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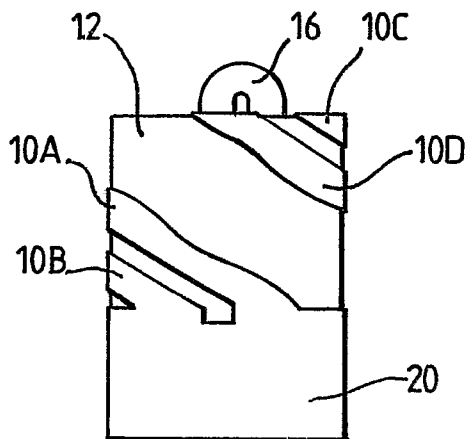
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(54) Title: A DIELECTRICALLY-LOADED ANTENNA



(57) **Abstract:** A dielectrically-loaded loop antenna has a cylindrical di-
electrical core (12), a feeder structure (18) passing axially through the core,
a sleeve balun (20) encircling one end portion of the core and helical an-
tenna elements (10A - 10B) extending from a feed connection with the
feeder structure at the other end of the core to the rim (20U) of the balun.
The antenna elements (10A - 10D) are arranged as a pair of laterally op-
posed groups (10AB, 10CD) of conductive elongate helical elements each
having at least first and second conductive elements of different electrical
lengths to form a plurality of looped conductive paths. By forming at least
one of the conductive elements in each group as a conductive strip with one
or both edges meandered, such that the edges of the strip are non-parallel
and have different electrical lengths, additional modes of resonance are cre-
ated, yielding an improvement in bandwidth.

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