

**CPC****COOPERATIVE PATENT CLASSIFICATION****F41G****WEAPON SIGHTS; AIMING** (optical aspects thereof [G02B](#) )**Guidance heading:****F41G 1/00**

**Sighting devices** (for indirect laying of fire [F41G 3/16](#); bombsights [F41G 3/24](#); { structurally associated with laser telemeters [F41G 3/065](#); mounting tubular or beam shaped aiming devices on firearms [F41G 11/001](#) } )

**F41G 1/01**

- . characterised by the visual combination effect of the respective geometrical forms of fore and rear sight ([F41G 1/42](#) takes precedence)

**F41G 1/02**

- . Foresights

**F41G 1/027**

- .. with lens

**F41G 1/033**

- .. adjustable

**F41G 1/04**

- .. Protection means therefor

**F41G 1/06**

- . Rearsights

**F41G 1/065**

- .. {Protection means therefor ([F41G 1/04](#) takes precedence) }

**F41G 1/08**

- .. with aperture; {tubular or of ring form; Peep sights ([F41G 1/42](#) takes precedence) }

**F41G 1/10**

- .. with notch

**F41G 1/12**

- .. with line or mark other than notch

**F41G 1/14**

- .. with lens

**F41G 1/16**

- .. Adjusting mechanisms therefor; Mountings therefor

**F41G 1/17**

- ... Convertible sights, i.e. sets of two or more sights brought into the sight line optionally

**F41G 1/18**

- ... Clicking-indicators with spring detents

**F41G 1/20**

- ... coarse and fine

**F41G 1/22**

- ... Friction clamps

**F41G 1/24**

- ... rack-and-pinion; lever; linkwork

**F41G 1/26**

- ... screw

**F41G 1/28**

- ... wedge; cam; eccentric

**F41G 1/30**

- . Reflecting-sights specially adapted for smallarms or ordnance ([reflecting-sights in general G02B](#) )

**F41G 1/32**

- . Night sights, e.g. luminescent { ([optical aspects of sighting devices G02B 23/00](#), [G02B 27/00](#)) }

**F41G 1/34**

- .. combined with light source, e.g. spot-light

**F41G 1/345**

- ... {for illuminating the sights }

**F41G 1/35**

- ... for illuminating the target, {e.g. flash lights }

**F41G 1/36**

- ... with infra-red light source

**F41G 1/38**

- . Telescopic sights specially adapted for smallarms or ordnance ([telescopic sights in](#)

- general [G02B](#) ) ; Supports or mountings therefor
- F41G 1/383 . . {Protection means therefor }
- F41G 1/387 . . Mounting telescopic sights on smallarms
- F41G 1/393 . . Mounting telescopic sights on ordnance; Transmission of sight movements to the associated gun
- F41G 1/3935 . . . Transmission of sight movements to the associated gun
- F41G 1/40 . Periscopic sights specially adapted for smallarms or ordnance ([periscopic sights in general G02B](#) ) ; Supports or mountings therefor
- F41G 1/41 . . Mounting periscopic sights on smallarms
- F41G 1/42 . Tube sights; Bar sights ; {Combinations of tubular fore and rearsights }
- F41G 1/425 . . {Bar sights }
- F41G 1/44 . Spirit-level adjusting means, e.g. for correcting tilt ; {Means for indicating or correcting tilt or cant }
- F41G 1/46 . for particular applications
- F41G 1/467 . . for bows
- F41G 1/473 . . for lead-indicating or range-finding, e.g. for use with rifles or shotguns
- F41G 1/48 . . for firing grenades from rifles
- F41G 1/50 . . for trench mortars {or for other mortars }
- F41G 1/52 . . for rifles or shotguns having two or more barrels, or adapted to fire different kinds of ammunition, e.g. ball or shot
- F41G 1/54 . Devices for testing or checking; {Tools for adjustment of sights }
- F41G 1/545 . . {Tools for adjustment of sights }
- F41G 3/00** **Aiming means; Laying means** ([sighting-devices F41G 1/00](#); { mounting tubular or beam shaped aiming devices on firearms [F41G 11/001](#); } determining direction, distance or velocity by use of radio or other waves [G01S](#) ; computer [G06](#) ; aerials [H01Q](#) )
- F41G 3/005 . . {with means for correcting the parallax between the sighting means and the muzzle axis }
- F41G 3/02 . using an independent line of sight
- F41G 3/04 . for dispersing fire from a battery; {for controlling spread of shots; for coordinating fire from spaced weapons }
- F41G 3/06 . with rangefinder ([rangefinders per se G01C](#) )
- F41G 3/065 . . {Structural association of sighting-devices with laser telemeters }
- F41G 3/08 . with means for compensating for speed, direction, temperature, pressure, or humidity of the atmosphere ([measuring G01](#) )
- F41G 3/10 . with means for compensating for canting of the trunnions
- F41G 3/12 . with means for compensating for muzzle velocity or powder temperature {with means

