The present invention relates to a case for electronic apparatus comprising a body, the said body comprises a cavity adapted for receiving an electronic apparatus, an aperture adapted for being connected with the said cavity is arranged on a side of the said body, the said body comprises a magnetic member adapted for mounting the said electronic apparatus inside the said body, the said body further comprises a lock releasing device adapted for dismounting the said electronic apparatus from the said magnetic member, the said lock releasing device comprises a pulling member, the said pulling member is located inside the said cavity, a first end of the said pulling member is protruded from the said aperture, a second end of the said pulling member is mounted to the said side face inside the said body which is opposite to the said aperture.
FIG. 1

FIG. 2
CASE FOR ELECTRONIC APPARATUS

TECHNICAL FIELD

[0001] The present invention relates to the peripheral field of electronic apparatus, and in particular, the present invention relates to a case for electronic apparatus.

BACKGROUND OF THE INVENTION

[0002] The variety of portable electronic apparatus is increasing in the market. The user always carries the electronic apparatus by putting the device into a case for electronic apparatus for the purpose of protecting the device. The case for electronic apparatus of the existing technology is usually of a square shape which has an opening at the side face. The device can be put into the case for electronic apparatus through such opening. However, such case for electronic apparatus has a disadvantage that the device is easy to be slipped out from the case through such opening of the side face. Therefore, it is required to have an improved case for electronic apparatus in order to overcome the above problem.

SUMMARY OF THE INVENTION

[0003] The problem to be solved in the present invention is that the electronic apparatus is easy to be slipped out from the opening located at the side face of the case for electronic apparatus of the existing technology. Another problem to be solved in the present invention is to provide an advanced and user-friendly case for electronic apparatus.

[0004] A case for electronic apparatus comprising a body, the said body comprises a cavity adapted for receiving an electronic apparatus, an aperture adapted for being connected with the said cavity is arranged on a side of the said body, the said body comprises a magnetic member adapted for mounting the said electronic apparatus inside the said body, the said body further comprises a lock releasing device adapted for dismounting the said electronic apparatus from the said magnetic member, the said lock releasing device comprises a pulling member, the said pulling member is located inside the said cavity, a first end of the said pulling member is protruded from the said aperture, a second end of the said pulling member is mounted to the said side face inside the said body which is opposite to the said aperture.

[0005] In an embodiment, the said magnetic member is mounted to a side face inside the said body which is opposite to the said aperture.

[0006] In an embodiment, the said magnetic member is of a longitudinal shape.

[0007] In an embodiment, the said magnetic member comprises a plurality of portions.

[0008] In an embodiment, the said pulling member is arranged between the said magnetic member and the said cavity.

[0009] In an embodiment, the said case for electronic apparatus is a mobile phone case.

[0010] In an embodiment, the said case for electronic apparatus is a tablet case.

[0011] In an embodiment, the said magnetic member comprises a magnetic field device adapted for changing the magnetic fields.

[0012] In an embodiment, the said magnetic field device comprises an electric coil.

[0013] In an embodiment, the said body further comprises a power supply and the said magnetic field device, the said magnetic field device is mounted on the outer face of the said body, the said power supply is mounted inside the said body, the said power supply and the said electric coil are mounted with each other.

[0014] In an embodiment, the said magnetic field device comprises a resistor, the said magnetic field device is adapted for controlling the intensity of electric current flowing towards the said electric coil and the direction of electric current, the said magnetic field device is adapted for mounting and dismounting the said electronic apparatus by controlling the change of positive and negative magnetic fields of the said magnetic field device.

[0015] In an embodiment, the said magnetic field device further comprises at least one extending member extended from an outer face of the said body, the said extending member is adapted for moving linearly along the outer face of the said body.

[0016] In an embodiment, the said electronic apparatus comprises a magnet.

[0017] In an embodiment, the said magnetic field device further comprises a power supply releasing device adapted for cutting off the electric current of the said magnetic field device.

[0018] The case for electronic apparatus provided by the present invention receives the magnetic member for mounting to the said electronic apparatus, thus effectively preventing the electronic apparatus from slipping off the case for electronic apparatus accidentally, and thus effectively protecting the electronic apparatus.

DESCRIPTION OF DRAWINGS

[0019] This and other objects, features and advantages of the present invention will become apparent upon reading of the following detailed descriptions and drawings, in which:

[0020] FIG. 1 shows a perspective view of an embodiment of the present invention;

[0021] FIG. 2 shows a first sectional view of FIG. 1; and

[0022] FIG. 3 shows a second sectional view of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0023] The present invention relates to a case for electronic apparatus adapted for receiving an electronic apparatus including a mobile phone and a tablet.

