

Title (en)

Method of manufacturing pressed part and steel sheet for press working

Title (de)

Verfahren zur Herstellung von gepresstem Teil und Stahlblech zur Pressbearbeitung

Title (fr)

Procédé de fabrication de pièce moulée par compression et feuille d'acier pour travail à la presse

Publication

**EP 2803737 A2 20141119 (EN)**

Application

**EP 14166981 A 20140505**

Priority

JP 2013103763 A 20130516

Abstract (en)

Provided is a method of manufacturing a pressed part, which imparts excellent formability on a steel sheet, and the steel sheet for press working used in the manufacturing of the pressed part when the pressed part is manufactured with a silicon steel sheet. A manufacturing method includes a process of siliconizing a low-silicon steel sheet (14) which becomes a material of a high-silicon steel sheet in a state where a surface of a to-be-pressed portion (16) is coated with a mask (30); and a process of pressing the to-be-pressed portion (16) of the siliconized high-silicon steel sheet as a workpiece. Since the surface of the to-be-pressed portion (16) is coated with the mask (30) and the siliconizing treatment is performed, it is possible to obtain the high-silicon steel sheet in which the to-be-pressed portion (16) is softer than other portions. Since the high-silicon steel sheet is pressed, the steel sheet is excellent in formability during the press working.

IPC 8 full level

**C21D 8/12** (2006.01); **B21D 28/00** (2006.01); **C21D 1/673** (2006.01); **C23C 10/04** (2006.01); **C23C 10/08** (2006.01); **C23C 10/60** (2006.01)

CPC (source: EP)

**C21D 1/673** (2013.01); **C21D 8/1255** (2013.01); **C21D 8/1277** (2013.01); **C21D 8/1294** (2013.01); **C23C 10/04** (2013.01); **C23C 10/08** (2013.01); **C23C 10/28** (2013.01); **C23C 10/60** (2013.01); **C21D 2221/00** (2013.01); **C21D 2261/00** (2013.01)

Citation (applicant)

- JP 2000178699 A 20000627 - NIPPON KOKAN KK
- WO 2004044251 A1 20040527 - POSCO [KR], et al

Cited by

CN108581057A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2803737 A2 20141119**; **EP 2803737 A3 20151104**; CN 104164645 A 20141126; CN 104164645 B 20170412; JP 2014223641 A 20141204

DOCDB simple family (application)

**EP 14166981 A 20140505**; CN 201410167849 A 20140424; JP 2013103763 A 20130516