

Title (en)
PNEUMATIC EXTRACTION HEAD

Publication
EP 0357652 B1 19920122 (DE)

Application
EP 88903817 A 19880427

Priority
DE 3714073 A 19870428

Abstract (en)
[origin: WO8808470A1] A pneumatic extraction head for underwater debris, in particular sand and gravel, comprises a housing (16), a base plate (21) located at the bottom of the housing and forming an inlet opening for the debris, and a flange plate (22) located at the top of the housing for connection with an extraction pipe and a compressed air duct. A joint extending inside the housing between the base plate and the flange plate and surrounding the inlet opening for the debris serves to form an annular space for compressed air between the inner wall of the housing and the outer wall of the joint. Several mutually-spaced outlet openings for the compressed air in the compressed air space are provided in the base plate around the debris inlet opening. These outlet openings are provided with spring-loaded nonreturn valves.

IPC 1-7
E02F 3/88; **E02F 3/90**; **E02F 3/92**; **E02F 5/28**; **E02F 7/10**; **E21C 45/00**

IPC 8 full level
E02F 3/88 (2006.01); **E02F 3/90** (2006.01); **E02F 3/92** (2006.01); **E02F 5/28** (2006.01); **E02F 7/10** (2006.01); **E21C 45/00** (2006.01)

CPC (source: EP US)
E02F 3/88 (2013.01 - EP US); **E02F 3/907** (2013.01 - EP US); **E02F 3/92** (2013.01 - EP US); **E02F 3/925** (2013.01 - EP US); **E02F 5/287** (2013.01 - EP US); **E02F 7/10** (2013.01 - EP US); **E21C 50/00** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8808470 A1 19881103; AT E71999 T1 19920215; DE 3714073 A1 19881110; DE 3868062 D1 19920305; EP 0357652 A1 19900314; EP 0357652 B1 19920122; JP H02503337 A 19901011; US 4995175 A 19910226

DOCDB simple family (application)
EP 8800355 W 19880427; AT 88903817 T 19880427; DE 3714073 A 19870428; DE 3868062 T 19880427; EP 88903817 A 19880427; JP 50381088 A 19880427; US 42426389 A 19891020