

Title (en)
Device for removing dents from sheet metal parts

Title (de)
Vorrichtung zum Ausbeulen von Blechteilen

Title (fr)
Dispositif de débosselage de pièces de tôle

Publication
EP 1459814 B1 20060927 (DE)

Application
EP 04006194 A 20040316

Priority
CH 4252003 A 20030317

Abstract (en)
[origin: EP1459814A1] The device has a working unit supported on a bearer unit (14,18,20), with a tool at one end for temporary connection to the panel. The working unit has a self-locking spindle (44) moveable along its longitudinal axis (60) and supported on an abutment of the bearer (12). Either spindle or abutment is fixed, and the other one is turnable via a ball bearing. The working unit has an integrated welding tip and a power connection, or it may be combined with a welding tool. It may also have a lever mechanism.

IPC 8 full level
B21D 1/06 (2006.01)

CPC (source: EP)
B21D 1/06 (2013.01)

Citation (examination)
• EP 0783926 A1 19970716 - ISHIHARA KOSEI [JP]
• JP 2000254727 A 20000919 - NOMURA EIZO
• PATENT ABSTRACTS OF JAPAN

Cited by
CN108176762A; DE102019125136A1; US11865601B2; WO2021053037A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

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EP 1459814 A1 20040922; EP 1459814 B1 20060927; AT E340659 T1 20061015; DE 502004001556 D1 20061109

DOCDB simple family (application)
EP 04006194 A 20040316; AT 04006194 T 20040316; DE 502004001556 T 20040316