

Title (en)  
PNEUMATIC-HYDRAULIC DEVICES FOR SETTING BLIND NUTS

Publication  
**EP 0120309 A3 19860514 (DE)**

Application  
**EP 84101932 A 19840223**

Priority  
DE 3306827 A 19830226

Abstract (en)  
[origin: US4612793A] A tool for setting blind rivet nuts has a housing having a head defining a head axis, a pulling rod extending along and rotatable about the head axis, projecting axially forwardly from the head, and threadable into a blind rivet nut, and a hydropneumatic actuator including a rear air chamber and a source of air under pressure for axially displacing the rod along the axis between an extended position projecting axially relatively far from the head and a withdrawn position axially therebehind. A pneumatic motor connected to the pulling rod for rotating same in one sense to screw it into a rivet nut and for rotating the rod in the opposite sense direction to screw it out of the nut. A manually operable valve is connected to the motor unit for rotating the rod in the one sense and an automatic valve independent of the manual valve unit is connected to the rod and between the rear chamber and the motor for feeding air from the air chamber to the motor unit and thereby automatically rotating the rod in the opposite sense on displacement of the rod by the hydropneumatic actuating unit from the extended to the withdrawn position.

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**B25B 27/00**; **B21J 15/06**

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CPC (source: EP US)  
**B25B 27/0014** (2013.01 - EP US)

Citation (search report)  
• [X] GB 655512 A 19510725 - CHICAGO PNEUMATIC TOOL CO  
• [Y] GB 612368 A 19481111 - GOODRICH CO B F  
• [Y] EP 0062206 A2 19821013 - GESIPA BLINDNIETTECHNIK [DE]  
• [A] US 3555649 A 19710119 - RIGOT ROBERT M, et al  
• [A] US 2283708 A 19420519 - TRAUTMANN HERBERT L  
• [A] FR 2275282 A1 19760116 - CHAUSSY ALBERT [FR]

Cited by  
EP0325669A1; US4770023A; US11673243B2; WO8701630A1

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