

Title (en)

METHOD AND DEVICE FOR PRODUCING HARDENED STEEL COMPONENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ERZEUGEN GEHÄRTETER STAHLBAUTEILE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FABRICATION DE PIÈCES EN ACIER TREMPÉ

Publication

**EP 3414072 A1 20181219 (DE)**

Application

**EP 17707480 A 20170207**

Priority

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Abstract (en)

[origin: WO2017137377A1] The invention relates to a method for hot stamping steel sheet metal components, wherein a sheet metal blank is cut from a steel sheet metal strip made of a hardenable steel alloy and the sheet metal blank is then austenitized in that it is heated to a temperature of more than Ac3 and is then placed into a forming tool and formed in the forming tool and, during forming, is cooled at a rate above the critical cooling rate, characterized in that oxygen is supplied to the sheet metal blank to be formed, adjacent to positive radii and/or drawing edges, during the forming and hardening process in order to prevent microcracks of the second type. The invention also relates to a device therefor.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2017137377A1

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**DE 102016102322 A1 20170810**; **DE 102016102322 B4 20171012**; CN 109070396 A 20181221; CN 109070396 B 20211015; EP 3414072 A1 20181219; EP 3414072 B1 20200909; ES 2820362 T3 20210420; JP 2019504771 A 20190221; JP 6744416 B2 20200819; KR 102224343 B1 20210309; KR 20180112820 A 20181012; US 2019048432 A1 20190214; WO 2017137377 A1 20170817

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