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(54) KNEEPAD WITH IMPLEMENT HOLDER

(57) A kneepad (10) includes a front (20), top (12), bottom (14) and first (16) and second (18) lateral sides and a stretchable band (30) attached to the kneepad (10) to form at least one channel to snugly releasably receive an implement (42).

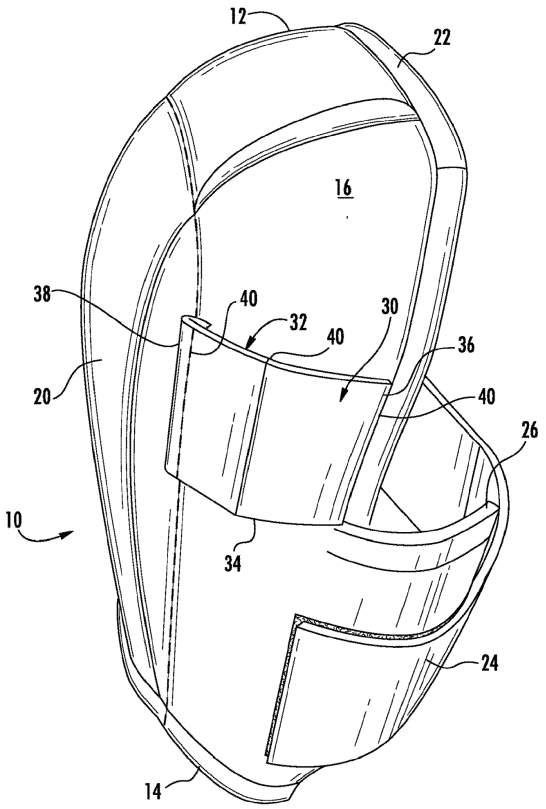


FIG. 1

EP 3 354 146 A1

Description

[0001] This application relates to kneepads and, more particularly to kneepads which securely retain an implement so that a worker wearing the kneepad has convenient access to the implement when needed. The term "implement" should be interpreted in its broadest sense to include anything that a wearer of the kneepad might need to use. By way of non-limiting example, this would include tools, writing instruments, marking instruments, drawing instruments, etc.

[0002] Kneepads typically are used for impact protection, such as by participants in sporting events, and for comfort, such as by persons engaged in outdoor or indoor activities that require kneeling. Non-limiting examples of the former activities include roofing, general contracting, bricklaying, carpentry, landscaping and gardening. Non-limiting examples of the latter include interior construction, general contracting, plumbing, electrical, floor, carpet and tile installation.

[0003] Previously suggestions have been made to provide a tool holder on a kneepad such as, for example, in McKee U.S. Patent No. 9,326,555 the entirety of which is hereby incorporated by reference. U.S. Patent No. 9,326,555 refers to a tool or accessory holder preferably attached to a kneepad through the use of snap fasteners so that the holder may be removed. One of the many limitations of the holder described in U.S. Patent No. 9,326,555 is that it is bulky thus encouraging the user to remove the holder when it is not being used. However, this leads to a first problem, namely, that it is easy to misplace the holder. Second, the holder typically can be used only on one kneepad depending on the placement of the snap fasteners on the holder and on the kneepad, thus a worker typically cannot conveniently move the holder from one knee to the other knee. Yet another problem is the relative rigidity and size of the holder in that some tools do not fit snugly in the holder and therefore can move, or even fall from the holder as the worker moves up and down as well as forward, sideways, and backward.

[0004] Thus there is a need for a kneepad implement holder that recognizes and solves the aforementioned problems.

[0005] The kneepad and implement holder described herein overcomes the aforementioned problems, and other problems, through the use of a flexible holder that does not protrude from the kneepad when not in use and that snugly retains implements of various configurations.

