

## F41A

### FUNCTIONAL FEATURES OR DETAILS COMMON TO BOTH SMALLARMS AND ORDNANCE, e.g. CANNONS; MOUNTINGS FOR SMALLARMS OR ORDNANCE

#### Definition statement

*This place covers:*

This subclass covers those features or details which are considered to be of a kind generally applicable to, or to be concerned with intrinsic functions common to, both smallarms and ordnance. Such features or details are classified in this subclass, even if they are stated to be applied only to smallarms or only to ordnance.

## F41A 1/00

**Missile propulsion characterised by the use of explosive or combustible propellant charges (projecting missiles without use of explosive or combustible propellant charge [F41B](#); launching rockets or torpedoes [F41F 3/00](#); missile self-propulsion [F42B 15/00](#))**

#### Definition statement

*This place covers:*

Propulsion is to be interpreted as the launching process of a missile within the barrel. Emphasis is made on the "characterised by", obviously only documents with characteristic propulsion systems are included in this subclass, since every single firearm launches missiles with a pyrotechnic propellant charge.

#### Relationships with other classification places

Jet propulsion plants	<a href="#">F02K</a>
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## References

### Limiting references

*This place does not cover:*

Projecting missiles without use of explosive or combustible propellant charge	<a href="#">F41B</a>
Launching rockets or torpedoes	<a href="#">F41F 3/00</a>
Separately loaded propellant charges	<a href="#">F42B 5/38</a>
Missile self-propulsion	<a href="#">F42B 15/00</a>

## F41A 1/02

**Hypervelocity missile propulsion using successive means for increasing the propulsive force, e.g. using successively initiated propellant charges arranged along the barrel length; Multistage missile propulsion**

### Definition statement

*This place covers:*

Multistage propulsion is generated by the firearm and NOT the missile, usually by using multiple sequentially triggered propellant chambers located at different locations along the barrel.

### References

#### Limiting references

*This place does not cover:*

Multistage rocket-engine plants	<a href="#">F02K 9/76</a>
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## F41A 1/06

**Adjusting the range without varying elevation angle or propellant charge data, e.g. by venting a part of the propulsive charge gases, or by adjusting the capacity of the cartridge or combustion chamber {(adjusting the range by using gas-relieving ports in the barrel [F41A 21/28](#))}**

### Definition statement

*This place covers:*

Mechanical aspects of the range adjustments.

### References

#### Limiting references

*This place does not cover:*

Adjusting the range by using gas-relieving ports in the barrel	<a href="#">F41A 21/28</a>
Gun mountings permitting traversing or elevating movement	<a href="#">F41A 27/00</a>
Elevating or traversing control systems for guns	<a href="#">F41G 5/00</a>
Arrangements on projectiles or missiles for range-reducing, range-increasing	<a href="#">F42B 10/00</a>

## F41A 1/08

**Recoilless guns, i.e. guns having propulsion means producing no recoil**

### Definition statement

*This place covers:*

Guns with means for eliminating recoil by accelerating a mass in a direction opposite to the missile propulsion direction. Usually through Venturi pipes or by causing a part of the propellant gases to be expelled rearwardly to counteract the recoil forces.

## References

### Limiting references

*This place does not cover:*

Stocks specially adapted for recoil reduction	<a href="#">F41C 23/06</a>
Recoilless rocket launchers adapted to be carried and used by a person, e.g. bazookas	<a href="#">F41F 3/045</a>

### Informative references

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

Cartridge ammunition for recoilless guns	<a href="#">F42B 5/05</a>
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## F41A 1/10

**a counter projectile being used to balance recoil**

### Definition statement

*This place covers:*

The counter projectile can be a disintegrating projectile, e.g. comprising liquid or powder.

## F41A 3/00

**Breech mechanisms, e.g. locks**

### Definition statement

*This place covers:*

The breech mechanism, i.e. the breech block itself and the mechanism enabling the opening and closing and if applicable the locking of the breech. Furthermore the mounting of the breech block and mechanism is covered.

## References

### Limiting references

*This place does not cover:*

Mechanisms or systems operated by propellant charge energy for automatically opening the lock	<a href="#">F41A 5/00</a>
Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing	<a href="#">F41A 7/00</a>
Ramming arrangements, the breech-block itself being the rammer	<a href="#">F41A 9/40</a>
Mounting of cartridge ejectors on or within the bolt	<a href="#">F41A 15/14</a>
Mounting of cartridges ejectors in the breech housing	<a href="#">F41A 15/16</a>
Safeties for locking the breech-block or bolt in a safety position	<a href="#">F41A 17/42</a>

## Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Breech	The rear part of the bore of a gun barrel, especially the opening that permits the projectile to be inserted at the rear of the bore.
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## F41A 3/66

### Breech housings or frames; Receivers

## References

### Informative references

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

Weapons manufactured from plastics:	<a href="#">B29L 2031/777</a>
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## F41A 3/78

### Bolt buffer or recuperator means

## Definition statement

*This place covers:*

The primary mechanism in automatic and semi-automatic firearms for bringing the bolt or breech block back into closed position after a recoil cycle.

