

PATENTS ACT 1977

APPLICANT Proto Magic Innovations Limited

ISSUE Whether patent application GB0723574.0 complies
 with section 1(1)(b) of the Patents Act

HEARING OFFICER A Bartlett

DECISION**Introduction**

- 1 UK patent application 0723574.0 was filed in the name of Proto Magic Innovations Limited on 30 November 2007 and published as GB2455149 on 3 June 2009. Despite numerous rounds of amendment and examination the examiner and the applicants have been unable to agree as to whether the invention defined in the claims involves an inventive step as required by section 1(1)(b) of the Act. The matter came before me to decide at a hearing on 1 April 2011. The applicants were represented (by telephone) by Mr Ivor Ponting who is one of the inventors. The examiner also attended.

The Law

- 2 Section 1 of the Act sets out a number of requirements that an application must comply with before it can be granted. The relevant parts of that section read as follows:

1 (1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –

(a) The invention is new;

(b) It involves an inventive step

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- 3 Section 3 then goes on to provide some explanation of the inventive step requirement . It 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).*

4 At the hearing Mr Ponting accepted that the approach to be taken when assessing whether an invention provides the required inventive step is that laid down by the Court of Appeal in *Pozzoli*¹. In delivering his judgment in that case Jacob LJ expressed the test as follows:

- (1) (a) Identify the notional “person skilled in the art”
(b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be 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 the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention.

5 That is the test I will apply in deciding this issue.

The application

6 The application relates to a profiling device which is placed on the mattress of a bed and which typically allows the occupant of the bed to be supported in a variety of positions. These devices are typically though not exclusively used in hospitals. On page 1 of the application it is acknowledged that it is common for such profiling devices to include a soft cover and that it is common practice for a pillow to be positioned to support the head (and sometimes the knees) of the person using the bed. The present invention is particularly concerned with the way that the pillows are held in place.

7 The latest form of claims which I was asked to consider were filed by the applicants with their letter dated 22 December 2010. These include 4 claims in total of which claim 1 is the only independent claim. I will initially focus my consideration on that claim. It reads:

- 1) *A bed profiling device suitable for fitting on top of a bed mattress and comprising a soft cover comprising an upper surface and a lower surface and with at least one pocket formed by a single sheet of material attached to the upper surface at the head end of the mattress and suitable for retaining a soft member in a specified position, the retention means comprising the pocket permanently attached to the upper surface of the soft cover and being attached along the side nearest to the*

¹ *Pozzoli SPA vs BDMO SA* [2007] EWCA Civ 588

users (sic) feet and along the two sides adjacent to this side, leaving the side nearest to the users (sic) head open and suitable for the insertion of the soft member.

Argument

- 8 The first part of the Pozzoli test requires me to identify the notional person skilled in the art and the relevant common general knowledge of that person. This was the subject of some discussion during the hearing.
- 9 In his final report dated 28 March, the examiner identified the skilled person as being “a skilled technician familiar with patient bed design and manufacture” and the common general knowledge “to encompass all details of beds, including but not limited to patient beds, and extending to associated devices such as covers and pillows”.
- 10 Mr Ponting considered a narrower view of both aspects to be appropriate. In his view a “bed profiling device” has a specific meaning in the art and he considered the skilled man to be the designer of appliances to be applied to beds (rather than the designer of beds for patients per se) so as to make them more suitable for less able bodied occupants. Furthermore he considered that that skilled person’s knowledge only extended to such devices and not to bedding in general.
- 11 Claim 1 is clearly concerned with the features of a device to be placed on a bed rather than to a bed per se and I agree with Mr Ponting that the skilled person is the designer of appliances to be placed on a bed. This would encompass knowledge of covers applied to bed profiling devices as well as to the mechanical features of the profiling device.
- 12 Step 2 requires me to identify the inventive concept of the claim. This doesn’t pose any particular difficulties. As I have already mentioned, the application acknowledges that bed profiling devices commonly have a soft cover and that pillows are used to support their occupants. The inventive concept in claim 1 is the particular construction and location of a pocket on the cover to hold a pillow in place. The claim is relatively long winded in describing the particular construction of the pocket which is what I would call a “patch pocket” of the sort commonly found on the front of a shirt (ie a single piece of material attached along three sides and left open at the fourth). Thus I would characterise the inventive concept as being a bed profiling device having a soft cover, the cover including a patch pocket on its upper surface at its head end to hold a pillow, the open side of the pocket being the one nearest the head end of the cover.
- 13 Whilst some of those limitations might seem somewhat arbitrary, their significance will become apparent in addressing the remaining steps of the test.
- 14 The third step requires me to identify the differences between the matter cited as forming part of the state of the art and the inventive concept I have just identified. In reporting that the invention defined in claim 1 lacks the required inventive step, the examiner has relied on three pieces of prior art:

i. GB 2397 224 (Minney)

ii. US 6415466 (Laiso)

iii. US 5438719 (Anthony)

