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[Continued on next page]

(54) Title: A LOOP ANTENNA FOR MOBILE HANDSET AND OTHER APPLICATIONS

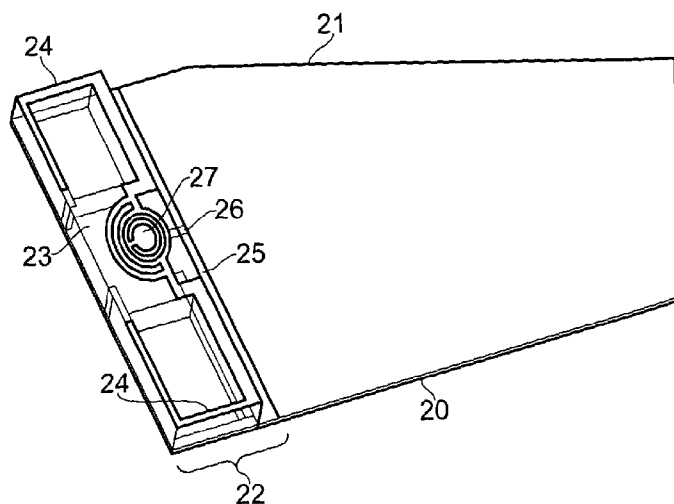


FIG. 2

(57) Abstract: There is disclosed a loop antenna for mobile handsets and other devices. The antenna comprises a dielectric substrate having first and second opposed surfaces and a conductive track formed on the substrate. A feed point and a grounding point are provided adjacent to each other on the first surface of the substrate, with the conductive track extending in generally opposite directions from the feed point and grounding point respectively. The conductive tracks then extend towards an edge of the dielectric substrate, before passing to the second surface of the dielectric substrate and then passing across the second surface of the dielectric substrate along a path generally following the path taken on the first surface of the dielectric substrate. The conductive tracks then connect to respective sides of a conductive arrangement formed on the second surface of the dielectric substrate that extends into a central part of a loop formed by the conductive track on the second surface of the dielectric substrate. The conductive arrangement comprises both inductive and capacitive elements. The antenna can be multi-moded and operate in several frequency bands.

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