# (11) EP 2 455 698 A2

(12)

## **EUROPEAN PATENT APPLICATION**

(43) Date of publication:

23.05.2012 Bulletin 2012/21

(51) Int Cl.: F41A 23/14 (2006.01)

F41A 23/16 (2006.01)

(21) Application number: 11187323.8

(22) Date of filing: 31.10.2011

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

**BA ME** 

(30) Priority: 22.11.2010 IT PS20100011 U

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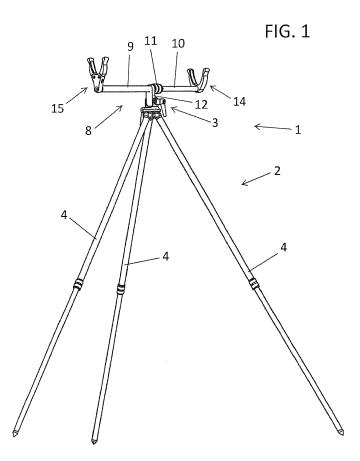
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### (54) Tripod for long firearms

(57) The present invention refers to a ground support structure (1) for long firearms, such as for example rifles and carabines, comprising a stand (2) with a plurality of legs (4) associated to a tilting telescopic support (8) through an orbital head (3) for selectively modifying - in

rotation and inclination - the position of the tilting telescopic support (8), the latter apically carrying two support members (14, 15) on which a long firearm can be placed, at least one of said two support members (14, 15) comprising locking means for locking said long firearm to the tilting telescopic support (8).



P 2 455 698 A2

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#### Description

### **DETAILED DESCRIPTION**

#### Technical field of the invention

**[0001]** In selective hunting there is known the use of supports to be placed on the ground for supporting and positioning the firearms used in such hunting activity at firing position.

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**[0002]** Such supports, in order to be comfortably and efficiently used by a shooter using it, must be as light and small in size as possible given the need to be carried to the hunting site which often is not accessible using means of transport, and simultaneously attain the maximum stability of the supported firearm.

#### Objects of the invention

**[0003]** The main object of the present invention is that of providing an innovative and functional ground support for long firearms, such as for example rifles and carabines, capable of stably supporting such type of firearm, hence allowing a shooter using it to aim and shoot a given prey with great accuracy.

**[0004]** The second object of the present invention is to attain the abovementioned object by means of a device that is light and small in size.

**[0005]** Another object of the present invention is to attain the previous objects through a device that is adjustable and polyvalent as possible in the possible applications thereof.

**[0006]** A further object of the present invention is to attain the preceding objects through a simple and efficient device, that is safe to use and relatively inexpensive considering the results practically attained therewith.

### Summary of the solution concept

[0007] These and other objects are attained by means of the ground support structure for long firearms according to the present invention, comprising a stand (2) with a plurality of legs (4) associated to a tilting telescopic support (8) through an orbital head (3) for selectively modifying - in rotation and inclination - the position of the tilting telescopic support (8), the latter apically carrying two support members (14, 15) on which a long firearm can be placed, at least one of said two support members (14, 15) comprising locking means for locking said long firearm to the tilting telescopic support (8).

### Description of the attached drawings

**[0008]** Further characteristics and advantages of the device provided for by the present invention shall be more apparent from the following detailed description of a preferred but not exclusive embodiment thereof, represented solely by way of non-limiting example in the four at-

tached drawings, wherein:

figure 1 shows a ground support for long firearms according to the present invention in the open operative configuration thereof;

figure 2 shows the ground support for long firearms of figure 1 in the closed inoperative configuration thereof:

figure 3 is a further detailed view of the ground support for long firearms shown in figures 1 and 2; figure 4 is a cross-sectional view of a detail of the ground support for long firearms shown in figures 1 to 3

### 15 Static description of the embodiment

**[0009]** With reference to such figures, a ground support structure for long firearms according to the present invention, preferably made of light material, for example aluminium, comprising a stand 2 with an orbital head 3 from which three proximally articulated and tiltable telescopic legs 4 extend downwards, is indicated in its entirety with 1.

