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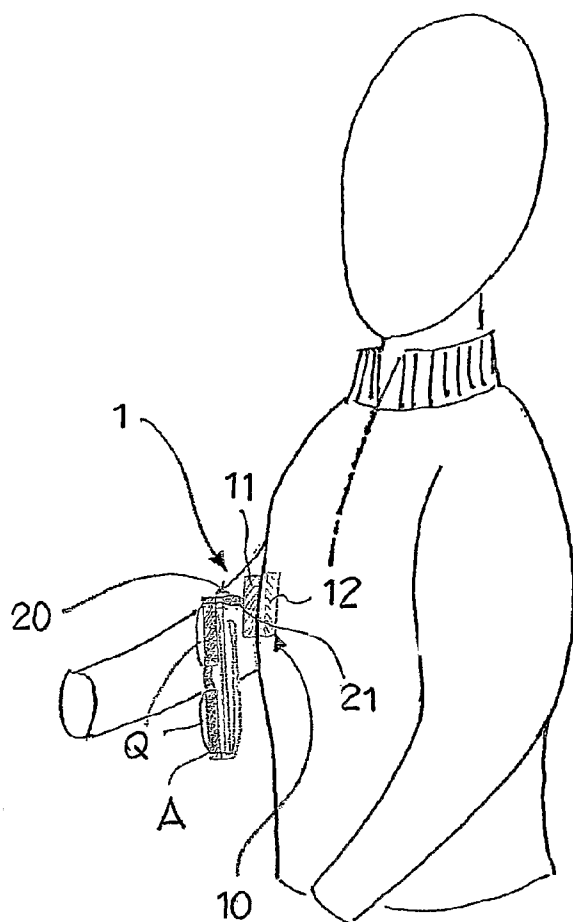
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(54) Title: A SPECTACLES HOLDER DEVICE



(57) Abstract: A spectacles holder device intended for holding
in a separable manner a pair of spectacles A on the clothes of
a user, comprising supporting means (10), provided with a mag-
netic element (11) and intended for being associated to the above
clothes, as well as holding means (20): the latter are intended for
being mechanically associated to the pair of spectacles A and are
susceptible of magnetically connecting to the supporting means
(10) for holding the pair of spectacles A on supporting means
(10). The holding means (20) comprise a threaded rod (22) ar-
ranged along the rotation axis and at least one coupling element
(21), made of a magnetic or ferromagnetic material, mechan-
ically connected to the threaded rod and susceptible of magnet-
ically connecting to the magnetic element (11). The coupling
element (21) is arranged in line with the rotation axis X or be-
tween the latter and the free end of the temple, so that when the
magnetic interaction between the magnetic element (11) and the
coupling element (21) orientates the temples towards the clothes,
the glasses are prevented from contacting the clothes themselves.

"A spectacles holder device"

[0001] The present invention relates to a spectacles holder device.

5 [0002] The subject spectacles holder device in general falls within the field of spectacles, and more in particular, in the field of accessories for spectacles, and is advantageously intended for replacing the conventional support string for holding a pair of
10 spectacles on a wearer, when not worn.

[0003] As known, people with poor short-sight, for example suffering from hypermetropia or presbyopia, and who mainly use glasses for reading, need to continuously wear and take off their glasses when they have to repeatedly
15 move their sight from a close up point to a far away point and vice versa.

[0004] Traditionally, to always have the spectacles at hand, these individuals wear their glasses hanging on the neck by a support string having the two ends thereof attached
20 to the ends of the spectacles temples. In this way, the spectacles need not be put away in a pocket, when they are not used, thus also preventing the risk of accidentally losing them.

[0005] A similar need - despite less urgent- exists also
25 for those using sunglasses, when they move from outdoor

and very lighted places to indoor or shadowy places.

[0006] Recently, in replacement of the above support string, which sometimes may be irritating or cumbersome, and for someone aesthetically not very pleasant, spectacles
5 holder pins of various types have been proposed, to pin on the chest, provided with an eyelet or a hook for hanging the spectacles thereon.

[0007] As compared to the strings, even though these spectacles holder pins are aesthetically more pleasant
10 and certainly less cumbersome, they are not as practical and functional. In fact, the spectacles hook up is not as immediate and easy, since the user must first find the hook or the eyelet without the aid of the spectacles and, before leaving them, he/she must first make sure that
15 they are properly hung up.

[0008] A spectacles holder device is further known from patent US 6168273 which allows quickly hanging a pair of spectacles to the clothes worn by the user without the aid of mechanical means like eyelets or hooks. This
20 device comprises a magnetic support to be applied to the clothes and a magnetic element to be separately attached to the spectacles frame. Operatively, the user can put away the spectacles by hanging them to his/her clothes, by simply moving the magnetic element in contact with the
25 above magnetic support.

[0009] Even though this device solves the problems mentioned above, nevertheless it cannot be used on any type of frames. In fact, if the frame has not been directly made with the magnetic element already incorporated therein, it is necessary to proceed - sometimes in a quite difficult way - to attach the magnetic element to the frame. In this case it is necessary to intervene on the frame by obtaining a seat therein, inside which the magnetic element is seated.

