

Title (en)  
PROCESS FOR MANUFACTURING AN INTERNALLY COOLED VALVE HAVING A COOLING STRUCTURE, AND VALVE MANUFACTURED BY SAID METHOD

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES INNENGEKÜHLTEN VENTILS MIT EINER KÜHLSTRUKTUR SOWIE EIN MIT DEM VERFAHREN HERGESTELLTES VENTIL

Title (fr)  
PROCÉDÉ DE FABRICATION D'UNE SOUPE À REFROIDISSEMENT INTÉRIEUR DOTÉE D'UNE STRUCTURE DE REFROIDISSEMENT ET SOUPE FABRIQUÉE AU MOYEN DUDIT PROCÉDÉ

Publication  
**EP 3585986 B1 20200826 (DE)**

Application  
**EP 18710795 A 20180228**

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• EP 2018054964 W 20180228

Abstract (en)  
[origin: WO2019001779A1] The invention relates to a process for manufacturing an internally cooled valve, said process involving providing an externally at least partly cylindrical semifinished product (2), creating or increasing the depth of an at least partly cylindrical cavity in the semifinished product (2) in a hot-working procedure using a male die such that a valve blank is formed; during the hot-working procedure, a recess on an end face of the male die forms a structure on the bottom of the cavity.

IPC 8 full level  
**B21K 1/22** (2006.01); **F01L 3/14** (2006.01)

CPC (source: EP KR US)  
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Citation (examination)  
• DE 102015118495 A1 20170504 - WF MASCHB UND BLECHFORMTECHNIK GMBH & CO KG [DE]  
• DE 102015116009 B3 20170126 - FEDERAL-MOGUL VALVETRAIN GMBH [DE]  
• EP 2811126 A1 20141210 - MITSUBISHI HEAVY IND LTD [JP], et al  
• US 2280758 A 19420421 - CARL VOORHIES  
• CN 202645663 U 20130102 - SOUTHERN CHINA AVIAT IND  
• US 2328512 A 19430831 - THOREN THEODORE R, et al  
• JP 2014084725 A 20140512 - MITSUBISHI HEAVY IND LTD, et al

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DOCDB simple family (publication)  
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