

F42D

BLASTING (fuses, e.g. fuse cords, C06C5/00;[N: for obtaining fluid from wells E21B43/00; for mining or quarrying E21C37/00; for making tunnels or galleries E21D9/006]; cartridges F42B3/00)

Definition statement

This subclass/group covers:

This subclass covers devices and methods for blasting for both civilian and military applications. The documentation is also organised according to the particular blasting operations. Further it includes particular safety arrangements for blasting or detonations.

Relationship between large subject matter areas

[C06B](#) : Chemical aspects of explosives, explosive compositions

[C06C](#):Chemical aspects of primers and detonators

References relevant to classification in this subclass

This subclass/group does not cover:

Fuses, e.g. fuse cords	C06C 5/00
Blasting cartridges	F42B 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

For obtaining fluid from wells	E21B 43/00
For mining or quarrying	E21C 37/00
For making tunnels or galleries	E21D 9/006
Seismic investigation using explosives	G01V 1/104

F42D 1/00

Blasting methods or apparatus, e.g. loading or tamping

Definition statement

This subclass/group covers:

Devices and methods for blasting, including the arrangement of blasting cartridges as the smallest explosive unit into assemblies, pyrotechnic, electric and electronic ignition arrangements, in particular for the timed ignition of a multitude of single blasting units, and methods and apparatus for the tamping or loading of explosives. Further includes set-ups for breaching of doors or walls.

F42D 1/042

[N: Logic explosive circuits, e.g. with explosive diodes]

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electric circuits for blasting	F41D 1/05
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F42D 1/043

[N: Connectors for detonating cords and ignition tubes, e.g. Nonel tubes (mounting of detonators in blasting cartridges F42B3/26)]

References relevant to classification in this group

This subclass/group does not cover:

Mounting of detonators in blasting cartridges	F42B 3/26
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Fuze connectors	C06C 5/06
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F42D 3/00

Particular applications of blasting techniques [N: explosive welding B23K20/08; explosive bolts or actuators F42B3/006; explosive valves F16K13/06; cutting devices actuated by explosion B23D15/145; pyrotechnical actuators F15B15/19; switching devices actuated by explosion H01H39/00]

Relationship between large subject matter areas

Cleaning by explosions	B08B 7/0007
Well/Drilling blast units, perforating guns	E21B

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cutting devices actuated by explosion	B23D 15/145
Explosive welding	B23K 20/08
Pyrotechnical actuators	F15B 15/19
Explosive valves	F16K 13/06
Explosive bolts or actuators	F42B 3/006
Switching devices actuated by explosion	H01H 39/00

F42D 3/06

for seismic purposes

Informative references

Attention is drawn to the following places, which may be of interest for search:

Generating seismic energy using explosive charges	G01V 1/104
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F42D 5/00

Safety arrangements

Definition statement

This subclass/group covers:

Methods and devices for increasing the safety of blasting operation, e.g. during blasting operation by providing a physical detonation wave absorbing shield, or the identification, neutralisation and removal of explosives in cases where the explosive did not detonate (abort of operation, malfunction/dud or decommissioning).

F42D 5/04

Rendering explosive charges harmless, e.g. destroying ammunition ([N: F42B39/14 and F42B39/20 take precedence]; extracting primers, dismantling ammunition F42B33/04, F42B33/06; [N: chemical deactivating of explosives C06B21/0091]); Rendering detonation of explosive charges harmless

References relevant to classification in this group

This subclass/group does not cover:

Fitting or extracting primers in or from fuzes or charges	F42B 33/04
Dismantling fuzes, cartridges, projectiles, missiles, rockets or bombs	F42B 33/06
Explosion or fire protection arrangements on packages or ammunition	F42B 39/14
Packages or ammunition having valves for pressure-equalising; Packages or ammunition having plugs for pressure release, e.g. meltable	F42B 39/20

Informative references

Attention is drawn to the following places, which may be of interest for search:

Elimination of undesirable or	C06B 21/0091
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temporary components of an intermediate or finished product, e.g. making porous or low density products, purifying, stabilising, drying; Deactivating; Reclaiming	
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F42D 5/045

Detonation-wave absorbing or damping means

Definition statement

This subclass/group covers:

This group includes all means to avoid the propagation of the detonation or blast wave during the destruction of ammunition by controlled detonation in a pressure chamber which is able to withstand a detonation inside. Also includes detonation wave guiding means.

References relevant to classification in this group

This subclass/group does not cover:

Dismantling fuzes, cartridges, projectiles, missiles, rockets or bombs by combustion	F42B 33/067
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F42D 99/00

Subject matter not provided for in other groups in this subclass