

Title (en)

Blasting methods and apparatus with reduced risk of inadvertent or illicit use

Title (de)

Sprengverfahren und -vorrichtung mit gemindertem Risiko einer versehentlichen oder gesetzwidrigen Verwendung

Title (fr)

Procédés et appareil de détonation à risque réduit d'utilisation accidentelle ou illégale

Publication

**EP 1857770 A2 20071121 (EN)**

Application

**EP 07017284 A 20060216**

Priority

- EP 06704880 A 20060216
- US 65308505 P 20050216
- US 71513305 P 20050909

Abstract (en)

Disclosed herein are significant improvements in security and safety of blasting apparatuses (11) intended for use in mining operations. These include the development of an apparatus and method for blasting that involves activation or deactivation of the blasting apparatus (11) in accordance with pre-determined parameters. For example, these parameters may include one or more of: a location of the blast site, a time for the blasting event, a number of previous blasts, a number of previous blasts within a given time period, and identification of detonator identification codes. The activation or deactivation may involve cross-communication between components (14,15) of the blasting apparatus (11) and/or associated detonators (20). Such cross-communication may involve electronic or wireless communication means, including for example the use of cell phone technology, or the Internet. In this way, preferred apparatuses and methods disclosed herein permit rapid analysis and verification of a geographical location and time for a blasting event, as well as control and logging of the blasting event, all from a remote location. Said components may include a location assesment component (14) and a location approval component (15).

IPC 8 full level

**F42D 1/05** (2006.01)

CPC (source: EP)

**F42D 1/05** (2013.01)

Citation (applicant)

- AU 351 A
- US 6644202 B1 20031111 - DUNIAM PETER J [AU], et al
- US 5937557 A 19990817 - BOWKER J KENT [US], et al
- WO 0060305 A1 20001012 - HATOREX AG [CH], et al

Cited by

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