

Title (en)

PIERCING MANDREL HAVING AN IMPROVED SERVICE LIFE FOR PRODUCING SEAMLESS TUBES

Title (de)

LOCHDORN MIT VERBESSERTER STANDZEIT ZUR HERSTELLUNG NAHTLOSSER ROHRE

Title (fr)

MANDRIN À DURÉE DE VIE AMÉLIORÉE POUR FABRIQUER DES TUBES SANS SOUDURE

Publication

**EP 2991780 A1 20160309 (DE)**

Application

**EP 14772318 A 20140922**

Priority

- DE 102013110725 A 20130927
- EP 2014070153 W 20140922

Abstract (en)

[origin: WO2015044094A1] The invention relates to a piercing mandrel (4) for piercing heated round blooms (3) made of metal, in order to produce seamless tubes (6), said piercing mandrel comprising a piercing mandrel nose (4.2) and a piercing mandrel main body (4.1) that can be connected to a mandrel bar (5). According to the invention, the external diameter of the piercing mandrel nose (4.2) is conically tapered in the longitudinal direction towards the piercing mandrel main body (4.1), in order to increase the service life of the piercing mandrel when cross-roll piercing round blooms made of metal, in particular made of more highly alloyed steel materials that are difficult to form, while taking into consideration a qualitative improvement of the inner surface of the pierced round blooms, and while reducing the cost of tools.

IPC 8 full level

**B21B 25/00** (2006.01)

CPC (source: EP US)

**B21B 25/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2015044094A1

Cited by

DE102021128128A1; WO2023073011A1

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

DOCDB simple family (publication)

**DE 102013110725 B3 20150212**; AR 097774 A1 20160413; CN 105377459 A 20160302; CN 105377459 B 20170718; EA 030534 B1 20180831; EA 201690448 A1 20160729; EP 2991780 A1 20160309; EP 2991780 B1 20170412; ES 2628728 T3 20170803; JP 2016531759 A 20161013; JP 6397032 B2 20180926; MX 2016003718 A 20160916; MX 370022 B 20191128; PL 2991780 T3 20170929; UA 116475 C2 20180326; US 2016346820 A1 20161201; US 9937540 B2 20180410; WO 2015044094 A1 20150402

DOCDB simple family (application)

**DE 102013110725 A 20130927**; AR P140103560 A 20140925; CN 201480039565 A 20140922; EA 201690448 A 20140922; EP 14772318 A 20140922; EP 2014070153 W 20140922; ES 14772318 T 20140922; JP 2016544747 A 20140922; MX 2016003718 A 20140922; PL 14772318 T 20140922; UA A201512517 A 20140922; US 201414917371 A 20140922