

Title (en)

ADJUSTABLE FORCE DEFLECTION DEVICE FOR VEHICLE WORK BENCHES

Title (de)

VERSTELLBARE KRAFTUMLENKUNG FÜR KRAFTFAHRZEUG-RICHTBÄNKE

Title (fr)

DISPOSITIF DE DEFLEXION DE FORCES REGLABLE POUR BANCS DE DRESSAGE POUR VEHICULES

Publication

**EP 0851794 B1 20000726 (DE)**

Application

**EP 96933373 A 19960920**

Priority

- DE 19535461 A 19950923
- EP 9604170 W 19960920

Abstract (en)

[origin: US6085568A] PCT No. PCT/EP96/04170 Sec. 371 Date Oct. 5, 1998 Sec. 102(e) Date Oct. 5, 1998 PCT Filed Sep. 20, 1996 PCT Pub. No. WO97/10906 PCT Pub. Date Mar. 27, 1997The invention is an adjustable force deflection device which can be used to guide, deflect, and apply force used in the restoration of deformed vehicle bodies on work benches or straighteners. The device consists of at least two fixable, pivoted joints, each comprising a pair of coupling discs that can be independently rotated about a common central axis to a desired angle relative to each other and then fixed in place. One of the coupling discs in each of the at least two pivotable joints is connected to either a separate force application device or to a tool attached to the portion of the vehicle body to be restored. The second of the coupling discs in each pair is connected to at least one rigid, elongated element of various possible sizes and shapes, or to a plurality of such rigid, elongated elements and interconnecting pivotable joints connected in alternating series. The pivotable joints and interconnecting rigid elements can be arranged in combinations of angles between each other so as to direct the restoring force around an intervening obstacle, to precisely direct the force to be applied to the vehicle body, or to transform an applied pulling force into a pushing force and vice versa.

IPC 1-7

**B21D 1/12; B21D 1/14**

IPC 8 full level

**B21D 1/12 (2006.01); B21D 1/14 (2006.01)**

CPC (source: EP US)

**B21D 1/12 (2013.01 - EP US); Y10S 72/708 (2013.01 - EP US)**

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**US 6085568 A 20000711; AT E194934 T1 20000815; AU 7213696 A 19970409; DE 19535461 A1 19970327; DE 19680807 D2 20000127;**  
**DE 29680804 U1 19991021; DE 59605657 D1 20000831; EP 0851794 A1 19980708; EP 0851794 B1 20000726; WO 9710906 A1 19970327**

DOCDB simple family (application)

**US 4361798 A 19981005; AT 96933373 T 19960920; AU 7213696 A 19960920; DE 19535461 A 19950923; DE 19680807 T 19960920;**  
**DE 29680804 U 19960920; DE 59605657 T 19960920; EP 9604170 W 19960920; EP 96933373 A 19960920**