

Publication

EP 0543815 A4 19940330

Application

EP 91904356 A 19910201

Priority

- US 9100709 W 19910201
- US 56729090 A 19900814
- US 63882891 A 19910108

Abstract (en)

[origin: WO9203261A1] An adjustable wrench having a housing (12) with a handle (14) and having a plurality of jaws (70) that extend out the bottom of the housing and move radially with respect to one another. The housing (12) contains a control disk (28) which may be locked to the housing (12) to prevent the jaws (70) from turning with respect to the housing (12). A jaw (70) adjusting disk (80) is disposed beneath the control disk (28) and extends out the bottom of the housing (12). The adjusting disk (80) contains cams (92, 100) that open and close the jaws (70) depending upon the direction of rotation of the adjusting disk (80).

IPC 1-7

B25B 13/46

IPC 8 full level

B25B 13/44 (2006.01); **B25B 13/46** (2006.01); **B25B 21/00** (2006.01)

CPC (source: EP)

B25B 13/44 (2013.01); **B25B 13/463** (2013.01); **B25B 13/466** (2013.01); **B25B 13/467** (2013.01); **B25B 21/004** (2013.01)

Citation (search report)

- [X] US 2580247 A 19511225 - GASTON SECONDI RAYMOND, et al
- [X] US 4932292 A 19900612 - MERRICK JAKE [US]
- [PX] DE 3924323 A1 19910131 - BAYERISCHE MOTOREN WERKE AG [DE]
- [DE] WO 9101854 A1 19910221 - FOSSELLA GREGORY [US]
- [A] US 1450641 A 19230403 - OGRABISZ STEPHEN J
- [A] US 1357935 A 19201109 - ARGETSINGER ULYSSES G
- [A] US 1410080 A 19220321 - JOSEF SCHWAHLEN
- [A] US 2860881 A 19581118 - JEAN PERRACHIONE
- See references of WO 9203261A1

Cited by

US8402863B2; US8833209B2; US6889579B1; US7992470B2

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

WO 9203261 A1 19920305; DE 69131896 D1 20000210; DE 69131896 T2 20000615; EP 0543815 A1 19930602; EP 0543815 A4 19940330; EP 0543815 B1 20000105; ES 2140387 T3 20000301

DOCDB simple family (application)

US 9100709 W 19910201; DE 69131896 T 19910201; EP 91904356 A 19910201; ES 91904356 T 19910201