## References

### Limiting references

*This place does not cover:*

Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing	<a href="#">F41A 7/00</a>
Gun mounting permitting recoil or return to battery	<a href="#">F41A 25/00</a>

## F41A 5/00

### Mechanisms or systems operated by propellant charge energy for automatically opening the lock

## Definition statement

*This place covers:*

Mechanisms for opening the lock of semi-automatic and automatic firearms using ONLY the energy provided by the propellant charge during the launching of the projectile, i.e. autonomous systems, independent from an auxiliary source of energy.

## References

### Limiting references

*This place does not cover:*

Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing	<a href="#">F41A 7/00</a>
Internally powered drives for feeding and loading ammunition	<a href="#">F41A 9/49</a>
Externally power or control systems	<a href="#">F41A 9/50</a>

### Informative references

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

Bolt buffers or recuperator means	<a href="#">F41A 3/78</a>
Gun mounting permitting recoil or return to battery	<a href="#">F41A 25/00</a>

## F41A 5/08

**having an accelerator lever acting on the breech-block or bolt during the opening movement**

## References

### Informative references

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

Delaying breech opening movements	<a href="#">F41A 3/62</a>
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## F41A 5/10

**having a movable inertia weight {, e.g. for storing energy}**

## Definition statement

*This place covers:*

The energy is accumulated during the rearward of the bolt or barrel after the lock has been opened by the recoil or due to gas operation, consequently implying that the stored energy is used for closing the lock

## References

### Informative references

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

Delaying breech opening means	<a href="#">F41A 3/62</a>
Energy accumulator systems	<a href="#">F41A 5/32</a>

## F41A 5/26

**Arrangements or systems for bleeding the gas from the barrel**  
([F41A 5/20](#) - [F41A 5/24](#) take precedence)

### References

#### Limiting references

*This place does not cover:*

Gas operated mechanisms or systems operated by propellant charge energy for automatically opening the lock using a gas piston arranged concentrically around the barrel	<a href="#">F41A 5/20</a>
Gas operated mechanisms or systems operated by propellant charge energy for automatically opening the lock by direct action of gas pressure on bolt or locking elements	<a href="#">F41A 5/24</a>
Evacuating combustion gas from barrels	<a href="#">F41A 13/06</a>
Barrels, gun tubes, muzzle attachments, barrel mounting means	<a href="#">F41A 21/00</a>

## F41A 5/32

**Energy accumulator systems, i.e. systems for opening the breech-block by energy accumulated during barrel or gas piston recoil**

### Definition statement

*This place covers:*

Implies a delayed or staged lock opening movement. The recoil or gas piston movement is accumulated, and the accumulated energy is used in a second stage to open the lock, after partial or full completion of the recoil/piston movement.

### References

#### Limiting references

*This place does not cover:*

Recoil operated opening with moveable inertia weight for storing energy	<a href="#">F41A 5/10</a>
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## F41A 7/00

**Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing; Drives for externally-powered guns; Remote-controlled gun chargers**

### Definition statement

*This place covers:*

Mechanisms for automatically cycling a firearm independent of the propellant charge for bringing the moving components back into firing position enabling the choice of firing rate.

## References

### Limiting references

*This place does not cover:*

External power or control systems for feeding and loading	<a href="#">F41A 9/50</a>
Shot velocity control	<a href="#">F41A 19/03</a>

## F41A 9/00

**Feeding or loading of ammunition ({conveying ammunition through pipes by the action of flowing gases [B65G 51/025](#) } ; adaptations for feeding or loading missiles from magazines in air guns [F41B 11/50](#)); Magazines; Guiding means for the extracting of cartridges (cartridge extractors or ejectors [F41A 15/00](#))**

### Definition statement

*This place covers:*

Devices and mechanisms for conveying the ammunition from its storage location or transport unit to the firing position.

## References

### Limiting references

*This place does not cover:*

Cartridge extractors or ejectors	<a href="#">F41A 15/00</a>
Adaptations for feeding or loading missiles from magazines in air guns	<a href="#">F41B 11/50</a>

### Informative references

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

Conveying ammunition through pipes by the action of flowing gases	<a href="#">B65G 51/025</a>
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## Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Feeding	Devices or mechanisms for sequentially bringing missiles from an external storage (magazine, belt, box) into the gun frame/casing/housing/receiver
Loading	Devices or mechanisms for sequentially bringing missiles into the firing chamber
Ramming	Devices or mechanisms for forcing a projectile into the constricting area of the chamber or the beginning of the barrel itself

## F41A 9/01

### Feeding of unbelted ammunition

#### Definition statement

*This place covers:*

Feeding of unconnected cartridges, projectiles or propelling charges one by one or in batches.

