



(19)

Europäisches Patentamt

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(11)

**EP 0 710 575 A1**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**08.05.1996 Bulletin 1996/19**

(51) Int. Cl.<sup>6</sup>: **B43K 23/008**

(21) Application number: **95304044.1**

(22) Date of filing: **12.06.1995**

(84) Designated Contracting States:  
**AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL  
PT SE**

(30) Priority: **07.11.1994 GB 9422399**

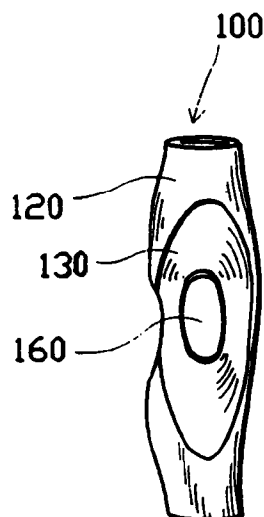
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**(54) A digit positioning sleeve**

(57) A digit positioning sleeve (100) slidable longitudinally over an elongated implement (110), comprising at least one recess (130) for receiving at least one digit of a user's hand, the at least one recess having an aperture (160) formed therein, such that in use the digit(s) positioned by the digit positioning sleeve can directly contact the elongated implement.



**—Fig. 1—**

## Description

This invention relates to a digit positioning sleeve. In particular, but not exclusively, this invention relates to a digit positioning sleeve for use with writing implements.

Known support sleeves tend to be uncomfortable, unattractive to adults, and unsuitable for children, as they are very thick in comparison to the thickness of the implement they surround.

An object of the present invention is therefore, to overcome the above disadvantages or difficulties, or at least to provide the public with a useful choice.

Accordingly, the present invention may be said to broadly consist in a digit positioning sleeve slidable longitudinally over an elongated implement, comprising at least one recess for receiving at least one digit of a user's hand, the at least one recess having an aperture formed therein, such that in use the digit(s) positioned by the digit positioning sleeve can directly contact the elongated implement.

A preferred embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a side view of a preferred embodiment of a digit positioning sleeve of the present invention;

Figure 2 is a side view of the digit positioning sleeve of figure 1 turned clockwise 60° about its longitudinal axis;

Figure 3 is a side view of the digit positioning sleeve of figure 2 turned clockwise 60° about its longitudinal axis;

Figure 4 is a side view of the digit positioning sleeve of figure 3 turned clockwise 60° about its longitudinal axis;

Figure 5 is a side view of the digit positioning sleeve of figure 4 turned clockwise 60° about its longitudinal axis;

Figure 6 is a side view of the digit positioning sleeve of figure 5 turned clockwise 60° about its longitudinal axis, illustrating one suitable use of the sleeve.

Referring to the drawings, the digit positioning sleeve of the present invention is indicated generally at 100. The sleeve is tubular and has a central aperture through which an elongated implement such as a ball-point pen 110 may be passed, see figure 6.

On the outer surface 120 of the support sleeve 100, are formed at least one, and preferably three recesses 130. In this particular embodiment, two different types of recesses 130 are formed, that being recess type 140 and recess type 150. This recess arrangement makes the positioning sleeve suitable for use with the traditional tri-point precision grip, in which an implement rests on

between the middle knuckle and the tip of the middle finger of the user's hand with the pad of the index finger pressing down on the implement to hold it on the middle finger, and the pad of the thumb also pressing on the implement to hold it against the index and middle fingers to steady it. Thus, in use, the recesses 140 would receive the pad of the index finger and the pad of the thumb and the recess 150 would receive the middle finger. Other recess arrangements could of course be used for different implement grips, for example, different grips might be required for eating utensils, paint-brushes, etc.

A significant feature of the present invention is that each recess 130 has an aperture 160 formed therein. These apertures 160 allow, in use, the fingers of the user's hand to touch the implement being used. This has a number of advantages. The first advantage is that, the width of the sleeve is reduced and therefore is more comfortable for the user. A reduced width and also an ability to see the implement inside the sleeve also makes the sleeve more aesthetically pleasing. Further, the sleeve is particularly useful in training children to hold implements in an efficient fashion. Children who have been trained to hold implements with a known sleeve, often have trouble transferring that learned grip to the natural width of an implement. However, the current sleeve more accurately approximates the natural width of the implement being used, because the fingers actually touch the implement. Thus, children find it more easy to transfer from a sleeve around an implement to the implement itself.

The apertures also provide for a better grip on the implement.

The digit positioning sleeve of the present invention is preferably formed of a resilient material which can easily slide over a desired implement, but which will also stay firmly in place on the implement in use. Suitable compounds forming the sleeve are rubber or a resilient plastic substance.

The above describes a preferred embodiment of the present invention, variations and modifications in which may be made without departing from the scope of the invention, as defined in the accompanying claims.

For example, the sleeve may be used with any desired implement such as a pen, a pencil, a paint brush, a drafting implement, a pointer or cutlery such as a spoon, knife, fork or chopsticks, etc; with a suitable recess arrangement to suit the grip required for each particular implement and its use.

At least one of the recesses must have an aperture formed therein but other recesses may not have such an aperture.

