

**SURFACE MOUNTING ANTENNA AND COMMUNICATION APPARATUS USING THE
SAME ANTENNA**

ABSTRACT OF THE DISCLOSURE

A surface mounting antenna in which a wider frequency bandwidth can be achieved and a dual-frequency signal can be obtained without hampering the gain and needing to enlarge the configuration of the antenna. Also disclosed is a communication apparatus using this type of antenna. Two radiation electrodes for producing different resonant frequencies and a feeding electrode are formed on the obverse surface of a substrate formed of a dielectric material or a magnetic material. A ground electrode is primarily disposed on the reverse surface of the substrate. The radiation electrodes form open ends and are connected at the other ends to the ground electrode. The open ends of the radiation electrodes and the feeding electrode are electromagnetically coupled to each other through capacitances generated in gaps formed between the feeding electrode and the open ends.

Figure 1.