

Title (en)
LOCKING OR EXPANDING PLIERS

Title (de)
KLEMM- ODER SPREIZZANGE

Title (fr)
PINCE ETAU OU PINCE EXTENSIBLE

Publication
EP 1401616 B1 20070718 (DE)

Application
EP 02754649 A 20020610

Priority
• DE 10129130 A 20010616
• EP 0206331 W 20020610

Abstract (en)
[origin: WO02102553A2] The invention relates to locking or expanding pliers (1) comprising two plier arms (4,5) which are joined to each other in the manner of a scissor-type joint, said arms forming grip sections (6,7) on one end and clamping sections (12,13) on the other end and being able to be locked in various clamping positions, whereby the clamping results from the elastic deformation of at least one of the two plier arms (4,5) occurring when the plier arms (4,5) are placed in a clamping position. According to the invention, a spring element (F) is arranged in the active area between the clamping section and the grip section in order to achieve improved proportioning of the clamping force, whereby both grip sections (6,7) can be disposed on top of each other and placed in another locking position (19,20), when both clamping sections (12,13) are maintained in a distanced position (a), in order to increase clamping power.

IPC 8 full level
B25B 7/12 (2006.01); **B25B 7/02** (2006.01); **B25B 7/14** (2006.01)

CPC (source: EP US)
B25B 7/02 (2013.01 - EP US); **B25B 7/12** (2013.01 - EP US); **B25B 7/14** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02102553 A2 20021227; **WO 02102553 A3 20030918**; AT E367242 T1 20070815; AU 2002320839 A1 20030102; CA 2455262 A1 20021227; CA 2455262 C 20100511; DE 10129130 A1 20030109; DE 50210514 D1 20070830; EP 1401616 A2 20040331; EP 1401616 B1 20070718; US 2004255730 A1 20041223; US 6973859 B2 20051213

DOCDB simple family (application)
EP 0206331 W 20020610; AT 02754649 T 20020610; AU 2002320839 A 20020610; CA 2455262 A 20020610; DE 10129130 A 20010616; DE 50210514 T 20020610; EP 02754649 A 20020610; US 48057804 A 20040818