

Title (en)

AN APPARATUS FOR FORMING AN UNDERGROUND TUNNEL

Title (de)

VORRICHTUNG ZUR HERSTELLUNG EINES UNTERIRDISCHEN TUNNELS

Title (fr)

APPAREIL POUR LA FORMATION D'UN TUNNEL SOUTERRAIN

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2009076710A1] The present disclosure provides an apparatus for forming an underground tunnel. The apparatus comprises a cutting head for removing material from a wall portion of the tunnel and thereby forming a portion of the tunnel. Further, the apparatus comprises a support structure for supporting a previously formed portion of the tunnel. The support structure is arranged to provide a supporting force against a surface of the tunnel when stationary and when being moved along the tunnel. Further, the apparatus comprises a conveyor for conveying removed material from the cutting head to a location remote from the cutting head during formation of the portion of the tunnel.

IPC 8 full level

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CPC (source: EP)

E21D 9/1013 (2013.01); **E21D 9/12** (2013.01); **E21D 20/003** (2013.01); **E21D 23/0086** (2013.01)

Citation (search report)

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- [X1] US 6206478 B1 20010327 - UEHARA TOSHIKI [JP], et al
- [X1] US 5816750 A 19981006 - STEFFENINO JOHN E [US]
- [X1] US 5527099 A 19960618 - FIKSE TYMAN H [US]
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Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2009076710 A1 20090625; AR 069719 A1 20100210; AU 2008338242 A1 20090625; CA 2708373 A1 20090625; CA 2708373 C 20180313; CL 2008003752 A1 20091211; CN 101970797 A 20110209; CN 101970797 B 20131120; EP 2229505 A1 20100922; EP 2229505 A4 20130327; EP 2229505 B1 20170208; NZ 586504 A 20121130; PL 2229505 T3 20170831; RU 2010129760 A 20120127; RU 2475650 C2 20130220; ZA 201004949 B 20111026

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AU 2008001850 W 20081217; AR P080105479 A 20081217; AU 2008338242 A 20081217; CA 2708373 A 20081217; CL 2008003752 A 20081216; CN 200880121145 A 20081217; EP 08862215 A 20081217; NZ 58650408 A 20081217; PL 08862215 T 20081217; RU 2010129760 A 20081217; ZA 201004949 A 20100714