

Title (en)

PRECISION SENSOR FOR DETERMINING MECHANICAL CONSTRAINTS ON A CUTTING TOOL OF A TUNNEL CUTTING MACHINE

Title (de)

HOCHPRÄZISE SENSORIK ZUM ERMITTELN EINER MECHANISCHEN BELASTUNG EINES ABBAUWERKZEUGS EINER TUNNELBOHRMASCHINE

Title (fr)

CAPTEUR DE PRÉCISION POUR DÉTERMINER UNE CONTRAINTE MÉCANIQUE SUR UN OUTIL E COUPE D'UN TUNNELIER

Publication

**EP 3129593 A1 20170215 (DE)**

Application

**EP 15713516 A 20150402**

Priority

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- EP 2015057361 W 20150402

Abstract (en)

[origin: CA2944967A1] A mining tool (100) for a drill head (150) of a tunnel boring machine (180) for mining in rock (102), wherein the mining tool (100) has a roller cutter fastening device (104), mountable on the drill head (150), for accommodating and mounting a rotatable roller cutter (106), the roller cutter (106) for mining in rock (102) is accommodated or in particular can be interchangeably accommodated rotatably in the roller cutter fastening device (104), and a sensor arrangement (112) for detecting a mechanical load of the mining tool (100), in particular of the roller cutter (106), wherein the sensor arrangement (112) is formed at least partially in the roller cutter fastening device (104) and/or on the sleeve (177) mounted on the roller cutter (106) with at least one load-sensitive element (108) mounted thereon.

IPC 8 full level

**E21D 9/10** (2006.01); **E21D 9/00** (2006.01); **E21D 9/11** (2006.01)

CPC (source: CN EP RU US)

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Citation (search report)

See references of WO 2015155124A1

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**DE 102014105014 A1 20151008**; AU 2015243595 A1 20161110; AU 2015243595 B2 20190620; BR 112016023263 A2 20170815; BR 112016023263 B1 20220329; BR 112016023263 B8 20221122; CA 2944967 A1 20151015; CA 2944967 C 20211228; CL 2016002533 A1 20170120; CN 106414898 A 20170215; CN 106414898 B 20191119; EP 3129593 A1 20170215; EP 3129593 B1 20190605; ES 2742126 T3 20200213; JP 2017511436 A 20170420; JP 6484699 B2 20190313; NZ 725536 A 20191220; RU 2016140704 A 20180508; RU 2016140704 A3 20181011; RU 2688997 C2 20190523; US 10151201 B2 20181211; US 2017122103 A1 20170504; WO 2015155124 A1 20151015; WO 2015155124 A9 20151217

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