

Title (en)

Remote control proportional flow adhesive dispensing gun.

Title (de)

Klebepestole mit ferngesteuerter Durchflussregelung.

Title (fr)

Pistolet dispensateur télécommandé à débit proportionnel pour adhésifs.

Publication

EP 0202413 A1 19861126 (EN)

Application

EP 86103534 A 19860315

Priority

US 71941585 A 19850403

Abstract (en)

A remote control proportional flow adhesive dispensing gun (10) is pneumatically actuated and electrically controlled. An electric current applied to a magnetic torquemotor (17) rotates a torquemotor arm (61) which displaces the spool (41) of a three-way air valve (16), admitting air to a control valve stem actuating piston (30). A constant rate feedback spring (18) directly disposed between the actuating piston (30) and the torque arm (61) of the torquemotor (17) acts to restore the air valve spool (41) to an equilibrium non-flow position as the control valve stem (25) approaches a position proportional to torquemotor control current. The air valve (16) exhausts air from the piston (30) and return springs (27) close the control valve (15) when control signal is removed. A shaped control plug (26) attached to the flow control valve stem (25) varies a control opening linearly as stem position changes. A nozzle opening is selected which coordinates with the greatest possible control opening, such that flow is more nearly linearly proportioned to torquemotor control current across the full range of openings in a constant pressure adhesive supply system. The gun body is electrically heated and thermostatically controlled.

IPC 1-7

B05C 5/04; **B05C 9/14**

IPC 8 full level

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CPC (source: EP)

B05C 5/001 (2013.01); **B05C 5/0225** (2013.01)

Citation (search report)

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