Title (en)

CATHODE RAY TUBE HAVING AN ENHANCED INTERNAL NEUTRAL DENSITY FILTER

Title (de

KATHODENSTRAHLRÖHRE MIT VERBESSERTEM INTERNEN NEUTRALDICHTEFILTER

Title (fr)

TUBE À RAYON CATHODIQUE AYANT UN FILTRE DE DENSITÉ NEUTRE INTERNE AMÉLIORÉ

Publication

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Application

EP 04757423 A 20040805

Priority

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Abstract (en)

[origin: WO2006022692A1] A composition and method of forming an enhanced internal neutral density filter on a luminescent screen assembly of a cathode ray tube (CRT) is disclosed. The luminescent screen assembly is formed on an interior surface of a glass faceplate panel of the CRT tube. The luminescent screen assembly includes a patterned light-absorbing matrix that defines three sets of fields corresponding to one of a blue region, a green region and a red region. An enhanced internal neutral density filter is formed on the light-absorbing matrix. An array of blue, green and red color phosphors is formed on the internal neutral density filter corresponding to one of the blue region, the green region and the red region defined in the light-absorbing matrix. The enhanced internal neutral density filter has a composition including a red pigment, a blue pigment, one or more surface active agents and at least one non-pigmented oxide particle. The enhanced internal neutral density filter preferably has the surface active agent in the amount of about 0.7 to 1.2 weight % based upon the total mass in the filter.

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