INTELLECTUAL PROPERTY OFFICE

BL O/391/10

11 November 2010

PATENTS ACT 1977

APPLICANT Kezi Levin

ISSUE Whether patent application number GB 0514244.3 complies with section 3

HEARING OFFICER B Micklewright

DECISION

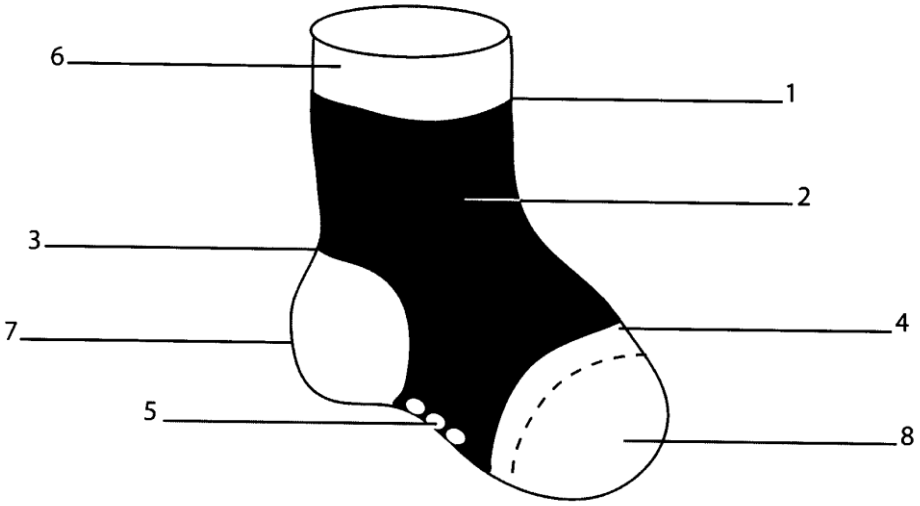
Introduction

1 Patent application GB 0514244.3 entitled "Garment securing infant socks" was filed on 12 July 2005 in the name of Kezi Levin. It was published on 24 January 2007 as GB 2428178 A. The examiner argued that the claimed invention lacked an inventive step. The applicant disagreed and, after several rounds of correspondence with the examiner, requested a hearing. The matter therefore came before me at a hearing on 14 September 2010 at which the applicant attended the hearing with her patent attorney Martyn Draper of the firm Boult Wade Tennant. The examiner Stuart Purdy also attended.

2 The compliance period for this application ended on 27 April 2010. No extension is now available to the compliance period and thus it is no longer possible to amend the application. I therefore have to decide whether the application was in order at the end of the compliance period.

The invention

3 The invention relates to a method of preventing an infant pulling their sock off their foot. A tube of material 2, open at each end, is pulled over the infant's sock. The tube also includes a hole 3 in which is located the infant's heel. The infant's sock is thus secured on the foot.



4 The single independent claim reads:

> *1. A method of preventing a sock from being pulled from the toe end off an infant's foot comprising pulling a sock over garment, comprising a tube of material with open ends and a hole in the body of the tube, over the sock on the infant's foot so that the heel of the infant is located in the hole.*

The law

5 Section 3 of the Act states:

> *3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).*

6 In *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd,* [1985] RPC 49, the Court of Appeal formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588 where Jacob LJ reformulated the *Windsurfing* approach as follows:

(1)(a) Identify the notional "person skilled in the art".

(1)(b) Identify the common general knowledge of that person.

(2) Identify the inventive concept of the claim in question or if that cannot be readily done, construe it.

(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or claim as construed.

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention?

7 In assessing whether the invention claimed in the present application involves an inventive step, I will therefore use this *Windsurfing/Pozzoli* approach.

Assessment

The cited prior art

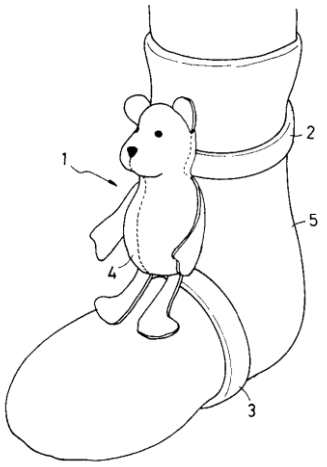
8 The examiner based his inventive step objection on the following two documents.

