

Title (en)

Method for manufacturing welded sheet metal wheels for motor vehicles, the plant for its implementation and the wheels obtained.

Title (de)

Verfahren zur Herstellung von geschweissten Blechrädern für Kraftfahrzeuge, Anlage für dessen Durchführung und die danach erhaltenen Räder.

Title (fr)

Procédé de fabrication de roues en tôles soudées pour véhicules à moteur, usine pour sa mise en oeuvre et les roues obtenues.

Publication

EP 0393250 A1 19901024 (EN)

Application

EP 89200984 A 19890418

Priority

EP 89200984 A 19890418

Abstract (en)

A method for manufacturing shaped and welded sheet metal wheels comprises the following operations relative to the manufacture of the rim: - forming and sizing a continuous tube (13) from a roll of sheet (3) metal by roller-shaping (7) and high frequency welding (8) - eliminating the external weld seam by chipping with a fixed tool during the advancement of the tube - cutting the tube into cylindrical segments (15, 16) - rolling the cylindrical segments to shape the rim (20); a plant for implementing the method comprises: - a clamp for clamping and locking the tube and arranged to move in the direction of the tube axis between two end positions, - a circular frame rotating in front of said clamp and carrying peripherally in equidistant positions at least two idle circular cutters each supported at the end of a rod of a cylinder-piston unit located on the frame in a radial position, - a plug coaxial to the clamp and shaped to provide a shoulder able to act as a backing blade for said idle circular cutters, and a slightly tapered portion of diameter substantially equal to the inner diameter of the tube and provided with electromagnets, - means for moving said clamp in the forward and rearward directions, - means for moving said plug in the forward and rearward directions; the sheet metal wheels for motor vehicles have their rim welded along a generating line by high-frequency welding.

IPC 1-7

B21D 53/30

IPC 8 full level

B21D 53/30 (2006.01)

CPC (source: EP)

B21D 53/30 (2013.01)

Citation (search report)

- US 3333754 A 19670801 - CATALANO PHILIP F, et al
- PATENT ABSTRACTS OF JAPAN, vol. 13, No. 13 (M-783)[3361], 12th January 1989; & JP-A-63 224 826 (SUMITOMO METAL IND. LTD) 19-09-1988

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR LI LU NL SE

DOCDB simple family (publication)

EP 0393250 A1 19901024

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EP 89200984 A 19890418