

Title (en)

Device for removing drill cuttings from augers

Title (de)

Einrichtung zum Entfernen von Bohrgut aus der Wendelrippe eines Erdbohrers

Title (fr)

Dispositif pour enlever les déblais de forage d'une trarière

Publication

EP 0844364 A2 19980527 (DE)

Application

EP 97119930 A 19971114

Priority

DE 29620235 U 19961121

Abstract (en)

This original stripper unit removes drillings from the intermediate spaces (82) between adjacent flights of the spirals of an earth borer (48). A stripping section (80) can be moved from between the flights to a position outside the edge contour of the borer. The original feature is that the stripper (80) is held against rotation, but can slide on a carrier extending along and parallel to the borer. This moves between a working position where the stripper is engaged, and a neutral position where the stripper is pulled outside the borer contour, to a neutral position. Preferably the stripper is spring-loaded into a mean axial location on the carrier. Two springs are used, acting against the edge surfaces of the stripper and stops on the carrier, or a mounting carrying it. The carrier is a polygonal rod, the stripper having a guide recess running on it, with sliding play. Alternatively pair of circular rods is used for the carrier, in a similar arrangement. The measuring unit gives a signal indicating stripper position on the rod(s). There are one or more stress gauges, mechanically in series with the spring loading. A measuring unit works with the drives and the desired stripper position indication on its carrier. Control loops are included, with limits on the maximum upper and lower positions indicated by the sensors. There is no output signal when the input signals are within tolerance limits, otherwise an error signal results. Further details of the drive and the neutral position indicator are provided.

Abstract (de)

Eine Einrichtung zum Abstreifen von Bohrgut aus den Zwischenräumen (82), die zwischen benachbarten Gängen einer Wendelrippe (52) eines Erdbohrers (48) liegen, wird eine Abstreifeinrichtung (44) vorgeschlagen, die einen Abstreifer (80) aufweist, der zwischen einem zwischen die Wendelrippe (52) eingreifenden Arbeitsstellung und einer außerhalb der lichten Kontur des Erdbohrers (48) liegenden Ruhestellung bewegbar und zusätzlich parallel zur Bohrerachse verschiebbar ist. Hat das mit der Abstreifeinrichtung versehene Bohrgerät einen Bohrröhrantrieb, so ist das Abstreifteil (80) durch eine Zugangsöffnung (78) bewegbar, die in einem mit dem oberen Ende des Bohrröhrs (46) verbundenen Antriebsrohr (36) vorgesehen ist. <IMAGE>

IPC 1-7

E21B 12/06

IPC 8 full level

E21B 7/20 (2006.01); **E21B 12/06** (2006.01)

CPC (source: EP)

E21B 7/201 (2013.01); **E21B 12/06** (2013.01)

Cited by

FR2960573A1; EP1367215A1; CN110130827A

Designated contracting state (EPC)

BE DE FR IT NL

DOCDB simple family (publication)

DE 29620235 U1 19980402; DE 59704714 D1 20011031; EP 0844364 A2 19980527; EP 0844364 A3 19990317; EP 0844364 B1 20010926

DOCDB simple family (application)

DE 29620235 U 19961121; DE 59704714 T 19971114; EP 97119930 A 19971114