## Claims

1. A digit positioning sleeve slidable longitudinally over an elongated implement, comprising at least one recess for receiving at least one digit of a user's hand, the at least one recess having an aperture formed therein, such that in use the digit(s) posi-

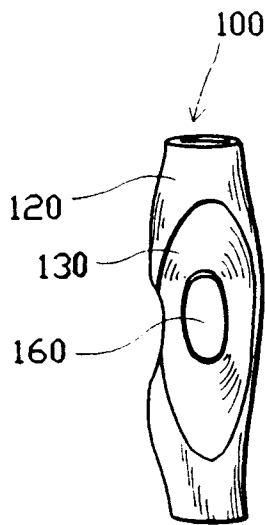
tioned by the digit positioning sleeve can directly contact the elongated implement.

2. A digit positioning sleeve as claimed in claim 1, wherein the support sleeve is provided with three recesses for receiving three digits of a user's hand. 5
3. A digit positioning sleeve as claimed in claim 2, wherein two of the three of the recesses have apertures formed therein. 10
4. A digit positioning sleeve as claimed in claim 2, wherein all three of the recesses have apertures formed therein. 15
5. A digit positioning sleeve as claimed in any one of claims 2 - 4, wherein one recess receives the thumb, one receives the index finger and one recess receives the middle finger of the user's hand. 20
6. A digit positioning sleeve as claimed in any one of claims 1 - 5, wherein each recess is contoured to correspond with the shape and positioning of the digit which it supports. 25
7. A digit positioning sleeve as claimed in any one of claims 1 - 6, wherein the support sleeve is provided with three recesses and wherein one recess is contoured to receive the pad of the thumb, one recess is contoured to receive the pad of the index finger, and one recess is contoured to receive a part of the middle finger between the middle knuckle and the tip. 30
8. A digit positioning sleeve as claimed in any one of the preceding claims, wherein the sleeve is formed of a resilient substance. 35
9. A digit positioning sleeve substantially as herein described with reference to any one of the accompanying drawings. 40

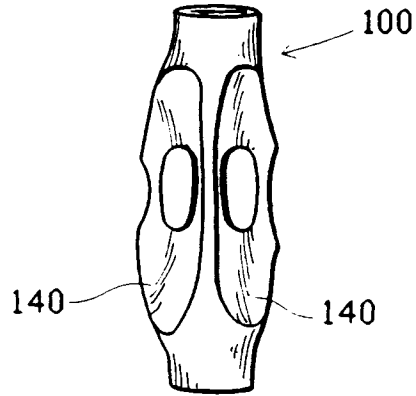
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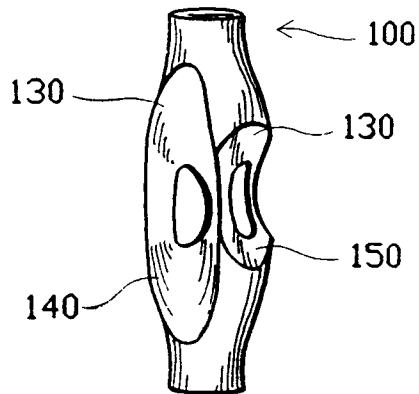
—Fig. 1—



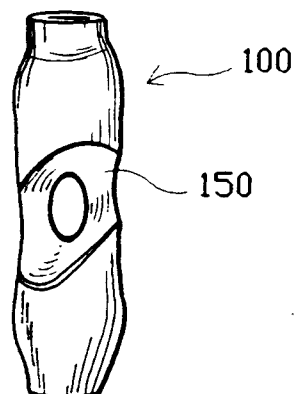
—Fig. 2—



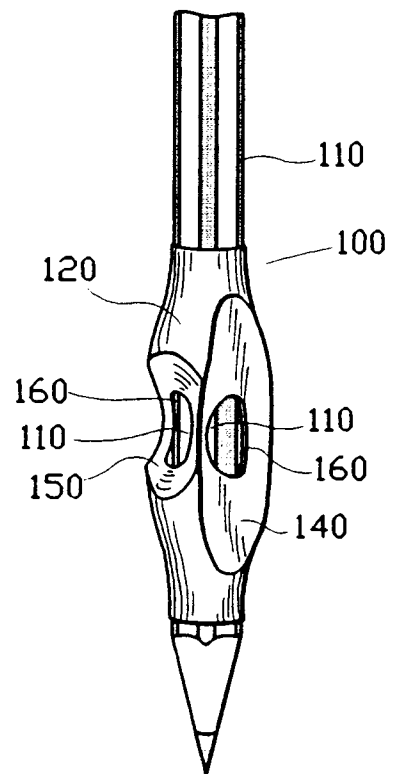
—Fig. 3—



—Fig. 4—



—Fig. 5—



—Fig. 6—



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# EUROPEAN SEARCH REPORT

Application Number  
EP 95 30 4044

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE-A-20 13 582 (MERZ & KRELL) * the whole document *	1-9	B43K23/008
A	US-A-4 526 547 (RUSK) * abstract; figures *	1	
A	US-A-5 320 438 (YANG) * abstract; figures *	1	
The present search report has been drawn up for all claims			<b>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</b> B43K
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>11 January 1996</b>	Examiner <b>Perney, Y</b>
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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