

Title (en)
Coated metallic substrate.

Title (de)
Beschichtetes metallisches Substrat.

Title (fr)
Substrat métallique revêtu.

Publication
EP 0438971 B1 19940511 (DE)

Application
EP 90810867 A 19901112

Priority
CH 18190 A 19900122

Abstract (en)
[origin: US5230755A] A protective layer for a metal substrate is metallurgically bonded to the substrate and contains (as a percentage by mass) 35 to 50% chromium, up to 10% of which can be replaced by molybdenum, and at least iron, the proportion of iron being at least 25%. The minimum hardness is 800 HVO.1, obtained by a structure having a minimum content of 5% by volume as sigma phase. The sigma phase is obtained by heat-treatment of the coated substrate. The protective layer is particularly resistant to corrosion and also has good resistance to erosion and wear.

IPC 1-7
C23C 4/08; **C23C 4/18**; **C23C 30/00**; **C23C 26/02**

IPC 8 full level
C21D 9/00 (2006.01); **C22C 27/06** (2006.01); **C22C 30/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22F 1/00** (2006.01); **C23C 4/08** (2016.01); **C23C 4/18** (2006.01); **C23C 26/00** (2006.01); **C23C 26/02** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP US)
C23C 4/08 (2013.01 - EP US); **C23C 4/18** (2013.01 - EP US); **C23C 26/02** (2013.01 - EP US); **C23C 30/00** (2013.01 - EP US)

Citation (examination)
EP 0266149 A2 19880504 - HITACHI LTD [JP], et al

Cited by
EP0542631A1; DE19740696A1; WO9529274A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)
EP 0438971 A1 19910731; **EP 0438971 B1 19940511**; AT E105594 T1 19940515; DE 59005683 D1 19940616; ES 2053163 T3 19940716; JP 3065674 B2 20000717; JP H04214879 A 19920805; US 5230755 A 19930727

DOCDB simple family (application)
EP 90810867 A 19901112; AT 90810867 T 19901112; DE 59005683 T 19901112; ES 90810867 T 19901112; JP 510691 A 19910121; US 64160391 A 19910115