

Title (en)

VACUUM CLAMPING DEVICE FOR FLAT PIECES

Publication

EP 0053278 B1 19850522 (DE)

Application

EP 81108978 A 19811027

Priority

US 21093680 A 19801128

Abstract (en)

[origin: US4357006A] This is a vacuum clamp for holding workpieces which assures that the workpiece is held without distortion. This is accomplished by providing a fixed support, with a convex surface, and a flexible seal around the fixed support so that when a vacuum is drawn within the seal the workpiece being held abuts the fixed support tangentially. The convex surface of the support does not force the workpiece to conform to the surface of the support as it would if the surface of the support were flat.

IPC 1-7

B23Q 3/08

IPC 8 full level

B25J 15/06 (2006.01); **B25B 11/00** (2006.01); **B65H 3/08** (2006.01)

CPC (source: EP US)

B25B 11/005 (2013.01 - EP US); **Y10T 83/748** (2015.04 - EP US); **Y10T 279/11** (2015.01 - EP US); **Y10T 408/554** (2015.01 - EP US)

Cited by

FR2707541A1; EP0604339A1; FR2699846A1; EP2613347A1; RU2624883C2; US10130971B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0053278 A2 19820609; **EP 0053278 A3 19830720**; **EP 0053278 B1 19850522**; DE 3170635 D1 19850627; JP H025559 B2 19900202; JP S5796794 A 19820616; US 4357006 A 19821102

DOCDB simple family (application)

EP 81108978 A 19811027; DE 3170635 T 19811027; JP 12950081 A 19810820; US 21093680 A 19801128