

Title (en)  
IN-LINE COLOUR PICTURE TUBE.

Title (de)  
IN-LINE-FARBBIldrÖHRE.

Title (fr)  
TUBE IMAGE EN COULEURS EN LIGNE.

Publication  
**EP 0432217 B1 19940302 (DE)**

Application  
**EP 89910431 A 19890904**

Priority  
DE 3829794 A 19880902

Abstract (en)  
[origin: WO9003042A1] To prevent the formation of a corona (2) in a known in-line colour picture tube with an automatic-focusing deflection system and four grids (G1-G4), a rectangular opening is provided on the side of the second grid (G2) facing the first grid (G1). As a result, the luminous spot (1) formed by the electron beam at the centre of the screen is converted to a vertical ellipse and the ratio of the axes of the lateral ellipses on the edge of the image is reduced, thus improving the sharpness of the edges. The openings (5) in the first grid (G1) are elongated in the in-line direction, in particular rectangular, the adjacent openings of the second grid (G2) are also rectangular and all the other openings in the other grids (G2, G3, G4) are circular. In this way, the ratio of the axes of the luminous elliptical spot (11) produced by the electron beam at the center of the screen is reduced without adversely affecting the sharpness of the edges.

IPC 1-7  
**H01J 29/50**; **H01J 29/56**

IPC 8 full level  
**H01J 29/50** (2006.01); **H01J 29/56** (2006.01)

CPC (source: EP US)  
**H01J 29/503** (2013.01 - EP US); **H01J 2229/4865** (2013.01 - EP US); **H01J 2229/4868** (2013.01 - EP US); **H01J 2229/4872** (2013.01 - EP US); **H01J 2229/4875** (2013.01 - EP US)

Designated contracting state (EPC)  
AT DE FR GB IT NL

DOCDB simple family (publication)  
**WO 9003042 A1 19900322**; DE 3829794 A1 19900315; DE 58907137 D1 19940407; EP 0432217 A1 19910619; EP 0432217 B1 19940302; JP 3068145 B2 20000724; JP H04500742 A 19920206; US 5148081 A 19920915

DOCDB simple family (application)  
**EP 8901029 W 19890904**; DE 3829794 A 19880902; DE 58907137 T 19890904; EP 89910431 A 19890904; JP 50974989 A 19890904; US 65544691 A 19910228