Title (en)
  PLIERS

Title (de)
  ZANGE

Title (fr)
  TENAILLE

Publication
  EP 3411188 B1 20200408 (DE)

Application
  EP 17703369 A 20170201

Priority
  • DE 102016101927 A 20160204
  • EP 2017052100 W 20170201

Abstract (en)
  [origin: WO2017134074A1] The invention relates to a pair of pliers (1) having two pliers legs (2, 3) that are arranged in a crossing manner, wherein a fixed joint is formed, having a joint pin (8), wherein the joint pin (8) has, in any case assigned to an outer side (18) of a pliers leg (2, 3), a first conical portion (19) that widens towards the outer side (18), wherein, furthermore, the pliers leg (2, 3) is assigned a second conical portion (21) which bears on the first conical portion (19) and transitions into a first mouth portion (22) that leads into the outer side (18) of the pliers leg (2, 3). In order to configure a pair of pliers of the type in question in a further improved manner, it is proposed that the joint pin (8) has a second mouth portion (20) which, starting from the outer side (18) of the pliers leg (2, 3) and perpendicularly to a joint axis (x), overlaps the first mouth portion (22), wherein the first and the second mouth portion (22, 20) bound a circular clearance (23) between one another in a radially encircling manner, the radial dimension (a) of said clearance (23) corresponding to 0.05 to 0.15 times the radial dimension (b), measured from the joint axis (x), of the joint pin (8) in the region of the second mouth portion (20).

IPC 8 full level
  B25B 7/06 (2006.01); **B25B 7/08** (2006.01)

CPC (source: EP RU US)
  B25B 7/06 (2013.01 - EP RU US); **B25B 7/08** (2013.01 - EP RU US); B25B 7/22 (2013.01 - US)

Citation (examination)
  • US 2003070300 A1 20030417 - HUANG CHIN-CHI [TW]
  • US 2011005086 A1 20110113 - PUTSCH RALF [DE]
  • US 7389715 B1 20080624 - LIN MING-SHUAN [TW]

Designated contracting state (EPC)
  AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
  WO 2017134074 A1 20170810; CN 108698208 A 20181023; CN 108698208 B 20210112; DE 102016101927 A1 20170810;
  EP 3411188 A1 20181212; EP 3411188 B1 20200408; ES 2803212 T3 20210125; PL 3411188 T3 20200921; RU 2018131514 A 20200304;
  RU 2018131514 A3 20200423; RU 2731622 C2 20200907; TW 201731638 A 20170916; TW I726044 B 20210501; US 10751857 B2 20200825;
  US 2019039214 A1 20190207

DOCDB simple family (application)
  EP 2017052100 W 20170201; CN 201780009266 A 20170201; DE 102016101927 A 20160204; EP 17703369 A 20170201;
  ES 17703369 T 20170201; PL 17703369 T 20170201; RU 2018131514 A 20170201; TW 106102612 A 20170124; US 201716073822 A 20170201