building or rooms within the employment building through an electronic lock mechanism. In cases such as this, it is often desirable for the user to be able to move the security card 68 close to the electronic sensing mechanism without having to move the device 10, and consequently the user him or herself, close to the sensing mechanism. Therefore, it is desirable to be able to extend the security card 68 from its normal position close to the device 10 (FIG. 1) to an extended position away from the device 10 (FIG. 2) where the security card 68 can be easily brought close to the sensing mechanism.

Alexander Rankin, IV, U.S. Pat. No. 6,731,956 entitled “Retractable Cord for a Mobile Phone or Other Wireless Device” issued May 4, 2004 to Tania W. Hanna and Christopher T. Long and U.S. Pat. No. 6,813,976 entitled “Tethered Hand Tool” issued Nov. 9, 2004 to Phillip Joseph Malvini and Daniel Cornell, the collective teachings of which are incorporated herein by reference in their entirety.

[0086] Although the preferred embodiment of the invention includes a tether 14 with a retraction mechanism 82, it is also within the scope of the invention that tether 14, in whatsoever form, not be retractable. In other words, one embodiment of the device 10 has a tether 14 that extends away from the outer shell 28 or inner shell 30 without a retraction mechanism 82. In this embodiment as well, tether 14 may or may not include the removable connector 80.

[0087] Where the device 10 is attached to a security card 68, it is also often desirable for the security card 68 to be displayed with a preferred side, for example the side with the user’s picture and ID number, facing outward. Therefore, it is often desirable for the device 10 to include a mechanism or mechanisms to direct the security card 68 to preferentially have a preferred face of the security card 68 facing outward.

[0088] In the configuration where tether 14 is ribbon-like, such a mechanism to preferentially have a preferred face of the security card 68 facing outward may take the form of an outlet member 84 through which the tether 14 exits the outer shell 28 or inner shell 30. In the embodiment shown in FIGS. 5 and 15, the outlet member 84 is located along the outer shell bottom edge 38. Outlet member 84 has an opening 86 dimensioned to be only slightly larger than the dimensions of tether 14. The tether 14 passes through the opening 86 as it exits the outer shell 28. In this way, if tether 14 is twisted, either by itself or by the twisting of the security card 68, key 70 or other item of interest, the tether 14 will come into contact with the material of the outlet member 84 which will resist the twisting of the tether 14 due to the physical contact and interaction between the tether 14 and the opening 86. As a result, this contact and interaction will help prevent the tether 14 from twisting which will then also help prevent the security card 68, key 70 or other item of interest from twisting.

[0089] Another mechanism to accomplish having a preferred face of the security card 68 facing outward is the addition of a bead 88 at the distal end 48 of the tether 14 near but proximal to the removable connector 80. Bead 88 is an oval in cross-section (FIG. 16), has a long axis 90, opposite ends 92 and an outer edge 94 extending between the opposite ends 92 and is rigidly attached to tether 14 (FIGS. 2, 4, 7, 12-13). Bead 88 is rigidly attached to the tether 14 so that the long axis 90 of the oval cross-section of bead 88 is parallel to the plane of the security card 68. Because the security card 68 is flat, potential energy considerations favor security card 68 lying flat against the user’s clothing. But, movement of the user or leaning may draw the security card 68 away from the user’s body where the security card 68 may twist around the tether 14. The addition of the oval bead 88 a slight distance from the security card 68 provides an additional means to assist the security card 68 from turning so that the face of the security card 68 faces inward instead of outward.

[0090] Should the security card 68 be twisted so that the face side 72 of security card 68 begins to be turned away from facing outward, the bead 88 is also twisted so that only one of its ends 92 is in contact with the user’s clothing. This places the bead 88 in a higher energy state that when the bead 88 contacts the user’s clothing along the outer edge 94. Consequently, the bead 88 will try to move back to its lowest energy configuration (i.e., contact with the user’s clothing along its outer edge 94) and thereby attempt to return the security card 68 to the position where the outer face side 72 is again directed outward.

