

26 August 2011

PATENTS ACT 1977

APPLICANT Wayne Dyer & Gilliam Dawn Dyer

ISSUE Whether patent application
GB0803424.1 complies with section
1(1)(a) and 1(1)(b)

HEARING OFFICER Peter Slater

DECISION**Introduction**

- 1 Patent application GB0803424.1 entitled "Easy level (for caravans and motor homes)" was filed on 26 February 2008 in the names of Wayne Dyer & Gilliam Dawn Dyer. The application was then published on 2 February 2009 as GB2457882.
- 2 Following a request for accelerated examination on 2 August 2009, the examiner issued his first examination report on 10 September 2009. Since then there have been a number of additional rounds of correspondence throughout which the examiner has maintained the view that the invention as claimed is not new and involves no inventive step. Having been unable to resolve this issue the applicants requested a decision be taken on the papers.

The invention

- 3 The invention relates to an arrangement for levelling a caravan in the form of a graduated, colour coded and numbered spirit level together with a series of associated interlocking ramps. Whilst traditionally, caravan enthusiasts may well have used a spirit level to indicate whether or not the caravan was level, it would have still been necessary, through a process of trial and error, to estimate how much packing was required to be placed under the wheels in order to achieve a levelling of the van. However, the invention as disclosed removes any need for trial and error, providing the user with a direct indication, via the graduations on the spirit level of the number and size of ramps required to level the van.

4 Once the caravan is positioned in the preferred location, the spirit level is placed on the floor of the van parallel to the axle. The ramps used to level the caravan are themselves colour coded and numbered to correspond to the graduations on the spirit level. If the caravan is not level, displacement of the “bubble” relative to graduations indicates the number, size and combination of ramps required to level the van. The appropriate arrangement of ramps, as indicated by the spirit level, is then placed beneath the wheels of the caravan, and the wheels secured in place on the uppermost ramp by a combination of chocks and/or lips built into the surface of the ramp.

5 The most recent set of claims was filed on 9 April 2008. There are a total of six claims including a single independent claim which reads as follows:

1. A levelling system for caravans and motor homes incorporating a graduated spirit level whereby each graduation measures the degree of bubble movement away from absolute level and this measurement then provides the measurement of lift required to level the caravan or motor home and each graduation is colour and number coded to correspond to a combination of interlocking rigid flat plastic ramps which are also colour and number coded.

The Law

6 Section 1(1) sets out the requirement that an invention protected by a patent must be both novel and involve an inventive step, 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;

(c) it is capable of industrial application;

(d) the grant of a patent for it is not excluded by subsections (2) and (3) or section 4A below;

and references in this Act to a patentable invention shall be construed accordingly.

7 Section 2 sets out what novelty means; subsections (1) to (3) are relevant here:

2(1) An invention shall be taken to be new if it does not form part of the state of the art.

2(2) 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 Section 3 sets out how the presence of an inventive step is determined:

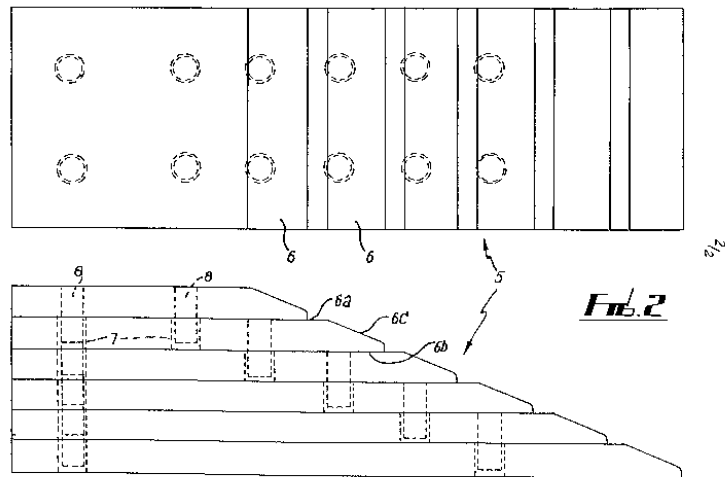
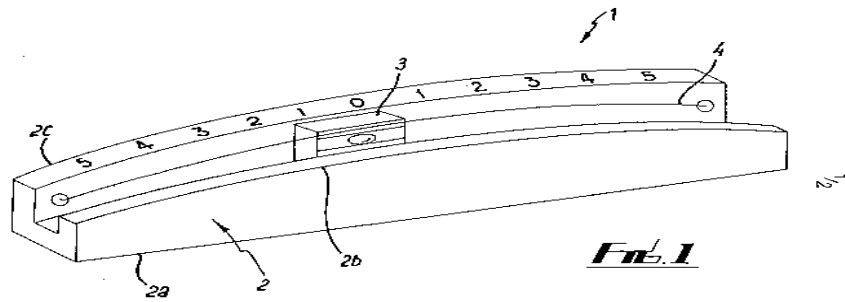
3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

