

Title (en)  
METHOD FOR FORMING A SPANNER

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES SCHRAUBENSCHLÜSSELS

Title (fr)  
PROCÉDÉ DE FABRICATION D'UNE CLÉ PLATE

Publication  
**EP 3495070 A1 20190612 (EN)**

Application  
**EP 17206066 A 20171208**

Priority  
EP 17206066 A 20171208

Abstract (en)  
A method (3) for forming a spanner includes following steps (31, 32, 33, 34): preparing a cylindrical metal blank (7), heating the metal blank (7) to become softened, shaping the metal blank (7) by pressing and pushing the metal blank (7) forward on a shaping die (52) with a pushing unit (53) to form two head sections (71) and a holding section (72) connected between the head sections (71), and stamping the metal blank (7) when the metal blank (7) still has residual heat to flatten the holding section (72) and shape each head section (71) into a spanner-shaped part (711) . Therefore, a spanner product is made. The method (3) simplifies the processing procedures, decreases residual materials, achieves a quick shaping operation, reduces processing costs, and increases the forming efficiency.

IPC 8 full level  
**B21H 1/18** (2006.01); **B21H 7/00** (2006.01); **B21K 5/16** (2006.01)

CPC (source: EP)  
**B21H 1/18** (2013.01); **B21H 7/00** (2013.01); **B21K 5/16** (2013.01)

Citation (search report)  
• [XY] FR 2831473 A1 20030502 - FACOM [FR]  
• [I] FR 1426815 A 19660128 - ZENTRALE ENTWICKLUNG KONSTRUKT  
• [Y] WO 2016179780 A1 20161117 - HUIJI DENG YUN AUTO-PARTS (HOLDING) CO LTD [CN]  
• [Y] WO 2009120397 A1 20091001 - AMERICAN AXLE & MFG INC [US], et al  
• [A] US 2016158827 A1 20160609 - CHEN MING-CHANG [TW], et al

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

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