

Title (en)

COATED METAL SUBSTRATE AND METHOD OF COATING A METAL SUBSTRATE

Publication

**EP 0074211 B1 19871104 (EN)**

Application

**EP 82304451 A 19820824**

Priority

GB 8126928 A 19810905

Abstract (en)

[origin: EP0074211A1] A non-alloy steel is treated to provide a good keying surface for a solid polymeric or wax coating by heat treatment at 550 to 720 deg C for up to 4 hours in an atmosphere of, eg ammonia and endothermic or exothermic gas, followed by cooling to produce an epsilon iron nitride surface layer. The solid coating adheres tenaciously to the surface layer to give excellent salt spray resistance.

IPC 1-7

**C23C 8/32; C23C 8/80; B05D 3/10**

IPC 8 full level

**C23C 8/32** (2006.01); **B05D 3/10** (2006.01); **B05D 7/14** (2006.01); **C21D 1/72** (2006.01); **C23C 8/04** (2006.01); **C23C 8/80** (2006.01);  
**C23C 12/00** (2006.01); **C23C 28/00** (2006.01)

CPC (source: EP)

**C23C 8/80** (2013.01); **C23C 28/00** (2013.01)

Citation (examination)

- JP S55129176 A 19801006 - HONDA MOTOR CO LTD
- Dawes C. et al., Low pressure oxy-nitro-carburising at 570°C, Metallurgy and metal forming, February 1975, pages 58-60

Cited by

DE3609477A1; US4756774A; CN107109617A; CN100445032C; US5037491A; EP0122762B1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0074211 A1 19830316; EP 0074211 B1 19871104; AR 228794 A1 19830415; AU 552307 B2 19860529; AU 8796882 A 19830317;**  
BR 8205184 A 19830816; DE 3277585 D1 19871210; ES 515496 A0 19830801; ES 8307909 A1 19830801; HU 186571 B 19850828;  
IN 159201 B 19870411; JP S5852474 A 19830328; NZ 201811 A 19850816; PL 238136 A1 19830328; SU 1364242 A3 19871230;  
YU 199782 A 19851031; ZA 826202 B 19830727

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**EP 82304451 A 19820824;** AR 29053682 A 19820903; AU 8796882 A 19820901; BR 8205184 A 19820903; DE 3277585 T 19820824;  
ES 515496 A 19820904; HU 282782 A 19820903; IN 1027CA1982 A 19820904; JP 15284582 A 19820903; NZ 20181182 A 19820903;  
PL 23813682 A 19820903; SU 3489306 A 19820903; YU 199782 A 19820903; ZA 826202 A 19820825