D1: JP 2004162235 A (YASUDA)

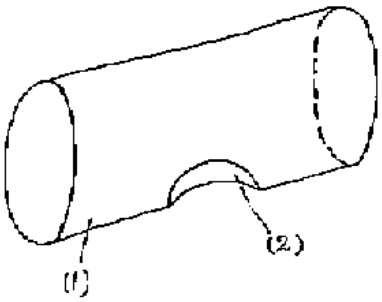
D2: JP 4092510 U

9 The latter document is a Japanese utility model classified under A41F13/00 ("Other devices for supporting or holding stockings or socks during wear") in the International Patent Classification (IPC). I am grateful to the applicant for supplying a translation of this document as part of the application process.

10 D1 discloses a solution to the same problem as that considered in the present application, namely the problem of preventing infants from pulling their socks off their toes. The solution disclosed in D1 comprises an item with two bands 2 and 3 connected together by strap 4. A stuffed toy is attached to strap 4.



11 D2 discloses a means for preventing the slippage of socks towards the toes when boots are worn which, according to the document, occurs when boots are worn for a long time and which results in it becoming difficult to walk. It comprises a tube of thin, stretchable fabric 1 with a hole 2. In use the heel of the wearer protrudes through hole 2. See the figures below for further details.



Inventive step

Step (1)(a): Identify the notional "person skilled in the art"

12 The examiner identified the person skilled in the art as a manufacturer of baby accessories, in particular those associated with baby clothing. The applicant agreed with this identification and so do I.

Step (1)(b): Identify the common general knowledge of that person

13 The examiner considered that the person skilled in the art would be aware of the commonly known problem of retaining socks on an infant's foot. The applicant did not disagree with this.

Step (2): Identify the inventive concept of the claim in question or if that cannot be readily done, construe it

14 The inventive concept is a method of preventing a sock being pulled off an infant's foot comprising pulling a tube of material comprising a hole in the body of the tube over the sock such that the heel of the foot is located in the hole so as to secure the sock on the foot. There were no disagreements in relation to this.

Step (3): Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or claim as construed

15 D1 discloses an arrangement with two co-operating straps or hoops. The arrangement is in use pulled over the foot so that the heel resides in the space between the two straps and the sock is held onto the foot of the infant by these straps. Instead of pulling an arrangement involving two straps over a foot, in the present invention a tube with a hole is pulled over the foot so that heel resides in the hole. This therefore constitutes a difference between D1 and the present invention.

16 D2 discloses a tube with a hole which is pulled over a socked foot to prevent the sock from slipping down towards the toes inside a boot when the wearer is walking. The difference between D2 and the present invention is the use of the tube with a hole on an infant to prevent the infant pulling the sock off their foot.

Step (4): Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person

skilled in the art or do they require any degree of invention?

17 It is important to remember that the invention relates to a method, not to an apparatus. The inventive concept could be rewritten as “a method of preventing an infant pulling off their sock, the method comprising pulling an item over the sock which secures the sock, the item comprising a tube of material with a hole for receiving the heel of the foot”. The step of pulling an item over the sock which secures the sock is disclosed in D1. The difference is in the nature of the item pulled over the foot. The item used in the present invention, instead of that being disclosed in D1, is the item disclosed in D2, albeit adapted for the size and shape of an infant’s foot. The question I therefore have to answer is whether the person skilled in the art, faced with the method disclosed in D1, would consider adapting it by replacing the item used to secure the sock with the item disclosed in D2.

18 Mr. Draper argued that D1 and D2 would not be considered together by the person skilled in the art because the inventions described in the two documents are completely different in terms of function and structure. D1 relates exclusively to a method used for infants and is not suitable for use with a boot. D2 discloses an apparatus exclusively for use in a boot to be used when walking. Different forces are involved between a short sharp pull of an infant pulling their sock off and a sock being worked down a boot when walking. Mr. Draper submitted that there was thus no reason why the apparatus for one application would necessarily work for the other application. He pointed to the background to the invention disclosed in page 1 of the application in suit, where it is made clear that the invention is for securing infant socks and where it is said that babies feet are short and stout, making it more difficult for the sock to stay in place, a problem which ceases to exist once the foot grows longer. He argued this was a very strong pointer away from the field of D2. Mr. Draper emphasised that the problem of babies pulling their socks off was a long-standing one which had been around for decades. Yet prior to the present invention there had only been one attempt to solve the problem, namely that disclosed in D1. Moreover D2 was published 12 years before the filing date of D1 and thus would have been available to the inventors in D1. Yet the inventor of D1 did not make use of its teaching. This, in Mr. Draper’s view, is a very strong indication of an inventive step.

