

Title (en)
Handheld drilling machine with compressed-air-operated percussion mechanism

Title (de)
Handbohrgerät mit druckluftherregtem Schlagwerk

Title (fr)
Machine à forer portable avec mécanisme à percussion mû à l' air comprimé

Publication
EP 0974428 A3 20030212 (DE)

Application
EP 99810527 A 19990614

Priority
DE 19832946 A 19980722

Abstract (en)
[origin: EP0974428A2] The output shaft (15) carries a chuck and is axially moveable when impacted by the piston (30) which slides back and forth in the cylinder housing (22) according to the position of a shuttle (41), and bores (46-52) with pressure applied to an opening (24). Air is released through an opening (23). As the piston contacts the output shaft the shuttle is pushed back to reverse the air flow until the piston contacts a rear face (26), after which it again reverses the air flow.

IPC 1-7
B25D 16/00; **B25D 9/20**

IPC 8 full level
B23B 45/16 (2006.01); **B25D 9/04** (2006.01); **B25D 16/00** (2006.01)

CPC (source: EP US)
B25D 9/04 (2013.01 - EP US); **B25D 16/00** (2013.01 - EP US); **B25D 17/06** (2013.01 - EP US); **B25D 2211/003** (2013.01 - EP US); **B25D 2217/0023** (2013.01 - EP US); **B25D 2250/341** (2013.01 - EP US)

Citation (search report)
• [Y] US 4506742 A 19850326 - FUKASE YUTAKA [JP]
• [Y] GB 2188270 A 19870930 - BERGWERKSVERBAND GMBH
• [A] BOILLAT P ET AL: "LES DIFFERENTES TECHNIQUES DE FORATION", INDUSTRIE MINERALE - MINES ET CARRIERES, EDITIONS GEDIM. ST ETIENNE, FR, vol. 75, no. SUPPLEMENT, 1 April 1993 (1993-04-01), pages 36 - 70, XP000383297, ISSN: 0994-2556

Cited by
US7868750B2; US8106759B2; US8384535B2; US8280580B2; US8258939B2; US8576061B2; US8306728B2; US8548730B2

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
EP 99810527 A 19990614; CN 99110615 A 19990720; DE 19832946 A 19980722; JP 20814199 A 19990722; US 35743799 A 19990720