

Title (en)

Shadow mask frame of a cathode ray tube, method of fabrication and mounting means for a mask frame

Title (de)

Lochmaskenrahmen einer Kathodenstrahlröhre, Verfahren zur Herstellung und Aufhängung für den Rahmen

Title (fr)

Cadre de masque perforé d'un tube à rayons cathodiques, son procédé de fabrication et élément de suspension d'un cadre de masque perforé

Publication

EP 0809272 A1 19971126 (FR)

Application

EP 97401086 A 19970515

Priority

FR 9606366 A 19960522

Abstract (en)

A shadow mask frame for a CRT, especially a colour television tube, has its sides (30a-d) formed by mutually offset and fixed external and internal membranes (31, 32), each of which consists of a portion of a thin metal strip.. A method of making a shadow mask frame involves (a) cutting one or more thin metal strips to form first and second membranes (31, 32); (b) forming reinforcing grooves or impressions in the membranes; and (c) assembling the frame by welding the membranes together. Also claimed is a suspension element for a shadow mask frame, the frame preferably being made of a high elastic limit metal selected from maraging steels, 25% Ni/15% Cr steels containing Ti and Al, Fe-Ni alloys, Ni base superalloys and martensitic stainless alloys.

Abstract (fr)

Le cadre (30) comporte des côtés plats (30a, 30b, 30c, 30d) disposés suivant des faces latérales d'une surface prismatique droite. Les côtés (30a, 30b, 30c, 30d) du cadre (30) comportent une membrane externe (31) et une membrane interne (32) rapportées et fixées l'une contre l'autre et constituées chacune par une portion de bande métallique mince de préférence renforcée par des nervures. Les dispositifs (34) de suspension du cadre (30) dans l'enveloppe de verre du tube à rayons cathodiques peuvent être fixés par clipsage ou par soudage sur des parties d'angle (33) du cadre (30). <IMAGE>

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Citation (search report)

- [A] US 5072150 A 19911210 - LEE WOO-JONG [KR]
- [A] FR 2184899 A1 19731228 - RCA CORP [US]
- [A] GB 2097996 A 19821110 - PHILIPS NV

Cited by

EP1032016A1; FR2790140A1; US6528933B1; WO0051157A1; WO0033348A1

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