#### References

##### Informative references

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

Transporting ammunition through pipes by means of fluid medium pressure pneumatically	<a href="#">B65G 51/025</a>
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## F41A 9/04

### using endless-chain belts carrying a plurality of ammunition

#### Definition statement

*This place covers:*

The endless belt is only used to move UNBELTED ammunition from the storage magazine into the firearm

#### References

##### Limiting references

*This place does not cover:*

Feeding of belted ammunition	<a href="#">F41A 9/29</a>
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## F41A 9/29

### Feeding of belted ammunition

#### Definition statement

*This place covers:*

Feeding of ammunition strings having cartridges carried by a textile band or by carrier units each holding one cartridge, the carrier units being sequentially connected to each other by connecting elements or connected to each other by belt links, each belt link holding one cartridge and embracing the previous or subsequent cartridge.

#### References

##### Limiting references

*This place does not cover:*

Belt link collectors or catchers	<a href="#">F41A 9/60</a>
Magazines with belt link collectors and catchers	<a href="#">F41A 9/81</a>



**Informative references**

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

Feeding of unbelted ammunition with an endless belt conveyor	<a href="#">F41A 9/04</a>
Feeding of ammunition mounted on solid racks, the racks passing through the gun (Hotchkiss type, Japanese Type 92 HMG)	<a href="#">F42B 39/08</a>

**Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Cartridge stripping	removing belt link from the cartridge
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**F41A 9/49**

**Internally-powered drives, i.e. operated by propellant charge energy, e.g. couplings, clutches, energy accumulators**

**Definition statement**

*This place covers:*

Mechanisms wherein the propellant charge energy is used for particular ammunition loading and feeding.

**References****Limiting references**

*This place does not cover:*

Mechanisms or systems operated by propellant charge energy for automatically opening the lock	<a href="#">F41A 5/00</a>
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**F41A 9/50**

**External power or control systems**

**Definition statement**

*This place covers:*

Mechanisms wherein an external drive is used for particular ammunition loading and feeding.

**References****Limiting references**

*This place does not cover:*

Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing; Drives for externally-powered guns; Remote-controlled gun chargers	<a href="#">F41A 7/00</a>
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## F41A 9/53

**Charged-condition indicators, i.e. indicating the presence of a cartridge in the cartridge chamber**

### References

#### Limiting references

*This place does not cover:*

Magazines having means for indicating the number of cartridges left in the magazine, e.g. last-round indicators	<a href="#">F41A 9/62</a>
Last round safeties	<a href="#">F41A 17/40</a>

## F41A 9/60

**Empty-cartridge-case or belt-link collectors or catchers ([F41A 9/81](#) takes precedence)**

### References

#### Limiting references

*This place does not cover:*

Cartridge stripping means in sprocket transporters	<a href="#">F41A 9/31</a>
Cartridge stripping means in reciprocating slide transporters	<a href="#">F41A 9/33</a>
Magazines for belted ammunition having provision for collecting belt links or empty cartridge cases	<a href="#">F41A 9/81</a>

## F41A 9/62

**having means for indicating the number of cartridges left in the magazine, e.g. last-round indicators (last-round safeties [F41A 17/40](#))**

### References

#### Limiting references

*This place does not cover:*

Charge condition indicator	<a href="#">F41A 9/53</a>
Last round safeties	<a href="#">F41A 17/40</a>

## F41A 11/00

**Assembly or disassembly features; Modular concepts; Articulated or collapsible guns ([F41A 3/64](#), [F41A 19/10](#) - [F41A 19/15](#), [F41A 21/48](#), [F41A 25/26](#) take precedence)**

### Definition statement

*This place covers:*

Features and mechanisms and methods for assembling and dissassembling a firearm.

## Definition statement

Modular weapon family concepts.

Articulation and collapsing of firearms for the PURPOSE of storage or transport.

## References

### Limiting references

*This place does not cover:*

Breakdown breech mechanisms	<a href="#">F41A 3/58</a>
Mounting of breech-blocks; Accessories for breech-blocks or breech-block mountings	<a href="#">F41A 3/64</a>
Triggers; Trigger mountings	<a href="#">F41A 19/10</a>
Modular firing mechanism units	<a href="#">F41A 19/15</a>
Barrel mounting means, e.g. releasable mountings for replaceable barrels	<a href="#">F41A 21/48</a>
Assembling or dismounting recoil elements or systems	<a href="#">F41A 25/26</a>
Folding or telescopic stocks or stock parts	<a href="#">F41C 23/04</a>

## F41A 13/00

### Cooling or heating systems; Blowing-through of gun barrels; Ventilating systems

#### Definition statement

*This place covers:*

Active systems specially adapted for cooling or heating firearm components, in particular the barrel and the firing chamber.