- 15 The first thing to say about all three documents is that they relate to general bed linen rather than covers for bed profiling devices with which the present invention is concerned. Anthony discloses a fitted sheet with an integrated pillow case attached to its upper surface for holding the pillow in place. In the examiner's view the pillow case constitutes the pocket required in present claim 1 but acknowledges that whilst it is correctly positioned, it is of a different construction to that specified in the invention presently claimed.
- 16 Laiso discloses a fitted sheet having a number of pockets located on its underside into which various pillows can be placed both to support the occupant's head and to define a sleeping space. Laiso does not specify which side of the pockets are left open though it seems to be optional that the "open" side can have a closing means eg a drawstring. Thus the arrangement disclosed in Laiso differs from that presently claimed by the pocket being on the opposite side of the sheet and in that it does not specify which side of the pocket is left open.
- 17 The examiner has reported (and I agree) that patch pockets (ie a pocket formed of a single piece of material and left open at one side) are very well known. Minney discloses a fitted sheet for an infant bed with a pouch located on its upper surface whose purpose is to prevent a child wriggling down to the bottom of the bed (and possibly suffocating). The pouch has the same construction as a patch pocket and the examiner has cited it to show that in addition to being used in a wide range of fields, patch pockets are known in the field of bedding. The Minney pocket opens at the correct side (ie towards the head end of the bed) though it is not itself located at that end of the sheet. Thus the arrangement disclosed in Minney differs from that presently claimed both in the purpose of the pocket and its position relative to the head end of the bed.
- 18 Step 4 requires me to decide whether, without the benefit of hindsight, those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention.
- 19 In the examiner's view the step of using a patch pocket of the sort known from Minney to retain a pillow in the arrangements of either Laiso or Anthony does not require any degree of invention and the invention defined in claim 1 is obvious in light of those documents. I do not agree.
- 20 In reaching that conclusion, I first need to consider the different fields that the documents come from compared to the invention. As mentioned above, the cited prior art all relates to general bed linen rather than the more specific field of the claimed invention, namely bed profiling devices. In my view that difference is not particularly significant. Indeed, I think it entirely reasonable to expect that when faced with solving a problem associated with the cover for a bed profiling device, the skilled person would appreciate that a solution might

be available from other related fields including more widely applicable bed coverings. Thus I think it entirely reasonable that the skilled person might consider Laiso and Anthony as offering potential solutions to the problem the invention seeks to address, namely a way to secure a pillow to the cover of a bed profiling device. Whilst it looks very much like the arrangement presently claimed, Minney is concerned with solving a rather different problem, namely holding an infant in place in a bed and the skilled person in my view would not have given it serious consideration when faced with the present problem.

- 21 As for Laiso and Anthony, I mentioned above that whilst some of the limiting features recited in claim 1 might seem rather arbitrary, they are nonetheless significant. That is particularly so in relation to the position of the pocket and how it opens. Of course there is no invention in placing a pocket for a pillow in the place you want the pillow to be held ie at the head end of the cover. But the remaining features are important. The location of the pocket on the upper surface of the sheet and the opening of the pocket being towards the head end of the cover makes it easy to insert or remove the pillow, particularly when the bed is occupied. In contrast, Laiso teaches an arrangement where the pockets and pillows are located on the underside of the sheet. That is stated to give the benefit of support being provided where desired whilst the smooth finish of the upper surface of the sheet is retained even when pillows are not present. But to my mind that teaches the skilled reader away from what is presently claimed where the pocket is on the upper surface of the cover giving easy access to the pillow.
- 22 In Anthony, whilst the pillow retention means is attached to the upper side of the sheet, the opening is far less accessible than in the present invention and deliberately so. To insert a pillow in Anthony, requires in one embodiment the pocket to be lifted (to reveal a zipped opening) or in a second embodiment, the sheet to be lifted and the pillow to be inserted through a slit from underneath. This is done to meet a stated objective in that patent of making it harder for pillows to be easily removed for example to reduce pillow theft in hotels. Again that specifically teaches the skilled reader away from the arrangement presently claimed which provides easy access.
- 23 In my view, to conclude that the invention defined in present claim 1 lacks an inventive step over the documents cited relies on the benefit of hindsight which the Pozzoli test does not allow.
- 24 In so far as they recite further limiting features, it follows that the remaining claims are also inventive over the prior art cited.

Other Matters

- 25 The sole issue I was asked to consider at the hearing was whether the claimed invention made an inventive step over the cited prior art documents. I have found that it does. However there are a number of other issues that will need to be resolved before the application can be sent to grant. For example claim 3 is not consistent with claim 1 and there are a number of passages in the description that purport to relate to the invention but (as a consequence of amendments made to the claims during the examination process) are not

consistent with it. I am therefore remitting the application back to the examiner to address those issues.

Conclusion

- 26 I have found that the invention defined in claim 1 does involve an inventive step over the prior art previously cited and remit the application back to the examiner to complete the examination process.

Appeal

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

A BARTLETT

Deputy Director, acting for the Comptroller