

SCAN LOSS DETECTOR FOR CATHODE RAY TUBEABSTRACT

An active amplifier (Q1) is responsive to a vertical parabola voltage (V_1) developed across a trace or S-shaping capacitor (C_V) for developing a DC voltage (V_2) at an increased voltage level than can be obtained by rectifying the parabola voltage. The increased voltage level is developed in a capacitor (C_5), during part of the period of each scan. The capacitor is discharged through a parallel resistor (R_8). During normal scanning, the capacitor voltage, alternately, increases and decreases, but remains above a threshold level (V_{REF}) as detected by a comparator (U2). Upon scan loss, the capacitor discharges below the threshold and the comparator triggers blanking of the kinescope driver. In this way, the phosphors of a cathode ray tube (10,11,12) of a television, especially a projection television, are protected from burning due to a loss of electron beam deflection.

FIGURE 1

This Sheet Has Been Replaced