## References

### Limiting references

*This place does not cover:*

Barrels and gun tubes with fins or fins for cooling	<a href="#">F41A 21/02</a>
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## F41A 13/06

### Evacuating combustion gas from barrels ([F41A 13/10](#) takes precedence)

## References

### Limiting references

*This place does not cover:*

Arrangements or systems for bleeding the gas from the barrel	<a href="#">F41A 5/26</a>
Blowers or turbines for evacuating or cooling guns, e.g. driven by combustion gas pressure or recoil	<a href="#">F41A 13/10</a>

## F41A 13/12

**Systems for cooling the outer surface of the barrel** ([F41A 13/10](#), [F41A 21/24](#) take precedence)

### References

#### Limiting references

*This place does not cover:*

Blowers or turbines for evacuating or cooling guns, e.g. driven by combustion gas pressure or recoil	<a href="#">F41A 13/10</a>
Barrels or gun tubes with fins or ribs, e.g. for cooling	<a href="#">F41A 21/24</a>

#### Informative references

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

Insulation jackets & protective jackets for barrels	<a href="#">F41A 21/44</a>
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## F41A 15/00

**Cartridge extractors, i.e. devices for pulling cartridges or cartridge cases at least partially out of the cartridge chamber; Cartridge ejectors, i.e. devices for throwing the extracted cartridges or cartridge cases free of the gun** ([F41A 9/54](#), [F41C 9/08](#) take precedence; {Means for removing duds or misfires in rocket throwers [F41F 3/058](#)})

### Definition statement

*This place covers:*

Devices, mechanisms or tools for removing a spent cartridge case or a dud from the firing chamber or for unloading a cartridge from the chamber.

### References

#### Limiting references

*This place does not cover:*

Blowers or turbines for evacuating or cooling guns, e.g. driven by combustion gas pressure or recoil	<a href="#">F41A 9/54</a>
Barrels or gun tubes with fins or ribs, e.g. for cooling	<a href="#">F41C 9/08</a>
Means for removing duds or misfires in rocket throwers	<a href="#">F41F 3/058</a>

### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Dud:	Cartridge, or separately loaded projectile or case, remaining stuck in the firing chamber after a misfire
Spent cartridge case:	case remaining after the projectile was launched

## F41A 17/00

### Safety arrangements, e.g. safeties

#### Definition statement

*This place covers:*

Devices and mechanism covering all aspects of firearm safety, including:

preventing unauthorised use

blocking or rendering ineffective diverse functional parts of the firearm to prevent inadvertent firing

inhibiting firing in a particular direction

preventing cook off or hang fire

preventing release of magazine

last round safeties

## F41A 17/06

### Electric or electromechanical safeties ([F41A 17/04](#), [F41A 17/08](#) take precedence)

#### Definition statement

*This place covers:*

Includes electric or electromagnetic means for preventing or enabling the use of a firearm. Also includes the remote control of a firearm, in the sense that a central control instance can block or release the use of the firearm. Also includes remote monitoring of firearm movement and/or usage. Further includes passive, post-incident safety means such as a black box data recording.

#### References

##### Limiting references

*This place does not cover:*

Safeties of the combination-lock type	<a href="#">F41A 17/04</a>
Safeties for inhibiting firing in a specified direction, e.g. at a friendly person or at a protected area	<a href="#">F41A 17/08</a>
Remote triggering of a firearm	<a href="#">F41A 19/08</a>
Electric firing mechanisms	<a href="#">F41A 19/56</a>

## F41A 17/063

### {comprising a transponder}

#### Definition statement

*This place covers:*

Includes means for remote weapon control and monitoring.

## F41A 17/14

### Double-loading prevention

#### Definition statement

*This place covers:*

Features to avoid jamming in the cartridge chamber caused by an attempt to load a second cartridge in an already loaded chamber.

## F41A 17/18

### Hang-fire prevention

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Hang fire	an unexpected delay between the triggering of a firearm and the ignition of the propellant
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## F41A 17/34

### Magazine safeties

#### References

##### Limiting references

*This place does not cover:*

Safety plugs, e.g. for plugging-up cartridge chambers	<a href="#">F41A 17/44</a>
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## F41A 17/36

locking the gun {automatically} in a safety condition when the magazine is empty or removed {([F41A 17/44](#) takes precedence)}

#### Definition statement

*This place covers:*

Last round safety for magazine fed smallarm, the follower of the magazine activating or acting on a gun-locking element such as a bolt or pistol slide. Means for preventing a loaded cartridge to be fired when the magazine is removed from the smallarm.

