Title (en)

Method of manufacturing a hardened sheet metal profile

Title (de)

Verfahren zur Herstellung eines gehärteten Blechprofils

Title (fr)

Procédé de fabrication d'un profilé en tôle durci

Publication

EP 1253208 B1 20040707 (DE)

Application

EP 02008690 A 20020418

Priority

DE 10120919 A 20010427

Abstract (en)

[origin: EP1253208A1] Production of a hardened sheet metal profile from a plate or a semi-finished product comprises hot deforming the plate or semi-finished product in a pressing tool and hardening. Collars protruding from the surface of the plate are provided on the sheet metal profile. Preferred Features: The collars are produced in the form of an embossed piece on the sheet metal profile.

IPC 1-7

C21D 1/02; C21D 1/673; B21D 19/08; B21D 22/04

IPC 8 full level

B21D 19/08 (2006.01); **B21D 19/10** (2006.01); **B21D 22/04** (2006.01); **B21D 22/06** (2006.01); **B21D 31/00** (2006.01); **C21D 1/02** (2006.01); **C21D 1/673** (2006.01); C21D 9/46 (2006.01)

CPC (source: EP)

B21D 19/088 (2013.01); **B21D 22/04** (2013.01); **C21D 1/673** (2013.01); C21D 9/46 (2013.01)

Cited by

DE102014004165A1; DE102011117066A1; EP2062664A1; CN106488813A; CN102574187A; FR2996473A1; EP2181911A1; DE102014004165B4; CN104372278A; DE102004038626B3; US10364476B2; DE102011054866A1; EP3060687A4; EP4252930A3; WO2011023318A1; WO2016005210A1; WO2007028475A3; WO2016119940A1; DE102011117066B4; US8613819B2; US8756969B2; EP2177641A1; US8181331B2; EP3868900B1; EP3060687B1

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 1253208 A1 20021030; **EP 1253208 B1 20040707**; AT E270713 T1 20040715; CZ 298312 B6 20070822; DE 10120919 A1 20021031; DE 50200587 D1 20040812; ES 2223991 T3 20050301

DOCDB simple family (application)

EP 02008690 A 20020418; AT 02008690 T 20020418; CZ 20021464 A 20020425; DE 10120919 A 20010427; DE 50200587 T 20020418; ES 02008690 T 20020418