

[54] **MICROSTRIP CONFIGURATION WITH INDUCTIVE PICKUP LOOP FOR VSWR METER**

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[58] Field of Search **324/95, 58 B, 58 R; 333/7 R, 10; 325/67, 133, 363**

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[57] **ABSTRACT**

A VSWR meter unit for detecting and measuring the

forward and reflected RF voltage wave signals on a coaxial transmission line. The unit is adapted to be electrically inserted in a tubular or coaxial transmission line, having an outer conductor with a coaxial center conductor therein. A microstrip circuit board is provided within the meter unit and comprises a dielectric board with a ground plane conductor printed on one side and inserted across the outer conductor, and a specially designed conductive path printed on the other side and inserted across the inner conductor. Also printed on the other side of the microstrip board is an inductive sensing loop located within and concentric with a circular loop portion of the conductive path. The sensing loop is closely spaced to the loop portion of the conductive path so as to be responsive to the voltage wave signal on the transmission line. A D'Arsonval meter movement is connected to the conductive loop through a specially designed 180° switch assembly in either a "forward" or "reflected" condition through a meter circuit, designed so that the meter provides an indication of the level of either the forward voltage wave signal or the reflected wave signal depending on the condition of the switch assembly.

3 Claims, 8 Drawing Figures