#### References

##### Limiting references

*This place does not cover:*

Safety plugs, e.g. for plugging-up cartridge chambers	<a href="#">F41A 17/44</a>
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**F41A 17/38****{Magazine mountings, e.g. for} locking the magazine in the gun****References****Limiting references***This place does not cover:*

Safety plugs, e.g. for plugging-up cartridge chambers	<a href="#">F41A 17/44</a>
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**F41A 17/40****Last-round safeties ([F41A 17/34](#) takes precedence)****Definition statement***This place covers:*

Means for setting an automatic, non-magazine-fed and usually medium or large calibre gun's feeding, ramming, loading and/or firing mechanism into a safe/inactive configuration when the last cartridge is chambered or fired, e.g. in Gatling type guns.

**References****Limiting references***This place does not cover:*

Locking a smallarm in a safety condition when the magazine is empty or removed	<a href="#">F41A 17/34</a>
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**F41A 19/00****Firing or trigger mechanisms; Cocking mechanisms****Definition statement***This place covers:*

Mechanisms or systems for firing, i.e. initiating the ignition of the propellant charge by mechanical, fluid-operated, pyrotechnic, optical or electric means.

Cocking mechanisms, i.e. for bringing mechanical firing means in a pre-tensioned, ready to fire state (cocked).

Further includes means for controlling number of shots fired, firing rate and synchronisation.

**Glossary of terms***In this place, the following terms or expressions are used with the meaning indicated:*

Sear:	the part of the trigger mechanism which holds the hammer or striker back until the correct amount of pressure has been applied to the trigger; at which point the hammer or striker is released to discharge the weapon. The sear may be a separate part or can be a surface incorporated into the trigger
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DA	Double action trigger performs the action of cocking during the initial trigger pull movement and releases the hammer or striker at the pressure point
DA/SA	Double action / Single action Double action for first shot and single action for subsequent shots
DAO	Double action only Double action for all shots
SA	Single action trigger only performs the action of releasing the hammer or striker
Cocking	bringing mechanical firing means in a pre-tensioned, ready to fire state (cocked)

## **F41A 19/02**

### **Burst limiters ([F41A 19/67](#) takes precedence)**

#### **Definition statement**

*This place covers:*

Means for allowing a predefined number of rounds to be fired upon a single trigger action.

#### **References**

##### **Limiting references**

*This place does not cover:*

Arrangements for the selection of automatic and semi-automatic fire in bolt action guns having a sliding striker	<a href="#">F41A 19/33</a>
Arrangements for the selection of automatic and semi-automatic fire in bolt action guns having a hammer	<a href="#">F41A 19/46</a>
Burst limiters	<a href="#">F41A 19/67</a>

## **F41A 19/08**

### **remote actuated; lanyard actuated**

#### **References**

##### **Limiting references**

*This place does not cover:*

Remote safing and monitoring of firearms	<a href="#">F41A 17/06</a>
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## **F41A 19/17**

### **Hair-trigger mechanisms**

#### **Definition statement**

*This place covers:*

A trigger allowing a shooter to have a greatly reduced trigger pull (the resistance of the trigger) while maintaining a degree of safety in the field



**F41A 19/19****with single-trigger firing possibility****Definition statement***This place covers:*

One trigger can cause the firing of more than one barrel

**F41A 19/20****Double-trigger arrangements having the possibility of single-trigger actuation****Definition statement***This place covers:*

One trigger per barrel is present, but the shooter has the choice of firing each barrel with its dedicated trigger, or both at the same time by actuation of a single trigger (after appropriate setting).

**F41A 19/58****Electric firing mechanisms ([F41A 17/10](#), [F41A 17/12](#) take precedence)****Definition statement***This place covers:*

Means for electrically releasing mechanical firing means or for firing electrical primers in cartridges. Further includes mechanisms where the primer charge is ignited optically, e.g. by a laser or intense light.

**References****Limiting references***This place does not cover:*

Firing mechanisms with elevation stop	<a href="#">F41A 17/10</a>
Firing mechanisms with anti-canting safety	<a href="#">F41A 17/12</a>

**F41A 21/00****Barrels; Gun tubes; Muzzle attachments; Barrel mounting means ([F41A 25/00](#) takes precedence; barrel attachments for firing grenades or riot-control ammunition from smallarms [F41C 27/06](#))****Definition statement***This place covers:*

Includes barrels, tubes; attachments and mounting means therefore. The cartridge chamber or firing chamber is an integral part of the barrel, except for, e.g. revolver type guns and certain block action guns.