Construing the claim

- 9 In deciding whether the invention as claimed is novel and involves an inventive step, I must first construe the claims. Claim 1 relates to a system for levelling a caravan comprising amongst other things a graduated spirit level. By spirit level, I assume the applicant to mean a conventional spirit level, such as that used by a carpenter, comprising a transparent vial containing a liquid such as alcohol in which a bubble is trapped, wherein movement of the bubble indicates the degree to which a surface is level. According to claim 1, the spirit level must also carry graduations which are colour and number coded. Each graduation representing a combination of correspondingly colour and number coded interlocking ramps such that movement of the bubble relative to the graduations indicates which combination of ramps is required to level the caravan.
- 10 It is readily apparent from the description on pages 8 and 9, and in particular the table on page 9, that the ramps have different dimensions, and that movement of the bubble relative to the graduations does more than just identify the number of ramps required to level the caravan more importantly it identifies a unique combination of different sized ramps which are required to level the van. For example, "mark 4" on the spirit level would indicate that the caravan needs to be lifted by 50mm, and that this can be achieved by placing a combination of ramps 1, 2 & 6 beneath the wheels. This is what I think a skilled person would have understood the phrase a "combination" of ramps to have meant, and that this doesn't include merely selecting the first three ramps as may have been the case in the prior-art. It is this interpretation which I have adopted throughout my decision.

Novelty

- 11 The examiner maintains that the invention as defined in claims 1-3 is not novel given the disclosure in the following document:
- GB2244331 (Thomson), published on 27 November 1991
- 12 *Thomson* discloses an apparatus for levelling a vehicle such as a caravan comprising an angle measurement device 1 and a segmented ramp 5. The angle measurement device comprising a graduated base unit 2 having a curved upper surface 2b adapted to receive a spirit level 3. In the preferred embodiment, the spirit level is supported for movement along the upper surface of the base unit by a wire 4. However, this document also refers to an alternative embodiment wherein "...the spirit level could be integral with the base unit. In this way, merely the bubble would move without the need to move the spirit level." (see page 4, lines 23 to 26). In use, the angle measurement device is placed on the floor of the caravan, the spirit level is moved across the base unit until it is level, and the number of ramps required to level the caravan is indicated by the graduations on the base unit at that point. See figures 1 & 2 reproduced below.



- 13 The correspondence has tended to concentrate on what I would regard as the question, *when is a spirit level not a spirit level?* For example, the preferred embodiment shown in *Thomson* where the angle measurement device includes a graduated base on which, what I would regard as a traditional spirit level is free to move along a wire does not seem sufficient to anticipate claim 1, as the level itself is not graduated, and it is the position of the spirit level as a whole relative to the base that is used to determine the number of ramps required to level the van. However, the examiner has quite rightly pointed-out that the description on page 4, lines 23 to 26 envisages an alternative embodiment where “...the spirit level could be integral with the base unit. In this way, merely the bubble would move without the need to move the spirit level...”, which in itself seems sufficient to suggest that, in this embodiment the spirit level itself would have to be graduated and movement of the bubble would be sufficient to determine the number of ramps required. Thus in my view Thomson does appear to provide an enabling disclosure of a graduated spirit level as required by claim. However, that is not the end of the matter,

- 14 Claim 1 also requires both the graduations on the spirit level and on the ramps to be colour and number coded. However, there is no such disclosure in *Thomson*, where the graduations are merely numbered as are the ramps. The examiner seems to be suggesting that this is not relevant as this feature amounts to nothing more than the presentation of information and as such is not patentable. However, I would have to disagree, in order for the disclosure in *Thomson* to anticipate the invention as claimed, it must disclose all the features required of the claim, which it does not appear to do.
- 15 Furthermore, the invention as claimed requires the graduations to be colour and number coded in such a way as to correspond to a specific combination of interlocking ramps which when placed beneath the wheels of the van will be sufficient to level it., For example, the graduations might indicate that a combination of ramps 1,2 & 6, which are of different dimensions, are required to level the van. This is not the case in *Thomson*, where the graduations merely indicate the absolute number of ramps required to level the van, and all the ramps appear to be of the same height.
- 16 I therefore conclude that the invention as claimed is novel, and is not anticipated by the disclosure in *Thomson* which clearly does not disclose a graduated spirit level having colour and number coded graduations in combination with a corresponding set of colour and number coded ramps, nor does it disclose an arrangement in which the spirit level provides an indication as to the specific combination of ramps required to level the caravan as I interpret that requirement.

