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**Chiba et al.**

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(54) **MULTIFREQUENCY INVERTED F-TYPE ANTENNA**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.<sup>7</sup>** ..... **H01Q 1/38**

(52) **U.S. Cl.** ..... **343/700 MS; 343/767**

(58) **Field of Search** ..... **343/700 MS, 767, 343/770, 846, 868**

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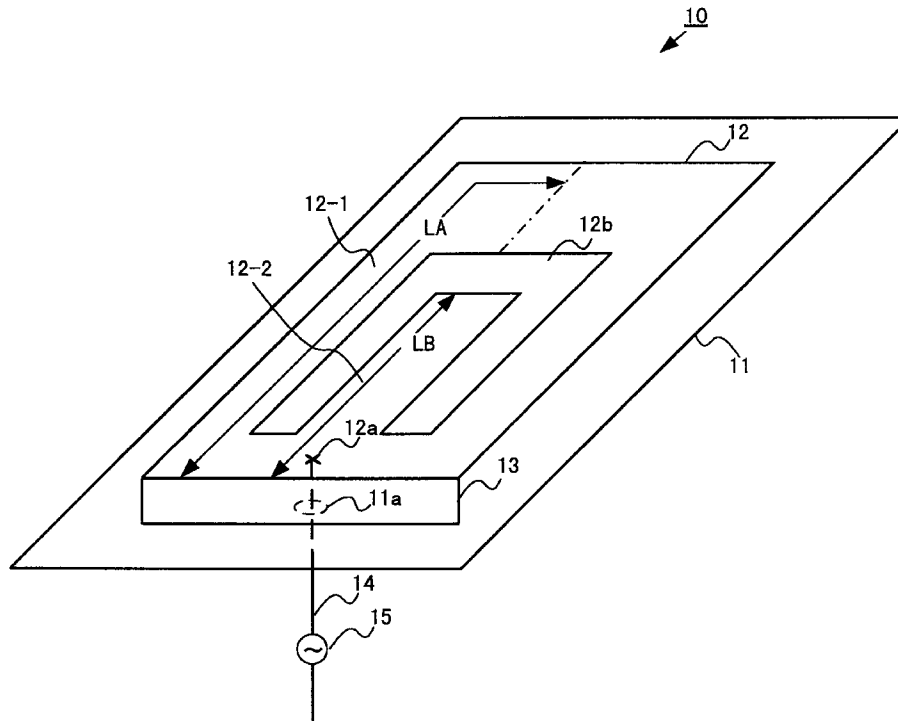
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(57) **ABSTRACT**

A multifrequency inverted F-type antenna which can receive multifrequency band radio waves without the enlargement of its shape. A cut-out part (12b) is formed in an emission conductor (12) one end of which is connected to a short-circuit plate (13) planted in a ground conductor (11) and which has a feeding point (12a) to form on the emission conductor (12) a first emission conductor (12-1) and a second emission conductor (12-2) which resonate at respective frequency bands different from each other. By this construction the radio waves of two different frequency bands, i.e. a first frequency band determined by the shape of the first emission conductor (12-1) and a second frequency band determined by the shape of the second emission conductor (12-2), can be received.