[0091] As mentioned above, the combination of a pedometer 12 with a tether 14 is but a representative example of one embodiment of the invention. FIGS. 22-35 show alternate embodiments of this invention where various personal devices are combined with a tether 14, in whatever form, and with or without an attachment clip 78 or retraction mechanism 82 as described in this specification. In all of these examples, the personal device includes a means for connecting the personal device to the user such as a fastening clip 58. Fastening clip 58 may be located on the personal device itself or the personal device may be placed in a case 96 (FIG. 29) that has a fastening clip 58 or other well-known mechanism for being attached to the user.

[0092] FIGS. 22 and 23 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a personal digital assistant (PDA) 98 combined with a tether 14 according to the present invention. The PDA 98 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0093] FIGS. 24 and 25 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a cellular phone 100 combined with a tether 14 according to the present invention. The cellular phone 100 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0094] FIGS. 26 and 27 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a pager 102 combined with a tether 14 according to the present invention. The pager 102 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0095] FIGS. 28 and 29 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a global positioning system (GPS) 104 combined with a tether 14 according to the present invention. The GPS 104 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0096] FIGS. 30 and 31 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a personal radio 106 combined with a tether 14 according to the present invention. The personal radio 106 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0097] FIGS. 32 and 33 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a MP3 player 108 combined with a tether 14 according to the present invention. The MP3 player 108 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0098] FIGS. 34 and 35 show a schematic diagram and a perspective view, respectively, of a personal device in the form of a calculator 110 combined with a tether 14 according
to the present invention. The calculator 110 combined with the tether 14 may also, but is not required to, include a pedometer 12 as described in this specification.

[0099] In several embodiments of the device 10, it is desirable for device 10 to communicate with other systems or devices separate from the device 10. FIG. 36 shows schematically several possible communication paths. As can be seen, device 10 can communicate with a local device 112 such as a personal computer (PC) 114 or modem 116 or communicate with a remote device 118. Local device 112 gathers information or data from or sends information or data to the device 10 or allows the device 10 to communicate with other devices or networks. There are at least three ways that the device 10 can communicate with the local device 112. First, the device 10 can be connected to the local device 112 by a direct line 120. Line 120 can take the form of a serial cable, for example under RS232 protocol, parallel cable, a firefighters cable, USB cable or any other well known direct connection method.

[0100] Where device 10 is connected to the local device 112 by such a direct line 120, the local device 112 must have a means of connecting the device 10 to such direct line 120. One exemplary way, shown in FIG. 1, is a USB connector 122 built into the side edge 40 of the outer shell 28. Were direct line 120 to be a USB cable, one end of the USB cable would be connected to the USB connector 122 and the other end of the USB cable connected to the local device 112. FIG. 9 shows a port 124 located in the outer shell top edge 40 for receiving a firefighters cable. Similar connectors for the various direct lines 120 could be made in the device 10 at these or other convenient locations to accommodate the connection of such direct lines 120 to the device 10. It is also clear that the location of the connectors such as USB connector 122 and firefighters port 124 may be located anywhere on the device 10 that the physical configuration of such connector allows and that several different types of connectors, such as a port 124 and a USB connector 122, can be located on the same device 10.

[0101] Another method of directly connecting the device 10 to the local device 112 is by using a cradle, not shown, such as is commonly used with commercially available PDAs 98, that is electronically coupled to the local device 112. The device 10 may then be inserted into the cradle and communication established between the device 10 and local device 112 through the cradle which is connected to the local device by any of the various connection methods described in this specification. The uploading or downloading of data or instructions could be initiated by simply pressing a button on the cradle or could be initiated automatically upon insertion of device 10 into the cradle.

[0102] In addition or in the alternative, the device 10 can be connected to the local device 112 through a short-range or medium-range wireless network 126. Wireless network 126 may take any of a number of forms used for wireless communication between electronic devices such as the Bluetooth, Blackberry, infrared, RF, Wi-Fi or other systems in common usage and well known to those skilled in the art. Wireless network 126 requires a device connection 128 and a PC connection 130. Device connection 128 and PC connection 130 transmit and receive information from each in the wireless network 126. Information, data or instructions may be passed both to and from the device 10 and the local device 112 through the wireless network 126 by techniques and protocols well understood in the art.

