



PATENTS ACT 1977

APPLICANT Perry Day

ISSUE Whether patent application number GB1121419.4
complies with Section 1(1)(b)

HEARING OFFICER Stephen Brown

DECISION

Introduction

- 1 This application was filed on 13th December 2011 with a claimed priority of 15th December 2010 (claiming priority from GB1021303.1). It was published as GB2486556 A on 20th June 2012.
- 2 During the examination process the applicant was unable to persuade the examiner that the application complied with Section 1(1)(b) of the Patents Act 1977 (the Act). The matter came before me at a hearing on 10th October 2016 which was attended by the applicant Perry Day, Steve Day and his attorney Stephen Craske. It was also attended by the examiner Rhodri Sykes, and an assistant to the Hearing Officer, Mr Mark Sexton.
- 3 Prior to the hearing the attorney filed skeleton arguments on 3rd October 2016. After the hearing the attorney filed a letter on the 13th October 2016 giving an overview of the issues presented at the hearing.

The invention

- 4 The current set of claims were filed on 19th April 2016 and contains 1 independent claim, claim 1, which reads as follows:

1. Blind operating apparatus which includes a blind suspended from a carrier with a transmission assembly mounted at one end of the carrier and an operating wand connected to the transmission assembly for operating the blind, the wand including a stem with an axis, a first crank handle disposed on one side of the stem axis, and a second crank handle disposed on the opposite side of the stem axis.

The law and its interpretation

5 Section 1(1) of the Act states that:

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

....

(b) it involves an inventive step;

....

6 Section 3 of the Act goes on the state that:

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).

7 Section 2(2) of the Act states:

The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

8 In addition to statute, the courts have long used the so called *Windsurfing* test to assess issues of inventive step. This test was reformulated by the Court of Appeal in *Pozzoli*¹. Paragraph 23 of this decision lays out the test as:

(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?

9 I will now consider each step of this test in turn.

¹ *Pozzoli Spa v BDMO SA & Anor* [2007] EWCA Civ 588.

The 'person skilled in the art' and their relevant common general knowledge

- 10 Previously, the examiner had identified the person skilled in the art as 'one skilled in the art of blinds' and identified their common general knowledge as including 'knowledge of common blinds, their construction and workings, and associated accessories. They would be aware of known means and handles for winding blinds'. The attorney and the applicant concurred with this assessment and I shall do so as well.
- 11 In more detail, the application itself acknowledges that cranks with a single handle, on one side of the stem axis, are known in conjunction with blinds. Furthermore, at the hearing, the applicant acknowledged that such single handled crank operated blinds have been known for many decades. One example of such an arrangement, cited by the examiner, is shown in US1744686 (hereafter referred to as PEASE).
- 12 The examiner also identified a number of documents showing that double handled cranks have been used, over a long period of time, in a variety of fields *other than blind operation*. These include US2006156857, CA2008746, US150069, US1053536, US2004175248, US5833217, US2003150291 and US5904342. I note, however, that while the examiner contended that the skilled person would be aware of such crank designs, the attorney disputes this. He asserts that the skilled blind manufacturer would not be aware of prior art in unrelated fields. I will return to this key issue in due course below.

Identify the inventive concept of the claim

- 13 Once again, the applicant and the attorney agreed with the examiners' assessment. Namely, that the inventive concept is 'the use of a double handled crank with one handle on either side of the stem axis, in conjunction with a blind'. I too think that this is correct.
- 14 The applicant emphasised the advantages of this key difference with a demonstration of the product at the hearing. He showed that the ability to use two hands on the crank allowed greater force to be applied, which meant that a different gear ratio could be used in the transmission assembly leading to the blind being deployed more quickly. I am very grateful to Mr Day for this demonstration, which showed clearly the advantages of his two handled crank design. However, I can find no mention in the specification as filed relating to the speed of deployment or to the gearing.
- 15 On this point, the attorney directed me to the first page of the description, which states that single handled cranks are 'hard work' whereas the claimed crank is 'comfortable to operate'. While I might just stretch the construction of these phrases to include 'allowing the application of greater force by a user', I do not think that they disclose anything concerning the speed of deployment or improved gearing ratios.
- 16 Another advantage of the claimed crank is stated to be that it 'hangs neatly' whereas single handed cranks 'do not hang vertically'. To my mind this is purely an aesthetic difference that cannot be considered to add anything to the inventive concept of the

claimed invention. Likewise, the stated advantage that a two handled crank may be narrower and thus fit within standard packaging is purely a commercial difference. Again, I do not think that it adds anything to the inventive concept. As such the inventive concept of the claim (and the specification as a whole) is simply that stated in paragraph 13, above.

