

Title (en)

BORE HOLE HAMMER, ESPECIALLY DOWN-THE-HOLE HAMMER

Publication

EP 0004946 B1 19811014 (DE)

Application

EP 79101125 A 19790412

Priority

DE 2816737 A 19780418

Abstract (en)

[origin: US4280570A] An impact and rotary rock drilling tool for operation by compressed air fed through a three-part control unit that contains a valve and duct system and is housed in a cage mounted to an outer tube. A central spindle tube is positively connected to the control unit and guides a main ram as well as an intermediate ram that rests on top of a steel drill member for reciprocating movement therewith. An insert portion secured inside the central spindle tube, which latter may comprise a check valve at its lower end, has partitions separating a plurality of passages with ports arranged in the central spindle tube for selected flow connections.

IPC 1-7

E21B 4/06

IPC 8 full level

E21B 1/30 (2006.01); **E21B 4/14** (2006.01)

CPC (source: EP US)

E21B 4/14 (2013.01 - EP US)

Cited by

CN105378206A; EP0011219A1; GB2151930A

Designated contracting state (EPC)

BE CH FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0004946 A1 19791031; **EP 0004946 B1 19811014**; AT 363427 B 19810810; AT A277979 A 19810115; DE 2816737 A1 19791025; DE 2816737 B2 19800710; DE 2816737 C3 19810319; US 4280570 A 19810728

DOCDB simple family (application)

EP 79101125 A 19790412; AT 277979 A 19790413; DE 2816737 A 19780418; US 3094879 A 19790417