

Title (en)

Coated metal substrate and method of coating a metal substrate.

Title (de)

Überzogenes metallisches Substrat und Verfahren zum Überziehen dieses Substrates.

Title (fr)

Substrat métallique revêtu et procédé de revêtement dudit substrat.

Publication

**EP 0074211 A1 19830316 (EN)**

Application

**EP 82304451 A 19820824**

Priority

GB 8126928 A 19810905

Abstract (en)

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 11/14**; **B05D 3/10**

IPC 8 full level

**B05D 3/10** (2006.01); **B05D 7/14** (2006.01); **C21D 1/72** (2006.01); **C23C 8/04** (2006.01); **C23C 8/32** (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 (search report)

- [X] GB 2026045 A 19800130 - HONDA MOTOR CO LTD
- [X] GB 2027062 A 19800213 - HONDA MOTOR CO LTD
- [E] EP 0053521 A2 19820609 - LUCAS IND PLC [GB]
- [A] GB 1299308 A 19721213 - CESKOSLOVENSKA AKADEMIE VED [CS]
- [A] FR 2428682 A1 19800111 - STEPHANOIS RECH MECA HYDR CENT [FR]
- [A] PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 155, 29th October 1980, page 136 C-29; & JP - A - 55 102 471 (HONDA GIKEN KOGYO K.K.) (05-08-1980)
- [A] PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 155, 29th October 1980, page 134 C-29; & JP - A - 55 102 465 (HONDA GIKEN KOGYO K.K.) (05-08-1980)
- [A] HÄRTEREI TECHNISCHE MITTEILUNGEN, vol. 29, no. 1, March 1974, pages 42-49;

Cited by

US4756774A; DE3609477A1; 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

DOCDB simple family (application)

**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