10 Alternatively, if the magnetic element is shaped as a thin plate, it is possible to wind it about a suitable portion of the frame (for example a temple or a portion of the front) thus avoiding any operations on the frame. However, this latter solution is not easy to actuate

15 given the limited free space available on a frame. In fact, having to have a magnetic mass sufficient for supporting the weight of a pair of spectacles, it is necessary to use a very extended plate, which with difficulty may be completely wound on a portion of frame.

20 [0010] A device is also known from patent US 6168273 for applying an auxiliary spectacles holder structure, for example for sunglasses, to a standard frame. In particular, the device comprises two magnetic clips connectable to the hinges of the two temples and intended

25 for magnetically coupling to two corresponding magnetic

portions arranged at the sides of the auxiliary spectacles holder structure. Each magnetic clip consists of an arm which at an end is associated to the hinge of the temple through the screw fixing the hinge itself and
5 at the opposite (free) end carries a magnetic body attached thereto. The arm is attached so as to arrange the magnetic body in the space comprised between the hinge and the front of the frame, in the proximity of the latter.

10 [0011] Given this arrangement, the magnetic body is not usable as an element suitable for coupling the spectacles to a magnetic support arranged on the clothes of a wearer. In fact, even if one wanted to improperly use such magnetic body as a coupling element, due to the above
15 spatial arrangement, the magnetic interaction of such body with the support would bring the glasses in contact with the clothes, with the risk of friction and damage of the same.

[0012] In this situation, therefore, the object of the
20 present invention is to eliminate the disadvantages of the prior art mentioned above by providing a spectacles holder device to be applied to the clothes of a wearer which is usable with any type of spectacles frame and which prevents the spectacles glasses to contact the
25 clothes on which such device is applied.

[0013] Another object of the present invention is to provide a spectacles holder device which can be easily applied to the clothes and as easily removed, without using adhesive means or mechanical means, such as pins or
5 Velcro strips.

[0014] Another object of the present invention is to provide a spectacles holder device which is simple and inexpensive to manufacture.

[0015] The technical features of the invention, according
10 to the above objects, can be clearly found in the contents of the claims below and the advantages of the same will appear more clearly from the following detailed description, made with reference to the annexed drawings, which show a purely exemplifying and non-limiting
15 embodiment thereof, wherein:

[0016] - Figure 1 shows a view of the spectacles holder device according to the invention worn by a user;

[0017] - Figure 2 shows a side view of a detail of the spectacles holder device according to the invention
20 relating to supporting means;

[0018] - Figure 3 shows a side exploded view of a detail of the spectacles holder device obtained according to a first embodiment of the invention relating to holding means;

25 [0019] - Figure 4 shows a side exploded view of a detail of

the spectacles holder device obtained according to a second embodiment of the invention relating to holding means;

[0020] - Figure 5 shows a side view of a detail of the spectacles holder device obtained according to a third
5 embodiment of the invention relating to holding means;

[0021] - Figure 6 shows a top view of the holding means shown in Figure 5;

[0022] - Figure 7 shows a top view of a detail of the spectacles holder device obtained according to a fourth
10 embodiment of the invention relating to holding means;
and

[0023] - Figure 8 shows a side view of the holding means shown in Figure 7.

[0024] With reference to the annexed drawings, reference
15 numeral 1 globally denotes the spectacles holder device object of the present invention. The spectacles holder device 1 is intended for replacing the conventional support string for holding a pair of spectacles on the
20 user when he/she does not need to use them.

[0025] As can be seen in figure 1, the spectacles holder device 1 consists of supporting means 10 intended for being associated to the clothes, preferably at the user's chest, and of holding means 20, intended for being
25 mechanically associated to a pair of spectacles A. The

holding means 20 are removably connectable to the supporting means 10 thanks to a reciprocal magnetic interaction in order to hold the pair of spectacles A on the clothes.

5 [0026] According to the invention, as can be seen in Figures 3 to 8, the holding means 20 are mechanically attached on a pair of spectacles A at one of the hinges connecting temples S to front F.

[0027] The term "front" is understood to refer to the frame
10 portion intended for supporting a pair of spectacles glasses.

[0028] For this end, the holding means 20 comprise a threaded rod 22 to be inserted along the axis of rotation X of the hinge in replacement of the screw that is the
15 pivot of the hinge itself.

[0029] Preferably, the threaded rod 22 must have a greater longitudinal development than that of the original screw fixing the temple, so that once mounted, the threaded rod 22 may protrude relative to temple S, at the top or at
20 the bottom, with an end portion 22a along the axis of rotation X.

[0030] The holding means 20 further comprise a coupling element 21, which is made of a magnetic or ferromagnetic material or in any case sensitive to the magnetic field,
25 and is susceptible of magnetically connecting to a

magnetic element 11 of the supporting means 10.