[0006] The foregoing advantages of the kneepad and implement holder, together with other benefits and advantages that may be attained by its use will become apparent upon reading the following detailed description in conjunction with the following drawings. In the drawings, which are exemplary only:

FIG. 1 is a perspective illustration of a kneepad viewed generally from one side;

FIG. 2 is a perspective illustration of a kneepad viewed generally from the side opposite the side of FIG. 1; and

FIG. 3 is a perspective illustration of the kneepad of FIG. 1 with an implement retained in the holder.

[0007] Referring first to FIG. 1, a kneepad 10 includes a top 12, bottom 14, first lateral side 16, and an opposed second lateral side 18. The lateral sides extend from the top 12 to the bottom 14 and the kneepad includes a front face 20 extending from the top to the bottom and from the first side to the second side. The kneepad includes a peripheral edge 22 extending from the top 12, along a first lateral side 16, along the bottom 14, and along the second lateral side 18 and returning to the top 12. The kneepad includes two straps 24, 26 each extending away from the front face 20 so that when the kneepad is placed in position by the user, the straps encircle the leg of the user. The straps fasten together such as through the use of hook and loop fasteners. In some embodiments a single strap may be used to encircle the leg of the user with the single strap extending from one side of the kneepad and engaging fasteners on the opposite side of the kneepad. Snap fasteners or buckles rather than hook and loop fasteners may be used. The front face 20 is the part of the kneepad that, in use, would be in contact with a surface from which the user of the kneepad seeks protection or comfort. Thus while the front face 20 may be of rigid material for protection or flexible material for comfort, it is contemplated that peripheral edge and lateral sides be made of fabric. All of the foregoing is conventional.

[0008] The present kneepad may include one or more implement holders. Referring to FIGS. 1 and 3, one form of an implement holder or band or sleeve 30 is illustrated having a top 32, and a bottom 34, and first and second lateral ends 36, 38. The size and dimensions of the band or sleeve 30 may be selected to take into account the types of implements to be retained. For explanatory purposes only, a non-limiting form of the band 30 is illustrated as having a length between the ends 36, 38 that is greater than the height between the top and bottom 32, 34. The band is preferably made of a material that is elastic or stretchable and that has some memory so that it may return to its non-stretched configuration.

[0009] The kneepad extends in a generally first direction from the top 12 to the bottom 14. The first and second lateral ends 36, 38 of the band may be secured such as by stitching 40 to the kneepad with the stitching preferably extending generally parallel to the first direction of the kneepad and thus generally perpendicular to the front-to-back direction of the kneepad. As one non-limiting example, FIG. 1 illustrates two vertical lines of stitching 40, one at each end 36, 38 of the band 30.

[0010] Thus one exemplary location for one line of stitching 40 would be the peripheral edge 22 of the kneepad as illustrated in FIG. 1 with the opposite end of the band 30 stitched to the lateral side 16 at or adjacent to

the front face 20. In this variation the two ends of the band 30 may be stitched solely to spaced-apart locations on one lateral side of the kneepad and a channel for the implement is present between the band and the lateral side.

[0011] A second exemplary location for the stitching is illustrated in FIG. 3 involving three vertical lines of stitching 40, with one end of the band 30 stitched to the peripheral edge, the second end of the band 30 stitched to the lateral side at or adjacent to the front face, and a third line of stitching 40 intermediate the two ends 36, 38. The third line of stitching need not be exactly halfway between the other two lines of stitching. In this situation, two separate channels are present between the band and the lateral side. If the band is secured to a different part of the kneepad, i.e., other than a lateral side, then the channel is present between the band and the associated part of the kneepad.

[0012] Yet a third exemplary option as illustrated in FIG. 2 includes the band 30 where both ends are stitched to the same general area of the kneepad such that the band forms a loop. Alternatively, one end of the band may be stitched adjacent to the other end of the band to form a loop. In either of these alternatives, the loop is then stitched to the kneepad and one non-limiting position is at or adjacent the face of the kneepad, and a second non-limiting position for the stitching would be at the peripheral edge 22 and a third position would be on the lateral side itself. In the variations described in this paragraph, the interior of the loop itself forms the channel.

