

Title (en)

A METHOD FOR MANUFACTURING OF A TUBULAR ELEMENT COMPRISING A TUBE WITH A FIXEDLY ARRANGED FLANGE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES RÖHRENFÖRMIGEN ELEMENTS, DAS EIN ROHR MIT EINEM FEST ANGEORDNETEN FLANSCH UMFASST

Title (fr)

PROCEDE DE FABRICATION D'UN ELEMENT TUBULAIRE COMPORTANT UN TUBE MUNI D'UN FLASQUE DISPOSE DE FAÇON FIXE

Publication

**EP 1960135 A4 20110511 (EN)**

Application

**EP 06824639 A 20061214**

Priority

- SE 2006050581 W 20061214
- SE 0502768 A 20051215

Abstract (en)

[origin: WO2007070003A1] The present invention relates to a method for manufacturing a tubular element which comprises a tube (1') with a fixedly connected flange (2'). The tubular element is manufactured by means of a hydroforming process with such a high internal pressure in a tubular blank (1) that it expands plastically to a final tube (V) at the same time as the expansion of the tubular blank (1) widens an opening of the flange blank in an at least partly elastic manner such that a permanent state of tension is created in the final flange (2'), which state exerts a compressive force on the tube (V) in a connecting area (7) such that a fixed connection is accomplished between the flange (2') and the tube (V).

IPC 8 full level

**B21D 26/02** (2011.01); **B21D 26/033** (2011.01); **B21D 39/04** (2006.01)

CPC (source: EP SE)

**B21D 26/033** (2013.01 - EP); **B21D 39/04** (2013.01 - EP); **B21D 39/046** (2013.01 - SE)

Citation (search report)

- [XY] DE 4306496 A1 19940601 - ZEUNA STAERKER KG [DE]
- [X] JP S62251410 A 19871102 - MUSASHI SEIMITSU KOGYO KK
- [X] JP S639603 A 19880116 - MUSASHI SEIMITSU KOGYO KK
- [X] US 4763503 A 19880816 - HUGHES ROBERT W [US], et al
- [YA] US 5101554 A 19920407 - BREUER HANS-JUERGEN [DE], et al
- [A] EP 0320789 A2 19890621 - EMITEC EMISSIONSTECHNOLOGIE [DE]
- [A] DE 10002620 A1 20010726 - VOLKSWAGEN AG [DE]
- [A] DE 3302762 A1 19840216 - KOKAN KAKO CO [JP]
- See also references of WO 2007070003A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2007070003 A1 20070621**; EP 1960135 A1 20080827; EP 1960135 A4 20110511; SE 0502768 L 20070616; SE 529552 C2 20070911

DOCDB simple family (application)

**SE 2006050581 W 20061214**; EP 06824639 A 20061214; SE 0502768 A 20051215