

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](#))

1/00	Blasting methods or apparatus, e.g. loading or tamping	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
1/02	• Arranging blasting cartridges to form an assembly (adaptation of blasting cartridges therefor F42B 3/02)	5/045	• • Detonation-wave absorbing or damping means
1/04	• Arrangements for ignition {(ignition systems for shaped charge perforators E21B 43/1185 ; ignition devices for seismic energy generators G01V 1/06)}	5/05	• • • Blasting mats
1/041	• • {Tools for adapting cartridges for the mounting of detonators (Cartridges specially adapted for the mounting of detonators F42B 3/26)}	5/055	• • Silencing means for blasting operations
1/042	• • {Logic explosive circuits, e.g. with explosive diodes}	5/06	• Unloading boreholes
1/043	• • {Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges F42B 3/26)}	99/00	Subject matter not provided for in other groups in this subclass
1/045	• • Arrangements for electric ignition (dynamo-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		
1/14	• • 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		
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		
3/04	• for rock blasting		
3/06	• for seismic purposes		
5/00	Safety arrangements		
5/02	• Locating undetonated charges		