## References

### Limiting references

*This place does not cover:*

Gun mountings permitting recoil or return to battery, e.g. gun cradles; Barrel buffers or brakes	<a href="#">F41A 25/00</a>
Checking of barrels	<a href="#">F41A 31/02</a>
Rocket launcher tubes	<a href="#">F41F 3/04</a>

## F41A 21/02

**Composite barrels, i.e. barrels having multiple layers, e.g. of different materials**

## References

### Informative references

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

Manufacture with plastics	<a href="#">B29L 2031/777</a>
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## F41A 21/10

**Insert barrels, i.e. barrels for firing reduced calibre ammunition and being mounted within the normal barrels**

## References

### Limiting references

*This place does not cover:*

Adaptations for training	<a href="#">F41A 33/00</a>
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## F41A 21/20

**Barrels or gun tubes characterised by the material ([F41A 21/02](#) takes precedence)**

## References

### Limiting references

*This place does not cover:*

Composite barrels, i.e. barrels having multiple layers, e.g. of different materials	<a href="#">F41A 21/02</a>
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### Informative references

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

Making rifle or gun barrels	<a href="#">B21C 37/152</a>
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**F41A 21/24**

Barrels or gun tubes with fins or ribs, e.g. for cooling ([F41G 1/42](#) takes precedence)

**References****Limiting references**

*This place does not cover:*

Cooling or heating systems	<a href="#">F41A 13/00</a>
Tube sights; Bar sights	<a href="#">F41G 1/42</a>

**F41A 21/26**

pecially adapted for recoil reinforcement, e.g. for training purposes

**Definition statement**

*This place covers:*

Includes blank firing arrangements

**References****Informative references**

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

Bullet catchers not fixed to a fire arm	<a href="#">F41J 13/00</a>
Bullet traps in rifle grenades	<a href="#">F42B 30/06</a>

**F41A 21/30****Silencers****References****Informative references**

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

Mountings for muzzle attachments incl. suppressors or silencers	<a href="#">F41A 21/325</a>
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**F41A 21/32**

Muzzle attachments or glands ([F41A 21/26](#), [F41A 21/30](#), [F41A 21/46](#) take precedence {; for projectile velocity measurements [G01P 3/665](#), [G01P 3/685](#)})

**References****Limiting references**

*This place does not cover:*

Barrels specially adapted for recoil reinforcement, e.g. for training purposes	<a href="#">F41A 21/26</a>
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Silencers	<a href="#">F41A 21/30</a>
Barrels having means for separating sabots from projectiles	<a href="#">F41A 21/46</a>
Tube sights; Bar sights	<a href="#">F41G 1/42</a>

### Informative references

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

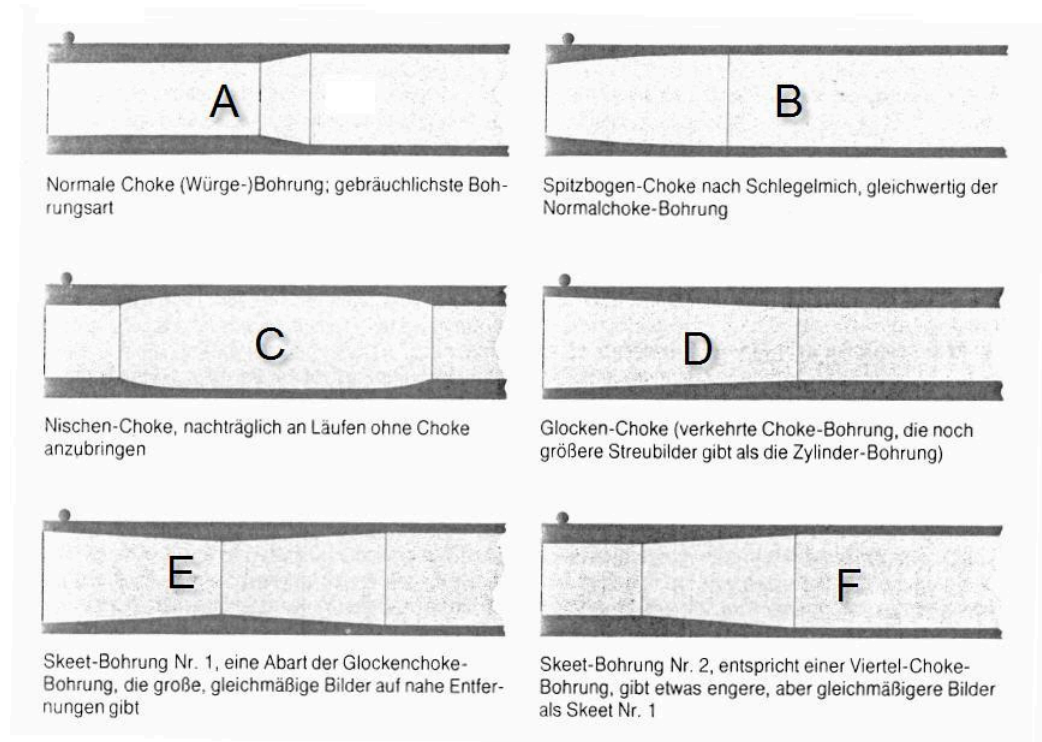
Blankfiring attachments	<a href="#">F41A 21/40</a>
Device using electric or magnetic means for projectile velocity measurements	<a href="#">G01P 3/665</a>
Device using optical means for projectile velocity measurements	<a href="#">G01P 3/685</a>

