

Title (en)

Method for hot-dip coating without alloying a low interstitial steel plate

Title (de)

Verfahren zur Heisstauch-Beschichtung ohne Legieren einer Stahlplatte mit einem geringen Gehalt an Zwischengitteratomen

Title (fr)

Procédé de revêtement au trempé et sans alliation d'une tôle d'acier à bas interstitiel

Publication

**EP 0710732 B1 19980107 (FR)**

Application

**EP 95402327 A 19951019**

Priority

FR 9413165 A 19941104

Abstract (en)

[origin: EP0710732A1] Interstitial free steel sheet is coated with Al, Zn or Al Zn alloy by dipping the heated steel into a relatively cool bath of molten Al, Zn or alloy and subjecting the dipped steel to a heat treatment of less than 5 mins., pref. around 2 mins., duration where it is first heated quickly to a temp. above 300 degrees C but below the temp. at which the coating would alloy with the steel and then quickly cooling to ambient temp. The heat treatment temp. is 550-625 degrees C for Al or Al alloy, 320-390 degrees C for Zn or Zn alloy and 390-550 degrees C for an alloy of Al and Zn. Prior to dipping the steel is cleaned and recrystallised by heating in a non-oxidising atmosphere. The Al based coating provides a base for subsequent enamelling and the Zn based coating for a paint coating which needs to be baked at over 100 degrees C.

IPC 1-7

**C23C 2/28**

IPC 8 full level

**C23C 2/28** (2006.01)

CPC (source: EP US)

**C23C 2/28** (2013.01 - EP US); **C23C 2/29** (2022.08 - EP US)

Cited by

AU728356B2; CN101952114A; EP0916624A1; US5993974A; EP0939141A1; FR2775297A1; EP2021523A4; US6231695B1; US10731241B2; WO2008138729A1; WO9821378A1; WO2007134400A1; US8221898B2; US6328824B1; US6395407B2; US8475609B2

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