[0103] Also, in addition or in the alternative, the device 10 may be connected to the local device 112 through a transferable memory device like a memory card 132 commonly used in digital cameras. Such a memory card 132 would be inserted into a memory card slot 134, such as shown in FIG. 1. The memory card slot 134 is thereby connected to the electronics, such as the microprocessor 22, of the device 10. Information, data or instructions on the memory card 132 can be transferred to and from the microprocessor 22. The memory card 132 may then be removed from the device 10 and inserted into a memory card slot 136 in the PC 114 to allow information, data and instructions on the memory card 132 to be transferred to the PC 114 and information, data and instructions on the PC 114 to be transferred to the memory card 132 where it may ultimately be transferred to the device 10.

[0104] In a variant of this embodiment, a transferable electronic circuit 138 may be used. Electronic circuit 138 may also contain memory but may also contain circuitry that acts separately from or interacts with the microprocessor 22. Electronic circuit 138 may have the same size, shape and configuration as the memory card 132 or electronic circuit 138 may have its own connection system such as its own connection slot.

[0105] Local device 112, in whatever form including PC 114 or modem 116, may itself be connected, through a LAN, WAN, the internet or other local or global electronic network or satellite network, collectively network 140, to other remote devices 118 through a phone, cable, dedicated internet connection or by a direct line. Once information, data or instructions are received by the local device 112 from the device 10, the information, data or instructions may be manipulated, displayed or stored on local device 112 or it may be compressed and encrypted by any one of a variety of well known methods and then sent out over the network 140 to a desired remote device 118 where the data may be manipulated, added to other data, displayed or stored.

[0106] Device 10 may be connected to a remote device 118 via a wireless system such as that used by wireless cellular phone system or paging systems, collectively remote wireless network 142, by means, techniques and protocols well understood in the art. In this embodiment, the device 10, preferably after encrypting or compressing the information, data or instructions broadcasts the information, data or instructions to the remote wireless network 142 through device connection 128 using the protocol and systems appropriate and well known for such systems. The information, data or instructions are then received by an antenna 144 of such system where the information, data or instructions is relayed, usually by local or long-distance phone service 146, to the desired remote device 118. In addition, information, data or instructions may be sent from a remote device 118 through the local or long-distance phone service 146 to the antenna 144 where the information, data or instructions are broadcast to and received by the device 10 through device connection 128 and thereafter processed by microprocessor 22 or stored in memory 18.

[0107] As stated in this specification, one item of interest is a pouch 148 (FIGS. 37-39). Pouch 148 is preferably, although not required to be, relatively flat as shown in FIG.
38. As shown in FIG. 37, pouch 148 may be large enough to hold one or more other items of interest including a security card 68, a key 70 or other items such as would typically be carried in a pouch such as a stick of gum 150. It may be desirable to make pouch 148 of a clear material, at least on one side, so that the items contained within the pouch 148 can be recognized while in the pouch 148. Also, it may be desirable to make pouch 148 in a desired shape such as the shape of a state (FIG. 39) or trademark shapes such as the Nike’s Swoosh or Nickelodeon’s Splat, corporate logos, sports icons like footballs, baseballs, basketballs, hockey pucks, free form shapes, geometric shapes, shapes of recognizable objects or cartoon characters to name but a few examples.

[0108] As explained above, programs have been designed with incentives or rewards for individuals for being physically active or increasing the level of their physical activity, particularly while at work or school. Many of these programs track the participant’s physical activity using a pedometer to measure the amount of activity, in the form of steps taken, performed by the individual. But, despite the usefulness and desirability of such programs, they depend on the user to wear the pedometer in order to measure the individual’s activity. Experience has shown that individuals frequently forget to wear their pedometers. As a result, it is difficult to accurately track the individual’s physical activity or provide adequate incentive or reward for desirable behavior.

[0109] The combination of the pedometer 12 with a security card 68 as described in this specification is particularly helpful to an individual in helping the individual remember to wear the pedometer 12 to where they will be performing the desired physical activity. This is particularly true in work settings because most corporate workers are good at remembering to wear their worker ID or security card 68 with them to work. As a result, since workers typically remember to wear their ID or security card 68 to work and since, in one embodiment of the present invention, their ID or security cards 68 are attached to the pedometer 12 which performs the function of a device for attaching the ID or security card 68 to their person, the individual will also be more likely to remember to wear the pedometer 12 at work.

