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.

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

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 43/1155; ignition devices for seismic energy generators G01V 1/06) } 1/041 . . {Tools for adapting cartridges for the mounting of detonators (cartridges specially adapted for the mounting of detonators F42B 3/26) }

1/042 . . {Logic explosive circuits, e.g. with explosive diodes} 1/043 . . {Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges F42B 3/26) }

1/045 . . Arrangements for electric ignition (dynarno-electric generators H02K) 1/05 . . Electric circuits for blasting 1/055 . . . specially adapted for firing multiple charges with a time delay 1/06 . . Relative timing of multiple charges { (F42D 1/043 and F42D 1/055 take precedence) }

1/08 . Tamping methods; Methods for loading boreholes with explosives; Apparatus therefor 1/10 . . Feeding explosives in granular or slurry form; Feeding explosives by pneumatic or hydraulic pressure 1/12 . . Feeding tamping material by pneumatic or hydraulic pressure


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

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) } 3/02 . . for demolition of tall structures, e.g. chimney stacks 3/06 . . for seismic purposes

5/00 Safety arrangements

5/02 . . Locating undetonated charges 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 5/045 . . . Detonation-wave absorbing or damping means 5/05 . . . . Blasting mats 5/055 . . . Silencing means for blasting operations 5/06 . . Unloading boreholes

99/00 Subject matter not provided for in other groups in this subclass