

Title (en)

METHOD AND DEVICE FOR FILLING THE HOLLOW SPACE BETWEEN THE ROOF SUPPORT OF GALLERIES AND THE ROCK BY MEANS OF PIPES CONTAINING A HARDENING FILLING

Publication

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Application

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Priority

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Abstract (en)

[origin: US4465405A] The invention relates to a process and device for backfilling of a roadway structure of mine and tunnel construction utilizing support hoses filled with a hardening filler. The hoses, when empty, are supported by the roadway support, after being put in place on the support are filled and thereby stretched out to form an inflated profile which locks onto the support section. The process and device used has the advantages of not being limited to certain specific support structure spacings and may be applied to a variety of roadway sections. The support section has the general shape of an I-beam and when used in multi-part roadway structures the section junctions are protected against overloads even when they are designed with limited yieldability. The support hose is laid on and supported over part of its length directly by the outer face of an "I" beam support section flange facing the rock. Where the flange supports the hose, the support section flange wholly or partly indents the cross-section contour of the inflated profile when the support hose is stretched out as it is filled with the hardener compound.

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E21D 11/15

IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

- DE 2627256 A1 19771222 - RUHRKOHL AG, et al
- CH 462871 A 19680930 - SCHINDLER BAUUNTERNEHMUNG AG L [CH], et al

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DE3914950A1; DE8814117U1; EP0203242A1; CN110631918A; CN113446040A; GB2245011A; FR2555657A1

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