[0031] The coupling element 21 is intended for being mechanically coupled to the spectacles at the end portion 22a of the threaded rod 22, with manners that may vary according to the type of frame.

According to the invention, the above coupling element 21 is arranged in line with the axis of rotation X or, with reference to the temples in opened position, it is arranged in a position comprised between the above axis X and the free end of the temple.

In other words, imagining a plane parallel to the front (and to the spectacles glasses) and passing by the temple hinges, the coupling element 21 is arranged in the space portion where the temples are arranged, that is, relative to such plane, at the side opposite the front. At most, the coupling element can be astride of such plane when it is arranged aligned with the axis of rotation X of one of the hinges, but it can never be completely arranged in the space portion occupied by the front.

In this way, when the coupling element 21 is moved in contact with the magnetic element 11 with the temples folded on front F in closed position, the magnetic interaction between the magnetic element 11 and the coupling element 21 orientates the temples towards the clothes, thus preventing the spectacles glasses supported

by front F from contacting the clothes themselves, with the risk of scratching.

With reference to the temples, the expression "opened position" refers to the position taken by the temples when the spectacles are worn, that is, substantially orthogonal to the glasses. Similarly, the expression "closed position" refers to the smaller overall dimension position taken by the temples when the spectacles are folded, that is, substantially parallel to the glasses.

10 [0032] Advantageously, the coupling element 21 must have such mass as to generate a magnetic interaction with the supporting means 10 capable of supporting the weight of a pair of spectacles. To this end, the use of the holding means 20, with the relevant coupling element 21, is
15 necessary not only for the models of spectacles provided with metal temples S made of plastic material, but also for those models provided with metal temples S. In fact, the metal mass of temples S usually is not sufficient for ensuring alone a safe anchoring of the spectacles to the
20 supporting means 10.

[0033] As explained in the description below, the holding means 20 are configured so as to be associated to any kind of frame.

[0034] Advantageously, as can be seen in Figure 2, the
25 supporting means 10 comprise a magnetic element 11 and a

fixing element 12, made of magnetic or ferromagnetic material, or in any case sensitive to the magnetic field, separably associable to one another by effect of a reciprocal magnetic interaction.

5 [0035] The magnetic element 11 must have such mass as to generate a sufficient magnetic field to safely support the weight of a pair of spectacles and can be manufactured with a natural magnet or with an alloy of ferromagnetic metals, such as iron, cobalt, nickel or niobium, whereas
10 the fixing element 12 is preferably made of a ferrous material or in any case sensitive to the magnetic field, such as steel.

[0036] Operatively, the supporting means 10 are secured to the user's clothes by interposing a hem L of the clothes
15 between the magnetic element 11 and the fixing element 12. In this way, thanks to the reciprocal magnetic interaction, the two elements 11 and 12 remain in strict contact with hem L which can thus support them, preventing the drop thereof.

20 [0037] Preferably, the magnetic element 11 and the fixing element 12 have a plate shape or in any case, substantially flat shape, so that the magnetic interaction surface is wide and the contact thereof with the clothes is facilitated.

25 [0038] For the supporting means 10 to effectively interact

11

with the holding means 20, the magnetic element 11 must be located on hem L of the clothes, so that the magnetic field faces outwards, whereas the fixing element 12 must be placed under hem L, facing inwards.

5 [0039] Advantageously, the magnetic element 11 needs not necessarily be arranged on the surface but can optionally be covered with another garment, so as to not be visible, being in any case capable of carrying out its function also underneath the clothes.

10 [0040] In accordance with a first embodiment shown in Figure 3, the coupling element 21 is arranged coaxially to the threaded rod 22 along the rotation axis X of the hinge, so that it can protrude at the bottom relative to temple S. In this way, the coupling element 21 is
15 substantially parallel relative to glasses Q of the spectacles and once attached to the magnetic element 11, it can hold the spectacles arranging them with the temples facing the clothes and the glasses facing outwards and substantially parallel to the user's body,
20 in the minimal projection position.

[0041] Advantageously, in this first embodiment, the holding means 20 comprise a bush 23, which is internally counter-threaded to connect to the threaded rod 22 and on the other hand is externally smooth. The coupling element
25 21 is supported by bush 23 so as to be coaxially aligned

to the threaded rod 22.

[0042] Preferably, to this end, the coupling element 21 is provided with a through hole 25 suitable for receiving bush 23 therein. In substance, bush 23 acts as a rotation
5 pin and holds the coupling element 21 in position, preventing the extraction thereof, thanks to its enlarged head position. In this way, even though the coupling element 21 is connected to the threaded rod 22, it is free to rotate about the rotation axis X of the hinge.

10 [0043] This first embodiment is preferably adopted for all those models of spectacles wherein the hinge screw is directly screwed on temple S. In this way, the coupling element 21 is prevented from hindering the free rotation of the threaded rod 22 and thus the opening and closing
15 movement of temple S.