## F41A 21/40

### Chokes for shotguns {, e.g. automatic chokes}

#### Definition statement

This place covers:



Lampel, Mahrholdt, "Waffenlexikon", 9th edition, DE, München, BLV Verlagsgesellschaft, 1981, S. 56

A: normal choke

B: Schlegelmich choke, constricting choke

C: Nischen , jug or recess choke

D: Glockenchoke, bell choke, diverging choke

E, F: Skeet chokes

## F41A 21/44

### Insulation jackets; Protective jackets

#### References

##### Informative references

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

see for cooling aspects such as cooling mantles also [F41A 13/12](#)

## F41A 23/00

**Gun mountings, e.g. on vehicles; Disposition of guns on vehicles ([F41A 25/00](#), [F41A 27/00](#) take precedence)**

#### Definition statement

*This place covers:*

All mountings of firearms, fixed or mobile, except for the ones specifically designed for return to battery and the ones permitting traversing or elevating movement (see precedence, [F41A 25/00](#) and [F41A 27/00](#)). It includes locking means between gun and mounting, mountings without wheels (conventional mono-, bi- or tripods, test mounts and bench rests), mountings permitting the gun to retract into a hidden position, wheeled mountings (the wheels being mounted directly on the gun), mounted on vehicles, mounts for transport and adjustments means of the platform position.

#### References

##### Limiting references

*This place does not cover:*

Gun mountings permitting recoil or return to battery, e.g. gun cradles; Barrel buffers or brakes	<a href="#">F41A 25/00</a>
Gun mountings permitting traversing or elevating movement, e.g. gun carriages	<a href="#">F41A 27/00</a>

##### Informative references

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

Central pivot bearings (for gun mountings)	<a href="#">F41A 27/14</a>
Gun mounting on aircraft	<a href="#">B64D 7/00</a>

## F41A 23/16

### Testing mounts

#### Definition statement

*This place covers:*

Rests holding the firearm so as to enable stabilised shooting, includes both test shooting mounts and shooting rests, i.e. for bench rest shooting

## References

### Informative references

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

Testing mounts for checking gun barrels	<a href="#">F41A 31/02</a>
Shooting stands, e.g. for firing hunting rifles from trees	<a href="#">A01M 31/02</a>

## F41A 23/18

Rests for supporting smallarms in non-shooting position (racks for storage [A47B 81/00](#); racks in vehicles {[B60R 7/14](#)})

### Definition statement

*This place covers:*

Rests for holding the firearm in a fixed position for displaying, inspecting, adjusting, maintaining, repairing or cleaning of the firearm.

## References

### Informative references

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

Key operated safeties	<a href="#">F41A 17/02</a>
Combination lock safeties	<a href="#">F41A 17/04</a>
Cabinets or racks specially adapted for other particular purposes, e.g. for storing guns or skis	<a href="#">A47B 81/00</a>
Disposition of racks for weapons inside vehicles	<a href="#">B60R 7/14</a>
For carrying firearms on the body	<a href="#">F41C 33/00</a>
Containers for carrying smallarms, boxes/gun cases	<a href="#">F41C 33/06</a>

## F41A 23/28

Wheeled-gun mountings; Endless-track gun mountings

### Definition statement

*This place covers:*

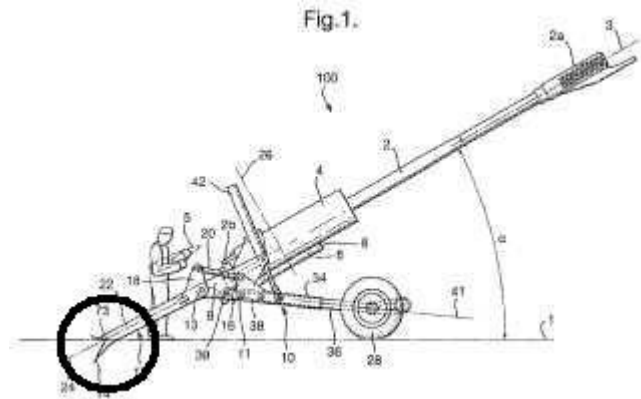
The wheels are directly mounted on the gun or gun cradle.

## F41A 23/46

### Trail spades

#### Definition statement

*This place covers:*



GB2455651

## F41A 25/00

### Gun mountings permitting recoil or return to battery, e.g. gun cradles; Barrel buffers or brakes (recoilless guns [F41A 1/08](#))

#### Definition statement

*This place covers:*

Gun mounts permitting travel of the gun from the shooting position into full recoil position along a bearing and returning to battery position, including spring, fluid, friction operated systems as well as hybrids thereof. It further includes bearings and assembly/disassembly features peculiar thereto.