[0110] Consequently, a method of using the combination of a pedometer 12 and tether 14 with a security card 68 as described in this specification as part of a plan to track, give incentives or rewards or both to participants in programs to promote increased physical activity as described in this specification is part of the present invention. The method comprises the steps of providing the program participant a combination of a pedometer 12 and tether 14 with a security card 68 as described in this specification, tracking, using the pedometer 12, the number of steps taken by the participant in the relevant time period and rewarding the participant for physical activity indicated by the pedometer 12. Because the participant will be more likely to remember to wear the pedometer 12 combination device of the present invention, the participant will be more likely to actively participate in the wellness plan and to have his or her participation accurately tracked.

[0111] The present invention has been described in connection with certain embodiments and relative dimensions. It is to be understood, however, that the description given herein has been given for the purpose of explaining and illustrating the invention and are not intended to limit the scope of the invention. For example, specific examples of the personal devices and items of interest have been shown. However, it is clear that an almost infinite number of personal devices and items of interest are included in the present invention. As such, it is not intended that the invention be limited to the specific personal devices or items of interest shown. Rather, the invention is intended to encompass all personal devices, as the term is used herein, with tethers 14 with or without being combined with pedometers 12. It is to be further understood that changes and modifications to the descriptions given herein will occur to those skilled in the art. Therefore, the scope of the invention should be limited only by the scope of the following claims.

What is claimed is:

1. A personal device and tether combination comprising:
   a personal device having a case containing the personal device; and
   a tether connecting the personal device to an item of interest, the tether having a proximal end and a distal end, the proximal end of the tether being connected to the case and the distal end of the tether being connected to the item of interest.

2. The personal device and tether combination of claim 1 wherein the personal device is a combination of one or more personal devices chosen from the group consisting of a pedometer, a personal digital assistant (PDA), a cellular phone, a pager, a global positioning system (GPS), a radio, a MP3 player and a calculator.

3. The personal device and tether combination of claim 1 wherein the case comprises:
   an outer shell having an outer shell edge, an outer shell bottom edge, outer shell top edge, outer shell side edges, outer shell front face and an outer shell back face;
   an inner shell connected to the outer shell by a hinge, the inner shell having an inner shell edge, an inner shell bottom edge, inner shell top edge, inner shell side edges, inner shell front face and an inner shell back face.

4. The personal device and tether combination of claim 3 wherein the outer shell includes a personal device chosen from the group consisting of a pedometer, a personal digital assistant (PDA), a cellular phone, a pager, a global positioning system (GPS), a radio, a MP3 player and a calculator.

5. The personal device and tether combination of claim 3 wherein the inner shell includes a personal device chosen from the group consisting of a pedometer, a personal digital assistant (PDA), a cellular phone, a pager, a global positioning system (GPS), a radio, a MP3 player and a calculator.

6. The personal device and tether combination of claim 3 wherein portions of a personal device are located in the inner shell and portions of the pedometer are located in the outer shell.

7. The personal device and tether combination of claim 3 wherein the personal device includes at least a pedometer having a display and input buttons and the outer shell front face contains the display and input buttons.
8. The personal device and tether combination of claim 7 wherein the inner shell is essentially hollow and allows the pedometer, especially the inner shell front face to be folded into and contained within the inner shell by rotation of the outer shell around the hinge.

9. The personal device and tether combination of claim 1 wherein the case comprises:

an outer shell having an outer shell edge, an outer shell bottom edge, outer shell top edge, outer shell side edges, outer shell front face and an outer shell back face;

an inner shell having an inner shell edge, an inner shell bottom edge, inner shell top edge, inner shell side edges, inner shell front face and an inner shell back face, the inner shell connected to the outer shell so that the outer shell top edge is merged with the inner shell top edge, the outer shell side edges are merged with the inner shell side edges, the outer shell bottom edge is merged with the inner shell bottom edge and there is no inner shell front face or outer shell front face.