**[0010]** The orbital head 3 has - at the lower part - a base joint 5 substantially shaped to form a disc with three seats for receiving the respective top parts of the three telescopic legs 4, connected to said head 3 in an articulated manner.

**[0011]** The orbital head 3 further comprises a bracket joint 6 rotatably mounted, through known connection means, on the base joint 5 on the side opposite to the legs 4, and which can be locked in any direction through a fastening lever 7.

**[0012]** The support 1 further comprises a tilting telescopic support 8 formed by two opposite telescopic rods 9, 10 mutually joined by a bushing 11, and by a cantilevered element 12 apically mounted on one of the aforementioned two telescopic rods at the bushing 11 and pivoted to the bracket joint 6 so that said support 8 can incline on each plane of the rotation axis between the base joint 5 and bracket joint 6.

**[0013]** A fastening lever 13 which can be used for locking said support 8 at any angle is used for adjusting the inclination of the tilting support 8.

**[0014]** The two opposite telescopic rods 9, 10 of the support 8 carry, at the respective apices, un fork-like support 14, for supporting the rod of a long firearm, and a clamp 15, for locking the stock of the arm in question, also configured fork-like and provided with two lateral jaws 16, 17 hinged to a central connection body 18 fixed to the support 8.

[0015] Two adjustment screws — only one of which is represented in figure 4 with the reference number 19 — intervening on which respectively and independently allows adjusting the inclination of the two jaws 16, 17 are provided on the central connection body 18 of the clamp 15 for fastening the lateral jaws 16, 17 on the firearm positioned on the support 8.

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**[0016]** The fork-like support 14 and the clamp 15, also fork-like as previously mentioned, are provided with respective flexible strips 20, 21 arranged folded within such two fork-like members and respectively intended to directly contact the rod and the stock of the firearm, thus providing an improved adhesion of the latter to the support 8.

### Dynamic description of the embodiment

**[0017]** Thus having completed the static description of the preferred embodiment of the ground support for long firearms according to the present invention, following is the dynamic description thereof, i.e. the relative operation

[0018] The support 1 may be easily transported folded to the hunting site (see figure 2), in that it is relatively light, given that it is formed by a simple structure composed by pipes made of light material, such as for example aluminium, with few components made ingot material. [0019] Upon reaching the hunting site, it can be quickly configured in operative position by performing a simple ejection of the telescopicities of the three legs 4 and locking them at the desired extension through systems of the known type suitable for the purpose (in particular see figure 1) and by intervening, depending on the specific needs, on the joints 5 and 6 of the orbital head 3.

**[0020]** The numerous adjustment possibilities which can be obtained due to the sliding of the aforementioned telescopicities and the rotary movements of the joints 5 and 6 allow the shooter using the of the support 1 to arrange a support 8, and thus the firearm supported thereby, in the most suitable position for use thereby.

**[0021]** Upon configuring the support 1 in the open arrangement, any long firearm can be associated to the support 8 by first adjusting the extension of the telescopicity of the latter and then resting respectively the stock and the rod of such arm on the clamp 15 and on the fork-like support 14.

**[0022]** Fixing the firearm to the support 8 simply requires intervening through simple fastening manoeuvres on the aforementioned adjustment screws present in the clamp 15, so as to fasten the stock of the arm between the jaws 16, 17 of said clamp 15.

### Alternative embodiment

[0023] It is obvious that in further alternative implementations falling within the concept solution subtended to the embodiments illustrated above and claimed below, the ground support structure for long firearms according to the present invention can be obtained using equivalent technical and mechanical elements, or supplemented with further integrating solutions, just like all the configurations of the relative components may vary to suit the purpose; in particular, according to a further embodiment of the present invention, with the aim of attaining greater solidity and stability of the support 1, the lower telescopic

portions of the legs 4, adapted to be inserted and removed from the relative upper hollow housing telescopic portions, are made of ingot material.

