

Title (en)
HOLLOW ROD COMPOSITE ANCHOR WITH IMPROVED SETTING CAPABILITY AND METHOD FOR SETTING A HOLLOW ROD COMPOSITE ANCHOR INTO A ROCK STRATUM

Title (de)
HOHLSTABVERBUNDANKER MIT VERBESSERTER SETZFÄHIGKEIT UND VERFAHREN ZUM SETZEN EINES HOHLSTABVERBUNDANKERS IN EINE GESTEINSSCHICHT

Title (fr)
ANCRAGE COMPOSITE À TIGE CREUSE AYANT UNE CAPACITÉ DE RÉGLAGE AMÉLIORÉE ET PROCÉDÉ DE RÉGLAGE D'UN ANCRAGE COMPOSITE À TIGE CREUSE DANS UNE STRATE ROCHEUSE

Publication
EP 4217589 A1 20230802 (DE)

Application
EP 21843629 A 20211220

Priority
• DE 102020134856 A 20201223
• EP 2021086746 W 20211220

Abstract (en)
[origin: WO2022136245A1] The invention relates to a hollow rod composite anchor for stabilizing rock strata in mining, tunnel construction, underground construction, and rock construction, at least having an anchor base with one or more outlet channels, a hollow rod which is arranged behind the anchor base and contains a static mixing device and an adhesive cartridge with a press-out piston, said adhesive cartridge being arranged on the static mixing device via a cylindrical seal device with at least one bursting surface, wherein the outer diameter of the seal device substantially corresponds to the inner diameter of the hollow rod, the area of the bursting surface is greater than or equal to 15% and less than or equal to 90% of the cylinder cross-section of the seal device, and the ratio of the area of the bursting surface to the area of the hollow rod wall cross-section is greater than or equal to 0.1 and less than or equal to 25. The invention additionally relates to an improved method for setting hollow rod composite anchors.

IPC 8 full level
E21D 20/02 (2006.01)

CPC (source: EP US)
E21D 20/026 (2013.01 - EP); **E21D 21/0006** (2013.01 - US); **E21D 21/008** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022136245 A1 20220630; AU 2021404998 A1 20230713; AU 2021404998 A9 20240530; DE 102020134856 A1 20220623; EP 4217589 A1 20230802; EP 4217589 B1 20240717; US 2023383652 A1 20231130

DOCDB simple family (application)
EP 2021086746 W 20211220; AU 2021404998 A 20211220; DE 102020134856 A 20201223; EP 21843629 A 20211220; US 202118034147 A 20211220