- for compensating for gun vibrations }
- F41G 3/14 . Indirect aiming means
- F41G 3/142 .. {based on observation of a first shoot; using a simulated shoot ([training F41G 3/26](#)) }
- F41G 3/145 .. {using a target illuminator }
- F41G 3/147 .. {based on detection of a firing weapon }
- F41G 3/16 .. Sighting devices adapted for indirect laying of fire
- F41G 3/165 ... {using a TV-monitor }
- F41G 3/18 .. Auxiliary target devices adapted for indirect laying of fire
- F41G 3/20 .. specially adapted for mountain artillery
- F41G 3/22 . for vehicle-borne armament, e.g. on aircraft
- F41G 3/225 .. {Helmet sighting systems }
- F41G 3/24 .. Bombsights
- F41G 3/26 . Teaching or practice apparatus for gun-aiming or gun-laying { ([shooting games A63F 9/02](#); [light- or radiation-emitting guns F41A 33/02](#); [targets therefor F41J](#) ; [responders, transponders for radar, sonar, lidar G01S 13/767](#), [G01S 15/74](#), [G01S 17/74](#)) }
- F41G 3/2605 .. {using a view recording device cosighted with the gun ([F41G 3/2616](#) takes precedence) }
- F41G 3/2611 ... {coacting with a TV-monitor }
- F41G 3/2616 .. {using a light emitting device }
- F41G 3/2622 ... {for simulating the firing of a gun or the trajectory of a projectile }
- F41G 3/2627 .... {Cooperating with a motion picture projector }
- F41G 3/2633 ..... {using a TV type screen, e.g. a CRT, displaying a simulated target }
- F41G 3/2638 ..... {giving hit coordinates by means of raster control signals, e.g. standard light pen }
- F41G 3/2644 .... {Displaying the trajectory or the impact point of a simulated projectile in the gunner's sight }
- F41G 3/265 .... {with means for selecting or varying the shape or the direction of the emitted beam }
- F41G 3/2655 .... {in which the light beam is sent from the weapon to the target }
- F41G 3/2661 .... { in which the light beam is sent from the target to the weapon ([F41G 3/2638](#) takes precedence) }
- F41G 3/2666 .... {with means for selecting or varying PRF or time coding of the emitted beam }
- F41G 3/2672 ..... {using PRF adapted receiver }
- F41G 3/2677 ..... {with PRF determination }
- F41G 3/2683 .... {with reflection of the beam on the target back to the weapon }
- F41G 3/2688 ..... {using target range measurement, e.g. with a laser rangefinder }
- F41G 3/2694 ... {for simulating a target ([F41G 3/2627](#) takes precedence; [moving targets per se F41J 9/00](#)) }
- F41G 3/28 .. Small-scale apparatus ([relief models or maps G09B](#) )
- F41G 3/30 .. Gun-laying apparatus

- F41G 3/32 . Devices for testing or checking
- F41G 3/323 . . {for checking the angle between the muzzle axis of the gun and a reference axis, e.g. the axis of the associated sighting device (testing alignment of axes in general [G01B 11/27](#)) }
- F41G 3/326 . . {for checking the angle between the axis of the gun sighting device and an auxiliary measuring device ([F41G 3/323](#) takes precedence) }

**F41G 5/00** **Elevating or traversing control systems for guns** ( {means for inhibiting firing in a specified direction [F41A 17/08](#) }; gun mountings permitting traversing or elevating movement, e.g. gun carriages, [F41A 27/00](#); computers [G06](#) )

- F41G 5/02 . using only mechanical means for remote control
- F41G 5/04 . using hydraulic means for remote control
- F41G 5/06 . using electric means for remote control
- F41G 5/08 . Ground-based tracking-systems for aerial targets
- F41G 5/12 . acoustically influenced
- F41G 5/14 . for vehicle-borne guns
- F41G 5/16 . . gyroscopically influenced
- F41G 5/18 . . Tracking systems for guns on aircraft
- F41G 5/20 . . for guns on ships
- F41G 5/22 . . . to compensate for rolling or pitching
- F41G 5/24 . . for guns on tanks
- F41G 5/26 . Apparatus for testing or checking

**F41G 7/00** **Direction control systems for self-propelled missiles** (flight control [B64C](#) , [G05D 1/00](#); { counter-measures against guided missiles [F41H 11/02](#); spin-stabilised missiles [F42B 10/26](#) }; self-propelled or guided missiles having direction control systems only installed aboard [F42B 15/01](#); rocket torpedoes [F42B 17/00](#); marine torpedoes or sea-mines having self-propulsion means [F42B 19/00](#); locating by use of radio or other waves [G01S](#) ; computing aspects [G06](#) )