[0044] Advantageously, in the models of spectacles wherein the screw is screwed on front F and therefore is not integral with temple S, the coupling element 21 is not required to be released from the threaded rod. It is
20 therefore possible to associate the magnetic element 21 directly to rod 22 without the interposition of bush 23.

[0045] In this first embodiment, the coupling element 21 is shaped so that the mass thereof is symmetrically distributed around the through hole 25. The shape of the
25 coupling element 21 is selected on the basis of the space

available between front F of the spectacles and the rotation axis X of temple S.

[0046] Advantageously, the coupling element 21 can for example have a disc shape or, for space reasons, it can
5 have a more tapered shape, for example ovoid.

[0047] Advantageously, the coupling element 21 can also be provided on the outer surface thereof with one or more inserts 40 of a rubber material, suitable for preventing direct contact between the coupling element 21 and the
10 clothes. In this way, it is possible to prevent the coupling element 21 from causing creases or abrasions on the clothes over time.

[0048] Advantageously, inserts 40 may consist, for example, of rings inserted into special grooves 41 obtained on the
15 outer surface of the coupling element 21.

[0049] For the same reason, also the magnetic element 11 and the fixing element 12 can be at least partly covered with a layer of plastic or rubber material, for example of silicone type, for preventing direct contact thereof
20 with the clothes. These covers or inserts of plastic or rubber material further allow eliminating the metal noise that would generate at the contact between the metal element 11 and the coupling element 21 upon the connection of the spectacles to the supporting means 10.

25 [0050] In accordance with a second embodiment shown in

Figure 4, the coupling element 21 is arranged so as to orthogonally protrude relative to the threaded rod 22 in a direction opposite that of glasses Q of the spectacles. When the temples are in opened position, the coupling element 21 is substantially parallel thereto; on the other hand, when they are in closed position, the coupling element is substantially orthogonal thereto.

[0051] This second embodiment is alternative to the first embodiment and is adopted for all those frames wherein between temple S and front F there is no sufficient space for inserting the coupling element 21 coaxially to the threaded rod 22. In this second embodiment, the coupling element 21, by protruding orthogonally relative to glasses Q and to the temples in closed position can still contact the supporting means 10 and, once attached to the magnetic element 11, it can still hold the spectacles arranging the temples in contact with the clothes and glasses Q facing outwards and parallel to the user's body, or in the minimal projection position.

[0052] More in detail, in this second embodiment, the holding means 20 comprise a spacer element 26 that is inserted in the threaded rod 22 coaxially to bush 23. Such element 26 has the function of mechanically supporting the coupling element 21 keeping it spaced from front F of spectacles A.

[0053] The spacer element 26 is provided with a through hole 27 suitable for receiving bush 23 therein.

[0054] Advantageously, the spacer element 26 consists of a piece of material without ferromagnetic properties, that is, not sensitive to the magnetic field, for example aluminium.

[0055] Advantageously, the spacer element 26 is provided with a substantially plane face 26a which is arranged in contact with front F of spectacles A in order to prevent the rotation of the spacer element 26 relative to bush 23 and to the rotation axis X.

[0056] The spacer element 26 is further provided with a seat 28 that develops according to a direction substantially orthogonal to the through hole 27 and relative to the plane face 26a and is suitable for receiving the coupling element 21. In this way, when the spacer element 26 is fitted on the spectacles, seat 28 is substantially orthogonal relative to front F and to the temples in closed position.

[0057] Preferably, the above seat 28 is a threaded hole. To this end, the coupling element 21 is provided with a counter-threaded appendix 29 suitable for screwing inside the threaded hole 28.

[0058] As can be seen in Figure 4, also in this case the coupling element 21 can be provided with a cover 42 of

plastic or rubber material, in particular shaped as a plug, to prevent direct contact with the clothes.

[0059] Advantageously, the holding means 20 comprise a hollow tubular body 60 that can be inserted between the
5 spacer element 26 and the coupling element 21, coaxially to the counter threaded appendix 29, for further moving the coupling element 21 away from front F in the temple movement zone.

[0060] In accordance with a third and fourth embodiment
10 respectively shown in Figures 5 and 6 and in Figures 7 and 8, the coupling element 21 is arranged in contact with the outer surface Se of a temple S, parallel to the longitudinal development direction Y of the latter.

[0061] To this end, the coupling element 21 consists of an
15 elongated and thin body, such as a plate, or of a metal wire with multiple folds for arranging on a single plane, as shown in Figure 5 and 7.

[0062] In these latter embodiments, the holding means 20
20 comprise a first and a second arm 31 and 32 which are mechanically attached to the coupling element 21 in distal positions and are suitable for respectively connecting to the end portion 22a of the threaded rod 22 and to temple S.

[0063] In accordance with the third embodiment shown in
25 Figures 5 and 6, the two arms 31 and 32 are provided with

higher elasticity as compared to the body that forms the coupling element 21 and allow constraining the latter to the threaded rod 22 and to temple S, adjusting to the shape of the latter.