[0024] As shown in FIG. 1, a case for electronic apparatus of an embodiment of the present invention comprises a square body 300, wherein the said body 300 comprises a cavity adapted for receiving an electronic apparatus 301. An aperture adapted for being connected with the cavity is arranged on a side of the body 300, and the electronic apparatus 301 can be mounted into the cavity of the body 300 through the aperture. When a user needs to use the electronic apparatus 301, the electronic apparatus 301 can also be slipped out from the aperture.

[0025] Alternatively, the body 300 is of a flat shape. The aperture is arranged at a side of the body 300 and is connected with the cavity of the body 300.

[0026] Alternatively, the body 300 possesses a certain rigidity so as to be capable of certainly protecting the electronic apparatus arranged in the cavity. For example, it prevents the electronic apparatus from external accidental collision.
Alternatively, an inner wall of the cavity is made of a soft material so as to protect the electronic apparatus which is arranged inside the cavity.

In embodiments of the present invention, the electronic apparatus can be a portable media player, a smartphone, a tablet, and the like.

As shown in FIG. 2, the body 300 comprises a magnetic member 303 which is adapted for mounting to the electronic apparatus. In this embodiment, the said magnetic member 303 is mounted to a side face inside the body 300 which is opposite to the aperture, and the magnetic member 303 is of a longitudinal shape. Preferably, the magnetic member 303 is embedded in the wall of the cavity so as to prevent the magnetic member 303 from being directly collided with the electronic apparatus.

In another embodiment, the body 300 comprises a magnetic member 303 which is adapted for mounting to the electronic apparatus. In this embodiment, the magnetic member 303 is mounted to a side face inside the body 300 which is opposite to the aperture, and the magnetic member 303 comprises a plurality of portions of magnets, wherein the plurality of portions of magnets are arranged in a row or in a plurality of rows. Similarly, the magnetic member 303 is embedded in the wall of the cavity so as to prevent the magnetic member 303 from being directly collided with the electronic apparatus.

The corresponding side face of the electronic apparatus 301 comprises a metal member 304 which is adapted for mounting to the magnetic member 303. It should be noted that a magnet can also be used for replacing the metal member 304.

To implement the embodiments of the present invention, the metal member 304 of the electronic apparatus is absorbed by the magnetic member 303 after the electronic apparatus 301 slips into the cavity from the aperture of the body 300, so as to prevent the electronic apparatus 301 from accidentally slipping off the body from the aperture, thus enhancing the protection on the electronic apparatus 301. Preferably, the magnetic member 303 is embedded in the wall of the cavity to prevent the magnetic member 303 from being directly collided with the electronic apparatus. Preferably, an inner wall of the cavity is manufactured by a soft material so as to protect the electronic apparatus arranged in the cavity.

In order to be convenient for the user to take out the electronic apparatus 301 in the body 300, the body 300 further comprises a lock releasing device adapted for dismounting the electronic apparatus from the magnetic member 303.

As shown in FIG. 3, the lock releasing device of the embodiment comprises a pulling member 302, wherein the pulling member 302 is located inside the cavity, and an outer end of the pulling member 302 is protruded from the aperture, and an inner end of the pulling member 302 is mounted to a side face of the body opposite to the aperture.

The pulling member 302 is manufactured by a soft material and can be bent freely. Using the soft material to manufacture the pulling member 302 not only is convenient for the user to use, but also can prevent the electronic apparatus arranged in the cavity from being damaged by the pulling member.

In an embodiment, an inner end of the magnetic member 302 is mounted to the side face of the body opposite to the aperture, and separates the cavity from the magnetic member 303. In this way, the pulling member 302 will be located between the electronic apparatus 301 and the magnetic member 303 after the electronic apparatus 301 is mounted to the body 300, thus avoiding the electronic apparatus 301 from being directly contacted with the magnetic member 303, and also being convenient for the user to use the pulling member 302 to relieve the mounting between the magnetic member 303 and the electronic apparatus 301.

