

Title (en)  
Pneumatic tool with a reverse valve having an overdrive

Title (de)  
Pneumatisches Werkzeug versehen mit einem Umkehr-Ventil mit Schnellgang

Title (fr)  
Outil pneumatique comprenant valve d'inversion avec dispositif à surmultiplier

Publication  
**EP 0876883 A2 19981111 (EN)**

Application  
**EP 98107828 A 19980429**

Priority  
US 85278597 A 19970507

Abstract (en)  
The invention is a pneumatic tool with a reverse valve having an overdrive. In particular, the pneumatic tool includes a housing, a rotor, rotatably mounted within the housing, an output shaft operatively coupled to the rotor, and pressure chambers defined between the housing and the rotor. A pneumatic reverse valve having an overdrive is operatively coupled to the rotor. The overdrive provides increased torque and increased speed to the output shaft. The reverse valve controls flow of pressurized air to a multi-chambered motor of the tool such that the direction of the motor can be reversed and the number of pressure chambers receiving pressurized air can be selected regardless of direction. <IMAGE>

IPC 1-7  
**B25F 5/00; B25B 21/02**

IPC 8 full level  
**B25B 23/14** (2006.01); **B25B 21/02** (2006.01); **B25B 23/145** (2006.01); **B25F 5/00** (2006.01); **F01C 20/04** (2006.01); **F01C 20/14** (2006.01)

CPC (source: EP KR)  
**B25B 21/00** (2013.01 - KR); **B25B 21/02** (2013.01 - EP); **B25B 23/1453** (2013.01 - EP KR); **B25F 5/00** (2013.01 - EP);  
**F01C 20/04** (2013.01 - EP); **F01C 20/14** (2013.01 - EP)

Cited by  
AU2002226192B2; EP1738876A1; US7021400B2; US6880645B2; US7404450B2; US6796386B2; WO02058893A1; WO0154865A3

Designated contracting state (EPC)  
BE DE FR GB IT

DOCDB simple family (publication)  
**EP 0876883 A2 19981111; EP 0876883 A3 20030402; EP 0876883 B1 20060524**; BR 9801583 A 19990629; CA 2236356 A1 19981107;  
CA 2236356 C 20051129; CN 1071173 C 20010919; CN 1205931 A 19990127; DE 69834597 D1 20060629; DE 69834597 T2 20070426;  
JP H10329050 A 19981215; KR 100553582 B1 20060523; KR 19980086813 A 19981205; TW 401332 B 20000811; ZA 983897 B 20000113

DOCDB simple family (application)  
**EP 98107828 A 19980429**; BR 9801583 A 19980505; CA 2236356 A 19980429; CN 98114837 A 19980507; DE 69834597 T 19980429;  
JP 12465998 A 19980507; KR 19980016256 A 19980507; TW 87106600 A 19980429; ZA 983897 A 19980507