

Title (en)  
PORTABLE TUNNEL WARNING INSTRUMENT

Publication  
**EP 0316828 B1 19910925 (DE)**

Application  
**EP 88118902 A 19881112**

Priority  
DE 3739325 A 19871120

Abstract (en)  
[origin: EP0316828A1] A portable tunnel warning instrument (10) for underground use in zone H and/or zone "O" has a device for picking up, processing and indicating tunnel signals detected by at least one sensor. A battery supply (27, 28) is accommodated in the tunnel warning instrument (10). It has an outer housing (13) of increased safety with a first housing section (11) in which the battery supply (27, 28) inserted in a sand-filled battery housing (26) is accommodated and which contains a switch (44) which is encapsulated in a pressure-resistant manner and can be actuated by the battery housing (26) during insertion or removal of the same. Furthermore, the outer housing (13) has a second housing section which is separated from the first housing section (11) by an intermediate wall (14) and in which devices for picking up, processing and indicating the tunnel signals are accommodated and which is itself sand-encapsulated. The leads between the two housing sections are passed through the intermediate wall (14) in a pressure-resistant manner. <IMAGE>

IPC 1-7  
**B61L 23/06; E21F 17/18**

IPC 8 full level  
**B61L 23/06** (2006.01); **E21F 17/18** (2006.01)

CPC (source: EP)  
**B61L 23/06** (2013.01); **E21F 17/18** (2013.01)

Cited by  
CN102926806A; CN111550288A

Designated contracting state (EPC)  
BE DE ES GB IT SE

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**EP 0316828 A1 19890524; EP 0316828 B1 19910925; DE 3865180 D1 19911031; ES 2027367 T3 19920601**

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