

Title (en)

METHOD FOR MANUFACTURING A PIPE WITH A NOT CIRCULAR CROSS-SECTION AND DEVICE THEREFOR

Title (de)

VERFAHREN ZUM HERSTELLEN EINES ROHRES MIT EINEM NICHT KREISFÖRMIGEN QUERSCHNITT SOWIE VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCEDE DE FABRICATION D'UN TUYAU DE SECTION NON CIRCULAIRE ET DISPOSITIF ASSOCIE

Publication

**EP 1169150 B1 20050601 (EN)**

Application

**EP 00917404 A 20000421**

Priority

- JP 0002612 W 20000421
- JP 15037999 A 19990421

Abstract (en)

[origin: WO0064606A1] The objective of the invention is, in the forming of a cylindrical pipe (60) into an angular pipe (70), to manufacture an angular pipe (70) in small volumes and with high efficiency correspondent to the variety of angular pipes demanded. This invention is configured from a plurality of horizontal forming roll pairs (na, nb) and a plurality of vertical forming roll pairs (nc, nd) arranged alternately in the direction of travel (HL) of the cylindrical pipe (60), and a configuration is further adopted in which the forming rolls are divided into several groups and incorporated in a common support frame for each group, and, a control mechanism is employed to vary the positions of the rolls to the pipe using supporting frame units. By the employment of this roll position control mechanism the roll positions incorporated using the supporting frame units and roll gaps in the vertical and horizontal direction are altered, and by the passing through the altered roll gap and the application of the desired deformation to the desired cylindrical pipe (70) the desired angular pipe is formed. Using a configuration such as this, forming of the angular pipe (60) is achieved with high productivity with differing dimensions, as appropriate, from a cylindrical pipe of differing dimensions with no changing of the forming rolls at all.

IPC 1-7

**B21D 3/05**; **B21B 17/14**; **B21B 13/12**; **B21B 31/02**

IPC 8 full level

**B21B 13/12** (2006.01); **B21B 17/14** (2006.01); **B21C 37/15** (2006.01); **B21D 5/12** (2006.01); **B21D 15/02** (2006.01); **B21B 31/20** (2006.01)

CPC (source: EP)

**B21B 13/12** (2013.01); **B21B 17/14** (2013.01); **B21C 37/155** (2013.01); **B21D 15/02** (2013.01); **B21B 31/20** (2013.01)

Cited by

CN109127736A; EP3778052A4

Designated contracting state (EPC)

AT DE IT

DOCDB simple family (publication)

**WO 0064606 A1 20001102**; AT E296691 T1 20050615; DE 60020545 D1 20050707; DE 60020545 T2 20060427; EP 1169150 A1 20020109; EP 1169150 B1 20050601; JP 2000301233 A 20001031

DOCDB simple family (application)

**JP 0002612 W 20000421**; AT 00917404 T 20000421; DE 60020545 T 20000421; EP 00917404 A 20000421; JP 15037999 A 19990421