10. The personal device and tether combination of claim 9 wherein portions of a pedometer are located in the inner shell and portions of the pedometer are located in the outer shell.

11. The personal device and tether combination of claim 1 wherein the case takes a form chosen from the group consisting of trademark shapes, shapes of states, corporate logos, sports icons, free form shapes, geometric shapes, shapes of recognizable objects or cartoon characters.

12. The personal device and tether combination of claim 1 wherein the case has information or designs printed, imprinted or molded into or onto it.

13. The personal device and tether combination of claim 1 wherein the case includes a fastening clip for attaching the device to the user's body.

14. The personal device and tether combination of claim 1 wherein the tether is string-like so that the tether has essentially a circular or oval cross-section.

15. The personal device and tether combination of claim 1 wherein the tether is ribbon-like so that the tether is relatively flat and wide.

16. The personal device and tether combination of claim 1 wherein the items or interest are selected from a group consisting of security cards or identity badges, credit cards, lunch cards, library cards, keys, group identifiers, motos, motivational or inspirational messages, pictures, colorful indicia, designs, pill containers, money clips, pouches, cases, purses, envelopes, pocket protectors, pens, pencils, pictures, loyalty cards, note paper, games, lotions, glasses or business cards.

17. The personal device and tether combination of claim 1 wherein the tether has an attachment clip located at the distal end of the tether which attachment clip connects the item of interest to the distal end of the tether.

18. The personal device and tether combination of claim 1 wherein the tether has a removable connector located along the tether between the proximal end and the distal end of the tether wherein the removable connector allows the distal end of the tether to be selectively attached or unattached from the proximal end of the tether.

19. The personal device and tether combination of claim 1 further comprising a retraction mechanism that allows the tether to be extended and retracted away from the body.

20. The personal device and tether combination of claim 1 further comprising means for preventing the item of interest from twisting the tether.

21. The personal device and tether combination of claim 1 further comprising a communication system to allow the personal device to communicate with other systems or devices separate from the personal device.

22. The personal device and tether combination of claim 21 wherein the communication system includes systems chosen from the group consisting of a direct line, a LAN, a WAN, the internet, local electronic network, global electronic network, satellite network, wireless cellular phone system, wireless paging systems, short-range or medium-range wireless network.

23. The personal device and tether combination of claim 21 wherein the communication system includes a local device to gather information or data from or send information or data to the case or allows the case to communicate with other devices or networks.

24. The personal device and tether combination of claim 1 further comprising a transferable device capable of carrying information or data from or to the personal device wherein the transferable device is chosen from the group consisting of a transferable memory card or a transferable electronic circuit.

25. A personal device and tether combination comprising:

a personal device having a case containing the personal device, wherein the personal device is a combination of one or more personal devices chosen from the group consisting of a pedometer, a personal digital assistant (PDA), a cellular phone, a pager, a global positioning system (GPS), a radio, a MP3 player and a calculator;

tether connecting the personal device to an item of interest, the tether having a proximal end and a distal end, the proximal end of the tether being connected to the case and the distal end of the tether being connected to the item of interest, wherein the items or interest are selected from a group consisting of security cards or identity badges, credit cards, lunch cards, library cards, keys, group identifiers, motos, motivational or inspirational messages, pictures, colorful indicia, designs, pill containers, money clips, pouches, cases, purses, envelopes, pocket protectors, pens, pencils, pictures, loyalty cards, note paper, games, lotions, glasses or business cards; and

a communication system to allow the personal device to communicate with other systems or devices separate from the personal device.

26. A method of giving incentives or rewards or both to participants in a program to promote increased physical activity comprising the steps of:

providing the program participants a combination of a pedometer, a tether and a security card connected to the pedometer by the tether;

tracking, using the pedometer, the number of steps taken by the participant in a relevant time period; and
rewarding the participant for physical activity indicated by the pedometer.

27. The method of claim 26 wherein the step of providing the program participant a combination of a pedometer, tether and a security card connected to the pedometer by the tether includes the step of providing the program participant a personal device in combination with the pedometer wherein the personal device is selected from the group consisting of a personal digital assistant (PDA), a cellular phone, a pager, a global positioning system (GPS), a radio, a MP3 player and a calculator.

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