

Title (en)

HIGH-PRESSURE TUBE AND METHOD FOR PRODUCING SAME

Title (de)

HOCHDRUCKROHR UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

TUYAU HAUTE PRESSION ET PROCÉDÉ POUR LE FABRIQUER

Publication

**EP 4263083 A2 20231025 (DE)**

Application

**EP 21839361 A 20211210**

Priority

- DE 102020133779 A 20201216
- EP 2021085290 W 20211210

Abstract (en)

[origin: WO2022128816A2] The aim of the invention is to provide a tube which has a length of over 10 m, is suitable for high-pressure applications at an internal pressure of 2 bar or more, and does not have the disadvantages of tubes that have been produced by means of conventional drawing rolling or cold pilger rolling methods. This aim is achieved by providing a tube in which the wall thickness is equal to or greater than the internal diameter, the axial length is 12 m or more, the tensile strength is  $R_m$  850 N/mm<sup>2</sup> or more and the average roughness  $R_a$  of the internal wall surface is 0.8  $\mu$ m or less. The invention also relates to a method for producing such a tube, in which method a blank is formed into a tubular intermediate product in a first forming step after the cold forming process, the tubular intermediate product obtained in this way is annealed, and the annealed tubular intermediate product is formed into a tube in a second forming step after the cold forming process.

IPC 8 full level

**B21C 1/18** (2006.01); **B21B 21/00** (2006.01); **B21C 1/22** (2006.01); **C21D 1/26** (2006.01); **C21D 6/00** (2006.01); **C21D 7/10** (2006.01); **C21D 8/10** (2006.01); **C21D 9/14** (2006.01)

CPC (source: EP KR US)

**B21B 21/00** (2013.01 - KR); **B21C 1/18** (2013.01 - EP KR US); **B21C 1/22** (2013.01 - EP KR US); **C21D 1/26** (2013.01 - EP KR); **C21D 6/004** (2013.01 - EP KR); **C21D 7/10** (2013.01 - EP KR); **C21D 8/105** (2013.01 - EP KR US); **C21D 9/14** (2013.01 - EP KR US); **F16L 9/02** (2013.01 - KR US); **B21B 21/00** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022128816 A2 20220623**; **WO 2022128816 A3 20220818**; CN 116568414 A 20230808; DE 102020133779 A1 20220623; EP 4263083 A2 20231025; KR 20230118853 A 20230814; US 2024093809 A1 20240321

DOCDB simple family (application)

**EP 2021085290 W 20211210**; CN 202180083777 A 20211210; DE 102020133779 A 20201216; EP 21839361 A 20211210; KR 20237019834 A 20211210; US 202118266813 A 20211210