

Title (en)  
Drill- and/or percussion apparatus

Title (de)  
Bohr- und/oder Meisselgerät

Title (fr)  
Appareil de forage et/ou percussion

Publication  
**EP 0876880 A3 20021127 (DE)**

Application  
**EP 98810142 A 19980223**

Priority  
DE 19714288 A 19970407

Abstract (en)  
[origin: EP0876880A2] The guide tube (9) for the striker piston has additional radially extending air passages (11) which are distributed circumferentially along at least one additional plane (E2) spaced apart from the plane (E1) of location of the first air passages (10). The two planes run parallel to each other. All the additional passages have the same cross-section which corresponds to the cross-section of the first passages.

IPC 1-7  
**B25D 11/12**; **B25D 17/06**

IPC 8 full level  
**B25D 11/04** (2006.01); **B23B 45/16** (2006.01); **B25D 11/00** (2006.01); **B25D 11/12** (2006.01)

CPC (source: EP US)  
**B25D 11/005** (2013.01 - EP US); **B25D 11/125** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0759341 A2 19970226 - MAKITA CORP [JP]  
• [A] US 5456324 A 19951010 - TAKAGI TOSHIAKI [JP], et al  
• [A] US 5111890 A 19920512 - RANGER ULRICH [DE], et al

Cited by  
EP1754575A3; US7040413B2; US7383895B2; US9925653B2; WO03045636A1; EP1368160B1

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**DE 19714288 A1 19981008**; CN 1065165 C 20010502; CN 1197716 A 19981104; DE 59813801 D1 20061228; EP 0876880 A2 19981111; EP 0876880 A3 20021127; EP 0876880 B1 20061115; JP 4195119 B2 20081210; JP H10309679 A 19981124; US 5975217 A 19991102

DOCDB simple family (application)  
**DE 19714288 A 19970407**; CN 98106333 A 19980406; DE 59813801 T 19980223; EP 98810142 A 19980223; JP 9352798 A 19980406; US 5658898 A 19980407