

Title (en)

PROCESS AND DEVICE FOR PRODUCING HOT-FORMED WHEEL NAVES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG WARMUMGEFORMTER RADSCHÜSSELN

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE PRODUIRE DES DISQUES DE ROUE FORMÉS À CHAUD

Publication

EP 3083099 A1 20161026 (DE)

Application

EP 14821064 A 20141215

Priority

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- EP 2014003355 W 20141215

Abstract (en)

[origin: CA2940676A1] The invention relates to a process and a device for producing a wheel nave (1) of a vehicle wheel, in which the wheel nave (1) is produced from a sheet (6) of steel by hot forming, the sheet (6) is at least partially hardened, preferably press-hardened, during or after the hot forming, wherein the sheet (6) is hot-formed by using at least one punch (7) and at least one die plate (8), and at least one opening (3, 4, 5) is introduced into the sheet (6) using hot trimming means (9, 10). The object of providing a process for producing a wheel nave (1) of a vehicle wheel with which a wheel nave (1) can be produced in a simple manner with high precision in such a way as to achieve a further weight reduction and meet the expected geometrical and safety requirements for the wheel nave (1) is achieved in a process and a device for producing a wheel nave (1) of a vehicle wheel by at least one opening (3, 4, 5) being introduced in the hot trimming by using at least one trimming pin (9) and a shutdown pin (10), wherein the shutdown pin (10) has at least one region (10a) with a cross-sectional shape that is variable in the longitudinal direction of the shutdown pin (10) and the at least one opening (3, 4, 5) is calibrated over the variable cross-sectional shape by using the shutdown pin (10).

IPC 8 full level

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Citation (search report)

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DE 102013114245 B3 20150521; CA 2940676 A1 20150625; CA 2940676 C 20180206; CN 106061643 A 20161026; CN 106061643 B 20180925; EP 3083099 A1 20161026; JP 2017507781 A 20170323; JP 6725418 B2 20200715; KR 20160101077 A 20160824; MX 2016007442 A 20170118; US 10092944 B2 20181009; US 2016318091 A1 20161103; WO 2015090552 A1 20150625

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