

Title (en)

A METHOD AND APPARATUS FOR DRILLING AND POSITIONING A COLLAR SUPPORT SLEEVE INTO A BLAST HOLE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BOHREN UND POSITIONIEREN EINES KRAGENTRÄGERS IN EINEM SPRENGRLOCH

Title (fr)

PROCÉDÉ ET APPAREIL POUR PERCER ET POSITIONNER UN MANCHON DE SUPPORT DE COLLIER DANS UN TROU DE MINE

Publication

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Application

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Abstract (en)

[origin: WO2021081592A1] The invention provides an apparatus and method for preventing surrounding loose rock fragments from falling or collapsing into a bore hole during drilling and immediately after removal of a drill string from the bore hole. The apparatus includes bore hole sleeve for a bore hole drill, the sleeve including a tube member adapted to be coupled to a mast of a mobile bore hole drill and to be positioned within the collar region of a bore hole, the tube member including a longitudinal internal passage for receiving a drill string therethrough and an external surface for facing outwardly against a wall of the bore hole.

IPC 8 full level

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Citation (search report)

- [X1] WO 2015097575 A2 20150702 - CT BADAN KOSM POLSKIEJ AKADEMII NAUK [PL], et al
- [X1] US 4166508 A 19790904 - BERG ARIE P VAN DEN [NL]
- [X1] DE 1189492 B 19650325 - ECKART CRONJAEGER
- [A] WO 2019014716 A1 20190124 - TBS MINING SOLUTIONS PTY LTD [AU]
- See also references of WO 2021081592A1

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DOCDB simple family (application)

AU 2020051176 W 20201029; AU 2020373299 A 20201029; BR 112022008153 A 20201029; CA 3158178 A 20201029; CL 2022000977 A 20220418; CN 202080077671 A 20201029; CO 2022006420 A 20220516; EP 20881244 A 20201029; MX 2022004998 A 20201029; US 202017768417 A 20201029; ZA 202204990 A 20220506