

Title (en)
APPARATUS FOR MANUFACTURING TUBE YOKE

Title (de)
VORRICHTUNG ZUR HERSTELLUNG EINER ROHRGABEL

Title (fr)
APPAREIL DE FABRICATION D'ÉTRIER DE TUBE

Publication
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Application
EP 16901783 A 20161018

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Abstract (en)
[origin: EP3456430A1] The present invention relates to a tube yoke manufacturing apparatus in which a tube yoke having a spline in a tube part through a forging process can be quickly manufactured and the shape of the spline may be prevented from being distorted. The tube yoke manufacturing apparatus according to the present invention comprises a plurality of tube yoke forming dies configured to form a tube yoke comprising a tube part and a yoke part by inserting a material into a dice and pressing the material by means of a punch, wherein the apparatus further comprises a spline forging die provided with a forming pin having a spline part formed in an outer circumferential surface thereof and thereby making a spline formed inside the tube part as being inserted into the tube part.

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Citation (search report)
• [X] WO 2008091134 A1 20080731 - KO JIN BEOM [KR]
• [A] JP S61201926 A 19860906 - TSUDA IND
• See references of WO 2017195950A1

Cited by
US11242085B2; US11541450B2; WO2022131594A1

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