[0013] The band, when not in use is, preferably flush to the kneepad but this is not required as long as the band does not interfere with use of the kneepad when there is no implement within the sleeve. Thus alternatives to stitching and alternatives to the band being absolutely flush with the kneepad are contemplated. The space between the band and the lateral side of the kneepad functions as a channel or receptacle or holder for an implement, except in the variation of FIG. 2 where the interior space of the loop of the band functions as a channel or receptacle or holder for an implement.

[0014] Optionally, as noted above, the band may include an intermediate vertical stitching 40 and the location of the intermediate vertical stitching may be closer to one of the ends 36, 38. Through the use of this option two channels or receptacles may be provided for retaining implements. Additional channels may be similarly provided.

[0015] In addition to or in lieu of stitching, the band may be attached to the kneepad (and attached to itself in the variation of FIG. 2) with hook and loop fasteners, snap fasteners or other attachment mechanisms in addition to or instead of stitching.

[0016] In use, the wearer will insert an implement 42 through the open top 32 of the band 30 as illustrated at 44. The implement, if of sufficient length, will extend through the open bottom 34 of the band 30 as illustrated at 46. The elastic nature of the material of the band causes the band to expand as necessary to generally conform to the external configuration of the implement and securely retain the implement in place. The elastic material snugly retains the implement in place even as the wearer may move about. This prevents the implement from being accidentally dislodged. In those situations where the intermediate vertical stitching is provided, there are two channels each of which will snugly engage an implement as well as preventing the implements from being accidentally dislodged. When the implements are removed (and even when the kneepads are removed) the memory of the band causes the band to return to its normal position lying generally (but not necessarily absolutely) flat against the side of the kneepad. The band should not interfere with use of the straps or the kneepad and vice-versa. In the embodiment of FIG. 2, the implement is placed within the top of the loop of the band, as illustrated at 44 and, the implement, if of sufficient length, will extend through the open bottom 34 of the band as illustrated at 46.

Claims

1. A kneepad comprising:

   a kneepad having a top, bottom and first and second lateral sides;
   the kneepad having a front face generally extending in a first direction from the top to the bottom and in a second direction generally perpendicular to the first direction; and
   an elastic band secured to the kneepad and having an open top and an opposed open bottom to form at least one channel to releasably receive and retain an implement therein.

2. The kneepad according to claim 1, wherein the band is secured to a lateral side of the kneepad, notably wherein the band is secured to at least two locations on a lateral side of the kneepad.

3. The kneepad according to claim 1 or claim 2, where the band is secured to at least two locations spaced apart in said second direction.

4. The kneepad according to any preceding claim, wherein the band forms at least two channels to releasably receive and retain implements therein.

5. The kneepad according to any preceding claim, wherein the band has first and second ends wherein both of said ends are secured to one of said lateral sides of the kneepad.

6. The kneepad according to any preceding claim, wherein the band is sufficiently flush against the kneepad to avoid interfering with the use of the knee-

pad in the absence of an implement therein.

7. The kneepad according to any preceding claim, wherein the band is secured to the kneepad in more than two locations and defines more than one channel between the band and the kneepad.

8. The kneepad according to any preceding claim, wherein the band extends generally away from the front face.

9. The kneepad according to any preceding claim, wherein the kneepad includes a peripheral edge and at least one end of the band is secured to the peripheral edge, notably wherein only one end of the band is secured to the peripheral edge.

10. The kneepad according to any preceding claim, wherein the channel extends generally parallel to the first direction.

11. The kneepad according to any preceding claim, wherein the band is stitched to the kneepad, notably wherein the band is stitched to the lateral side of the kneepad.

