

Title (en)  
Improvements introduced in Modular tabletop systems for connecting metal pieces by flanging

Title (de)  
Modulares Tischsystem zum Verbinden von Metallplatten durch Bördeln

Title (fr)  
Système de table modulaire pour la connexion de pièces métalliques par sertissage

Publication  
**EP 0924005 A2 19990623 (EN)**

Application  
**EP 98204241 A 19981214**

Priority  
ES 9702619 A 19971217

Abstract (en)  
The flanging operation is a folding operation of the contour flanging (20) of an exterior sheet or panel (21), on the edge of another inside one (22) by plastic mechanical deformation to connect both sheets. This folding is carried out in two successive operations: a pre-flanging step that folds said flange (20) to a intermediate position, and another final flanging position in which said flange (20) is closed totally over the edge of the interior one (22). The rising and lowering of the flanging group (2) is obtained by electric operation that causes the rotation of a spindle (7) in which the ball nut (4) is mounted. The spindle (7) includes an elastic package (10) that absorbs the force exerted by the flanging unit (2). The winding of the electric motor (1) ceases operating upon reaching a certain current level depending on the force to be exerted. The final flanging blades (14) are located in the top part of the flanging group and are attached to the same blade holder (13) as the pre-flanging blades (15). <IMAGE>

IPC 1-7  
**B21D 39/02**

IPC 8 full level  
**B21D 5/01** (2006.01); **B21D 5/16** (2006.01); **B21D 39/02** (2006.01)

CPC (source: EP)  
**B21D 39/021** (2013.01)

Citation (applicant)  
ES 9601677 A

Cited by  
DE10332942B4; DE20004498U1; FR2818173A1; CN108213230A; CN108176777A; US7487659B2; WO0030782A1; WO0168285A1; WO0249786A1; WO2005046905A1; US6314784B1; US6477881B2

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**EP 0924005 A2 19990623; EP 0924005 A3 20010314; EP 0924005 B1 20021127**; AR 017824 A1 20011024; BR 9805554 A 19991103; CZ 296492 B6 20060315; CZ 419298 A3 19991013; DE 69809695 D1 20030109; DE 69809695 T2 20030731; ES 2154529 A1 20010401; ES 2154529 B1 20011016; ES 2187883 T3 20030616; PL 330340 A1 19990621

DOCDB simple family (application)  
**EP 98204241 A 19981214**; AR P980106220 A 19981209; BR 9805554 A 19981216; CZ 419298 A 19981217; DE 69809695 T 19981214; ES 9702619 A 19971217; ES 98204241 T 19981214; PL 33034098 A 19981216