**14 Claims, 23 Drawing Sheets**



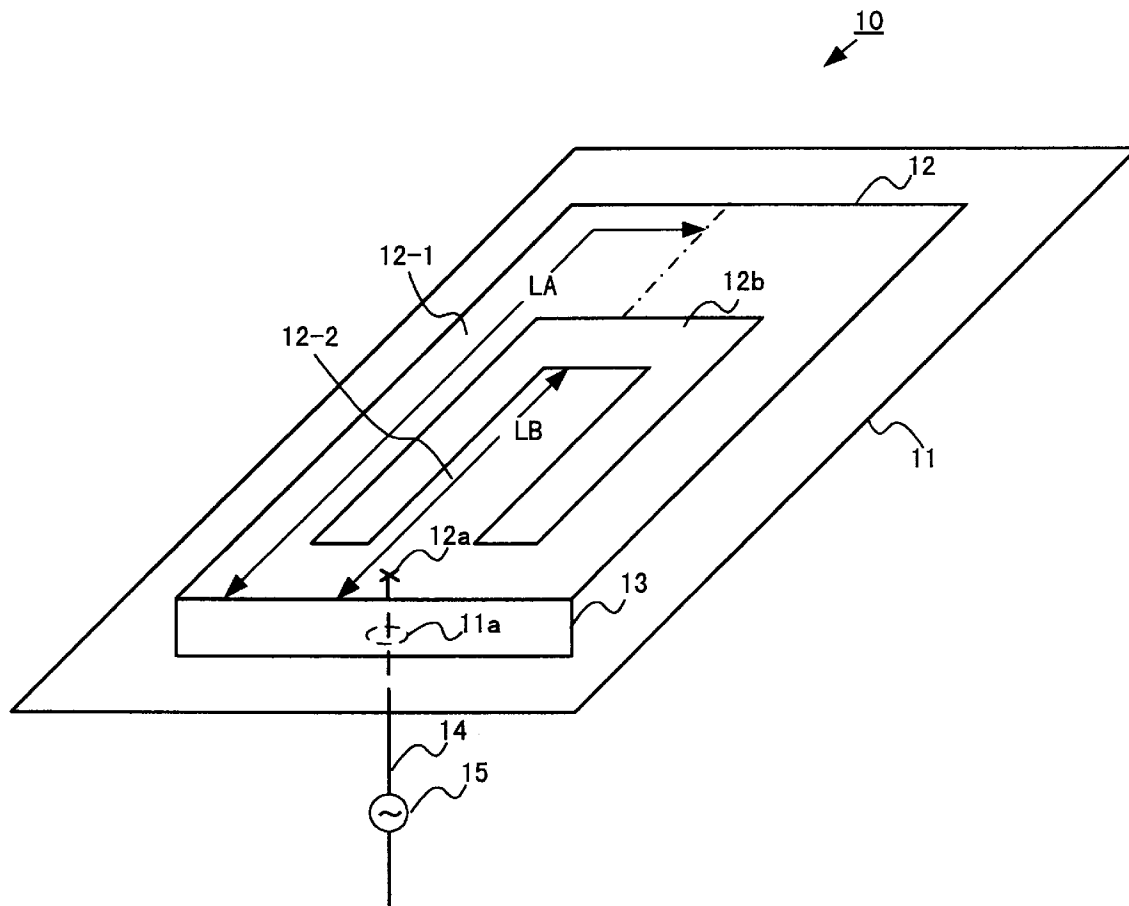


FIG. 1

