

Title (en)

Tool and use of the tool for the rolling treatment of a workpiece

Title (de)

Umformwerkzeug und Verwendung dieses Werkzeuges zum Walzformen eines Werkstückes

Title (fr)

Outil et son utilisation pour le formage d'une pièce par roulement

Publication

EP 0995510 A1 20000426 (EN)

Application

EP 99120768 A 19991020

Priority

- DE 19848153 A 19981020
- DE 19848144 A 19981020
- US 25831799 A 19990226

Abstract (en)

A deforming tool (1) for forming an elongated deformation in a planer workpiece includes cooperating upper and lower parts (50,51), at least a roller ball (11) being mounted in one of the parts and cooperating with a mating element (53) in the other part, the workpiece being engaged above and below by the two parts. The roller ball (11) is mounted for universal movement and thus allows for sharper turns when moving the workpiece without the risk of damage to the workpiece. <IMAGE>

IPC 1-7

B21D 17/04; B21D 13/04

IPC 8 full level

B21D 17/04 (2006.01); **B21D 37/00** (2006.01)

CPC (source: EP)

B21D 17/04 (2013.01)

Citation (search report)

- [DY] US 5555759 A 19960917 - ROSENE RONALD G [US], et al
- [Y] US 5655396 A 19970812 - SILER ERNEST RAY [US]
- [X] PATENT ABSTRACTS OF JAPAN vol. 9, no. 121 (M - 382) 25 May 1985 (1985-05-25)

Cited by

CN102000728A; CN102000722A; CN102000727A; EP1688195A1; US7343767B2; WO2005102551A1; WO2008046499A1; US8042369B2; US8490449B2; US8671728B2; US9207663B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0995510 A1 20000426; EP 0995510 B1 20061213; AT E347943 T1 20070115; AU 1447800 A 20000508; CA 2314987 A1 20000427; CA 2314987 C 20080603; DE 69934374 D1 20070125; DE 69934374 T2 20071011; JP 2003527965 A 20030924; JP 4406898 B2 20100203; WO 0023210 A1 20000427

DOCDB simple family (application)

EP 99120768 A 19991020; AT 99120768 T 19991020; AU 1447800 A 19991020; CA 2314987 A 19991020; DE 69934374 T 19991020; JP 2000576978 A 19991020; US 9924485 W 19991020