

Title (en)
Whole front face tunneling machine.

Title (de)
Vollfrontseiten-Vortriebsmaschine.

Title (fr)
Tunnelier à creusement frontal pleine section.

Publication
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Application
EP 94401323 A 19940613

Priority
FR 9307145 A 19930614

Abstract (en)
The present invention relates to a directable-shield tunnelling machine, for whole front face tunnelling. This tunnelling machine comprises a substantially cylindrical body (1), a peripheral cutting edge (110) inside which an extracting shield (130) is rotationally mounted, as well as a system (4) for removing debris via the rear end (12) of the body, is characterised in that the shield (130) comprises at least one opening (161-168) emerging in front of a work-face (F) of a gallery (G) to be tunnelled, and capable of being closed by at least one flap (141-148) capable of pivoting about a radial axis of the body (1) under the effect of one or more jacks (5) or the like, each flap being capable of being fitted with extraction tools (14) so that the area of the said opening (161-168) and/or the extraction angle of the tools (14) can be adjusted under the effect of pivoting of the flaps (141-148). The present invention applies to the production of tunnelling machines of various sizes and for various types of galleries or tunnels.
<IMAGE>

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IPC 8 full level
E21D 9/08 (2006.01); **E21D 9/087** (2006.01)

CPC (source: EP)
E21D 9/0879 (2016.01)

Citation (search report)

- [A] DE 1966242 A1 19711216 - BADE & CO GMBH
- [A] EP 0192847 A1 19860903 - ISEKI KAIHATSU KOKI [JP]
- [A] EP 0025475 A1 19810325 - ISEKI KAIHATSU KOKI [JP]
- [A] FR 1506054 A 19671215 - MEKH ZD N DEG 5
- [A] DE 4024819 A1 19920206 - WESTFALIA BECORIT IND TECH [DE]
- [A] US 4607889 A 19860826 - HAGIMOTO HAKUMI [JP], et al

Cited by
CN109184717A; CN109184721A

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