### 5 Advantages of the invention

**[0024]** As clear from the previous detailed description of the preferred embodiments, the ground support structure for long firearms according to the present invention offers advantages corresponding to the attainment of the preset objects and other objects: actually, it integrates a functional, modular, polyvalent and inexpensive device, that is easy to transport, for stably maintaining a long firearm in shooting position in any environmental condition

**[0025]** A further important advantage of the present invention lies in the fact that the support structure proposed herein is configured so as to exclude any interference thereof with the conventional shouldering of a long firearm and with the optical path of the view of the shooter when aiming.

### **KEY TO THE REFERENCE NUMBERS**

### 25 [0026]

- ground support structure for long firearms in its entirety
- 30 2) stand in its entirety
  - 3) orbital head in its entirety
  - 4) telescopic legs
  - 5) base joint
  - 6) bracket i oint
- 40 7) lever for locking the mutual movement between the bracket joint and the base joint
  - 8) tilting telescopic support
- 9) first telescopic rod of the tilting telescopic support
  - 10 ) second telescopic rod of the tilting telescopic support
- <sup>50</sup> 11) bushing
  - 12) cantilevered element
  - 13 ) lever for locking the mutual movement between the tilting telescopic support and the bracket joint
  - 14) fork-like support

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- 15) clamp
- 16) first lateral jaw of the clamp
- 17) second lateral jaw of the clamp
- 18) central connection body
- 19) adjustment screw
- 20) first flexible strip
- 21) second flexible strip

#### Claims

- Ground support structure for long firearms, characterised in that it comprises a stand (2) with a plurality of legs (4) associated to a tilting telescopic support (8) through an orbital head (3) for selectively modifying in rotation and inclination the position of the tilting telescopic support (8), said tilting telescopic support (8) apically carrying two support members (14, 15) on which a long firearm is to be placed during use, at least one of said two support members (14, 15) comprising locking means for locking, during use, said long firearm to the tilting telescopic support (8).
- Ground support structure for long firearms according to claim 1, characterised in that said locking means comprise a clamp (15) with two lateral jaws (16, 17) hinged to a central connection body (18) fixed to the tilting telescopic support (8).
- 3. Ground support structure for long firearms according to the preceding claim, **characterised in that** on the central connection body (18) of the clamp (15) there are provided two adjustment screws for respectively and independently adjusting the inclination of the two lateral jaws (16, 17) with respect to said central connection body (18).
- 4. Ground support structure for long firearms according to any one of the preceding claims, characterised in that the two support members (14, 15) are, respectively, substantially fork-shaped.
- 5. Ground support structure for long firearms according to the preceding claim, characterised in that the support members (14, 15) are provided with respective flexible strips (20, 21) arranged within said fork-shaped support members (14, 15) and respectively intended, during use, to directly contact the rod and the stock of the aforementioned long firearm.
- 6. Ground support structure for long firearms according

to any one of the preceding claims, characterised in that the plurality of legs (4) comprises three telescopic legs; in that the orbital head (3) comprises at the lower part - a base joint (5) substantially shaped to form a disc with three seats for receiving respective top parts of the three telescopic legs (4) connected to the orbital head (3) in an articulated manner, said orbital head (3) comprising a bracket joint (6) rotatably mounted on the base joint (5); and in that the tilting telescopic support (8) comprises two opposite telescopic rods (9, 10), mutually joined by a bushing (11), and a cantilevered element (12) apically mounted on one of said opposite telescopic rods at the bushing (11) and pivoted to the bracket joint(6), making the tilting telescopic support (8) inclinable on each plane of the rotation axis between the base joint (5) and the bracket joint(6).

7. Ground support structure for long firearms according to the preceding claim, characterised in that the orbital head (3) comprises two fastening levers (7, 13) for selectively locking, respectively, the mutual movement between the bracket joint (6) and the base joint (5), and the mutual movement between the tilting telescopic support (8) and the bracket joint(6).

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