Title (en)

Pneumatic screwdriver with screwing depth limitation

Title (de)

Pneumatischer Schrauber mit Begrenzung der Einschraubtiefe

Title (fr)

Outil pneumatique de vissage avec limitation de la profondeur de vissage

Publication

EP 1238757 A3 20050316 (EN)

Application

EP 02004959 A 20020305

Priority

JP 2001060812 A 20010305

Abstract (en)

[origin: EP1238757A2] An automatic stop device for a screwdriver stops the rotation of the air motor of the screwdriver if the desired screwing depht is reached. A screw feed device (15) of the screwdriver comprises a pneumatic cylinder (3). In an air passage (41) formed in the pneumatic cylinder, a valve chamber (47) is formed in order to operate an air exhaust valve (35) to communicate the pilot air chamber (23a) with the open air. An air exhaust hole (46) for exhausting compressed air from the air passage (41) is formed in the valve chamber (47). A timer chamber (50) is formed in the upstream of the valve chamber (47) in the air passage (41). A pressure within the valve chamber (47) increases and the air exhaust valve (35) operates upon the pressure increase and the stop valve (22) is actuated to close by discharging the compressed air from the pilot air chamber (23a) of the stop valve (22), when the piston reaches a position near the lower dead point and the compressed air flows from the air passage (41) to the valve chamber (47) via the timer chamber (50) and the air exhaust hole (46) is closed in synchronism with the operation of the contact arm (18). <IMAGE>

IPC 1-7

B25B 23/00; B25B 21/02

IPC 8 full level

B25B 23/145 (2006.01); **B25B 21/02** (2006.01); **B25B 23/00** (2006.01); **B25B 23/02** (2006.01); **B25C 7/00** (2006.01)

CPC (source: EP KR)

B25B 21/023 (2013.01 - EP); **B25B 23/0064** (2013.01 - EP); **B25C 7/00** (2013.01 - KR)

Citation (search report)
- [DX] EP 0967052 A2 19991229 - MAX CO LTD [JP]
- [A] US 3732934 A 19730515 - BRANDENBERG K

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DE102005014901A1; DE102005014901B4

Designated contracting state (EPC)

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DOCDB simple family (publication)

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