

Title (en)

Masking device for a colour flat screen cathode ray tube comprising a supporting frame for planar mask and planar mask

Title (de)

Maskierungseinrichtung für Flachschirm-Farbbildröhre mit Tragrahmen für Schattenmaske und Schattenmaske

Title (fr)

Dispositif de masquage pour tube cathodique de visualisation en couleur à écran plat, du type comprenant un cadre support pour masque d'ombre tendu et masque d'ombre tendu.

Publication

EP 1063304 B1 20020904 (FR)

Application

EP 00401772 A 20000621

Priority

FR 9907909 A 19990622

Abstract (en)

[origin: EP1063304A1] A device for masking a flat screen color monitor has a mask mounted within and tensioned at ambient temperature by a support. The support is an iron nickel alloy with a thermal expansion coefficient $\leq 5 \times 10^{-6}/K$ between 20 - 150 degrees C and an elastic limit Rp0.2 at 20 degrees C $\geq 700 \text{ MPa}$. Independent claims are included for the following: (a) Methods of manufacturing the above device including hardening of the screen at 400 - 800 degrees C. (b) Methods of manufacturing the above device including de-tensioning the screen at 400 - 600 degrees C.

IPC 1-7

C21D 6/00; H01J 29/07; C22C 30/00; C22C 38/08

IPC 8 full level

C21D 9/46 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C22C 30/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/44** (2006.01); **C22C 38/52** (2006.01); **H01J 9/14** (2006.01); **H01J 29/02** (2006.01); **H01J 29/07** (2006.01)

CPC (source: EP KR US)

C21D 6/001 (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C22C 30/00** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **H01J 29/02** (2013.01 - KR); **H01J 29/073** (2013.01 - EP US); **H01J 2229/0722** (2013.01 - EP US); **Y10T 428/12646** (2015.01 - EP US); **Y10T 428/12653** (2015.01 - EP US); **Y10T 428/12958** (2015.01 - EP US); **Y10T 428/12965** (2015.01 - EP US); **Y10T 428/12972** (2015.01 - EP US); **Y10T 428/12979** (2015.01 - EP US)

Cited by

FR2809747A1; EP1138797A1; FR2807269A1; EP1156126A1; FR2819825A1; SG101471A1; US8808475B2; US6734610B2; US6692992B1; WO03044822A1; WO2007087785A1; WO0192587A1; WO03079395A1; KR100820892B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 1063304 A1 20001227; EP 1063304 B1 20020904; AT E223502 T1 20020915; BR 0002870 A 20010130; CA 2312415 A1 20001222; CN 1157749 C 20040714; CN 1278105 A 20001227; DE 1063304 T1 20020117; DE 60000389 D1 20021010; DE 60000389 T2 20030109; ES 2181631 T3 20030301; FR 2795431 A1 20001229; FR 2795431 B1 20011207; ID 26429 A 20001228; JP 2001076643 A 20010323; KR 20010007472 A 20010126; PL 340943 A1 20010102; PT 1063304 E 20030131; RU 2000116573 A 20020527; TW 455630 B 20010921; US 6420054 B1 20020716

DOCDB simple family (application)

EP 00401772 A 20000621; AT 00401772 T 20000621; BR 0002870 A 20000623; CA 2312415 A 20000621; CN 00122260 A 20000621; DE 00401772 T 20000621; DE 60000389 T 20000621; ES 00401772 T 20000621; FR 9907909 A 19990622; ID 20000510 A 20000622; JP 2000187073 A 20000622; KR 20000034238 A 20000621; PL 34094300 A 20000621; PT 00401772 T 20000621; RU 2000116573 A 20000621; TW 89112186 A 20000621; US 59889200 A 20000622