

Title (en)

METHOD FOR CONTROLLING THE DIRECTION OF AN EARTH DRILLING APPARATUS AND DEVICE FOR MAKING BORE HOLES

Publication

EP 0522446 A3 19930324 (DE)

Application

EP 92111212 A 19920702

Priority

DE 4122350 A 19910705

Abstract (en)

[origin: EP0522446A2] In a method of controlling the direction of an earth drilling apparatus which comprises a tubular housing (34) and a head (36) arranged coaxially to the same, pressure fluid is directed to discharge nozzles (62) formed in the head (36) before or during the advance of the earth drilling apparatus to deflect the same from its axial driving direction, in the course of which pressure fluid is only admitted to the nozzle (62, 74) or nozzles (62, 74) whose discharge points at least approximately in the desired deflection direction of the earth drilling apparatus (10).

IPC 1-7

E21B 7/06; E21B 7/18; E21B 7/26; E21B 4/14; E21B 17/07; E21B 10/38

IPC 8 full level

E21B 4/14 (2006.01); **E21B 7/06** (2006.01); **E21B 7/18** (2006.01); **E21B 7/26** (2006.01); **E21B 10/38** (2006.01); **E21B 17/07** (2006.01)

CPC (source: EP US)

E21B 4/145 (2013.01 - EP US); **E21B 7/065** (2013.01 - EP US); **E21B 7/18** (2013.01 - EP US); **E21B 7/26** (2013.01 - EP US);
E21B 7/267 (2020.05 - EP); **E21B 10/38** (2013.01 - EP US); **E21B 17/07** (2013.01 - EP US)

Citation (search report)

- [X] US 4930586 A 19900605 - TURIN PAUL S [US], et al
- [Y] US 4993503 A 19910219 - FISCHER EDWARD E [US], et al
- [Y] US 4858703 A 19890822 - KINNAN FRANK R [US]
- [Y] US 4850440 A 19890725 - SMET NIC H W [BE]
- [X] FR 1091510 A 19550413 - REUTHER TIEFBAU G M B H
- [X] US 4991667 A 19910212 - WILKES JR ROBERT D [US], et al
- [X] US 4787465 A 19881129 - DICKINSON III BEN W O [US], et al
- [XD] US 3365007 A 19680123 - UVON SKIPPER
- [A] US 4957173 A 19900918 - KINNAN FRANK R [US]
- [A] GB 2126267 A 19840321 - COAL IND

Cited by

EP0792995A1; FR2714108A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0522446 A2 19930113; EP 0522446 A3 19930324; EP 0522446 B1 19961002; DE 4122350 A1 19930114; DE 4122350 C2 19961121;
US 5288173 A 19940222

DOCDB simple family (application)

EP 92111212 A 19920702; DE 4122350 A 19910705; US 90657992 A 19920630