- F41G 7/001 . {Devices or systems for testing or checking }
- F41G 7/002 . . {target simulators }
- F41G 7/003 . . . {for seekers using radio waves }
- F41G 7/004 . . . {for infra-red seekers }
- F41G 7/005 . . {for testing benches or sets }
- F41G 7/006 . {Guided missiles training or simulation devices }
- F41G 7/007 . {Preparatory measures taken before the launching of the guided missiles }
- F41G 7/008 . {Combinations of different guidance systems }

- F41G 7/20 . based on continuous observation of target position
- F41G 7/22 .. Homing guidance systems
- F41G 7/2206 ... {using a remote control station }
- F41G 7/2213 ... { maintaining the axis of an orientable seeking head pointed at the target, e.g. target seeking gyro }
- F41G 7/222 ... {for spin-stabilized missiles }
- F41G 7/2226 ... { comparing the observed data with stored target data, e.g. target configuration data }
- F41G 7/2233 ... {Multimissile systems }
- F41G 7/224 ... {Deceiving or protecting means (jamming or anti-jamming of radio-wave systems in general [G01S 7/36](#), [G01S 7/38](#); defense installations in general [F41H 11/02](#); chaff dispensers [F42B 12/70](#)) }
- F41G 7/2246 ... { Active homing systems, i.e. comprising both a transmitter and a receiver }
- F41G 7/2253 ... { Passive homing systems, i.e. comprising a receiver and do not requiring an active illumination of the target }
- F41G 7/226 ... { Semi-active homing systems, i.e. comprising a receiver and involving auxiliary illuminating means, e.g. using auxiliary guiding missiles }
- F41G 7/2266 .... { Systems comparing signals received from a base station and reflected from the target }
- F41G 7/2273 ... { characterised by the type of waves }
- F41G 7/228 .... { using acoustic waves, e.g. for torpedoes }
- F41G 7/2286 .... { using radio waves }
- F41G 7/2293 .... { using electromagnetic waves other than radio waves }
- F41G 7/24 .. Beam riding guidance systems ([conical-scan beam beacons therefor](#) [G01S 1/42](#))
- F41G 7/26 ... Optical guidance systems
- F41G 7/263 .... {Means for producing guidance beams }
- F41G 7/266 .... {for spin-stabilized missiles }
- F41G 7/28 ... Radio guidance systems
- F41G 7/30 .. Command link guidance systems {homing [F41G 7/2206](#) }
- F41G 7/301 ... {Details }
- F41G 7/303 .... {Sighting or tracking devices especially provided for simultaneous observation of the target and of the missile }
- F41G 7/305 .... {for spin-stabilized missiles }
- F41G 7/306 .... { for transmitting guidance signals; ([F41G 7/308](#) takes precedence) }
- F41G 7/308 .... {for guiding a plurality of missiles }
- F41G 7/32 ... for wire-guided missiles
  
- F41G 7/34 . based on predetermined target position data
- F41G 7/343 .. {comparing observed and stored data of target position or of distinctive marks along the path towards the target }
- F41G 7/346 .. { using global navigation satellite systems, e.g. GPS, GALILEO, GLONASS }
- F41G 7/36 .. using inertial references

**F41G 9/00 Systems for controlling missiles or projectiles, not provided for elsewhere**

- F41G 9/002 . {for guiding a craft to a correct firing position (for bombing control [F41G 9/02](#)) }
- F41G 9/004 . . {Training or teaching apparatus therefor }
- F41G 9/006 . . {for torpedo launchers (torpedo launching-apparatus [F41F 3/08](#)) }

- F41G 9/008 . { Means for controlling firing of torpedoes; Torpedo directors (acoustic homing [F41G 7/228](#)) }

- F41G 9/02 . for bombing control (bombsights [F41G 3/24](#))
- F41G 9/025 . . {Training or teaching apparatus therefor }

**F41G 11/00**      **Details of sighting or aiming apparatus; Accessories** { (Tools for adjustment of sights [F41G 1/545](#)) }

- F41G 11/001 . { Means for mounting tubular or beam shaped sighting or aiming devices on firearms }
- F41G 11/002 . . { Mountings with recoil absorbing means }
- F41G 11/003 . . { Mountings with a dove tail element, e.g. "Picatinny rail systems" }
- F41G 11/004 . . { Mountings with clamping means on the device embracing at least a part of the firearm, e.g. the receiver or a dustcover ([F41G 1/003](#) takes precedence) }
- F41G 11/005 . . { Mountings using a pivot point and an anchoring point }
- F41G 11/006 . . . { the device being rotated in a horizontal plane }
- F41G 11/007 . . . { the device being tilted in a vertical plane }
- F41G 11/008 . . . { the device being pivotable about an axis coaxial with the axis of the barrel, e.g. for loading }

**Guidance heading:**

**F41G 2700/00**      **Torpedoes**

- F41G 2700/005 . Remote steering of torpedoes by means of electric or acoustic waves or otherwise