

Title (en)

Method and apparatus for manufacturing metal can bodies having an internal coating.

Title (de)

Verfahren und Vorrichtung zur Herstellung von Metalldosenrumpfen mit Innenbeschichtung.

Title (fr)

Procédé et dispositif pour fabriquer des corps de boîte en métal pourvus d'un revêtement intérieur.

Publication

**EP 0426258 B1 19940727 (EN)**

Application

**EP 90202885 A 19901030**

Priority

NL 8902697 A 19891101

Abstract (en)

[origin: EP0426258A1] A process is provided for manufacturing internally coated can bodies from metal sheets in one continuous processing run, comprising the steps of: - providing metal sheets of which the width is a little greater than the periphery of a can body and the length corresponds to the height of a can body - transporting successive sheets in lengthwise feed direction - bending the metal sheets transversely of the lengthwise feed direction such that their edge zones mutually overlap - mutually adhering or joining the overlapping portions of the edge zones, preferably by welding - applying an internal coating on the thus formed tubular bodies, pushing one against the other, by means of a coating device carried by an arm extending in lengthwise direction inside said successive can bodies, said coating being preferably obtained by applying electrically charged plastic powder and causing said powder coating to melt, spread out and enamel by supplying heat and then curing the thus formed coating by cooling. An apparatus for performing the inventive method comprises - conveyor means (2, 4) for feeding metal sheets (3) to a flattening station (6) - bending means (7) for bending the flattened sheet transversely of the conveying direction (5) to a rounded shape (3') with overlapping edge portions - means for joining said overlapping portions so as to form successive can bodies - transporting means (114, 115) for transporting the can bodies in an axial direction (13) - applying device for applying an internal coating of plastic powder on said bodies, which device is carried by an arm (14) which extends in axial direction inside said bodies from a region located upstream relative to said adhering/joining means - heat treating means for causing said powder coating to melt, spread out, enamel and cure.

IPC 1-7

**B21D 51/26**; B05B 5/08; B05B 13/06

IPC 8 full level

**B05B 13/06** (2006.01); **B21D 51/26** (2006.01)

CPC (source: EP)

**B05B 13/0609** (2013.01); **B21D 51/2676** (2013.01)

Cited by

NL1008467C2; EP0744218A1; CN1078503C; US5997643A; US5725670A; EP0742680A3; US5821504A; FR2687336A1; US5497935A; WO2011116485A2; US6227769B1; WO9944768A1; WO9315856A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 0426258 A1 19910508**; **EP 0426258 B1 19940727**; AT E109040 T1 19940815; DE 69011039 D1 19940901; DE 69011039 T2 19941124; DK 0426258 T3 19941128; ES 2057360 T3 19941016; NL 8902697 A 19910603

DOCDB simple family (application)

**EP 90202885 A 19901030**; AT 90202885 T 19901030; DE 69011039 T 19901030; DK 90202885 T 19901030; ES 90202885 T 19901030; NL 8902697 A 19891101