

Title (en)

Jet guide rivet injector.

Title (de)

Nietzuführung mit Zentrierung durch einen Luftstrahl.

Title (fr)

Alimentation de rivets à guidage par un jet.

Publication

EP 0068857 A1 19830105 (EN)

Application

EP 82303351 A 19820625

Priority

US 27821281 A 19810629

Abstract (en)

Air pressure means for maintaining rivets (13) in axial alignment as they pass through a feed tube (15) to a riveting machine (10). The air pressure means comprises a circumferentially spaced series of air discharge passages (31) directed obliquely toward the axis of the feed tube (15) and in the direction of travel of the rivets (13) whereby a conical pattern of air pressure is directed against the shanks of the rivets (13) to urge them into axial alignment in the feed tube (15).

IPC 1-7

B21J 15/32; B25B 23/04

IPC 8 full level

B21J 15/00 (2006.01); **B21J 15/02** (2006.01); **B21J 15/16** (2006.01); **B21J 15/32** (2006.01); **B25C 1/00** (2006.01)

CPC (source: EP)

B21J 15/32 (2013.01); **B25C 1/001** (2013.01)

Citation (search report)

- [AD] US 3946926 A 19760330 - WILLIS CLYDE P
- [AD] US 3647129 A 19720307 - EHRLICH DON E
- [X] US 3275047 A 19660927 - KULMAN MELVIN L
- [A] US 3494393 A 19700210 - CASANOV RAYMOND C
- [A] GB 1419371 A 19751231 - KAYNAR MFG CO

Cited by

DE102004006411B4; CN106424516A; CN106040948A; DE102004006411A1; DE3825675A1; EP0995536A3; AU699299B2; EP0995537A3; US8141761B2; WO2008125311A3; WO9601161A1; US6196414B1; US6511061B1

Designated contracting state (EPC)

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EP 0068857 A1 19830105; AR 230737 A1 19840629; AU 8537682 A 19830106; BR 8203778 A 19830621; CA 1192769 A 19850903; ES 513533 A0 19831016; ES 8308492 A1 19831016; IL 66219 A 19851129; JP S5816750 A 19830131

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EP 82303351 A 19820625; AR 28980082 A 19820625; AU 8537682 A 19820628; BR 8203778 A 19820628; CA 406257 A 19820629; ES 513533 A 19820628; IL 6621982 A 19820704; JP 11055482 A 19820626