

Title (en)
MECHANICAL SPREADING APPARATUS

Title (de)
MECHANISCHER SPREIZER

Title (fr)
ECARTEUR MÉCANIQUE

Publication
EP 3383562 B1 20190911 (FR)

Application
EP 16819530 A 20161220

Priority
• EP 15201996 A 20151222
• EP 2016081842 W 20161220

Abstract (en)
[origin: WO2017108739A1] A mechanical spacer for spacing along a spacing axis, characterised in that it comprises a support (1) and two spacer plates (2), each spacer plate (2) comprising at least one bevel (3), and in that it also comprises a central rod (4) capable of sliding in said support (1) between the two spacer plates (2), said central rod (4) comprising a plurality of bevels (5) having a profile complementary to the bevels (3) of said spacer plates (2), the bevels (5) of said central rod (4) being in contact with the bevels (3) of said spacer plates (2), said spacer also comprising return means capable of exerting a return force on the spacer plates (2), means for biasing the central rod (4) and means for immobilising the spacer plates (2) in planes perpendicular to said spacing axis.

IPC 8 full level
B21D 1/12 (2006.01); **B21D 3/00** (2006.01)

CPC (source: EP US)
B21D 1/12 (2013.01 - EP); **B21D 3/00** (2013.01 - EP); **B21D 39/08** (2013.01 - US); **B21D 39/20** (2013.01 - US); **B21D 41/02** (2013.01 - US); **B21D 41/026** (2013.01 - US); **B21D 41/028** (2013.01 - US); **B21D 1/12** (2013.01 - US); **B21D 3/00** (2013.01 - US); **B21D 41/021** (2013.01 - US)

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)
EP 3184183 A1 20170628; CN 108472704 A 20180831; CN 108472704 B 20200515; EP 3383562 A1 20181010; EP 3383562 B1 20190911; US 10758961 B2 20200901; US 2018361449 A1 20181220; WO 2017108739 A1 20170629

DOCDB simple family (application)
EP 15201996 A 20151222; CN 201680075435 A 20161220; EP 16819530 A 20161220; EP 2016081842 W 20161220; US 201616061753 A 20161220