

Title (en)

MATERIAL AND PROCESS FOR THE MANUFACTURE OF TENSION MASKS FOR CATHODE RAY TUBES

Title (de)

STOFF UND VERFAHREN ZUR HERSTELLUNG VON GESPANNTEN SCHATTENMASKEN FÜR KATHODENSTRAHLRÖHREN

Title (fr)

MATERIAU ET PROCEDE SERVANT A LA FABRICATION DE MASQUES DE TENSION POUR TUBES A RAYONS CATHODIQUES

Publication

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Application

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Abstract (en)

[origin: WO8905513A1] A process and material is disclosed for use in the manufacture of a tensioned mask color cathode ray tube which includes a faceplate having on its inner surface a phosphor screen, and having on opposed sides of the screen a support structure for the mask. The process comprises providing an apertured foil shadow mask characterized by being composed of a nickel-iron alloy, and securing the foil mask to the support structure while under tension and in registration with the phosphor screen. The process is further characterized by the subjection of the foil mask to a thermal cycle to partially anneal the mask to a state in which the mask has favorable magnetic and mechanical properties. The partial anneal may be accomplished as a discrete step prior to installing the mask on the support structure, or accomplished during, or as a result of, a thermal cycle in the process of sealing the tube. The material comprises a nickel-iron alloy that displays, following treatment according to the invention, characteristics that make it uniquely suited for use as a shadow mask in tensioned mask color cathode ray tubes.

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