

Title (en)
SURFACE TREATED STEEL SHEET AND METHOD FOR PRODUCTION THEREOF

Title (de)
OBERFLÄCHENBEHANDELTES STAHLBLECH UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
FEUILLE EN ACIER TRAITEE EN SURFACE ET SON PROCEDE DE PRODUCTION

Publication
EP 1482074 A4 20050615 (EN)

Application
EP 02705083 A 20020306

Priority
JP 0202052 W 20020306

Abstract (en)
[origin: EP1482074A1] A zinc system plated steel sheet is coated with 2 membrane layers i.e. primary and secondary, the former is a composite oxides layer comprises oxide micro particles and phosphoric acid and/or phosphate compounds as constituents and the latter is straight silicone resin layer. Dosage of the primary layer is 5-4000 mg/(square m) in which phosphate system constituents are expressed as P 2O 5 and that of secondary layer is 0.1-3.0 g/(square m). Independent claims are included for two other compositions of the primary layer including its constituents, which claims specified metal oxides, composition and constituents of secondary layer, and two methods of manufacturing plated steel sheets.

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IPC 8 full level
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Citation (search report)

- [Y] EP 1050603 A1 20001108 - NIPPON KOKAN KK [JP]
- [A] EP 1142699 A1 20011010 - KAWASAKI STEEL CO [JP]
- [A] US 4942083 A 19900717 - SMITH JR W NOVIS [US]
- [A] GB 1500645 A 19780208 - TOYO KOHAN CO LTD
- [A] US 4440582 A 19840403 - SMITH NOEL A [US], et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 05 30 May 1997 (1997-05-30)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 05 30 May 1997 (1997-05-30)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 16 8 May 2001 (2001-05-08)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 07 31 July 1997 (1997-07-31)
- [A] DATABASE WPI Section Ch Week 198315, Derwent World Patents Index; Class A82, AN 1983-35398K, XP002324329
- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 112 (P - 124) 23 June 1982 (1982-06-23)
- [E] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 07 3 July 2002 (2002-07-03)
- [E] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04 2 April 2003 (2003-04-02)
- See references of WO 03074760A1

Cited by
US2018050367A1; US10987695B2

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