What differences exist between the state of the art and the inventive concept of the claim?

- 17 If we take PEASE as a good example of the state of the art, then the difference is clear. It is the use of a double handled crank *specifically* in the field of crank operated blinds. At the hearing all parties agreed that this was the crux of the difference.

Do those differences constitute steps which would have been obvious to persons skilled in the art or do they require any degree of invention?

- 18 The attorney and the applicant argued that the invention satisfied a long felt want and that the product had already achieved commercial success. I noted that these two arguments form part of the so-called Haberman questions considered by Justice Laddie². At the hearing, the attorney then briefly addressed all of the Haberman questions. He followed up these arguments in more detail in his subsequent letter dated 13th October 2016. I will now consider the Haberman questions in order:

(a) What was the problem which the patented development addressed?

- 19 The attorney stated that the problem addressed was that of improving existing cranks for operating blinds. The applicant further elaborated that the invention had been motivated to some degree by the emergence of European legislation relating to pull cords which are the almost ubiquitous alternative to cranks in blind operation. In their presentation it was not entirely clear what the timings of the legislation were, however it would seem to have been prompted by a commission decision dated the 27th July 2011, with regulation coming into force in 2014. As the application was filed in December 2011 and the priority document in December 2010 this is approximately contemporaneous with the legislation. The EU regulation was driven by a number of accidents in which children had been tangled in blind cords and injured or killed. The primary solution to this has been the introduction of clips to keep the loose cords tight and parallel to the wall. The applicant's alternative solution was to look to improve the crank system.
- 20 The applicant further explained that while 'safe' cranks have been known for a number of decades, existing single handled cranks are 'hard work' and slow. By developing a double handled arrangement, the applicant had created a crank which is 'comfortable to operate' and enables a greater speed of deployment. I note again

² *Haberman v Jackel* [1999] FSR 685 (esp. paragraphs 699 to 701)

though that the application does not disclose anything to support the latter, speed of deployment, improvement.

(b) How long had the problem existed?

- 21 The attorney argued that the disadvantages of cranks compared to pull cords had been known for many decades. Indeed, it is true that for a long time the pull cord has been the almost ubiquitous blind deployment solution. Also, following the European legislation the most common adaptation has been for pull cords to be clipped to a wall so that they can continue to be used.
- 22 However, I think that this misconstrues exactly what ‘the problem’ being overcome in this instance is. While pull cords were the almost ubiquitous solution to blind deployment there was no incentive to improving the operation of cranks. The alleged issues with single handled cranks only became a problem worth solving when European legislation rendered pull cords a less acceptable solution. Thus, in my opinion, the actual problem has only existed since shortly before 2011.

(c) How significant was the problem seen to be?

- 23 The attorney argues that the disadvantages of cranks were seen to be significant hence the preference for pull cords. In *Haberman*² though the point of this question was to suggest that if the problem was seen to be significant and that many people were working and failing to find a solution then this would weigh in favour of the development being inventive. In contrast, in this case the problem was not seen to be significant as a practical working solution, the pull cord, had already been found. Thus little effort was being expended on improving the performance of crank based systems until European legislation was mooted.
- 24 This conclusion is reinforced when I consider the competitor’s device ‘Soper’ which the applicant demonstrated at the hearing. I note that this device had much in common with the prior art document PEASE, filed in 1928. The lack of directly applicable prior art and the prevalence of pull cords suggest that there was little motivation for those in the art to focus on crank operated blind mechanisms. That motivation appears to have been reignited by the proposed EU legislation, at which point the applicant quickly suggested the current solution.

(d) How widely known was the problem and how many were likely to be seeking a solution?

- 25 The attorney pointed out that problem was very widely known, hence the preference for pull cords. Again, the original point of this question was to consider how many people were actively seeking solutions. In this case the technical problem had already been solved by using pull cords.

(e) What prior art would likely to be known to all or most of those who would have been expected to be involved in finding a solution?

- 26 The attorney accepted that a person skilled in the art would be aware of single handled cranks, but argued that they would be unaware of prior art in unrelated fields. I agree with the former point and will come back to the latter one below.