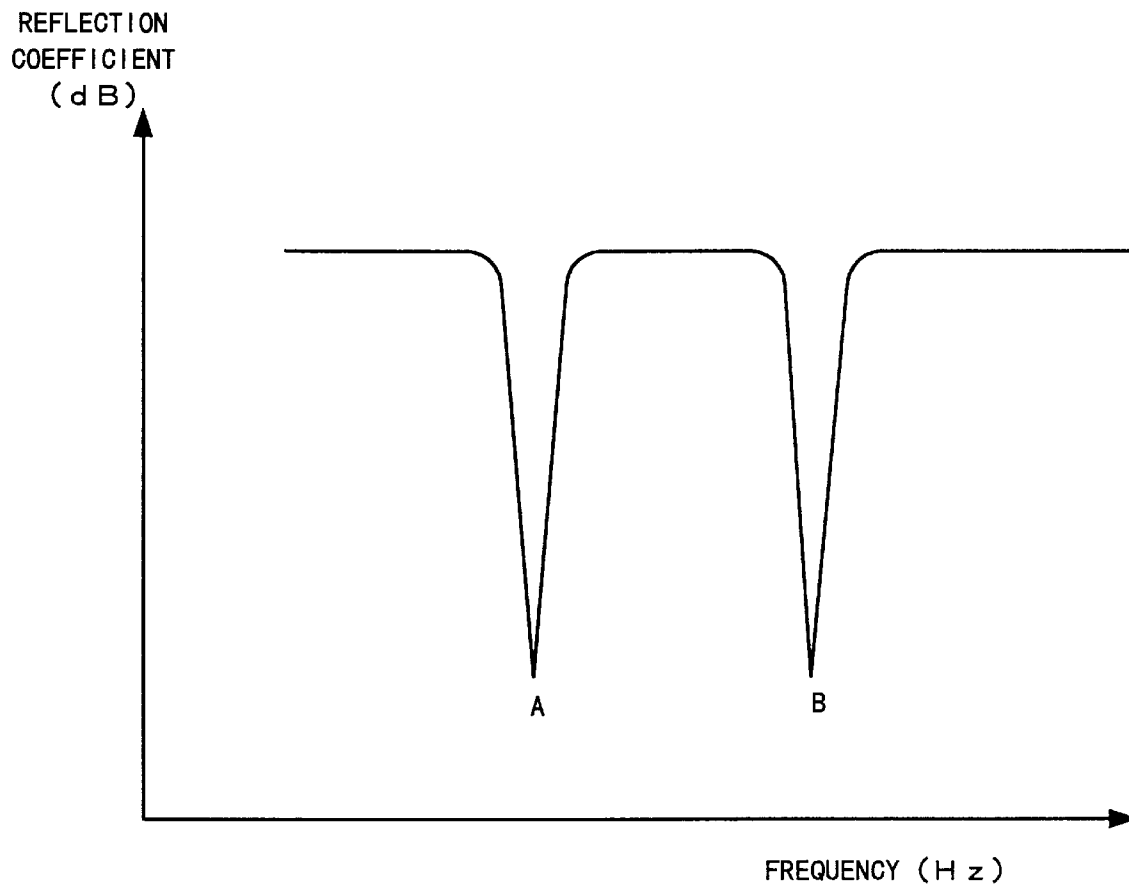


FIG. 2

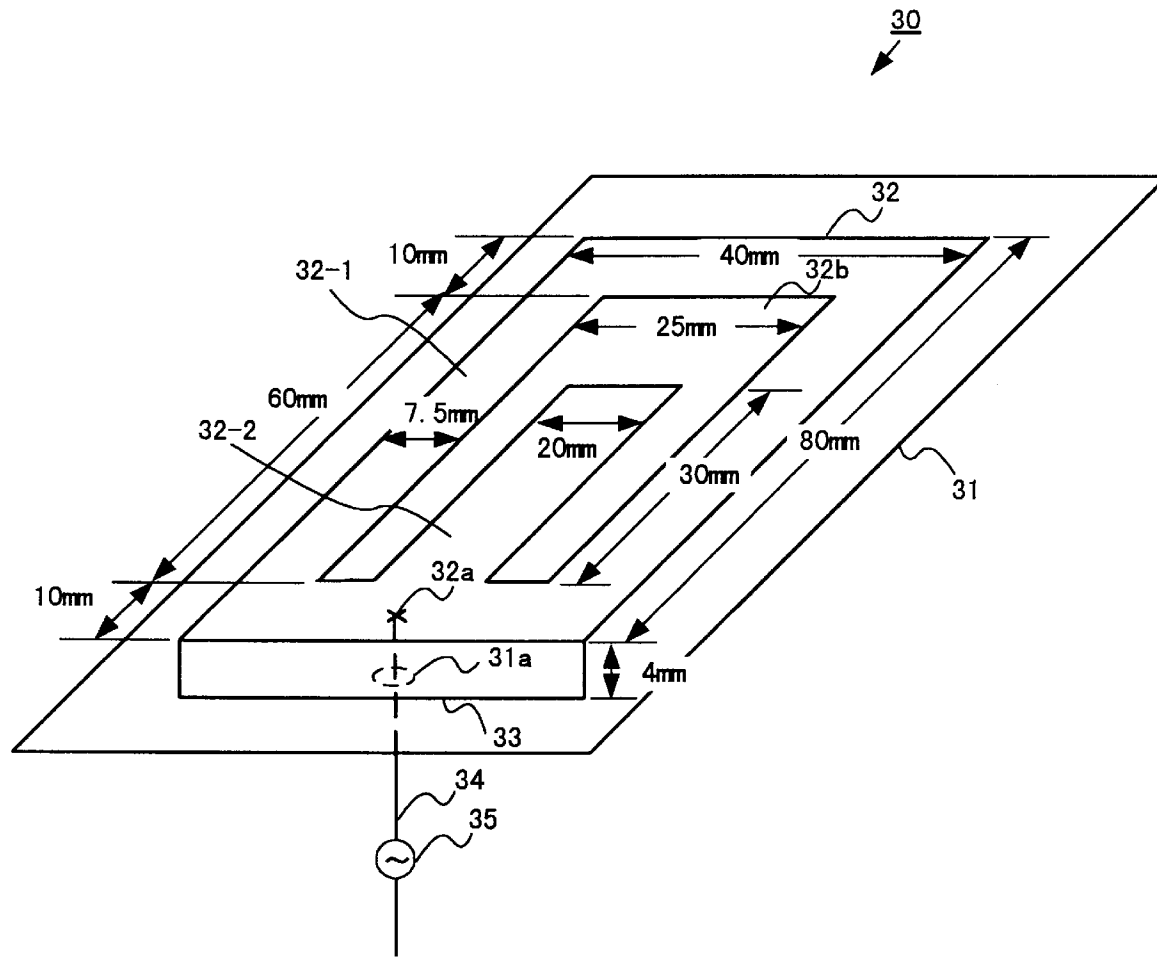


FIG. 3