5 [0064] More in detail, the first arm 31 is intended for being connected to the end portion 22a of the threaded rod 22, whereas the second arm 31 is intended for being slidably connected to temple S.

[0065] Operatively, the first arm 31 may be elastically
10 deformed, extending or shortening between the threaded rod 22 and the coupling element 21, for adjusting to the different cross thicknesses "t" of temples S and to the different distances "d" existing between the threaded rod 22 and the zone of temple S wherein the coupling element
15 21 is made to adhere. The elastic deformation of the first arm 31 is followed by the movement of the second arm 32 which can slide longitudinally along temple S. In this way, on any kind of spectacles, it is always possible to make the coupling element 21 adhere to the outer
20 surface Se of temple S.

[0066] Figures 5 and 6 show a particular example of this third embodiment. The holding means 20 and the coupling element 21 consist of a single piece of metal wire suitably shaped. Centrally, the metal wire is folded on
25 itself, arranged in a single extension plane, for forming

the coupling element 21. The two end portions of the wire form the two arms 31 and 32. In particular, the first arm 31 is shaped in an intermediate point thereof as a spiral for increasing its elastic properties and ends with a hook
5 70 to connect to the threaded rod 22. The second arm 32 is provided with an end element shaped as a U suitable for slidably receiving temple S therein.

[0067] Operatively, the second arm 32 is arranged in contact with the inner surface Si of temple S for keeping
10 the central portion of the wire (which forms the coupling element 21) as adhering as possible to the outer surface Se of temple S.

[0068] In accordance with the fourth embodiment, the first arm 31 is an indeformable element pivoted at the two ends
15 thereof respectively to the threaded rod 22 and at the coupling element 21 like a connecting rod, whereas the second arm 32 is provided with higher elasticity as compared to the body forming the coupling element 21.

[0069] In particular, the latter consists of an elongated
20 metal body, preferably with a laminar shape or in any case having a prevailing longitudinal development direction.

[0070] The second arm 32 consists of a metal wire welded to the coupling element 21 at an end and suitably shaped for
25 the remainder of its development to wind about the temple.

[0071] Advantageously, as shown in Figure 8, the first arm 31 is pivoted on the frame at the threaded rod 22 for rotating about axis X and is pivoted on the coupling element 21 by a pin for rotating about an axis Z parallel
5 to axis X.

[0072] Functionally, the coupling element 21, by rotating about the rotation axis X and axis Z, allows the coupling element 21 to move away and/or close parallel to the outer surface Se of the temple.

10 [0073] Similarly to what envisaged in the third embodiment, also in this fourth embodiment the second arm 32 is susceptible of longitudinally sliding relative to temple S so as to follow the movement of the first arm 31 and thus allow the coupling element 21 to adhere to the outer
15 surface Se adjusting to the thickness of the temple itself.

[0074] In this accompanying movement, the second arm 32 can elastically deform at least at the end portion connected to the coupling element 21.

20 [0075] Advantageously, as can be seen in Figure 2, in all the embodiments of this spectacles holder device 1, the magnetic element 11 can be provided with a hook or an eyelet 50. The latter is intended for supporting the end of a string 51 to be attached to a temple S of the pair of
25 spectacles A.

[0076] Functionally, when the spectacles are detached from the supporting means 10, string 51 opens temple S thus aiding the user when he/she is about to wear the spectacles.

5 [0077] To make use of this device, preferably the magnetic element 11 must not be covered by any clothes.

[0078] If on the other hand it is preferred to keep the magnetic element 11 covered, string 51 can be made to protrude from the garment's collar or from any other
10 opening optionally present.

[0079] Advantageously, all the metal parts of the spectacles holder device 1 can be coated with films made of an anallergic material.

[0080] A first advantage of device 1 according to the
15 invention is to be easily applied to the clothes.

[0081] Unlike what envisaged in the prior art device described above, the device according to the invention comprises supporting means that can be associated to a hem of a garment in a very quick, practical and immediate
20 manner. In fact, no pins, seams or Velcro strips are used since the magnetic interaction between two elements is used, of which at least one is susceptible of generating a magnetic field and the other is sensitive to the magnetic field itself.

25 [0082] A second advantage of the device according to the

invention is given by the possibility of being applied to any type of frame without having to envisage difficult modifications of the same.

[0083] A third advantage arises from the fact that the arrangement of the coupling element relative to the frame is such that the magnetic force generated between such coupling element and the supporting means orientates the spectacles arranging them with the temples in contact with the clothes and the glasses facing outwards. This prevents the glasses from rubbing against the clothes and thus being ruined.

[0084] A further object of the present invention is an assembly for holding in a separable manner a pair of spectacles on the clothes of a user, as well as a method for hanging a pair of spectacles on a garment.

[0085] The above assembly comprises a garment to wear that defines at least one hem L, as well as supporting means and holding means of device 1 described hereinbefore.

