TITLE OF THE INVENTION: DUAL INTERFACE METAL SMART CARD WITH BOOSTER ANTENNA

ABSTRACT

A card having a metal layer and an opening or cut-out region in the metal layer, with a dual-interface integrated circuit (IC) module disposed in the opening or cut-out region. A ferrite layer is disposed below the metal layer and a booster antenna is attached to the ferrite layer. A vertical hole extends beneath the IC module through the ferrite layer. The booster antenna may be physically connected to the IC module or may be configured to inductively couple to the IC module. In some embodiments, the IC may be disposed in or on a non-conductive plug disposed within the opening or cut-out region, or the vertical hole may have a non-conductive lining, or a connector may be disposed between the booster antenna and the IC module in the vertical hole.

[FIGURE 6]