After the electronic apparatus 301 is arranged into the cavity of the body 300 by the user, only one end of the pulling member 301 is needed to be pulled when needing to take the electronic apparatus 301 out from the body 300, and the other end of the pulling member 302 will separate the electronic apparatus 301 from the magnetic member 303, weaken or relieve the mounting between the two. After the mounting between the electronic apparatus 301 and the magnetic member is relieved or weakened, the user is able to conveniently slip the electronic apparatus 301 off the body 300.

In an embodiment, the magnetic member 303 comprises a magnetic field device adapted for changing the magnetic fields. The magnetic field device comprises an electric coil. The magnetic field device can be mounted on the outer face of the body or in an external form, the power supply can be mounted inside the body, the power supply and said electric coil are mounted with each other. The magnetic field device comprises a resistor, the magnetic field device is adapted for controlling the intensity of electric current flowing towards the electric coil and the direction of electric current, and the magnetic field device is further adapted for mounting and dismounting the electronic apparatus by controlling the change of positive and negative magnetic fields of the magnetic field device. The magnetic field device further comprises at least one extending member that can move linearly along the outer face of the body, so that the user can conveniently control the intensity of the electric current flowing towards the electric coil and the direction of electric current and decide a negative electrode of a positive magnetic field device so as to mount to the electronic apparatus or separate from the electronic apparatus. The electronic apparatus may comprise a magnet or other materials having a fixed electrode. The magnetic field device may further comprise a power supply releasing device adapted for cutting off the electric current of the magnetic field device.

The case for electronic apparatus provided by the present invention can be adapted for receiving various electronic apparatus such as a mobile phone, a tablet such as iPad, a media player, and the like.

The present invention has been described in detail, with reference to the preferred embodiment, in order to enable the reader to practice the invention without undue experimentation.

However, a person having ordinary skill in the art will readily recognize that many of the previous disclosures may be varied or modified without departing from the spirit and scope of the invention. Accordingly, the intellectual property rights to this invention are defined only by the following claims.

1. A case for electronic apparatus comprising a body, the said body comprises a cavity adapted for receiving an electronic apparatus, an aperture adapted for being connected with the said cavity is arranged on a side of the said body, the said body comprises a magnetic member adapted for mounting the said electronic apparatus inside the said body, the said body further comprises a lock releasing device adapted for
dismounting the said electronic apparatus from the said magnetic member, the said lock releasing device comprises a pulling member, the said pulling member is located inside the said cavity, a first end of the said pulling member is protruded from the said aperture, a second end of the said pulling member is mounted to the said side face inside the said body which is opposite to the said aperture.

2. The case for electronic apparatus according to claim 1, characterized in that the said magnetic member is mounted to a side face inside the said body which is opposite to the said aperture.

3. The case for electronic apparatus according to claim 2, characterized in that the said magnetic member is of a longitudinal shape.

4. The case for electronic apparatus according to claim 2, characterized in that the said magnetic member comprises a plurality of portions.

5. The case for electronic apparatus according to claim 1, characterized in that the said pulling member is arranged between the said magnetic member and the said cavity.

6. The case for electronic apparatus according to claim 1, characterized in that the said case for electronic apparatus is a mobile phone case.

7. The case for electronic apparatus according to claim 1, characterized in that the said case for electronic apparatus is a tablet case.

8. The case for electronic apparatus according to claim 1, characterized in that the said magnetic member comprises a magnetic field device adapted for changing the magnetic fields.

9. The case for electronic apparatus according to claim 8, characterized in that the said magnetic field device comprises an electric coil.

10. The case for electronic apparatus according to claim 9, characterized in that the said body further comprises a power supply and the said magnetic field device, the said magnetic field device is mounted on the outer face of the said body, the said power supply is mounted inside the said body, the said power supply and the said electric coil are mounted with each other.

11. The case for electronic apparatus according to claim 10, characterized in that the said magnetic field device comprises a resistor, the said magnetic field device is adapted for controlling the intensity of electric current flowing towards the said electric coil and the direction of electric current, the said magnetic field device is adapted for mounting and dismounting the said electronic apparatus by controlling the change of positive and negative magnetic fields of the said magnetic field device.

12. The case for electronic apparatus according to claim 11, characterized in that the said magnetic field device further comprises at least one extending member extended from an outer face of the said body, the said extending member is adapted for moving linearly along the outer face of the said body.

13. The case for electronic apparatus according to claim 12, characterized in that the said electronic apparatus comprises a magnet.

14. The case for electronic apparatus according to claim 13, characterized in that the said magnetic field device further comprises a power supply releasing device adapted for cutting off the electric current of the said magnetic field device.