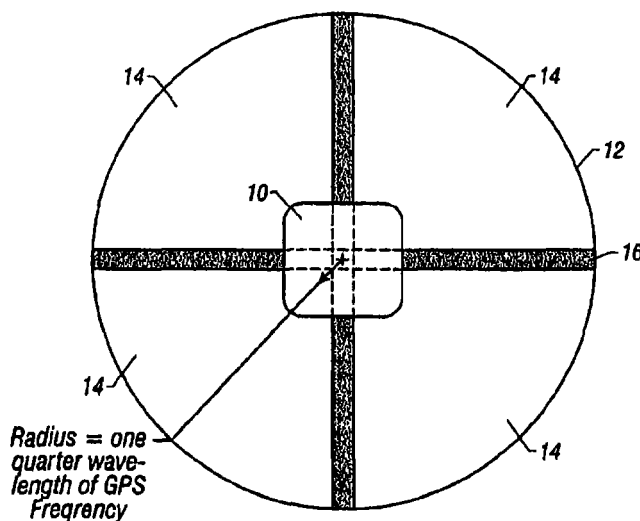




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(54) Title: GROUND PLANE FOR GPS PATCH ANTENNA



(57) Abstract

An antenna structure including a ground plane (12) that provides a good front to back ratio while maintaining a small size and which can mechanically be made to fit into tight areas. The antenna structure may be a GPS patch antenna (10), or any other antenna adapted to receive broadcast signals. The ground plane (12) is made from radar absorbing material (14, RAM) in electrical contact with conductive radials (16). The RAM (14) inherently acts to suppress surface currents on the ground plane (12), which in turn reduces back signals. Although RAM (14) has some resistance, it is low enough such that the electrical effect of the radials (16) is extended through the RAM (14), essentially simulating a "solid" conductive disk. Both the RAM (14) and radials (16) may be made from light and flexible material, and consequently may be adapted for use in a variety of applications.

