

# 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](#))

<b>1/00</b>	<b>Blasting methods or apparatus, e.g. loading or tamping</b>	5/04	• Rendering explosive charges harmless, e.g. destroying ammunition ({ <a href="#">F42B 39/14</a> and <a href="#">F42B 39/20</a> take precedence } ; extracting primers, dismantling ammunition <a href="#">F42B 33/04</a> , <a href="#">F42B 33/06</a> ; {chemical deactivating of explosives <a href="#">C06B 21/0091</a> }); Rendering detonation of explosive charges harmless
1/02	• Arranging blasting cartridges to form an assembly (adaptation of blasting cartridges therefor <a href="#">F42B 3/02</a> )	5/045	• • Detonation-wave absorbing or damping means
1/04	• Arrangements for ignition {(ignition systems for shaped charge perforators <a href="#">E21B 43/1185</a> ; ignition devices for seismic energy generators <a href="#">G01V 1/06</a> )}	5/05	• • • Blasting mats
1/041	• • {Tools for adapting cartridges for the mounting of detonators (Cartridges specially adapted for the mounting of detonators <a href="#">F42B 3/26</a> )}	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 <a href="#">F42B 3/26</a> )}	<b>99/00</b>	<b>Subject matter not provided for in other groups in this subclass</b>
1/045	• • Arrangements for electric ignition (dynamo-electric generators <a href="#">H02K</a> )		
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 ({ <a href="#">F42D 1/043</a> and } <a href="#">F42D 1/055</a> 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 <a href="#">F42B 3/087</a> )		
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		
<b>3/00</b>	<b>Particular applications of blasting techniques</b> {(explosive welding <a href="#">B23K 20/08</a> ; explosive bolts or actuators <a href="#">F42B 3/006</a> ; explosive valves <a href="#">F16K 13/06</a> ; cutting devices actuated by explosion <a href="#">B23D 15/145</a> ; pyrotechnical actuators <a href="#">F15B 15/19</a> ; switching devices actuated by explosion <a href="#">H01H 39/00</a> )}		
3/02	• for demolition of tall structures, e.g. chimney stacks		
3/04	• for rock blasting		
3/06	• for seismic purposes		
<b>5/00</b>	<b>Safety arrangements</b>		
5/02	• Locating undetonated charges		