(f) *What other solutions were put forward in the period leading up to the patentee's development?*

27 The most widely adopted response to the European legislation was to the use of 'P-clips' to fix the bottom of pull cords to a wall, or other surface. However, the applicant admitted that many users did not realise the importance of the clips and failed to use them properly.

(g) *To what extent were there factors which would have held back the use of the solution even if it was technically obvious?*

28 The attorney was not aware of any such factors.

(h) *How well had the patentee's development been received?*

29 The attorney and applicant asserted that the invention had been received very well but did not provide any evidence as to the commercial success of the product. While it appears that there has been some demand for the product, it would also seem that the simpler and cheaper option of providing a p-clip to a pull cord is probably more widespread.

(i) *To what extent could it be shown that the whole or much of the commercial success was due to the technical merits of the development?*

30 The attorney explained that in large part the commercial success of the invention could be attributed to the technical merits of the double crank. I am willing to accept this point, at least for the sake of argument, but note that another possible driver of commercial success could lie in the EU legislation which provided a general motivation to move away from pull cords.

31 Taking a step back now, I note that in the original *Haberman*² case the questions were used to judge the technical obviousness of a solution in a field of technology where many different solutions by many different inventors had been proposed over a long period of time without success. In that case the answers to the questions pointed towards the solution being non-obvious because there had been much effort expended without that solution being arrived at.

32 In my opinion though the current case is clearly different. In the current case the applicant acknowledges that for most of the intervening decades since PEASE the widely used solution was the provision of a pull cord. It would seem that within a matter of months of safety concerns and legislation being mooted around the pull cord solution, the applicant took the old crank handle operated blind and proposed a two handled solution for packaging and 'ease of use' reasons. I am afraid that I can see no evidence of a long-felt want or of competitors working for decades to find a solution to this issue. As such, in this case, the answers to the Haberman questions do not persuade me that the solution is inventive.

33 I will now move on to the question of whether or not a person skilled in the art would have found it obvious to try a two handled crank instead of the previously known one handled crank. Another way of phrasing this question is: 'is replacing a one handled crank with a two handled alternative simply a workshop modification that a person

skilled in the art would have tried, had a simpler solution (the pull cord) not dominated the market?’

- 34 As illustrated in the citations found by the examiner, double handled cranks are used across a wide variety of fields in which deployment through turning is affected. The attorney argued that these wouldn’t have been seen as viable options to couple to blinds because of the greater mechanical forces involved and the positions in which they would be used. I feel, however, that this is being over specific. It remains that two handled and one handled cranks are well known varieties of crank design in general.
- 35 As mentioned above, the attorney also argued that a person skilled in blind manufacture would not be aware of prior art in unrelated fields. Again, I am afraid that I disagree. In my opinion the skilled person engaged in the exercise of developing an improved crank for use with a blind would be aware of generally applicable variants of crank design. As such I believe that the possibility of a two handled crank would form part of the common general knowledge of the skilled person identified above. Even if I accept that the skilled blind designer is wholly ignorant of crank design, which I do not, then when engaged in the exercise of improving a known crank such a person would inevitably consult someone who was knowledgeable of known crank designs.
- 36 Finally, the attorney also argued that following the guidance in *Saint-Gobain*³ there must be a reasonable expectation of success in order for something to be obvious. I note that in paragraph 35 of this decision, Jacob LJ expressed this point as “the ‘obvious to try’ test really only works where it is more-or-less self-evident that what is being tested ought to work”. In the current case, it is my opinion that the use of a two handled crank was obvious to try. Furthermore, the skilled person would be aware that it would have a very good prospect of success, it being a general solution in similar, but arguably heavier-duty, circumstances.
- 37 Taken as a whole it is therefore my view that the use of a two handled crank amounts to no more than a non-inventive workshop modification. I thus conclude that the invention as defined in claim 1 lacks the required inventive step.

Decision

- 38 I have found that claim 1 of the application lacks an inventive step contrary to section 1(1)(b) of the Patents Act. I have read the specification carefully and I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

³ *Saint-Gobain PAM SA v Fusion Provida Ltd and Electrosteel Castings Ltd* [2005] EWCA Civ 177

Appeal

- 39 Any appeal must be lodged within 28 days.

Dr. Stephen Brown

Deputy Director, acting for the Comptroller