

Title (en)

Flat Viewing screen with a protective grid

Title (de)

Flasches Bildschirm mit Schutzgitter

Title (fr)

Ecran plat de visualisation à grille de protection

Publication

**EP 1096542 A1 20010502 (FR)**

Application

**EP 00410130 A 20001027**

Priority

- FR 9913753 A 19991028
- FR 0004171 A 20000331

Abstract (en)

[origin: JP2001176432A] PROBLEM TO BE SOLVED: To provide a flat-display screen that protects cathodes from positive ions which exist in the space between electrodes. SOLUTION: This flat display screen includes a cathode (1), equipped with electron emitting means (2) of field effect, a light emitting anode (5) disposed at a side opposite to the cathode (1), an extraction grid (3) made to correspond to the cathode (1), and one or more filtering grids (20, 30, 40). The filtering grids, have transmitting nature with respect to electron bombardment and are biased so that parasitic ions produced at their one side, are inhibited from reaching the cathode or anode disposed at the other side.

Abstract (fr)

L'invention concerne un écran plat de visualisation du type comprenant une cathode (1) pourvue de moyens (2) d'émission électronique à effet de champ, une anode (5) cathodoluminescente placée en regard de la cathode, une grille d'extraction (3) associée à la cathode, et au moins une grille de filtrage (20), perméable au bombardement électronique et polarisée pour interdire à des ions parasites, produits d'un côté de cette grille de filtrage, d'atteindre la cathode ou l'anode située de l'autre côté. <IMAGE>

IPC 1-7

**H01J 31/12**; **H01J 1/52**; **H01J 29/84**; **H01J 29/46**

IPC 8 full level

**G09G 3/20** (2006.01); **G09G 3/22** (2006.01); **H01J 1/52** (2006.01); **H01J 29/06** (2006.01); **H01J 29/46** (2006.01); **H01J 29/84** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP US)

**H01J 1/52** (2013.01 - EP US); **H01J 29/467** (2013.01 - EP US); **H01J 29/84** (2013.01 - EP US); **H01J 31/127** (2013.01 - EP US)

Citation (search report)

- [Y] EP 0660358 A1 19950628 - CANON KK [JP]
- [Y] EP 0660368 A1 19950628 - MARCONI GEC LTD [GB]
- [A] FR 2764731 A1 19981218 - COMMISSARIAT ENERGIE ATOMIQUE [FR]
- [A] FR 1329194 A 19630607 - ASS ELECT IND
- [A] US 2431113 A 19471118 - NICHOLAS GLYPTIS, et al
- [A] US 4012656 A 19770315 - NORMAN RALPH L, et al

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