[0086] In particular, the above supporting means comprise the magnetic element 11 and the fixing element 12, which are susceptible of attracting each other by magnetic interaction. Such supporting means engage on the clothes by interposing the above hem L between the magnetic element 11 and the fixing element 12.

[0087] The holding means 20 are intended for being mechanically associated to the pair of spectacles A and are removably connected to supporting means 10 by magnetic interaction with said magnetic element 11 in order to hold the pair of spectacles A on the supporting means 10 and thus on the clothes.

[0088] Preferably, the holding means 20 are mechanically connected to the pair of spectacles at the rotation axis X of one of temples S of the pair of spectacles A.

10 [0089] Such holding means 20 comprise a threaded rod 22 for connecting temple S to front F along the rotation axis X, which is provided with a protruding end portion 22a, and at least one coupling element 21, made of a magnetic or ferromagnetic material.

15 [0090] Such coupling element 21 is susceptible of magnetically connecting to the magnetic element 11 of the supporting means 10 and is suitable for being mechanically connected to the threaded rod 22 at the end portion 22a.

20 [0091] In particular, the coupling element 21 is arranged in line with the rotation axis X or, with reference to the temples in opened position, it is arranged between the rotation axis X and the free end of the temple.

[0092] In this way, when the coupling element 21 is moved
25 in contact with the magnetic element 11 with the temples

folded on front F in closed position, the magnetic interaction between the magnetic element 11 and the coupling element 21 orientates the temples towards the clothes, thus preventing the spectacles supported by front F from contacting the clothes themselves.

[0093] The method for hanging a pair of spectacles A to a garment comprises the following steps:

[0094] - providing a device or an assembly as described hereinbefore according to any one of the embodiments thereof;

[0095] - arranging a garment provided with at least one hem (L);

[0096] - interposing the hem L between the magnetic element 11 and the fixing element 12 so that these two elements, attracting by magnetic interaction, hold each other on hem L;

[0097] - associating the holding means 20 to the pair of spectacles A; and

[0098] - magnetically connecting the holding means 20 to the supporting means 10, thus holding the pair of spectacles A on the clothes.

[0099] The invention thus conceived thus achieves the intended purposes.

[0100] Of course, in the practical embodiment thereof, it may take shapes and configurations differing from that

illustrated above without departing from the present scope of protection.

[0101] Moreover, all the parts may be replaced by technically equivalent ones and the sizes, shapes and
5 materials used may be whatever according to the requirements.

Claims

1. A spectacles holder device intended for holding in a separable manner a pair of spectacles (A) on the clothes of a user, comprising:
- 5 - supporting means (10), intended for being associated to said clothes and comprising a magnetic element (11); and
- holding means (20), which are intended for being mechanically associated to said pair of spectacles (A) and are removably connectable to said supporting means
- 10 (10) by magnetic interaction with said magnetic element (11) in order to hold said pair of spectacles (A) on said supporting means (10) and thus on said clothes;
- characterised in that said holding means (20) are mechanically connected to said pair of spectacles at the
- 15 rotation axis (X) of one of the temples (S) of said pair of spectacles (A) relative to the front (F) and comprise:
- a threaded rod (22) provided with a protruding end portion (22a) and suitable for connecting said temple (S) to said front (F) along said rotation axis (X); and
- 20 - at least one coupling element (21), made of a magnetic or ferromagnetic material or sensitive to the magnetic field, which is susceptible of magnetically connecting to the magnetic element (11) of said supporting means (10) and is suitable for being mechanically connected to said
- 25 threaded rod (22) at said end portion (22a);

said coupling element (21) being arranged in line with said rotation axis (X) or, with reference to the temples in opened position, being arranged between said rotation axis (X) and the free end of said temple, so that when
5 said coupling element (21) is moved in contact with said magnetic element (11) with the temples of said pair of spectacles (A) folded on said front (F) in closed position, the magnetic interaction between said magnetic element (11) and said coupling element (21) orientates
10 said temples towards said clothes, thus preventing the glasses supported by said front (F) from contacting the clothes themselves.

2. A spectacles holder device according to claim 1, wherein said supporting means (10) comprise a fixing
15 element (12), made of a magnetic or ferromagnetic material, said magnetic element (11) and said fixing element (12) being susceptible of attracting each other by magnetic interaction, said supporting means (10) engaging on said clothes by interposition of at least one
20 hem (L) of said clothes between said magnetic element (11) and said fixing element (12).

3. A spectacles holder device according to claim 1 or 2, wherein said holding means (20) comprise a bush (23), suitable for connecting to said threaded rod (22) at said
25 end portion (22a) and intended for supporting said

coupling element (21).

4. A spectacles holder device according to claim 3,
wherein said coupling element (21) is provided with a
through hole (25) for receiving said bush (23) therein
5 and thus freely rotate about said rotation axis (X).

5. A spectacles holder device according to claim 4,
wherein said coupling element (21) has a symmetrical
development relative to said through hole (25).

