

Title (en)

COMBINATION OF A PREFORM AND DEVICE AND METHOD FOR PRODUCING A LIGHTWEIGHT METAL WHEEL

Title (de)

KOMBINATION EINER VORRICHTUNG UND EINER VORFORM UND VERFAHREN ZUM HERSTELLEN EINES LEICHT-METALLRADES

Title (fr)

COMBINATION D'UNE PREFORME ET DISPOSITIF ET PROCÉDÉ DE FABRICATION D'UNE ROUE EN ALLIAGE LÉGER

Publication

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Application

EP 12818482 A 20121024

Priority

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Abstract (en)

[origin: WO2013060451A1] The invention relates to a device for producing a metal wheel (1) from a preform, with stretching rollers (3) which act on the rim region of the preform and by means of which a rim (1.1) is brought into its final form, which device is further characterized by freely rotatable rollers (4) that are arranged underneath the stretching rollers (3) and interact with them, for the forming of a rim flange (1.7). The invention further proposes for this purpose a method for producing a metal wheel (1) from a preform, wherein the preform of the metal wheel (1) to be produced is fitted onto a clamping mandrel (2) and set in rotation, stretching rollers (3) act on the preform and exert radial pressure on it in the upper region of a rotationally symmetrical shell thereof and move along the shell wall of the preform, while compressing and stretching the shell wall to form a rim (1.1), with a main movement component parallel to the axis of rotation (2.1) of the preform, wherein the method is characterized in that the preform is engaged from below by freely rotating rollers (4), which are arranged around the circumference of the preform at the same circumferential angles as the stretching rollers (3), and so the stretching rollers form a rim flange (1.7) by stretching preform material against the freely rotating rollers engaging from underneath.

IPC 8 full level

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Citation (examination)

- DE 1452610 A1 19690327 - CINCINNATI MILLING MACHINE CO
- WO 2005065049 A2 20050721 - WHEELS INDIA [IN], et al

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