

Title (en)
METHOD FOR EXCHANGING DATA BETWEEN A DEVICE FOR PROGRAMMING AND TRIGGERING ELECTRONIC DETONATORS AND SAID DETONATORS

Title (de)
VERFAHREN ZUM AUSTAUSCH VON DATEN ZWISCHEN EINER EINRICHTUNG ZUR PROGRAMMIERUNG UND AUSLÖSUNG ELEKTRONISCHER ZÜNDER UND DEN ZÜNDERN

Title (fr)
PROCEDE D'ECHANGE DE DONNEES ENTRE UN DISPOSITIF DE PROGRAMMATION ET DE DECLENCHEMENT DE DETONATEURS ELECTRONIQUES ET LESDITS DETONATEURS

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Application
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Abstract (en)
[origin: DE19912688A1] Explosions are carried out in the mining of raw materials, whereby explosive charges are placed in numerous boreholes and are detonated in succession, according to a specific time frame. The electronic detonators (4a - 4c) of the explosive charges form an ignition system. Said electronic detonators are jointly connected to a programming and triggering device using a bus line (3). However, this leads to communication problems between a detonator and the programming and triggering device (2) in that the remaining detonators which are connected to the bus line present capacitive resistances which affect the transmission of the data. According to the invention, a direct current of a predetermined duration, which is greater than the current provided for generating signals, is applied to the ignition circuit (1) before an intended communication of a detonator with the device. The signals used to generate the data which is transmitted by the detonator as a response are subsequently generated with a lower current than the previously increased direct current and the direct current is increased again prior to the response of another detonator.

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