Title (en)

Explosive chain

Title (de)

Sprengkette

Title (fr)

Chaîne pyrotechnique

Publication

EP 0681158 B1 19980930 (DE)

Application

EP 95105373 A 19950410

Priority

DE 4415388 A 19940502

Abstract (en)

[origin: DE4415388C1] A detonating chain for use in particular in mining has a large number of triggering stages S1, S2, ..., each of which contains a series circuit which is connected between two supply lines (A, 0; B, 0) and consists of a thyristor T and a triggering device ZE. The signal voltage for the thyristor T of each stage is in this case derived just from the switching state of the thyristor T in the respectively preceding stage. In consequence, the activation is passed on from stage to stage independently of the triggering device ZE, and in particular independently of whether any fuze at all is connected and whether, as is correct during activation, the said fuze does or does not have high resistance. In this way, defects of known circuits are avoided, which can lead to the situation, when the electrical power supply is switched on, of the detonation originating not only at the first triggering stage but also, at the same time, at the point of a missing fuze, or the detonation sequence ending at the point of a fuze which is not operating correctly, or unacceptable delays occurring, and an excessive delay in consequence occurring to the interval between the electrical sequence and the explosion wave, and undesirable changes occurring in the pressure wave which is initiated by the detonation sequence. <IMAGE>

IPC 1-7

F42D 1/055

IPC 8 full level

F42C 11/06 (2006.01); **F42C 15/40** (2006.01); **F42D 1/055** (2006.01)

CPC (source: EP KR US)

F42D 1/055 (2013.01 - EP KR US); F42D 3/04 (2013.01 - KR)

Cited by

CN103997031A; WO2021229597A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 4415388 C1 19950420; AU 1779995 A 19951109; AU 684909 B2 19980108; CA 2147676 A1 19951103; CN 1062954 C 20010307; CN 1119735 A 19960403; DE 59503754 D1 19981105; EP 0681158 A1 19951108; EP 0681158 B1 19980930; EP 0845652 A2 19980603; EP 0845652 A3 20020130; ES 2123173 T3 19990101; JP 2820383 B2 19981105; JP H0875400 A 19960319; KR 950033411 A 19951226; US 5571985 A 19961105; ZA 946072 B 19950404

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DE 4415388 A 19940502; AU 1779995 A 19950501; CA 2147676 A 19950424; CN 95105176 A 19950428; DE 59503754 T 19950410; EP 95105373 A 19950410; EP 97120954 A 19950410; ES 95105373 T 19950410; JP 10574595 A 19950428; KR 19950010718 A 19950502; US 42830095 A 19950425; ZA 946072 A 19940812