

Title (en)
Ultrafast mining gallery insulation device

Title (de)
Ultraschnelle Bergwerks-Streckenabschottvorrichtung

Title (fr)
Dispositif d'isolation ultra rapide d'une galerie de mine

Publication
EP 3000964 A1 20160330 (EN)

Application
EP 14186718 A 20140927

Priority
EP 14186718 A 20140927

Abstract (en)
The present invention refers to an ultrafast insulation device for mining galleries, operating automatically, for delimiting and securing fresh air circuits from areas contaminated by burned gases, toxic and/or explosive gases, produced as a result underground events such as explosions fires. The ultrafast gallery insulation device is automatically triggered by an explosion overpressure sensor (6) or by an infrared radiation sensor (5), activating the pyrotechnic gas generator (4) which expels the shutter from the storage block (1) with subsequent inflation against the walls of the gallery. The shutter's central membrane (8) is provided with zipper (9) allowing the passage of workers.

IPC 8 full level
E21F 11/00 (2006.01); **A62C 3/02** (2006.01); **E21F 1/14** (2006.01); **E21F 17/107** (2006.01)

CPC (source: EP)
A62C 2/06 (2013.01); **A62C 3/0221** (2013.01); **E21F 1/10** (2013.01); **E21F 11/00** (2013.01)

Citation (applicant)
RO 201300197 A 20130305

Citation (search report)
• [Y] US 4023372 A 19770517 - PRESLER DONALD P, et al
• [Y] US 2007218825 A1 20070920 - HOWERY RODNEY [US]
• [Y] DE 10236726 A1 20040219 - BECKER HEIKE [DE], et al
• [Y] DE 69802684 T2 20020822 - S E I B S A R L [FR]
• [Y] DE 19718271 A1 19980122 - DIEHL GMBH & CO [DE]
• [Y] CH 706242 A1 20130913 - DOCUSAVE GUIDO VOSER [CH]
• [Y] WO 9110803 A1 19910725 - HILL HARRY ROGER [GB]
• [ED] RO 129843 A2 20141030 - INSTITUTUL NAȚIONAL DE CERCETARE DEZVOLTARE PENTRU SECURITATE MINIERĂ ȘI PROTE [RO]

Cited by
CN107448236A; CN113047891A; WO2018210614A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3000964 A1 20160330

DOCDB simple family (application)
EP 14186718 A 20140927