

CPC**COOPERATIVE PATENT CLASSIFICATION****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

F42D 7/00 covered by [F42D 1/00](#), [F42D 3/00](#)

F42D 1/00**Blasting methods or apparatus, e.g. loading or tamping**

- [F42D 1/02](#) . Arranging blasting cartridges to form an assembly (adaptation of blasting cartridges therefor [F42B 3/02](#))
- [F42D 1/04](#) . Arrangements for ignition ({ignition systems for shaped charge perforators [E21B 43/1185](#); ignition devices for seismic energy generators [G01V 1/06](#)})
- [F42D 1/041](#) . . {Tools for adapting cartridges for the mounting of detonators (Cartridges specially adapted for the mounting of detonators [F42B 3/26](#))}
- [F42D 1/042](#) . . {Logic explosive circuits, e.g. with explosive diodes}
- [F42D 1/043](#) . . {Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges [F42B 3/26](#))}
- [F42D 1/045](#) . . Arrangements for electric ignition (dynamo-electric generators [H02K](#))
- [F42D 1/05](#) . . . Electric circuits for blasting
- [F42D 1/055](#) . . . specially adapted for firing multiple charges with a time delay
- [F42D 1/06](#) . . Relative timing of multiple charges ({[F42D 1/043](#) and [F42D 1/055](#) take precedence})
- [F42D 1/08](#) . Tamping methods; Methods for loading boreholes with explosives; Apparatus therefor
- [F42D 1/10](#) . . Feeding explosives in granular or slurry form; Feeding explosives by pneumatic or hydraulic pressure
- [F42D 1/12](#) . . Feeding tamping material by pneumatic or hydraulic pressure
- [F42D 1/14](#) . . Hand-operated tamping or loading
- [F42D 1/16](#) . . . Tamping tools
- [F42D 1/18](#) . . Plugs for boreholes
- [F42D 1/20](#) . . Tamping cartridges, i.e. cartridges containing tamping material (flexible or deformable blasting cartridges [F42B 3/087](#))
- [F42D 1/22](#) . . Methods for holding or positioning for blasting cartridges or tamping cartridges
- [F42D 1/24](#) . . characterised by the tamping material
- [F42D 1/26](#) . . . Tamping with foaming agents
- [F42D 1/28](#) . . . Tamping with gelling agents

F42D 3/00	Particular applications of blasting techniques { explosive welding B23K 20/08 ; explosive bolts or actuators F42B 3/00D ; explosive valves F16K 13/06 ; cutting devices actuated by explosion B23D 15/14B ; pyrotechnical actuators F15B 15/19 ; switching devices actuated by explosion H01H 39/00 }
F42D 3/02	. for demolition of tall structures, e.g. chimney stacks
F42D 3/04	. for rock blasting
F42D 3/06	. for seismic purposes
F42D 5/00	Safety arrangements
F42D 5/02	. Locating undetonated charges
F42D 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
F42D 5/045	. . Detonation-wave absorbing or damping means
F42D 5/05	. . . Blasting mats
F42D 5/055	. . Silencing means for blasting operations
F42D 5/06	. Unloading boreholes
F42D 99/00	Subject matter not provided for in other groups in this subclass