

Title (en)  
PRODUCTION SYSTEM, IN PARTICULAR FOR FREE-FORM BENDING, HAVING AN INTEGRATED WORKPIECE AND TOOL MANIPULATOR

Title (de)  
FERTIGUNGSANLAGE, INSBESONDERE FÜR DAS FREIFORMBIEGEN MIT EINEM INTEGRIERTEN WERKSTÜCK- UND WERKZEUGMANIPULATOR

Title (fr)  
INSTALLATION D'USINAGE, NOTAMMENT POUR LE FORMAGE LIBRE AVEC UN MANIPULATEUR DE PIÈCE ET D'OUTIL INTÉGRÉ

Publication  
**EP 2498928 A1 20120919 (DE)**

Application  
**EP 10798452 A 20101109**

Priority  
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• AT 2010000432 W 20101109

Abstract (en)  
[origin: WO2011057312A1] The invention relates to a production system (1) for free-form bending. The production system comprises a bending press (3) having bending tools (4), which are interchangeably retained in tool holders (19, 20), a manipulator (28) having gripping tongs (30), which have gripping fingers (31, 32) and a recess (35, 36) that is arranged in the bending tool (4) and that has stop areas (49, 50) spaced apart from each other for manipulating the bending tool (4). At the ends (38, 39) of the gripping fingers (31, 32), additional contact surfaces (40) are formed on sides of the gripping fingers (31, 32) facing away from each other. The ends (38, 39) of the gripping fingers (31, 32) are inserted into the recess (35, 36) in order to retain the bending tool (4). The contact surfaces (40) are pressed against the stop areas (49, 50) in the direction opposite from the clamping force for retaining the workpiece (2) to be produced.

IPC 8 full level  
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Citation (search report)  
See references of WO 2011057312A1

Cited by  
US10384249B2; WO2016054668A1

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