

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

WEAPONS; BLASTING

F42 AMMUNITION; BLASTING (NOTES omitted)

F42D **BLASTING** (fuses, e.g. fuse cords, [C06C 5/00](#); {for obtaining fluid from wells [E21B 43/00](#); for mining or quarrying [E21C 37/00](#); for making tunnels or galleries [E21D 9/006](#)}; cartridges [F42B 3/00](#))

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| 1/00 | Blasting methods or apparatus, e.g. loading or tamping | 3/00 | Particular applications of blasting techniques {explosive welding B23K 20/08 ; explosive bolts or actuators F42B 3/006 ; explosive valves F16K 13/06 ; cutting devices actuated by explosion B23D 15/145 ; pyrotechnical actuators F15B 15/19 ; switching devices actuated by explosion H01H 39/00 } |
| 1/02 | . Arranging blasting cartridges to form an assembly (adaptation of blasting cartridges therefor F42B 3/02) | | |
| 1/04 | . Arrangements for ignition {(ignition systems for shaped charge perforators E21B 43/1185 ; ignition devices for seismic energy generators G01V 1/06)} | 3/02 | . for demolition of tall structures, e.g. chimney stacks |
| 1/041 | . . {Tools for adapting cartridges for the mounting of detonators (cartridges specially adapted for the mounting of detonators F42B 3/26)} | 3/04 | . for rock blasting |
| 1/042 | . . {Logic explosive circuits, e.g. with explosive diodes} | 3/06 | . for seismic purposes |
| 1/043 | . . {Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges F42B 3/26)} | 5/00 | Safety arrangements |
| 1/045 | . . Arrangements for electric ignition (dynamo-electric generators H02K) | 5/02 | . Locating undetonated charges |
| 1/05 | . . . Electric circuits for blasting | 5/04 | . Rendering explosive charges harmless, e.g. destroying ammunition ({ F42B 39/14 and F42B 39/20 take precedence } ; extracting primers, dismantling ammunition F42B 33/04 , F42B 33/06 { ; chemical deactivating of explosives C06B 21/0091 }); Rendering detonation of explosive charges harmless |
| 1/055 | . . . specially adapted for firing multiple charges with a time delay | 5/045 | . . Detonation-wave absorbing or damping means |
| 1/06 | . . Relative timing of multiple charges ({ F42D 1/043 and } F42D 1/055 take precedence) | 5/05 | . . . Blasting mats |
| 1/08 | . Tamping methods; Methods for loading boreholes with explosives; Apparatus therefor | 5/055 | . . Silencing means for blasting operations |
| 1/10 | . . Feeding explosives in granular or slurry form; Feeding explosives by pneumatic or hydraulic pressure | 5/06 | . Unloading boreholes |
| 1/12 | . . Feeding tamping material by pneumatic or hydraulic pressure | 99/00 | Subject matter not provided for in other groups in this subclass |
| 1/14 | . . Hand-operated tamping or loading | | |
| 1/16 | . . . Tamping tools | | |
| 1/18 | . . Plugs for boreholes | | |
| 1/20 | . . Tamping cartridges, i.e. cartridges containing tamping material (flexible or deformable blasting cartridges F42B 3/087) | | |
| 1/22 | . . Methods for holding or positioning for blasting cartridges or tamping cartridges | | |
| 1/24 | . . characterised by the tamping material | | |
| 1/26 | . . . Tamping with foaming agents | | |
| 1/28 | . . . Tamping with gelling agents | | |