Inventive step

- 17 The examiner has also cited a number of documents which he argues show that the invention as claimed involves no inventive step which I will now consider.
- 18 In determining whether the invention as claimed involves an inventive step, I will use the well established four step test set out by the Court of Appeal in *Windsurfing*¹ and restated by that Court in *Pozzoli*² 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?

¹ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd* [1985] RPC 59

² *Pozzoli SpA v BDMO SA* [2007] EWCA Civ 588, [2007] FSR 37

- 19 Firstly, I must identify the notional “person skilled in the art”. The examiner suggests in his letter of 7 April 2011, that this would be someone “...engaged in the production and use of devices for levelling caravans and motor homes at static locations.”. In the absence of any objections from the applicant, I am content to adopt this definition.
- 20 Next, I must determine the common general knowledge attributable to that person. Again the examiner has provided me with some useful guidance, suggesting that the common general knowledge would include “...the use of spirit levels for indicating inclination, ramps for raising the wheels of vehicles, the use of interlocking sectional ramps for selectively raising a wheel of a caravan or motor home and that interlocking formations might conventionally take a variety of forms.” Again, I am prepared to accept this as a basis on which to proceed.
- 21 Step 2 requires me to identify the inventive concept of claim 1. The examiner in his letter of 7 April 2011 suggests that this resides in “...the use of a spirit level as the angle measuring device graduated in such a way to correspond to a set of levelling ramps...”. However, I think the inventive concept goes beyond that to include not only a graduated spirit level but also the fact that movement of the bubble relative to the graduations provides an indication of the combination of ramps required to level the van, and that the spirit level and the ramps are colour and number coded to facilitate this. Again, it is important here for me to restate that my interpretation of a combination of ramps means just that i.e. that the graduations correspond to a unique combination of coded ramps, of different dimensions, which are required to level the van.
- 22 I must now decide what differences exist between the inventive concept and the prior-art cited by the examiner. I will begin by considering the disclosure in *Thomson* which is clearly the closest prior-art although I note that the examiner having concentrated on novelty has not raised any arguments in respect of inventive step in relation to claim 1 on the basis of the disclosure in this document. However, I think it appropriate for completeness to discuss it here. The difference between this disclosure and the invention is that in the invention the spirit level and ramps are colour and number coded, such that movement of the bubble relative to the graduations provides an indication as to the combination of ramps required to level the van. However, in *Thomson* the graduations and ramps are merely numbered, and movement of the spirit level merely provides an indication of the absolute number of ramps required to level the van rather than providing a distinct indication of which combination of ramps to select from a range having different dimensions which when combined would be sufficient to level the van. This I think is consistent with the interpretation I have applied to the claim.
- 23 Would the skilled person have thought this obvious? I do not think that the fact that the graduations and ramps are both colour and number coded is sufficient to render the invention as claimed inventive over the disclosure in *Thomson*. However, I think the fact that the invention is capable of identifying which unique combination of ramps to select from a range of ramps having different dimensions provides a distinct advantage over the prior-art in terms of enabling a wider range of incremental heights to be achieved than would previously have

been possible, and that this provides the user with additional flexibility when levelling the van. For this reason, I do not think this would have been obvious at the time and therefore consider the invention as claimed to involve an inventive step above and beyond that which is disclosed in *Thomson*.

- 24 The examiner has also raised an inventive step objection in relation to the disclosure in US4427179 (*Price*). *Price* discloses a similar arrangement for levelling a caravan as that which is described in *Thomson*. However, *Price* uses a graduated pendulum in place of the spirit level to indicate the number of ramps required to level the van. The examiner argues that merely replacing the pendulum with a spirit level does not constitute an inventive step. I agree that if that were the only difference between *Price* and the invention as claimed it would not be sufficient to establish an inventive step. However, this is not the case as *Price* also fails to disclose the use of colour and number coded graduations and ramps, nor does it suggest that the pendulum indicates anything more than the number of ramps required to level the van as was the case in *Thomson*. I therefore consider that for much the same reasons, the invention as claimed involves an inventive step above and beyond that which is disclosed in *Price*.
- 25 Having found the invention as claimed in claim 1 to be both novel and inventive in relation to the disclosures in *Thomson* and *Price* (the closest prior-art), I do not think it necessary to consider the additional prior-art cited by the examiner or the dependant claims.

Conclusion

- 26 I have found that the invention as claimed in claim 1 is both new and involves an inventive step in relation to those documents cited by the examiner. I therefore remit the application to examiner to complete his examination.

Appeal

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

PETER SLATER

Deputy Director, acting for the Comptroller