#### References

##### Limiting references

*This place does not cover:*

Recoilless guns, i.e. guns having propulsion means producing no recoil	<a href="#">F41A 1/08</a>
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## F41A 27/00

### Gun mountings permitting traversing or elevating movement, e.g. gun carriages

#### Definition statement

*This place covers:*

Mechanical aspects of gun mounts permitting supported pointing of the gun for laying the gun, i.e. in the position to fire the gun and hitting the target.

## References

### Limiting references

*This place does not cover:*

Monopods	<a href="#">F41A 23/04</a>
Bipods	<a href="#">F41A 23/08</a>
Tripods	<a href="#">F41A 23/12</a>
Aiming means; Laying means	<a href="#">F41G 3/00</a>
Elevation or traversing control systems for guns	<a href="#">F41G 5/00</a>

## F41A 29/00

Cleaning or lubricating arrangements (injecting fluids into barrels or cartridge chambers [F41A 13/04](#) {; ammunition for cleaning purposes [F42B 5/24](#)})

## References

### Limiting references

*This place does not cover:*

Injecting fluids into barrels or cartridge chambers	<a href="#">F41A 13/04</a>
Ammunition for cleaning purposes	<a href="#">F42B 5/24</a>

### Informative references

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

Cleaning of hollow objects in general	<a href="#">B08B 9/00</a>
Pigs or moles, i.e. devices movable in a pipe or conduit with or without self-contained propulsion means	<a href="#">F16L 55/26</a>

## F41A 29/02

### Scrapers or cleaning rods

### Definition statement

*This place covers:*

Includes flexible cleaning devices for gun barrels, i.e. flexible wires or rope.

## F41A 29/04

### Lubricating, oiling or greasing means, e.g. operating during use

## References

### Limiting references

*This place does not cover:*

Projectiles or cartridges for cleaning cooling or lubricating	<a href="#">F42B 5/24</a>
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## F41A 31/00

### Testing arrangements (testing mounts [F41A 23/16](#))

#### Definition statement

*This place covers:*

All arrangements, devices, systems for testing the functionality of a firearm, except for testing of sighting, aiming and laying means.

#### References

##### Limiting references

*This place does not cover:*

Testing mounts	<a href="#">F41A 23/16</a>
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##### Informative references

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

Devices for testing or checking of sighting means	<a href="#">F41G 1/54</a>
Devices for testing or checking of aiming means	<a href="#">F41G 3/32</a>
Apparatus for testing or checking of laying means	<a href="#">F41G 5/26</a>
Checking or testing of ammunition	<a href="#">F42B 35/00</a>

## F41A 31/02

### for checking gun barrels

#### References

##### Limiting references

*This place does not cover:*

Devices for testing or checking of sights (parrallelity with the barrel)	<a href="#">F41G 1/54</a>
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#### Synonyms and Keywords

bore sighting devices

## F41A 33/00

Adaptations for training (adaptations of barrels for recoil reinforcement [F41A 21/26](#)); Gun simulators (teaching or practice apparatus for gun-aiming or gun-laying [F41G 3/26](#) {; shooting games [A63F 9/02](#); military simulation [G09B 9/003](#)}}

#### Definition statement

*This place covers:*

Adaptations of firearms for use in training without live ammunition or weapons specially adapted for training and simulation only.

## References

### Limiting references

*This place does not cover:*

Insert barrels	<a href="#">F41A 21/10</a>
Adaptations of barrels for recoil reinforcement	<a href="#">F41A 21/26</a>
Shooting or hurling games	<a href="#">A63F 9/02</a>
Teaching or practice apparatus for gun-aiming or gun-laying	<a href="#">F41G 3/26</a>
Simulators for teaching or training purposes for military purposes and tactics	<a href="#">G09B 9/003</a>

### Informative references

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

Firecrackers	<a href="#">F42B 4/04</a>
Hand thrown impact-exploded noise makers	<a href="#">F42B 4/16</a>

## F41A 33/02

**Light- or radiation-emitting guns {; Light- or radiation-sensitive guns;  
Cartridges carrying light emitting sources, e.g. laser}**

### Definition statement

*This place covers:*

Includes:

- separate light producing units fitted in the barrel of an existing gun and
- externally mounted light beam emitting units

(torch-like)

## References

### Limiting references

*This place does not cover:*

Cartridges carrying light emitting sources	<a href="#">F42B 8/00</a>
Military or tactic simulation systems	<a href="#">G09B 9/003</a>

### Informative references

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

Teaching or practice apparatus for gun laying or gun aiming	<a href="#">F41G 3/26</a>
Active targets transmitting infrared radiation	<a href="#">F41J 5/02</a>
Infrared hit indicating systems	<a href="#">F41J 5/08</a>

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

MILES: Multiple Integrated Laser Engagement System

**F41A 35/00**

**Accessories or details not otherwise provided for**

**Special rules of classification**

Residual group for [F41A 1/00-F41A 33/00](#), particularly listing common accessories such as dust covers, e.g. ejection port or muzzle covers, or adaptations for ambidextrous use of firearms.