

PERMANENT MAGNET FOCUS UNIT WITH INTEGRAL ASTIGMATISM CORRECTOR

Abstract

A permanent magnet focus unit (50) with integral astigmatism corrector for a cathode ray tube comprises a plurality of permanent magnets (54), each having a longitudinal axis, and a plurality of coils (58). A form (52) holds the magnets in a first annular array at substantially equally spaced intervals in which the magnet axes are substantially parallel to a longitudinal axis defined by the first annular array and holds the coils in a second annular array at positions spaced angularly between the magnets. Annular flanges of high magnetic permeability are disposed over longitudinally opposite ends of the magnets. At least one annular winding is disposed substantially adjacent to and inwardly from the first array of the magnets. The plurality of coils of the second array are coupled in two interleaved sets for generating two quadrupole focusing fields for correcting astigmatic aberrations of an electron beam in the cathode ray tube.

Fig. 8



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