

Title (en)

An excavating method and apparatus for constructing the base of a tunnel

Title (de)

Verfahren und Grabvorrichtung zur Herstellung von Tunnelsohlen

Title (fr)

Procédé et dispositif d'excavation pour la construction du sol dans un tunnel

Publication

EP 0757158 A1 19970205 (EN)

Application

EP 96110660 A 19960702

Priority

IT TO950652 A 19950802

Abstract (en)

An excavating apparatus for constructing, remaking, reinforcing or restoring any part of the base of a tunnel, such to provide an inverted arch (18) or resting piers structure adequate for sustaining the tunnel (11), comprises a power driven trencher excavating means (20) so restrained as to accomplish a combined movement of: oscillation about an axis substantially parallel to the longitudinal axis of the tunnel; sliding in a direction perpendicular to said axis; and transverse horizontal translation together with said oscillation axis, along a horizontal guide means (10) extending transversely in the tunnel (11). There is also disclosed an excavating method making use of such an apparatus. <IMAGE>

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E21D 9/00

IPC 8 full level

E21D 9/00 (2006.01)

CPC (source: EP)

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Citation (search report)

- [A] DE 3835459 A1 19900419 - GEWERK EISENHUETTE WESTFALIA [DE]
- [A] EP 0385233 A2 19900905 - CASAGRANDE SPA [IT]
- [A] DE 936859 C 19551222 - ORENSTEIN & KOPPEL AG, et al
- [A] US 4109336 A 19780829 - FORD DONALD E
- [A] EP 0394806 A1 19901031 - TREVI SPA [IT]
- [DA] DE 2545363 A1 19770421 - KUNZ ALFRED & CO
- [A] EP 0334262 A1 19890927 - RODIO & C CONST G [IT]
- [A] DE 4002177 A1 19910808 - SCHMAILZL JAKOB [DE]
- [A] FR 1071452 A 19540901

Cited by

CN106223960A; CN110226526A; DE19810475A1; EP0887512A3; DE19722459C1; CN109371765A

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