

Title (en)  
RADIAL EXTRUSION PROCESS COMBINED WITH INSIDE TUBE IRONING

Title (de)  
RADIAL-EXTRUSIONSVERFAHREN KOMBINIERT MIT INNEREM GLATTZIEHEN DES ROHRES

Title (fr)  
PROCEDE D'EXTRUSION RADIALE COMBINE AVEC L'ETIRAGE DE TUBE INTERIEUR

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Application  
**EP 94916475 A 19940516**

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Abstract (en)  
[origin: WO9426437A2] A subject of the invention is the radial extrusion process combined with inside tube ironing, which is an essence a cold extrusion process and can be reckoned among bulk metal forming processes. It enables tube shaped metal semiproducts to be formed into different final shaped parts or parts that are intended for additional working, for example by machining. The process is grounded on insertion of a tube (1), which may be on one end previously expanded, into a proper shaped die (3), where on one side there is a punch (4) which is retained with a determined force (F1) and inside which lies a free movable mandrel (5), while from the other side in working stroke the counter-punch (2) extrudes the difference of tube volume which results from ironing of the tube (1), in the direction of counter-punch (2) travel so, that the material fills up the starting clearance between the mandrel (5) and the tube (1), the space between the tube (1) and the punch (2) and arbitrary shaped space (B) in the punch (2) or in the die (3).

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