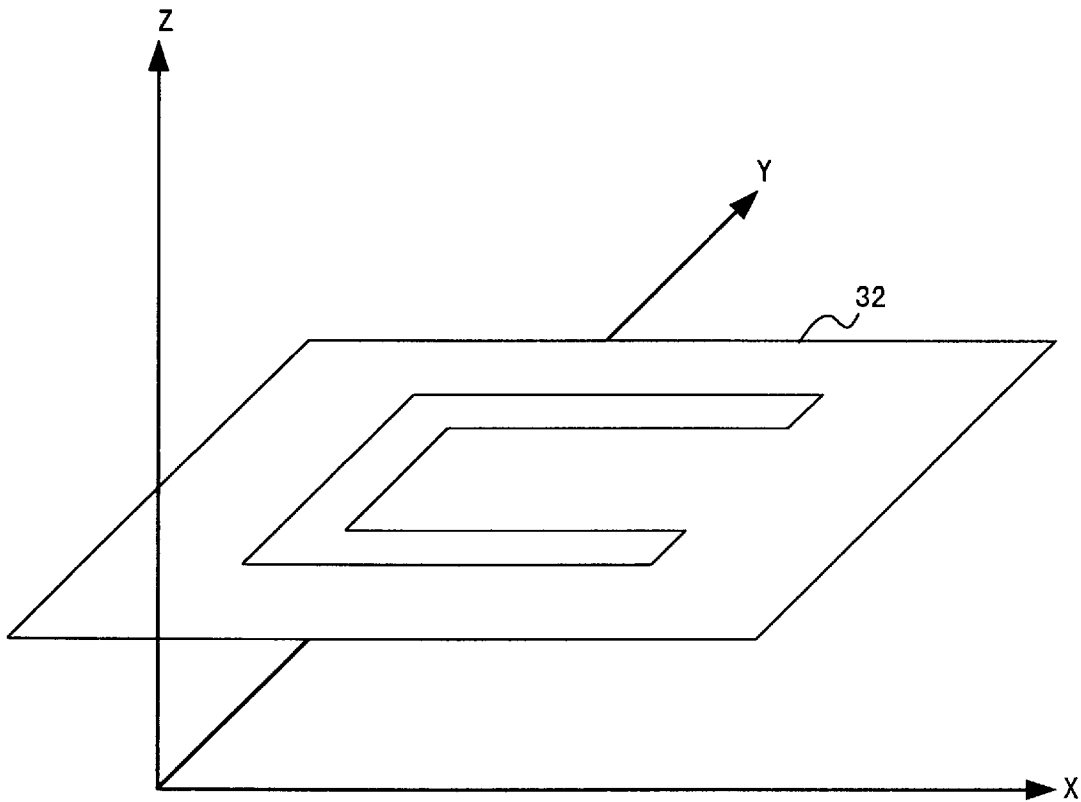


FIG. 4

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