12. The kneepad according to any preceding claim, wherein the band is permanently attached to the kneepad.

13. The kneepad according to any preceding claim wherein the band is configured as a loop to form the channel.

14. The kneepad according to any preceding claim, wherein the channel is formed solely by the interior of the band.

15. The kneepad according to any preceding claim, wherein the channel is partially formed by the band.

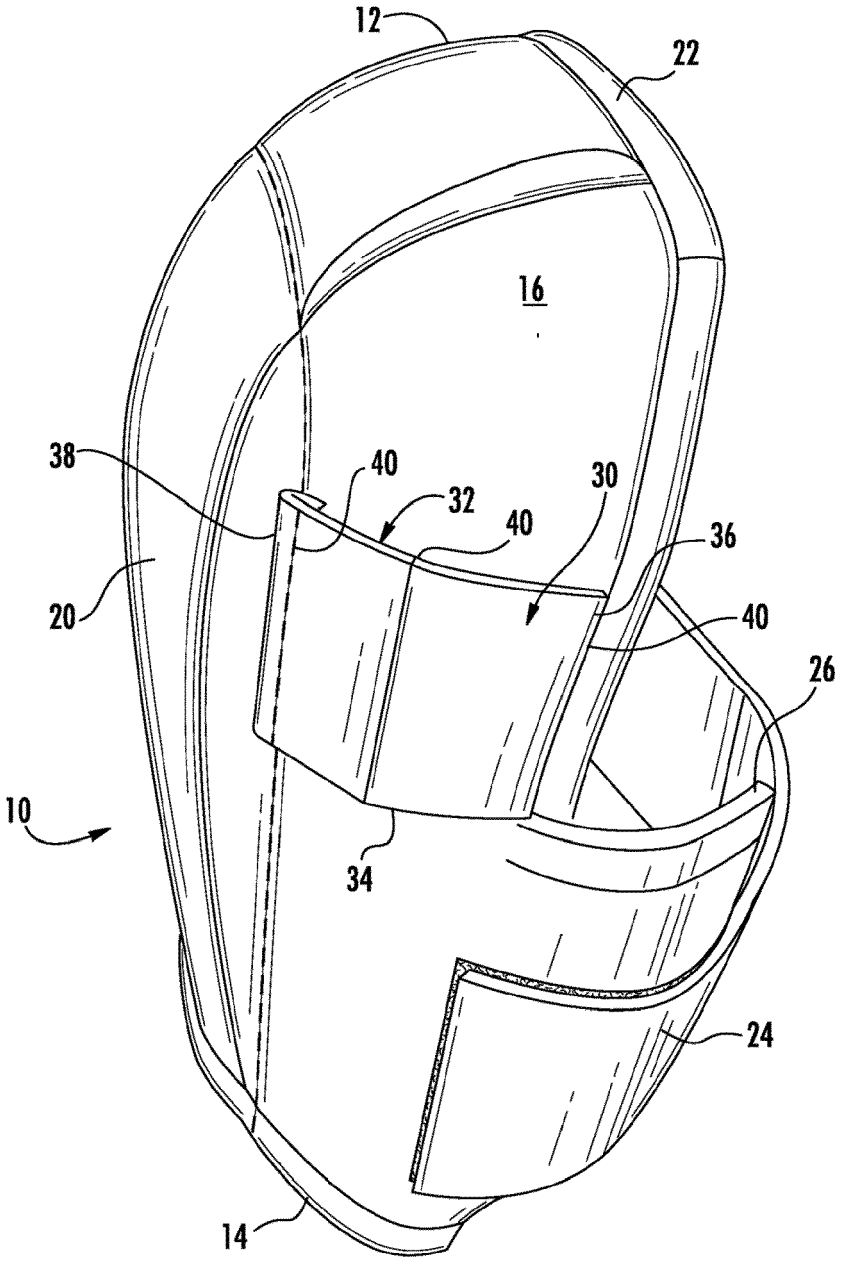


FIG. 1

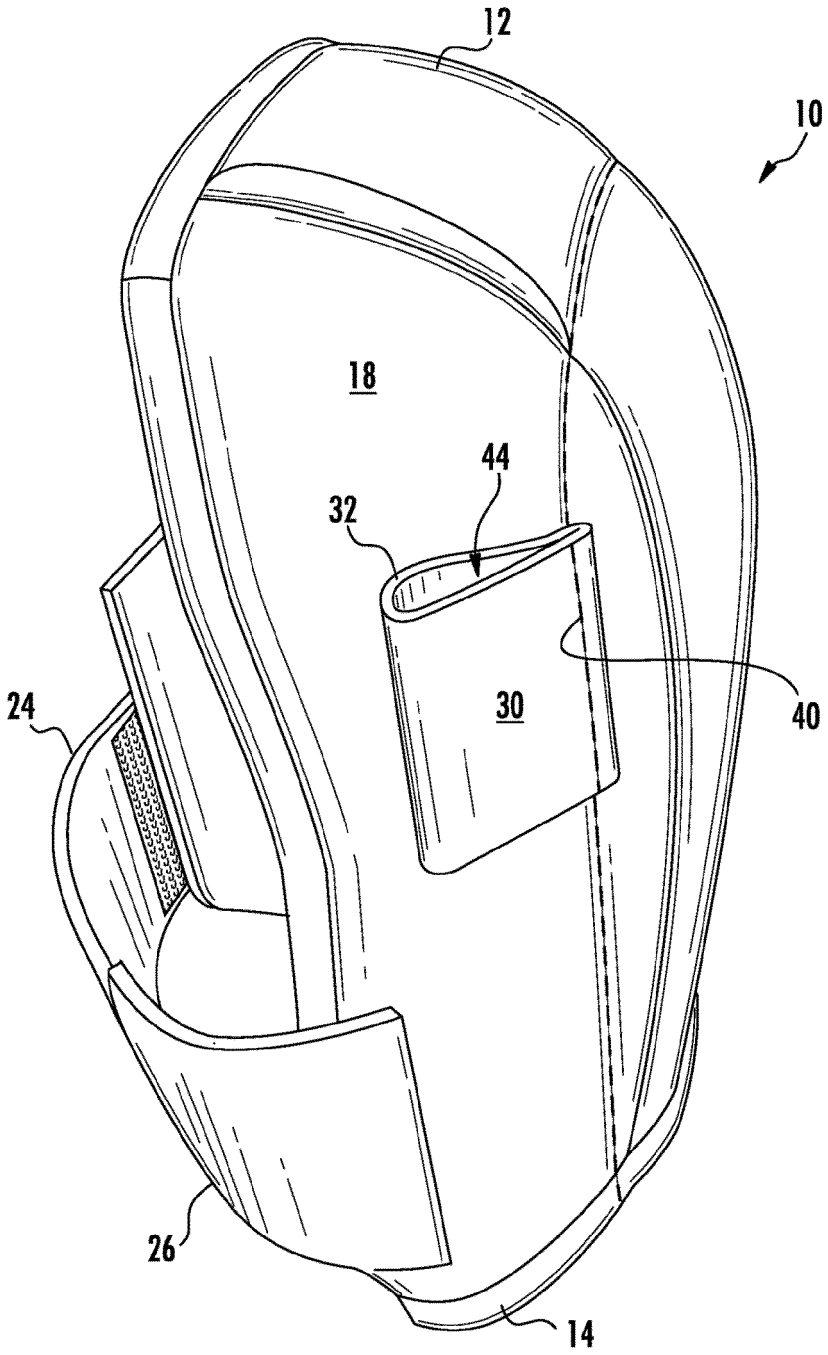


