

Title (en)
Punching tool

Title (de)
Stanzwerkzeug

Title (fr)
Outil à poinçonner

Publication
EP 0684095 B1 19980812 (EN)

Application
EP 95401227 A 19950524

Priority
JP 11508394 A 19940527

Abstract (en)
[origin: EP0684095A1] A punching tool for a press, includes: a punch guide (19) having a stripper plate (33) at a lower end thereof; a punch body (25) formed with a blade portion (27) at a lower end thereof and disposed within the punch guide movably up and down; a punch driver (37) having a piston rod (43) formed integral therewith and fixed to the punch body (25); a gas spring section (15) having a gas cylinder (45), the piston rod of the punch driver (37) being passed through the gas cylinder movably up and down, and a high pressure gas being filled in the gas cylinder to urge the punch driver (37) upward; and an annular elastic member (61) interposed between an upper surface of the punch guide (19) and a lower surface of the gas cylinder (45) of the gas spring section (15) to absorb shock generated when the stripper plate (33) attached to the punch guide (19) collides against work (W) during punching processing. The punching tool can reduce noise generated during punching processing and further to prevent a punching mark (scar) from being formed on the surface of the punched work. <IMAGE>

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IPC 8 full level
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CPC (source: EP)
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Cited by
CN104890046A; CN104889231A; CN108453170A; CN104307972A; CN111570635A; WO9967039A1

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