CLAIMS

What is claimed is:

1. An RF shielding device for mobile devices, the device comprising:

a conductive grid having first wire traces and second wire traces in electrical contact with each other at intersection points; and

a conductive trace disposed around the perimeter of the conductive grid, the conductive trace being in electrical contact with both ends of each of the first wire traces and the second wire traces;

wherein the conductive grid has a pitch ranging between 2 mm and 5 mm, such that potential harmful RF radiation caused by the mobile device is shielded by the RF shielding device while allowing a touch screen of the mobile device to operate.

2. The device as in claim 1, further comprising:

a first insulating film disposed on a top surface of the conductive grid; and

a second insulating film disposed on a bottom surface of the conductive grid and the conductive trace,

wherein the first insulating film and the second insulating film are of a transparent material.

3. The device as in claim 1 or claim 2, further comprising an adhesive layer disposed on a surface of the RF shielding device intended for contact to a front surface of the mobile device.

4. The device as in any one of the preceding claims, wherein the conductive grid and the conductive trace are formed of materials selected from: metals, metal alloys, plastics, inks, and paints.

5. The device as in any one of the preceding claims, further comprising a frame adapted to hold the RF shielding device in place against a front surface of the mobile device,

preferably wherein at least a portion of the frame is formed of a material substantially transparent to RF radiation emitted and received by the mobile device.

6. The device as in claim 5, wherein the frame is configured to hold the mobile device within the frame.
7. The device as in claim 5 or claim 6, wherein the frame is formed as a case having a second opening on a side dimensioned to accommodate sliding a mobile device into the void.
8. The device as in any one of the preceding claims 2 to 7:

wherein the conductive grid and the conductive trace are formed of materials selected from: metals, metal allys, plastics, inks and paints.

9. The device as in claim 8, further comprising an adhesive layer disposed on a surface of the RF shielding device intended for contact to a front surface of the mobile device.
10. The device as in claim 8 or claim 9, further comprising a frame adapted to hold the RF shielding device in place against a front surface of the mobile device preferably wherein at least a portion of the frame is formed of a material substantially transparent to RF radiation emitted and received by the mobile device.
11. The device as in claim 10, wherein the frame is configured to hold the mobile device within the frame.
12. The device as in claim 10 or claim 11, wherein the frame is formed as a case having a second opening on a side dimensioned to accommodate sliding a mobile device into the void.
13. The device as in any one of the preceding claims 2 to 12, wherein:

both the first wire traces and the second wire traces are formed of copper traces deposited onto the top surface of the second insulating film, such that the first wire traces are oriented orthogonally to the second wire traces and intersection between the first wire traces

and the second wire traces is at 90°, the conductive grid being rotated by 30° with respect to an x-y axis of the mobile device ; and

the device further comprises an optically transparent adhesive disposed between the bottom surface of the first insulating film and the top surface of the second insulating film.