

## Title (en)

A steel sheet for use as an electrode-supporting frame member of a color picture tube and manufacturing method thereof

## Title (de)

Stahlblech für einen, eine Elektrode tragenden Rahmen für ein Farbbildrohr und Verfahren zu seiner Herstellung

## Title (fr)

Tôle d'acier pour un cadre support d'électrode d'un tube de télévision en couleur et son procédé de fabrication

## Publication

**EP 0964073 A1 19991215 (EN)**

## Application

**EP 98109894 A 19980529**

## Priority

- EP 98109894 A 19980529
- JP 32566796 A 19961205

## Abstract (en)

A steel sheet has composition consisting of 0.003-0.10 wt.% C, not more than 1.0 wt.% Si, 0.05-1.5 wt.% Mn, not more than 0.10 wt.% P, not more than 0.02 wt.% S, 1.5-8.0 wt.% Cr, 0.003-0.10 wt.% Al, at least one of 0.08-0.40 wt.% Ti, 0.08-0.40 wt.% Nb and 0.08-0.40 wt.% V, optionally at least one of Cu up to 2.0 wt.%, Ni up to 2.0 wt.%, 0.01-2.0 wt.% Mo, 0.01-2.0 wt.% W and 0.0003-0.0050 wt.% B and the balance being essentially Fe except inevitable impurities. The steel sheet is good of both a room-temperature strength and a high temperature strength. The new steel sheet is useful as a frame member of a color picture tube for stretching color selecting electrode elements, instead of an expensive ferritic stainless steel.

<IMAGE>

## IPC 1-7

**C22C 38/24**; **C22C 38/26**

## IPC 8 full level

**C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/38** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01)

## CPC (source: EP)

**C21D 8/0205** (2013.01); **C22C 38/004** (2013.01); **C22C 38/06** (2013.01); **C22C 38/24** (2013.01); **C22C 38/26** (2013.01); **C22C 38/28** (2013.01); **C22C 38/42** (2013.01); **C22C 38/44** (2013.01); **C22C 38/46** (2013.01); **C22C 38/48** (2013.01); **C22C 38/50** (2013.01); **C21D 8/0226** (2013.01); **C21D 8/0278** (2013.01); **H01J 2229/0722** (2013.01)

## Citation (search report)

- [A] WO 9613618 A1 19960509 - PO HANG IRON & STEEL [KR], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 096, no. 007 31 July 1996 (1996-07-31)
- [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 028 (C - 264) 6 February 1985 (1985-02-06)
- [X] PATENT ABSTRACTS OF JAPAN vol. 098, no. 006 30 April 1998 (1998-04-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 013, no. 029 (C - 562) 23 January 1989 (1989-01-23)

## Cited by

EP1350858A4

## Designated contracting state (EPC)

DE FR GB

## DOCDB simple family (publication)

**EP 0964073 A1 19991215**; JP 3647582 B2 20050511; JP H10158789 A 19980616

## DOCDB simple family (application)

**EP 98109894 A 19980529**; JP 32566796 A 19961205