

ABSTRACT

An improved color picture tube (8) includes an evacuated glass envelope (10) having a faceplate panel (12) with a cathodoluminescent screen (22) comprising different color-emitting phosphor elements disposed thereon. The panel includes a shadow mask-frame assembly (30) mounted therein by support means (34) located at peripherally spaced positions within the panel. The shadow mask (24) includes an apertured portion (25), the apertures of which are in register with the phosphor elements of the screen. The support means at each spaced position includes a stud (44) attached to the glass envelope, a spring (46) having an aperture (60) therein for engaging the stud, and a plate (48) welded between the spring and the mask-frame assembly. The improvement comprises mechanically joining the spring and the plate by extrusions interlocking the parts together at two-spaced apart locations (50, 51) along one edge (52) of the parts, whereby the spring and the plate are in contact along at least a portion of the facing surfaces thereof. The interlocking extrusions render the spring and plate resistant to shock induced movement, thereby minimizing misregister between apertures in the mask and the phosphor elements of the screen. (Figs. 1-4)