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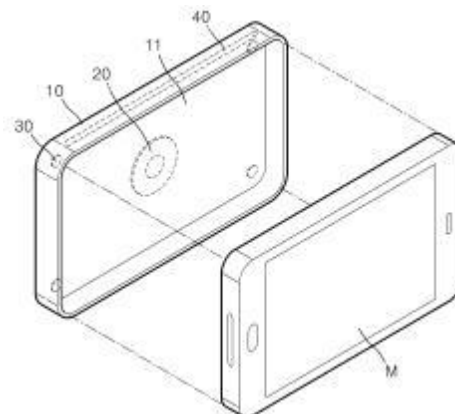
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(54) Mounting Unit for Mobile Communication Terminal

(57) Abstract

The present invention relates to a mounting unit for a mobile communication terminal, comprising: a cover part (10) formed with a coupling groove (11) into which a mobile communication terminal (M) is inserted and coupled; and a cover attachment part (20) embedded in the center of the rear surface of the cover part (10); wherein the cover part (10) is attached to and supported by a steel member or a magnetic member by means of the cover attachment part (20).

Representative Drawing - FIG. 1



What is claimed is:

1. A mounting unit for a mobile communication terminal, comprising:

a cover part (10) formed with a coupling groove (11) into which a mobile communication terminal (M) is inserted and coupled;

a cover attachment part (20) embedded in a center of a rear surface of the cover part (10);

wherein the cover part (10) is attached to and supported by a steel member or a magnetic member by means of the cover attachment part (20); and

a plurality of sub magnets (30) installed at corner portions of the rear surface of the cover part (10).

2. Deleted.

3. The mounting unit for a mobile communication terminal according to claim 1, wherein the rear surface of the cover part (10) is formed with a main protrusion (12) protruding from the rear surface at a portion where the cover attachment part (20) is embedded, such that the cover attachment part (20) and the sub magnets (30) are embedded therein, and a sub protrusion (13) protruding from the rear surface at a portion where the sub magnets (30) are located.

4. The mounting unit for a mobile communication terminal according to claim 1, further comprising speaker grooves (14) and (15) formed at both sides of the cover part (10), into which a pair of speakers (S1) and (S2) connected to the mobile communication terminal (M) are respectively coupled.

5. The mounting unit for a mobile communication terminal according to claim 1, further comprising an antenna (40) embedded in the cover part (10) and electrically connected to the mobile communication terminal (M).

6. The mounting unit for a mobile communication terminal according to claim 1, further comprising a cradle (50) provided with a cradle attachment part (51) to which the cover attachment part (20) is attached;

wherein the cradle (50) comprises a support part (52) for supporting a floor, an extension part (53) protruding upward from the support part (52), and a detachable part (54) coupled to the extension part (53) and provided with the cradle attachment part (51).

Specification***TECHNICAL FIELD***

[0001]

The present invention relates to a mounting unit for a mobile communication terminal, and more particularly, to a mounting unit for a mobile communication terminal capable of facilitating viewing of the mobile communication terminal and maximizing usability.

BACKGROUND

[0002]

Recently, mobile devices, for example, smartphones and tablet PCs, can execute various application programs by applying various applications, and provide large, high-definition images and various multimedia functions compared to conventional mobile communication terminals, so the number of users is rapidly increasing.

[0003]

Since such smartphones provide various usability to the extent of changing lifestyle patterns, there is an increasing demand not only for applications applicable to smartphones but also for peripheral devices.

Description of the Invention***Problem to be Solved***

- [0004] The present invention has been made in reflection of the above-described trend, and an object thereof is to provide a mounting unit for a mobile communication terminal capable of facilitating mounting, improving portability, and maximizing usability.

Means for Solving the Problem

- [0005] In order to achieve the above object, a mounting unit for a mobile communication terminal according to the present invention is characterized by comprising: a cover part (10) formed with a coupling groove (11) into which a mobile communication terminal (M) is inserted and coupled; and a cover attachment part (20) embedded in a center of a rear surface of the cover part (10); wherein the cover part (10) is attached to and supported by a steel member or a magnetic member by means of the cover attachment part (20); and a plurality of sub magnets (30) are installed at corner portions of the rear surface of the cover part (10).
- [0006] Deleted.
- [0007] In the present invention, the rear surface of the cover part (10) is formed with a main protrusion (12) protruding from the rear surface at a portion where the cover attachment part (20) is embedded, such that the cover attachment part (20) and the sub magnets (30) are embedded therein, and a sub protrusion (13) protruding from the rear surface at a portion where the sub magnets (30) are located.
- [0008] In the present invention, the mounting unit further comprises speaker grooves (14) and (15) formed at both sides of the cover part (10), into which a pair of speakers (S1) and (S2) connected to the mobile communication terminal (M) are respectively coupled.
- [0009] In the present invention, the mounting unit further comprises an antenna (40) embedded in the cover part (10) and electrically connected to the mobile communication terminal (M).
- [0010] In the present invention, the mounting unit further comprises a cradle (50) provided with a cradle attachment part (51) to which the cover attachment part (20) is attached; wherein the cradle (50) comprises a support part (52) for supporting a floor, an extension part (53) protruding upward from the support part (52), and a detachable part (54) coupled to the extension part (53) and provided with the cradle attachment part (51).

