

Title (en)

Method for manufacturing a body featuring very high mechanical properties, forming by cold drawing from a rolled steel sheet, in particular hot rolled and coated sheet

Title (de)

Verfahren zum Herstellen eines Bauteils mit sehr guten mechanischen Eigenschaften, Umformung durch kaltes Tiefziehen aus gewalztem, insbesondere warmgewalztem und beschichtetem Stahlblech

Title (fr)

Procédé de réalisation d'une pièce à très hautes caractéristiques mécaniques, mise en forme par emboutissage à froid, à partir d'une bande de tôle d'acier laminée et notamment laminée à chaud et revêtue

Publication

EP 1672088 B1 20100818 (FR)

Application

EP 06002618 A 20010404

Priority

- EP 01400861 A 20010404
- FR 0004427 A 20000407

Abstract (en)

[origin: EP1143029A1] A method for the production of a component with very high mechanical characteristics, by pressing a hot rolled steel strip coated with a protective metal or alloy, consists of cutting the strip to form a blank, pressing the blank to form the component, the production, before or after pressing, of an allied intermetallic compound at the surface acting as a lubricant and removing the surplus strip needed by the pressing operation. An Independent claim is included for the utilisation of a hot rolled steel strip coated with a protective metal or alloy in pressing operations.

IPC 8 full level

B21D 22/02 (2006.01); **C23C 2/26** (2006.01); **B21D 22/20** (2006.01); **B21J 5/00** (2006.01); **B21J 13/02** (2006.01); **B23P 13/00** (2006.01); **C21D 1/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/32** (2006.01); **C23C 2/06** (2006.01); **C23C 2/28** (2006.01); **C25D 7/00** (2006.01)

CPC (source: EP US)

B21D 22/20 (2013.01 - EP US); **C21D 8/0278** (2013.01 - EP US); **C23C 2/02** (2013.01 - EP US); **C23C 2/06** (2013.01 - EP US); **C23C 2/26** (2013.01 - EP US); **C23C 2/28** (2013.01 - EP US); **C23C 2/29** (2022.08 - EP US); **C23C 2/40** (2013.01 - EP US); **C21D 1/673** (2013.01 - EP US)

Citation (examination)

- EP 0971044 A1 20000112 - LORRAINE LAMINAGE [FR]
- JP S5528343 A 19800228 - NIPPON STEEL CORP

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1143029 A1 20011010; **EP 1143029 B1 20060524**; AR 028319 A1 20030507; AT E327353 T1 20060615; AT E478167 T1 20100915; BR 0102747 A 20011204; BR PI0102747 B1 20160830; BR PI0117371 B1 20160614; CA 2343340 A1 20011007; CA 2343340 C 20080708; DE 01400861 T1 20050504; DE 10006299 T1 20120126; DE 20122563 U1 20060511; DE 60119826 D1 20060629; DE 60119826 T2 20061214; DE 60142859 D1 20100930; DK 1143029 T3 20060918; EP 1672088 A1 20060621; EP 1672088 B1 20100818; EP 1672088 B2 20150128; EP 2224034 A1 20100901; EP 2224034 B1 20130717; ES 2263567 T3 20061216; ES 2350399 T3 20110121; ES 2350399 T5 20151110; ES 2428638 T3 20131108; FR 2807447 A1 20011012; FR 2807447 B1 20021011; JP 2001353548 A 20011225; JP 2005047001 A 20050224; JP 3663145 B2 20050622; JP 3825456 B2 20060927; PT 1143029 E 20060929; PT 1672088 E 20101104; US 2001042393 A1 20011122; US 6564604 B2 20030520

DOCDB simple family (application)

EP 01400861 A 20010404; AR P010101657 A 20010406; AT 01400861 T 20010404; AT 06002618 T 20010404; BR 0102747 A 20010402; BR 0117371 A 20010402; CA 2343340 A 20010406; DE 01400861 T 20010404; DE 10006299 T 20010404; DE 20122563 U 20010404; DE 60119826 T 20010404; DE 60142859 T 20010404; DK 01400861 T 20010404; EP 06002618 A 20010404; EP 10006299 A 20010404; ES 01400861 T 20010404; ES 06002618 T 20010404; ES 10006299 T 20010404; FR 0004427 A 20000407; JP 2001109121 A 20010406; JP 2004221430 A 20040729; PT 01400861 T 20010404; PT 06002618 T 20010404; US 82716701 A 20010406