

Title (en)

METHOD AND DEVICE FOR MONITORING UNDERGROUND INSTALLATIONS

Title (de)

VERFAHREN UND EINRICHTUNG ZUR ÜBERWACHUNG UNTERIRDISCHER ANLAGEN

Title (fr)

PROCEDE ET DISPOSITIF POUR SURVEILLER DES INSTALLATIONS SOUTERRAINES

Publication

**EP 1360669 B1 20050119 (DE)**

Application

**EP 02708209 A 20020201**

Priority

- DE 0200411 W 20020201
- DE 10107260 A 20010216

Abstract (en)

[origin: US2004089081A1] The invention relates to a method and apparatus for monitoring underground installations in which natural or forced flows are prevailing, such as tunnels, passages, canals, and the like, by at least sectional detection and evaluation of changing physical and/or chemical characteristics over the entire length of the installation to be monitored, whereby an alarm is released in case an admissible parameter is exceeded. The object of the invention is to provide a method of monitoring an underground installation which makes possible a high degree of reliability at reasonable economic expense. In particular, a quick and spatially precise localization is to be possible. In the device required therefor, simple and robust detectors are to be used. In accordance with the invention the physical and/or chemical characteristics are detected and evaluated in each section transversely of the flow (7) of air over the structural clearance profile of the underground installation. For this purpose the sensors and/or suction nozzles (4, 8) in each section are arranged over the structural clearance profile of the underground installation in a plane transversely of the flow (7) of the air.

IPC 1-7

**G08B 17/10**

IPC 8 full level

**G08B 17/10** (2006.01)

CPC (source: EP US)

**G08B 17/10** (2013.01 - EP US); **G08B 17/113** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 02067217 A1 20020829**; AT E287566 T1 20050215; CA 2438570 A1 20020829; DE 10107260 A1 20020912; DE 50202041 D1 20050224;  
EP 1360669 A1 20031112; EP 1360669 B1 20050119; NO 20033450 D0 20030804; NO 20033450 L 20030804; US 2004089081 A1 20040513

DOCDB simple family (application)

**DE 0200411 W 20020201**; AT 02708209 T 20020201; CA 2438570 A 20020201; DE 10107260 A 20010216; DE 50202041 T 20020201;  
EP 02708209 A 20020201; NO 20033450 A 20030804; US 46832503 A 20030815