Effects of the Invention

- [0011] According to the present application, simply by inserting and coupling the mobile communication terminal thereto, the mounting unit serves as a case protecting the mobile communication terminal from external impacts while maximizing portability.
- [0012] In addition, since the mounting unit of the present application, to which the mobile communication terminal is coupled, can be easily attached to and mounted on a steel member such as a wall surface of a refrigerator or an air conditioner, viewing or listening can be performed comfortably.
- [0013] Furthermore, when a speaker is installed on the cover part or an antenna is embedded therein, sound can be heard with greater volume and better sound quality, and since there is no need to extend an antenna from the mobile communication terminal, usability can be further increased.

BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

- [0014] FIG. 1 is an exploded perspective view of a mounting unit for a mobile communication terminal according to the present invention;
- FIG. 2 is a rear perspective view of the mounting unit for a mobile communication terminal of FIG. 1;
- FIG. 3 is a view for explaining speaker grooves formed in the cover part of FIG. 1; and
- FIG. 4 is a view for explaining a cradle for mounting the cover part of FIG. 1.

DETAILED DESCRIPTION OF ILLUSTRATED EMBODIMENTS

- [0015] Hereinafter, a mounting unit for a mobile communication terminal according to the present invention will be described in detail with reference to the accompanying drawings.
- [0016] FIG. 1 is an exploded perspective view of a mounting unit for a mobile communication terminal according to the present invention, FIG. 2 is a rear perspective view of the mounting unit for a mobile communication terminal of FIG. 1, FIG. 3 is a view for explaining speaker grooves formed in the cover part of FIG. 1, and FIG. 4 is a view for explaining a cradle for mounting the cover part of FIG. 1.
- [0017] As shown, the mounting unit for a mobile communication terminal according to the present invention comprises: a cover part (10) formed with a coupling groove (11) into which a mobile communication terminal (M), for example, a mobile phone, a smartphone, or a tablet PC, is inserted and coupled; a cover attachment part (20) embedded in a center of a rear surface of the cover part (10); and a plurality of sub magnets (30) installed at corner portions of the rear surface of the cover part (10). At this time, the cover attachment part (20) is implemented as a magnet or a steel piece. In addition, the sub magnets (30) are illustrated as being installed in four pieces at the corner portions of the rear surface of the cover part (10).
- [0018] With this structure, the cover part (10) is attached to and supported by a predetermined steel member, for example, a steel member such as a wall surface of a refrigerator or an air conditioner, by the magnetic force of the sub magnets (30). At this time, when the cover attachment part (20) is made of a magnet, the cover part (10) can be more firmly attached to a steel member such as a wall surface of a refrigerator or an air conditioner.
- [0019] The cover part (10) has a structure surrounding the rear surface and side surfaces of the mobile communication terminal (M), and is made of a flexible material such as silicone rubber or synthetic rubber, or is implemented with a plastic or leather material.
- [0020] The rear surface of the cover part (10) must be capable of embedding the cover attachment part (20) and the sub magnets (30) having a predetermined thickness. To this end, the rear surface of the cover part (10) is formed with a main protrusion (12) protruding at a portion where the cover attachment part (20) is embedded, and a sub protrusion (13) protruding at a portion where the sub magnets (30) are located.
- [0021] Since the main protrusion (12) and the sub protrusion (13) are thicker than the rear surface of the cover part (10), the cover attachment part (20) and the sub magnets (30) having a predetermined thickness can be completely embedded therein, and also, since the rear surface of the cover part (10) is spaced apart from the surface of a steel member such as a wall surface of a refrigerator or an air conditioner, the cover part (10) coupled with the mobile communication terminal (M) can be firmly attached to the steel member.
- [0022] If the main protrusion (12) and the sub protrusion (13) are not formed, the rear surface of the cover part (10) may be processed so as not to be completely flat, or the rear surface may become non-flat due to temperature differences in the environment, so that when attached to a steel member such as a wall surface of a refrigerator or an air conditioner, a part of the rear surface may be separated from the steel member. However, in the

present invention, by forming the main protrusion (12) and the sub protrusion (13) on the rear surface of the cover part (10), the cover part (10) can be firmly attached to the steel member.

