An eyeglass recharger is disclosed, whereby a pair of eyeglass frames may be placed into an eyeglass case, thereby making an electric connection and charging a battery attached to the pair of eyeglass frames.
Figure 1
Frame 60

Charging Electrode 70

Battery 80

Figure 2
METHOD AND APPARATUS FOR RECHARGING EYEGLASSES

[0001] This application claims the benefit of U.S. Provisional Application No. 60/566,464 filed Apr. 30, 2004. U.S. Provisional Application No. 60/566,464 is herein incorporated by reference in its entirety.

FIELD OF THE INVENTION

[0002] The present invention relates to the field of vision correction, more particularly to a method and system for recharging eyeglasses via an eyeglass case.

SUMMARY OF THE INVENTION

[0003] With the advent of electro-active and electro-chromatic lenses, and eyeglasses that contain a visual display, there is a need for a convenient way to recharge batteries that provides power to these various new generations of eyewear.

[0004] An embodiment of the present invention is to use the eyeglass case as a recharger. In this embodiment, the eyeglass case may contain a recharging element and a plug that allows for the eyeglass case to be plugged into an electrical socket each evening or however often the user elects to recharge their eyewear. Thus, the present invention solves the need for a compact and convenient way for a wearer of eyeglasses to recharge them.

[0005] Aspects of the present invention will now be described in more detail with reference to exemplary embodiments thereof as shown in the appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a front view of one embodiment of a compact and convenient system for recharging eyeglasses.

[0007] FIG. 2 is a front view of one embodiment of eyeglass frames adapted for use with a eyeglass case recharger.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

[0008] FIG. 1 is a front view of one embodiment of a compact and convenient system for recharging eyeglasses. In this embodiment, the eyeglass case 10 may contain a charging system 30 and an electrical cord 50 that may be plugged into any electrical outlet. Many users may prefer to plug their eyeglasses in to charge them at night, while they are sleeping, because it is convenient. However, the user may recharge their eyeglasses at any time of the day or night.

[0009] Eyeglass case 10 may be of numerous shapes or sizes, ideally slightly larger that the eyeglasses they house. In FIG. 1, eyeglass case 10 is a clam-shell design, with hinges 20 along one side of the eyeglass case 10. Eyeglass case 10 may have protruding electrodes 40 adapted to make surface contact with charging electrodes on a pair of eyeglasses placed into eyeglass case 10. Other embodiments of the present invention include making contact between the eyeglass case 10 and charging electrodes on the eyeglasses with a male/female connector.

[0010] The eyeglass case 10 may also contain a charging system 30 capable of providing electrical charge to a battery, such as is routinely used to charge many small appliances such as phones, electric shavers, drills, etc. The charging system 30 may either be connected to an electrical current charger or an electrical inductive charging system. These electrical current chargers and electrical inductive charging systems are well known to those skilled in the art.

[0011] Moreover, the eyeglass case 10 may have a plug connection in its sides capable of receiving a receptacle plug attached to electrical cord 50. The other end of electrical cord 50 may be connected to a common electrical outlet plug for inserting into a wall receptacle.

[0012] FIG. 2 is a front view of one embodiment of eyeglass frame 60 adapted for use with the eyeglass case 10 recharger shown in FIG. 1. Eyeglass frame 60 may be connected to charging electrodes 70, such that when eyeglass frame 60 is placed within the eyeglass case 10, charging electrodes 70 make contact with protruding electrodes 40. Battery 80, capable of storing an electrical charge, may be connected to eyeglass frame 60. Battery 80 may also provide power to electro-active lenses contained within eyeglass frame 60. In another embodiment of the present invention, eyeglass frame 60 may contain electro-chromatic lenses.

[0013] The present invention is not to be limited in scope by the specific embodiments described herein. Indeed, various modifications of the present invention, in addition to those described herein, will be apparent to those of ordinary skill in the art from the foregoing description and accompanying drawings. Thus, such modifications are intended to fall within the scope of the following appended claims. Further, although the present invention has been described herein in the context of a particular implementation in a particular environment for a particular purpose, those of ordinary skill in the art will recognize that its usefulness is not limited thereto and that the present invention can be beneficially implemented in any number of environments for any number of purposes. Accordingly, the claims set forth below should be construed in view of the full breadth and spirit of the present invention as disclosed herein.

What is claimed is:

1. A method for recharging eyeglasses, comprising:
   placing an eyeglass frame into an eyeglass case; and
   making a connection between the eyeglass frame and the eyeglass case; and
   charging a battery.

2. The method of claim 1 further comprising:
   indicating the eyeglass frame is charging.

3. The method of claim 1 further comprising:
   indicating the eyeglass frame is fully charged.

4. The method of claim 1 wherein the eyeglass frame holds an electro-active lens.

5. The method of claim 1 wherein the eyeglass frame holds an electro-chromatic lens.

6. The method of claim 1 wherein the connection between the eyeglass frame and the eyeglass case is a protruding electrode.

7. The method of claim 1 wherein the connection between the eyeglass frame and the eyeglass case is a male/female connector.
6. A system for recharging eyeglasses comprising:
   a means for making an electric connection between an
   eyeglass frame and a eyeglass case; and
   a means for charging a battery.
7. The system of claim 6 wherein the means for making
   an electrical connection comprises an inductive loop.
8. The system of claim 6 further comprising:
   a means for indicating that the battery is charging.
9. The system of claim 6 further comprising:
   a means for indicating that the battery is fully charged.
10. An eyeglass recharger, comprising:
    an eyeglass case disposed to hold a pair of eyeglasses;
    an electric connection between the eyeglass case and the
    pair of eyeglasses;
    a rechargeable battery attached to the pair of eyeglasses; and
    a charging mechanism disposed to provide an electric
    charge to the rechargeable battery.
11. The eyeglass recharger of claim 10 wherein the
    electric connection comprises an inductive loop.
12. The eyeglass recharger of claim 10 wherein the
    electric connection is a protruding electrode.
13. The eyeglass recharger of claim 10 wherein the
    electric connection is a male/female connector.
14. The eyeglass recharger of claim 10 wherein the
    charging mechanism is an electrical cord adapted to be
    connected to an electrical outlet.
15. The eyeglass recharger of claim 10 further comprising
    a mechanism capable of indicating that the battery is charg-
    ing.
16. The eyeglass recharger of claim 10 further comprising
    a mechanism capable of indicating that the battery is fully
    charged.

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