FIG. 2

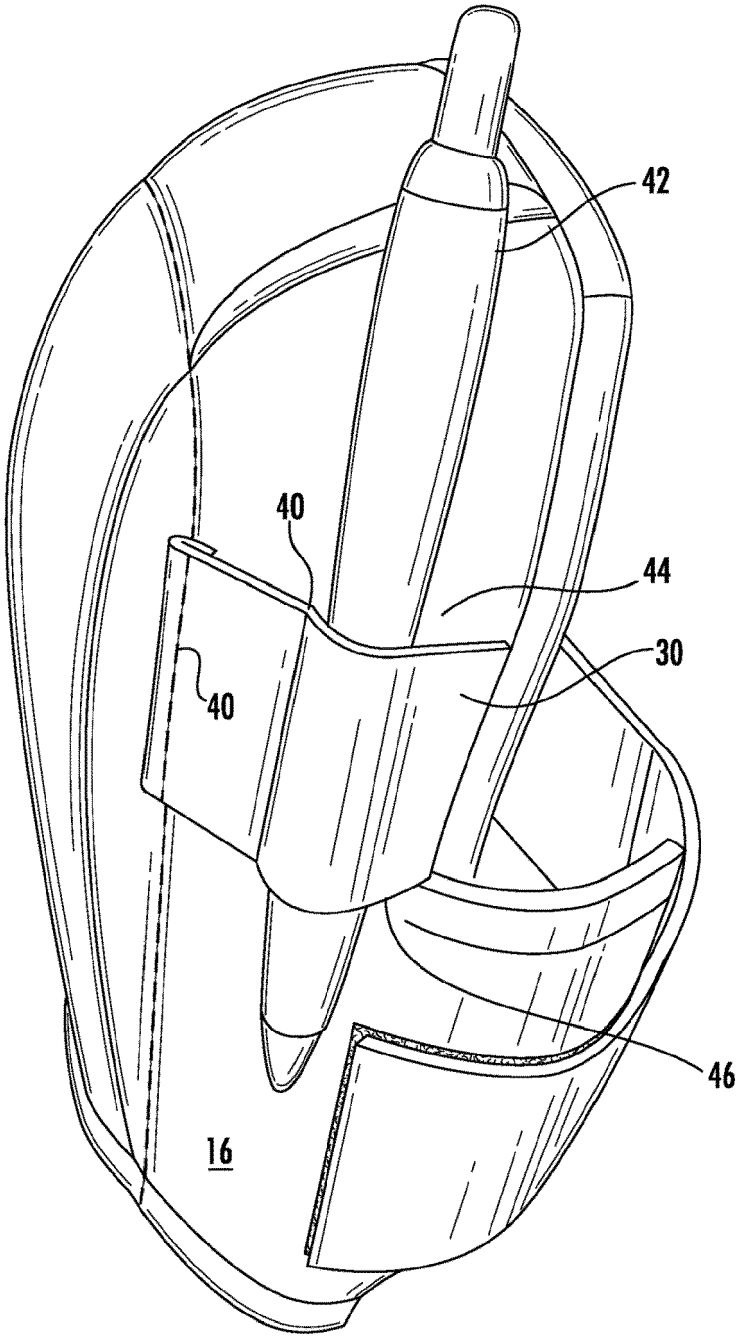


FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 18 15 0341

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 687 422 A (WURST PATRICK E [US] ET AL) 18 November 1997 (1997-11-18)	1-3,5,6, 8,10-12, 15	INV. A41D13/06
Y	* column 2, line 41 - line 45 * * column 4, line 3 - line 14; figures 2,3 *	9,13,14	
Y	US 2007/095870 A1 (GRIFFITH GRANT L [US] ET AL) 3 May 2007 (2007-05-03) * abstract; figures 1,2,3 * * paragraph [0033] - paragraph [0040] *	9,13,14	
X	CN 205 337 696 U (NINGBO XINWEINUO PROTECTIVE EQUIPMENT CO LTD) 29 June 2016 (2016-06-29) * paragraphs [0013], [0018], [0019], [0020]; figure 1 *	1-5,7,8, 10,12,15	
A,D	US 9 326 555 B1 (MCKEE STEVEN [US]) 3 May 2016 (2016-05-03) * abstract; figures 1,2,3 *	1-15	

TECHNICAL FIELDS SEARCHED (IPC)

A41D
A45F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	24 May 2018	Thielgen, Robert

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 18 15 0341

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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