[0023] Meanwhile, as shown in FIG. 3, speaker grooves (14) and (15) may be formed at both sides of the cover part (10), into which a pair of speakers (S1) and (S2) connected to the mobile communication terminal (M) are respectively coupled. At this time, the speaker grooves (14) and (15) are formed with a plurality of air flow holes (14a) and (15a) to allow air flow to the speakers (S1) and (S2).

[0024] Since a speaker embedded in the mobile communication terminal (M) has a diameter of less than 1 cm, the sound volume generated therefrom is small, and the sound quality is also poor. However, since the speakers (S1) and (S2) coupled to the speaker grooves (14) and (15) are significantly larger than the speaker embedded in the mobile communication terminal (M), the generated sound volume is large, and the sound quality is incomparably better. Accordingly, by generating sound output from the mobile communication terminal (M) through the speakers (S1) and (S2) coupled to the speaker grooves (14) and (15), sound can be enjoyed with greater volume and better sound quality, thereby maximizing the usability of the performance of the mobile communication terminal (M).

[0025] The cover part (10) is embedded with an antenna (40) electrically connected to the mobile communication terminal (M). Typically, when watching DMB or listening to the radio on the mobile communication terminal (M), it is necessary to extend a built-in antenna or attach a separate antenna. However, since the antenna is embedded in the mounting unit of the present invention, there is no need to extend an antenna from the mobile communication terminal or to install a separate antenna.

[0026] Meanwhile, the mounting unit of the present invention may further comprise a cradle (50) provided with a cradle attachment part (51) to which the cover attachment part (20) is attached. Such a cradle (50) comprises a support part (52) for supporting a floor, an extension part (53) protruding upward from the support part (52), and a detachable part (54) coupled to the extension part (53) and provided with the cradle attachment part (51). At this time, the support part (52) may be provided with a suction plate (55) to be attached to and coupled to a floor or a vehicle by suction.

[0027] When the cover attachment part (20) is implemented as a magnet, the cradle attachment part (51) is made of a steel piece, and when the cover attachment part (20) is made of a steel piece, the cradle attachment part is made of a magnet. Accordingly, the cover part (10) can be attached to and detached from the cradle attachment part (51) by means of the cover attachment part (20).

[0028] At this time, when the cover part (10) into which the mobile communication terminal (M) is inserted is attached to the cradle attachment part (51) by means of the cover attachment part (20), it should not slide due to its own weight. To this end, it is preferable that the cradle attachment part (51) is formed with a protrusion (51a), and the main protrusion (12) is formed with a protrusion groove (12a) into which the protrusion (51a) is inserted. In addition, when it is desired to form the protrusion groove (12a) deeper, it is preferable that the cover attachment part (20) be formed in a ring shape having an inner diameter larger than that of the protrusion groove (12a).

[0029] Although the present invention has been described with reference to one embodiment shown in the drawings, this is merely illustrative, and those skilled in the art will understand that various modifications and equivalent other embodiments are possible therefrom.

Reference Numerals

[0030]	10 ... cover part	11 ... coupling groove
	12 ... main protrusion	13 ... sub protrusion
	14, 15 ... speaker grooves	20 ... cover attachment part

