

Title (en)  
Mechanical assembly device

Title (de)  
Vorrichtung zum mechanischen Fügen

Title (fr)  
Dispositif d'assemblage mécanique

Publication  
**EP 0995515 B1 20040225 (DE)**

Application  
**EP 99119411 A 19990930**

Priority  
DE 19847794 A 19981016

Abstract (en)  
[origin: DE19847794C1] The appts. to form a shaped joint between two sheet plates has a limit at the shaping tool as a switch bolt (14). On a tool movement which reaches the required penetration depth, the limit (14) is moved against a switch rod (17), which is locked to the closure (22) of a valve (18) for the fluid supply in a release ratchet grip, to define the limit of the downwards movement. When engaged, the ratchet grip maintains a fluid flow, and the switch rod (17) acts as a trip for the ratchet to release the closure (22), switch the valve (18) and block the fluid flow.

IPC 1-7  
**B21D 39/03**

IPC 8 full level  
**B21D 39/03** (2006.01)

CPC (source: EP US)  
**B21D 39/031** (2013.01 - EP US); **Y10T 29/49936** (2015.01 - EP US); **Y10T 29/53065** (2015.01 - EP US); **Y10T 29/53996** (2015.01 - EP US)

Cited by  
DE10021781A1; DE10021781B4; WO02068139A1

Designated contracting state (EPC)  
CH FR GB LI

DOCDB simple family (publication)  
**DE 19847794 C1 19990819**; CA 2284090 A1 20000416; EP 0995515 A2 20000426; EP 0995515 A3 20020703; EP 0995515 B1 20040225;  
JP 2000117361 A 20000425; US 6240627 B1 20010605

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**DE 19847794 A 19981016**; CA 2284090 A 19990928; EP 99119411 A 19990930; JP 29284199 A 19991014; US 41881599 A 19991015