

COMBINATION COAXIAL SURGE ARRESTOR/POWER EXTRACTOR

ABSTRACT OF THE DISCLOSURE

Combination coaxial surge arrestor and power extraction apparatus for providing overvoltage protection for a coaxial transmission line carrying both an RF signal and AC power and for extracting AC power from the coaxial transmission line. The surge arrestor comprises a coaxial gas discharge tube with a center conductor and a conductive body. The apparatus includes an inductor for extracting the AC power, the inductor having a high reactance at the frequency of the RF signal and a low reactance at the frequency of the AC power, and a capacitor for passing the RF signal, the capacitor having a low reactance at the frequency of the RF signal and a high reactance at the frequency of the AC power.

Fig.1