30 ... sub magnets

40 ... antenna

50 ... cradle

51 ... cradle attachment part

52 ... upport part

53 ... extension part

54 ... detachable part

55 ... suction plate

DRAWING

FIG. 1

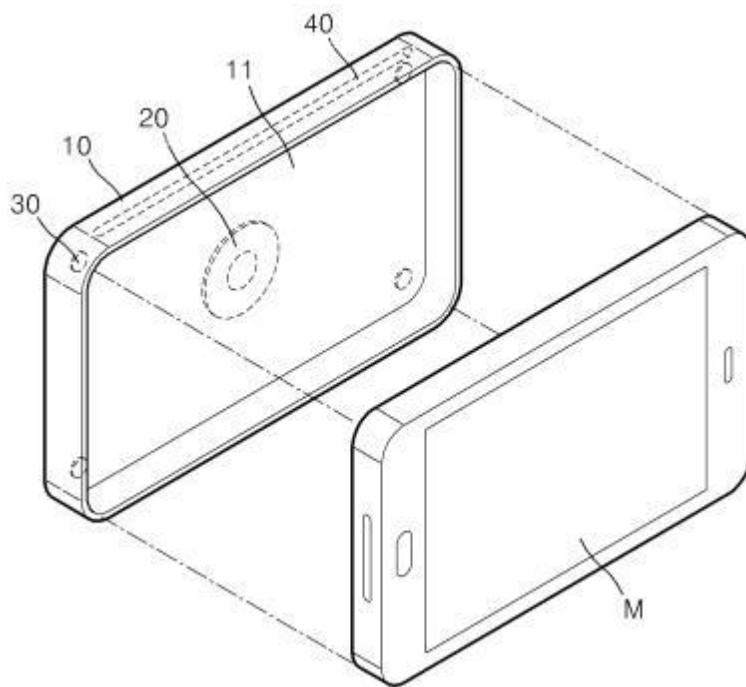


FIG. 2

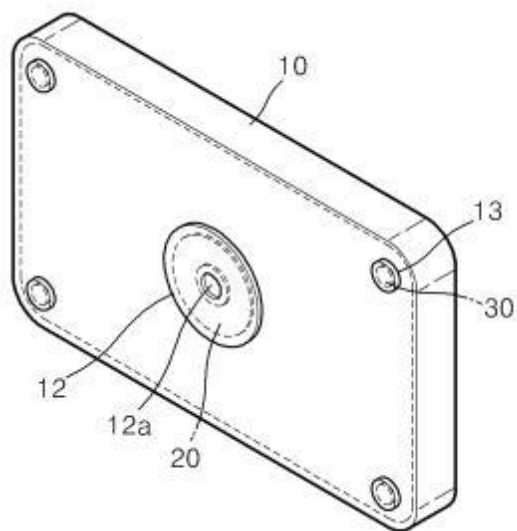


FIG. 3

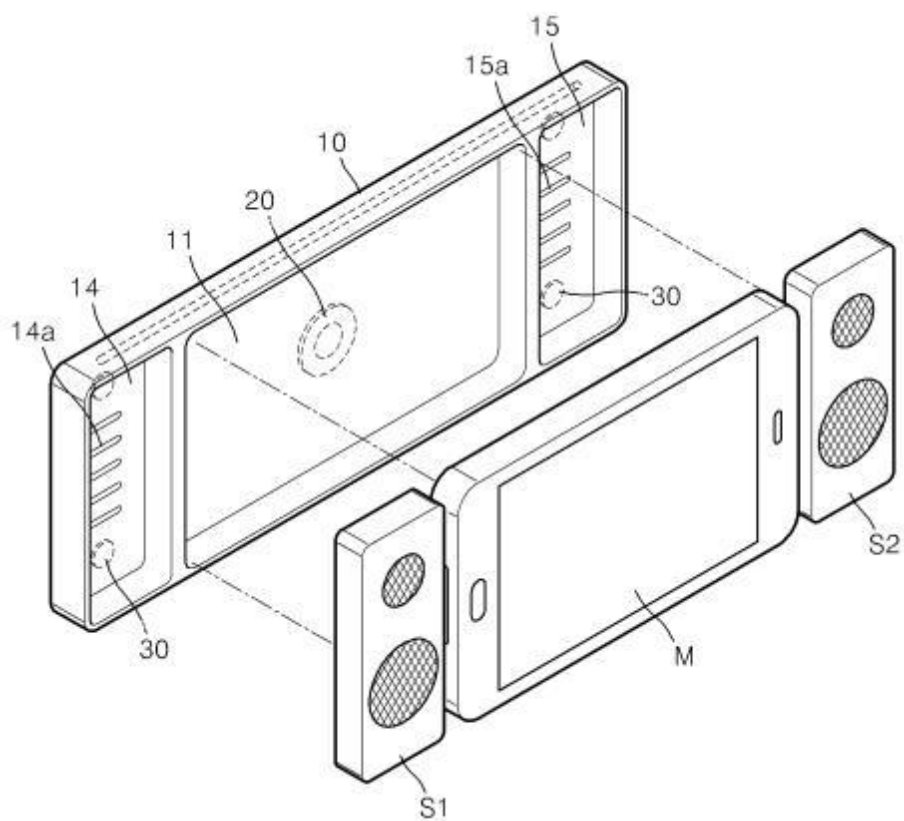


FIG. 4

