

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](#))

<p>1/00 Blasting methods or apparatus, e.g. loading or tamping</p> <p>1/02 . Arranging blasting cartridges to form an assembly (adaptation of blasting cartridges therefor F42B 3/02)</p> <p>1/04 . Arrangements for ignition {(ignition systems for shaped charge perforators E21B 43/1185; ignition devices for seismic energy generators G01V 1/06)}</p> <p>1/041 . . {Tools for adapting cartridges for the mounting of detonators (cartridges specially adapted for the mounting of detonators F42B 3/26)}</p> <p>1/042 . . {Logic explosive circuits, e.g. with explosive diodes}</p> <p>1/043 . . {Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges F42B 3/26)}</p> <p>1/045 . . Arrangements for electric ignition (dynamo-electric generators H02K)</p> <p>1/05 . . . Electric circuits for blasting</p> <p>1/055 . . . specially adapted for firing multiple charges with a time delay</p> <p>1/06 . . Relative timing of multiple charges ({F42D 1/043 and } F42D 1/055 take precedence)</p> <p>1/08 . Tamping methods; Methods for loading boreholes with explosives; Apparatus therefor</p> <p>1/10 . . Feeding explosives in granular or slurry form; Feeding explosives by pneumatic or hydraulic pressure</p> <p>1/12 . . Feeding tamping material by pneumatic or hydraulic pressure</p> <p>1/14 . . Hand-operated tamping or loading</p> <p>1/16 . . . Tamping tools</p> <p>1/18 . . Plugs for boreholes</p> <p>1/20 . . Tamping cartridges, i.e. cartridges containing tamping material (flexible or deformable blasting cartridges F42B 3/087)</p> <p>1/22 . . Methods for holding or positioning for blasting cartridges or tamping cartridges</p> <p>1/24 . . characterised by the tamping material</p> <p>1/26 . . . Tamping with foaming agents</p> <p>1/28 . . . Tamping with gelling agents</p>	<p>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)}</p> <p>3/02 . for demolition of tall structures, e.g. chimney stacks</p> <p>3/04 . for rock blasting</p> <p>3/06 . for seismic purposes</p> <p>5/00 Safety arrangements</p> <p>5/02 . Locating undetonated charges</p> <p>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</p> <p>5/045 . . Detonation-wave absorbing or damping means</p> <p>5/05 . . . Blasting mats</p> <p>5/055 . . Silencing means for blasting operations</p> <p>5/06 . Unloading boreholes</p> <p>99/00 Subject matter not provided for in other groups in this subclass</p>
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