

CLAIMS

What is claimed is:

1. An integrated structure of a metal housing and an antenna of an electronic apparatus, wherein the electronic apparatus comprises the metal housing and an antenna structure, the antenna structure comprises an antenna main body, at least one gap set is disposed on the metal housing, each gap set of the at least one gap set comprises multiple gaps, the at least one gap set divides the metal housing to form at least one metal region, and one metal region of the at least one metal region is connected to the antenna main body to serve as a radiating body of the antenna structure, a width of the gap is less than 0.5 millimeter, the metal housing is a back cover having a metal frame that is of the electronic apparatus, and the at least one gap sets laterally runs through the metal housing and extends to a position of the metal frame, one of the at least one gap set disposed at a lower end of the metal housing.

2. The integrated structure of a metal housing and an antenna of an electronic apparatus according to claim 1, wherein the antenna structure further comprises a matching circuit and a radio frequency transceiver circuit, and the matching circuit is located between the radio frequency transceiver circuit and the antenna main body, and is electrically connected to the radio frequency transceiver circuit and the antenna main body.

3. The integrated structure of a metal housing and an antenna of an electronic apparatus according to claim 1 or 2, wherein the antenna structure further comprises a feed point, and the feed point is disposed on the antenna main body.

4. The integrated structure of a metal housing and an antenna of an electronic apparatus according to any one of claims 1 to 3, wherein the gap set is formed by arranging the multiple gaps at intervals.

5. The integrated structure of a metal housing and an antenna of an electronic apparatus according to any one of claims 1 to 3, wherein the gap set is formed by crosswise disposing the multiple gaps.

6. The integrated structure of a metal housing and an antenna of an electronic apparatus according to claim 4 or 5, wherein a nonmetal material fills in the multiple gaps.

7. The integrated structure of a metal housing and an antenna of an electronic apparatus according to any one of claims 1 to 6, wherein the antenna main body and the metal region may be connected by using a metal dome or connected by using a screw.