

Title (en)

Horizontal-press cold-forging machine with reduced-speed hammering

Title (de)

Kaltverformungsmaschine in Horizontalpresse zum Schmieden mit verringerter Geschwindigkeit

Title (fr)

Machine de forgeage à froid dans presse horizontale pour martelage à vitesse réduite

Publication

**EP 2149412 A1 20100203 (EN)**

Application

**EP 09380093 A 20090504**

Priority

ES 200802223 A 20080728

Abstract (en)

Horizontal-press cold-forging machine with a forging zone that comprises at least one unit with a fixed part (1) and a moving part (2), wherein the fixed part (1) comprises a die (3) provided with a cavity (4) in which a billet (5) is introduced, and the moving part (2) comprises a needle (6) that presses the billet (5) causing it to adopt the shape of the cavity (4). The fixed part (1) comprises a speed-reducer system based on the fact that the die (3) moves inside the fixed part (1), so that the effective speed at which the needle (6) presses the billet (5) is lower than the speed at which the moving part (2) impacts on the fixed part (1). This enables the cold forging of complex parts such as helical gears at a high rate of productivity.

IPC 8 full level

**B21J 13/03** (2006.01); **B21K 27/00** (2006.01)

CPC (source: EP ES)

**B21J 13/02** (2013.01 - ES); **B21J 13/03** (2013.01 - EP); **B21K 27/00** (2013.01 - EP)

Citation (search report)

[A] DE 3409600 A1 19840920 - TOYODA GOSEI KK [JP]

Cited by

CN107321904A; CN113182480A

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2149412 A1 20100203**; **EP 2149412 B1 20130116**; ES 2351746 A1 20110210; ES 2351746 B1 20120126; ES 2402988 T3 20130513

DOCDB simple family (application)

**EP 09380093 A 20090504**; ES 09380093 T 20090504; ES 200802223 A 20080728