Title (en)

TUNNEL BORING MACHINE

Title (de)

TUNNELBOHRMASCHINE

Title (fr)

TUNNELIER

Publication

EP 4085182 C0 20240320 (DE)

Application

EP 21719108 A 20210413

Priority

- DE 102020111585 A 20200428
- EP 2021059587 W 20210413

Abstract (en)

[origin: CA3174494A1] In a tunnel boring machine with a shield skin (106) extending in a longitudinal direction, a sensor unit (118) for detecting convergences has a number of hydraulic distance sensors (121) equipped with an extendable probe (124) with extension path measurement. By virtue of the distance sensors (121), the distance between the shield skin (106) in the area of the relevant distance sensor (121) and the surrounding rock mass (103) can be detected as a distance value, so that the thickness of an annular gap (115) can be determined. The distance sensors (121) are arranged in the longitudinal direction of the shield skin (106) at a measuring distance which expediently corresponds to a typical ring width of a tubbing (112). In addition, there is a central unit by virtue of which the distance values of the distance sensors (121) can be evaluated to determine convergences and can preferably be used to predict future convergences.

IPC 8 full level

E21D 9/00 (2006.01)

CPC (source: EP US)

E21D 9/003 (2013.01 - EP 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

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

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