

Title (en)

METHOD OF MANUFACTURING AN ADHERENT PATTERN OF PARTICLES OF A SUBSTANCE ON A SUBSTRATE METHOD OF MANUFACTURING A DISPLAY SCREEN OF A COLOUR DISPLAY PICTURE TUBE, AND A COLOUR DISPLAY PICTURE TUBE HAVING A DISPLAY SCREEN MANUFACTURED BY THE METHOD

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Application

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Priority

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Abstract (en)

[origin: EP0192301A2] A colour-display picture tube display screen was made by providing a display screen substrate with a layer of a photosensitive composition which becomes sticky upon exposure to light. A black film matrix pattern and patterns of phosphor elements were formed on the photosensitive composition layer by imagewise exposing the layer to light in accordance with respective patterns of the black film matrix and of the respective phosphor elements, dusting the exposed layer with cobalt oxide particles and with particles of the respective phosphors, and blowing off the non-adhering particles. The photosensitive composition layer was then removed from the display screen substrate by condensing vapour of an organic solvent on the display screen structure so as to dissolve the material of the photosensitive composition layer, and continuing condensation of the solvent vapour until pure solvent falls off the substrate. During condensation of the solvent vapour the display screen is disposed so that the condensate falls off the substrate. The photosensitive composition is soluble in the solvent but the light-absorbing material and phosphors are insoluble in the solvent. The black film matrix and patterns of phosphor elements are fixed to the display screen substrate, for example, using an inorganic binder such as potassium metasilicate.

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