6. A spectacles holder device according to claim 5,
10 wherein said coupling element (21) has an ovoid or disc
shape.

7. A spectacles holder device according to claim 1, 2
or 3, wherein said holding means (20) comprise:

- a bush (23) suitable for connecting on said threaded
15 rod (22) at said end portion (22a); and
- a spacer element (26), which is provided with a through
hole (27) for connecting to said bush (23) and is
suitable for supporting said coupling element (21)
keeping it spaced from the front (F) of said pair of
20 spectacles (A).

8. A spectacles holder device according to claim 7,
wherein said spacer element (26) is provided with a flat
face (26a) which is intended for being arranged in
contact with said front (F) for preventing the rotation
25 of said spacer element (26) relative to said bush (23),

and with a seat (28) that develops in a direction substantially orthogonal relative to said through hole (27) and to said flat face (26a) and is suitable for receiving said coupling element (21) therein.

5 9. A spectacles holder device according to claim 8, wherein said seat (28) consists of a threaded hole and wherein said coupling element (21) is provided with a counter-threaded appendix (29) suitable for inserting into said seat (28) for connecting said coupling element
10 (21) to said spacer element (26).

10. A spectacles holder device according to claim 1 or 2, wherein said coupling element (21) is an elongated and thin body, suitable for adhering to the outer surface (Se) of said temple (S) parallel to the longitudinal
15 development direction (Y) of the latter, and wherein said holding means (20) comprise a first (31) and a second arm (32), which are secured to said coupling element (21) in distal positions and are suitable for respectively connecting to the end portion (22a) of said threaded rod
20 (22) and to said temple (S).

11. A spectacles holder device according to claim 10, wherein said two arms (31; 32) are provided with higher elasticity as compared to said coupling element (21), said first arm (31) being capable of elastically
25 extending between said threaded rod (22) and said

coupling element (21) and said second arm (31) being capable of longitudinally sliding relative to said temple (S) for allowing said coupling element (21) to adhere to said outer surface (Se) in any type of temple (S).

5 12. A spectacles holder device according to claim 11, wherein said first (31) and said second arm (32) consist of thread-like elements shaped so as to have shape elasticity.

13. A spectacles holder device according to claim 10,
10 wherein said second arm (32) is provided with higher elasticity as compared to said coupling element (21) for longitudinally sliding relative to said temple (S) and thus allow said coupling element (21) to adhere to said outer surface (Se) in any type of temple (S), and wherein
15 said first arm (31) is an indeformable element pivoted at the two ends thereof respectively to said threaded rod (22) and to said coupling element (21) like a connecting rod and is suitable for keeping the latter adhering to said surface (Se) as said second arm (32) slides.

20 14. A spectacles holder device according to claim 1 or 2, wherein said coupling element (21) is provided with a threaded hole (25) for connecting to said threaded rod (22) aligned along said rotation axis (X).

15. A spectacles holder device according to any one of
25 the previous claims, wherein said magnetic element (11)

is provided with a hook (50) intended for supporting the end of a string (51), said string (51) being attached to a temple (S) of said pair of spectacles (A) in order to open said temple (S) when said coupling element (21) is
5 separated from said magnetic element (11) thus aiding the user in putting on said pair of spectacles (A).

16. A spectacles holder device according to any one of the previous claims, wherein said magnetic element (11), said fixing element (12) and said coupling element (21)
10 are at least partly covered with plastic or rubber material so as not to cause creases on said clothes.

17. An assembly for holding in a separable manner a pair of spectacles (A) on the clothes of a user, comprising:

- a garment to wear that defines at least one hem (L);
- 15 - supporting means (10) according to any one of the previous claims, comprising a magnetic element (11) and a fixing element (12), made of a magnetic or ferromagnetic material, said magnetic element (11) and said fixing element (12) being susceptible of attracting each other
20 by magnetic interaction, said supporting means (10) engaging on said clothes by interposition of at least said hem (L) between said magnetic element (11) and said fixing element (12); and
- holding means (20) according to any one of the previous
25 claims, which are intended for being mechanically

associated to said pair of spectacles (A) and are
removably connectable to said supporting means (10) by
magnetic interaction with said magnetic element (11) in
order to hold said pair of spectacles (A) on said
5 supporting means (10) and thus on said clothes.

18. An assembly for holding in a separable manner a pair
of spectacles (A) on the clothes of a user, comprising:

- a garment to wear that defines at least one hem (L);
- supporting means (10), comprising a magnetic element
10 (11) and a fixing element (12), made of a magnetic or
ferromagnetic material, said magnetic element (11) and
said fixing element (12) being susceptible of attracting
each other by magnetic interaction, said supporting means
(10) engaging on said clothes by interposition of at
15 least said hem (L) between said magnetic element (11) and
said fixing element (12); and
- holding means (20), which are intended for being
mechanically associated to said pair of spectacles (A)
and are removably connectable to said supporting means
20 (10) by magnetic interaction with said magnetic element
(11) in order to hold said pair of spectacles (A) on said
supporting means (10) and thus on said clothes,
said holding means (20) being mechanically connected to
said pair of spectacles at the rotation axis (X) of one
25 of the temples (S) of said pair of spectacles (A)

relative to the front (F), said means (20) comprising:

- a threaded rod (22) for connecting said temple (S) to said front (F) along a rotation axis (X), provided with a protruding end portion (22a); and
 - 5 - at least one coupling element (21), made of a magnetic or ferromagnetic material, which is susceptible of magnetically connecting to the magnetic element (11) of said supporting means (10) and is suitable for being mechanically connected to said threaded rod (22) at said
10 end portion (22a);
- said coupling element (21) being arranged in line with said rotation axis (X) or, with reference to the temples in opened position, being arranged between said rotation axis (X) and the free end of said temple, so that when
15 said coupling element (21) is moved in contact with said magnetic element (11) with the temples of said pair of spectacles (A) folded on said front (F) in closed position, the magnetic interaction between said magnetic element (11) and said coupling element (21) orientates
20 said temples towards said clothes, thus preventing the glasses supported by said front (F) from contacting the clothes themselves.

19. A method for hanging a pair of spectacles (A) to a garment, comprising the following steps:

- 25 - providing a device or an assembly according to any one

of the previous claims;

- arranging a garment provided with at least one hem (L);
- interposing said hem (L) between said magnetic element (11) and said fixing element (12) so that said two last
5 elements, attracting by magnetic interaction, hold each other on said hem;
- associating said holding means (20) to said pair of spectacles (A);
- magnetically connecting said holding means (20) to said
10 supporting means (10), thus holding said pair of spectacles (A) on said clothes.

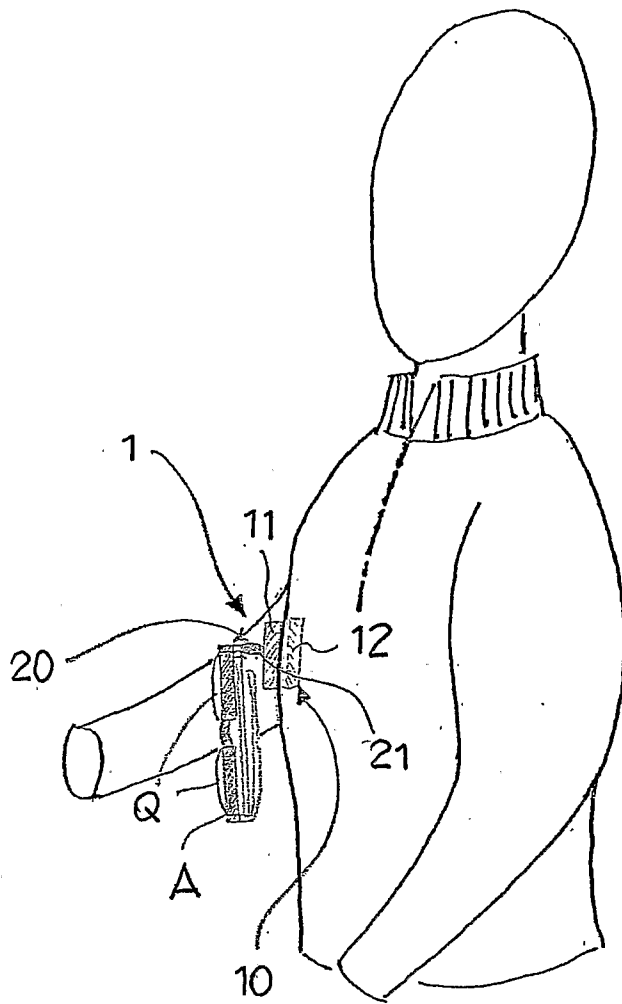


Fig. 1

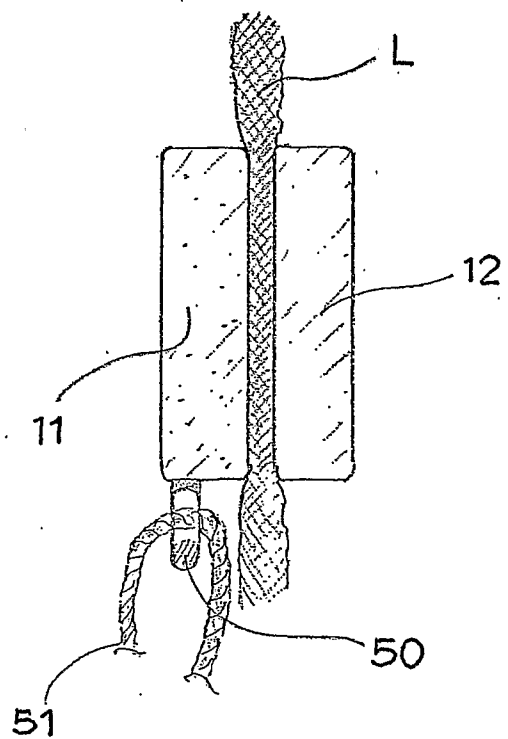


Fig. 2