19 I do not agree with these submissions. The person skilled in the art of baby clothing, faced with the teaching of D1, would in my view look for alternatives to the item used in the method of D1. The design of D1, with its stuffed toy, is very distinctive and would not suit all circumstances, for example circumstances where it is desired to put shoes on the baby’s feet. There could also potentially be other problems with the design of D1, such as cost of manufacture, simplicity, the clumsy look of the item of D1, strength durability, etc, which would in my view prompt the skilled person to look for alternative solutions.

20 The skilled person is not necessarily expert in the field of ways of keeping socks in place on feet. But, when faced with the problem of infants pulling their socks off their feet, a problem which Mr. Draper emphasised at the hearing had been well known for decades, would such a person consider looking at this art for possible solutions or alternatives to that disclosed in D1? In answering this question I have to be careful not to give the person skilled in the art undue inventive ingenuity or ability to think laterally, and I have to beware of using hindsight. The field of

keeping socks in place on feet, a field which is not large, is part of the more general field of clothing accessories. Accessories for baby clothing also forms a part of this field and the two fields therefore have some relation to each other. Once the problem of preventing babies pulling socks of their feet has been identified, as it has in D1, it would in my view be obvious to the skilled person to look in the related area of keeping socks in place of feet. It is a related art to that of baby accessories for clothing and is clearly directly relevant to the problem disclosed in D1. Upon deciding to look here, given the small size of the art (apart from sock suspenders and shoes there are few other solutions disclosed in at least the patent literature) the skilled person would find D2 and it would in my view be immediately evident to him that the apparatus disclosed in D2 could be used in the method of D1, despite the fact that the problem it is solving, and the forces involved in that problem, are different. I would add that although the problem is different, it is not completely different but relates to the same general problem of keeping socks in place on feet. The skilled person would therefore in my view consider the teaching of D1 and D2 together and give the item disclosed in D2 serious consideration as alternative to the item used in the method of D1. It would be apparent to the skilled reader without the need for any further investigation that the apparatus disclosed in D2 could also easily be used to keep infants' socks on their feet by using it in the manner disclosed in D1, and would be an effective solution to this problem. I note in reaching this view that the item of D2 is in use pulled over the foot in the same manner as the item of D1. Mr. Draper argued that you would have to throw out all the teaching of D1 in order to make this adaption, but this is not the case. As I have already emphasised, the claim is a method claim and the steps of the method disclosed in D1 remain essentially unchanged. All that is changed is the item which is pulled over the sock. Moreover D2 discloses a very similar method, albeit applied to a walker wishing to wear boots rather than to an infant and for a different purpose.

21 Moreover, I do not consider the long-felt want argument points to the presence of an inventive step in the present case. Although the problem has been around for a long time, it is not clear that there was a great deal of activity in terms of attempts to find a solution. This could be because parents have generally found ways to circumvent the problem, such as by using all-in-one baby grows, by placing shoes on the feet of the infant, or even by removing the socks from the infant's feet. Although the invention has, according to Mr. Draper, had some commercial success, there was no evidence placed before me to demonstrate that this success resulted from the presence of an inventive step in the invention. There are any number of factors which could have led to this success, for example innovative design, marketing, publicity, etc.

22 I therefore conclude that it would be obvious for the skilled person, faced with the teaching of D1, to consider the teaching of D2 and apply that teaching to the problem posed and the method disclosed in D1, arriving at the method disclosed in the present invention. I therefore consider that the present invention claimed in claim 1 does not provide an inventive step over prior art documents D1 and D2.

Conclusion

23 In conclusion claim 1 of the present invention lacks an inventive step over the prior art documents D1 and D2. The compliance period for this application has

expired and I thus need not consider whether any amendment to the claims would impart an inventive step over these documents. I therefore find that the application was not in order at the end of the compliance period and I refuse the application.

Appeal

24 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

B MICKLEWRIGHT
Deputy Director acting for the Comptroller