

Title (en)

APPARATUS FOR MAKING TUBES WITH HOLES IN THE WALLS

Publication

EP 0125540 B1 19880113 (DE)

Application

EP 84104663 A 19840425

Priority

DE 3317313 A 19830511

Abstract (en)

[origin: US4616540A] The invention relates to a method for making tubes formed with holes in their peripheral wall, particularly muffler tubes, in which the tubes are formed of sheet metal and subsequently welded along abutting edges of the sheet metal. Known from practical application is a method of the type defined above, in which a hole pattern is initially punched into a sheet metal strip. The metal strip is subsequently formed, as by a roll forming method, into tubes which are then closed by a longitudinal weld seam. After the welding step the tubes are cut to length by means of a cutting device, the operation of which is controlled depending on the hole pattern. It is the object of an invention to provide a method and apparatus of the type defined above which in addition to the advantage of economical production offers the possibility of forming the tubes with holes over their entire periphery. With regard to the method according to the invention, this object is attained by introducing a backing element into the previously welded tube and forcing it into engagement with the interior wall surface thereof, followed by the formation of holes from the exterior in the area of the tube supported by the backing element.

IPC 1-7

B21D 28/28

IPC 8 full level

B21C 37/15 (2006.01); **B21D 28/28** (2006.01)

CPC (source: EP US)

B21C 37/15 (2013.01 - EP US); **B21D 28/28** (2013.01 - EP US); **Y10T 83/0596** (2015.04 - EP US)

Citation (examination)

"METALLBEARBEITUNG", Band I, 7. Auflage, Fachbuchverlag Dr. Pfanneberg & Co. 6300 Giessen (BRD), 1970, Seite 172

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

US 4616540 A 19861014; AT E31883 T1 19880115; CA 1243826 A 19881101; DE 3317313 C1 19840830; DE 3468633 D1 19880218; EP 0125540 A2 19841121; EP 0125540 A3 19860102; EP 0125540 B1 19880113; JP H051092 B2 19930107; JP S59212130 A 19841201

DOCDB simple family (application)

US 60859684 A 19840509; AT 84104663 T 19840425; CA 453770 A 19840508; DE 3317313 A 19830511; DE 3468633 T 19840425; EP 84104663 A 19840425; JP 9381084 A 19840510