

Title (en)

Method and device for pressing a collar in a metal plate and collar and plate element.

Title (de)

Verfahren und Vorrichtung zum Pressen einer Manschette in eine Metallplatte und Manschette und Plattenelement

Title (fr)

Procédé et dispositif pour former un collier sur une plaque métallique et collier et élément de plaque

Publication

EP 2186580 A3 20130717 (EN)

Application

EP 09176086 A 20091116

Priority

SE 0802421 A 20081118

Abstract (en)

[origin: EP2186580A2] The invention relates to pressing a collar in a metal plate (10), which involves pressing a collaring portion of the plate into a forming duct for the collar and making a hole in the plate. According to the invention, the plate (10) is stretched in a region (R) which comprises the collaring portion (C) before the pressing of the collaring portion (C) into the forming duct.

IPC 8 full level

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Citation (search report)

- [XA] GB 2218023 A 19891108 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] US 2007234776 A1 20071011 - SHIGA HIDEAKI [JP], et al
- [A] US 4434639 A 19840306 - BREDOW WALTER [DE]
- [A] US 2005284203 A1 20051229 - TAKEKOSHI HIDEO [JP], et al
- [A] JP H04123828 A 19920423 - HIDAKA SEIKI KK

Cited by

EP2886731A1; IT202100020507A1; US2013152656A1; CN112317601A; JP2012071332A; DE102015101717A1; CN107206452A; US10265751B2; US10118211B2; WO2016124528A1; US11098478B2; US11965329B2

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