

Title (en)
HOT DIP ZINC PLATED STEEL SHEET AND METHOD FOR PRODUCTION THEREOF

Title (de)
FEUERVERZINKTE STAHLPLATTE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
FEUILLE D'ACIER ZINGUÉE À CHAUD ET PROCÉDÉ DE PRODUCTION IDOINE

Publication
EP 1806422 A4 20090715 (EN)

Application
EP 05793822 A 20051007

Priority

- JP 2005018904 W 20051007
- JP 2004294706 A 20041007
- JP 2005101781 A 20050331
- JP 2005200343 A 20050708

Abstract (en)
[origin: EP1806422A1] The hot-dip galvanized steel sheet has: a steel sheet containing 0.1 to 3.0% of Si by mass; a hot-dip galvanizing layer; and a segregated layer, being placed between the steel sheet and the hot-dip galvanizing layer, having a thickness in a range from 0.01 to 100 μm; containing an oxide containing Si, and being composed of at least one component selected from the group consisting of S, C, Cl, Na, K, B, P, F, and N. The hot-dip galvanized steel sheet shows beautiful surface appearance without generating non-plating portion and provides excellent plating adhesion and sliding property in spite of using a base steel sheet containing a large quantity of Si. Furthermore, the alloy hot-dip galvanized steel sheet obtained by alloying the hot-dip galvanized plating also has excellent anti-powdering property.

IPC 8 full level
C23C 2/02 (2006.01); **C23C 2/06** (2006.01)

CPC (source: EP KR US)
C23C 2/0222 (2022.08 - EP KR US); **C23C 2/0224** (2022.08 - EP KR US); **C23C 2/024** (2022.08 - EP KR US); **C23C 2/026** (2022.08 - EP KR US); **C23C 2/06** (2013.01 - EP KR US); **Y10T 428/12799** (2015.01 - EP US)

Citation (search report)

- [X] WO 03074751 A1 20030912 - KAWASAKI STEEL CO [JP], et al & EP 1482066 A1 20041201 - KAWASAKI STEEL CO [JP]
- [A] EP 0632141 A1 19950104 - NIPPON KOKAN KK [JP]
- [A] GB 2376954 A 20021231 - KOBE STEEL LTD [JP]
- See also references of WO 2006038736A1

Cited by
US2011253263A1; US8999084B2

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 1806422 A1 20070711; **EP 1806422 A4 20090715**; CA 2582762 A1 20060413; KR 100883245 B1 20090210; KR 20070050497 A 20070515; TW 200617207 A 20060601; TW I311163 B 20090621; US 2008070060 A1 20080320; WO 2006038736 A1 20060413

DOCDB simple family (application)
EP 05793822 A 20051007; CA 2582762 A 20051007; JP 2005018904 W 20051007; KR 20077007709 A 20070404; TW 94135149 A 20051007; US 66449005 A 20051007