

Title (en)
A TUNNELING MACHINE AND A METHOD OF EXCAVATING A TUNNEL

Title (de)
TUNNELBAUMASCHINE UND VERFAHREN ZUM GRABEN EINES TUNNELS

Title (fr)
MACHINE DE TUNNEL ET PROCÉDÉ D'EXCAVATION DE TUNNEL

Publication
EP 3106608 A2 20161221 (EN)

Application
EP 16174897 A 20160617

Priority
EP 15172922 A 20150619

Abstract (en)
The present invention relates to a tunneling machine comprising an elongated frame for being inserted into a tunnel pipe segment. The frame defines a front end and a rear end. The tunnelling machine further comprises an actuator for moving the frame within the tunnel pipe segment, an excavating mechanism located at the front end of the frame for excavating particulate material from the tunnel pipe segment, and a buffer tank located between the front end and the rear end of the frame. A first conveyor receives the particulate material from the excavating mechanism at the front end of the frame and transports the particulate material to the buffer tank. A soil transporter receives the particulate material from the buffer tank at the rear end of the frame and transports the particulate material from the rear end of the frame to the outside of the tunnel pipe segment.

IPC 8 full level
E21D 9/12 (2006.01)

CPC (source: EP)
E21D 9/12 (2013.01)

Citation (applicant)

- WO 9530065 A1 19951109 - PUTZMEISTER MASCHF [DE], et al
- WO 2008043511 A1 20080417 - SAENGER BERNHARD [DE]
- EP 0114452 A1 19840801 - STANDARD OIL CO OHIO [US]
- DE 3015319 A1 19811029 - DEILMANN HANIEL GMBH [DE]
- US 3574405 A 19710413 - SHIMADA TAKAO, et al
- DE 2840280 A1 19790705 - HERRENKNECHT ING BUERO
- DE 3434936 A1 19860403 - DRESHA GRISCHA [DE]
- US 4767253 A 19880830 - LUCK DIETER G [ZA]

Cited by
CN110424979A; CN115306416A

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

DOCDB simple family (publication)
EP 3106608 A2 20161221; EP 3106608 A3 20170125; EP 3106608 B1 20210224; DK 3106608 T3 20210426

DOCDB simple family (application)
EP 16174897 A 20160617; DK 16174897 T 20160617