



- 5 I have made my decision on the basis of the latest claims filed on 3 March 2016. There is a single independent claim, claim 1, which reads as follows (the numbers in brackets refer to the numbers in the drawings filed as part of the application):

*“1. An article of Footwear both left and right (9), comprising a so-called Upper or Body (1), a Ground Engaging Body (2a), wherein the so-called Upper or Body (1) includes mounting means for a Visual Display and Control Screen (3), that supports Touch Screen capability (3), having the means to use either Lcd, Led or Oled Display capability and to control functions of a Visual Display Screen (2b) located in a Ground Engaging Body Cavity, wherein the so-called Upper or Body (1) includes mounting means for a Manual QWERTY Keyboard (4) located in the so-called Upper or Body (2) to also control functions of the Visual Display Screen (2b) as an added alternative and back up to the Lcd/Led/ or Oled Visual Display and Control Screen (3) that supports Touch Screen Capability (3) having the means to use either Lcd, Led or Oled Display capability (3), wherein the Visual Display Screen extends all the way around the ground engaging body.”*

- 6 Further details of the invention are defined in claims 2 – 22.

### **The law and its interpretation**

- 7 Section 1(1)(a) of the Patents Act states that a patent may be granted only for an invention that is new. “New” means your invention must never have been made public in any way, anywhere in the world, before the date on which your patent application was filed.
- 8 Section 1(1)(b) of the Patents Act states that a patent may be granted only for an invention that involves an inventive step. “Involve an inventive step” means that your invention, when compared with what is already known, would not be obvious to someone with a good knowledge and experience of the subject. Section 3 of the Patents Act set out how the presence of an inventive step is determined. For example, an invention would be obvious if the only difference between it and what was known was the result of applying common general knowledge or adding a feature which was well known. As noted by the applicant, the approach to obviousness has been considered at length by the Courts most notably by the Court of Appeal in the cases generally referred to as *Windsurfing*<sup>1</sup> and *Pozzoli*<sup>2</sup>.
- 9 What the Courts provided in those cases was the idea of using a structured approach to the problem of deciding whether an invention involved an inventive step. That structured approach involved the following steps:
- (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;

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<sup>1</sup> *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*, [1985] RPC 59

<sup>2</sup> *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

(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 be obvious to the person skilled in the art or do they require any degree of invention?

10 To get a patent, a patent application – and specifically the invention as claimed – must meet all the requirements of UK patent law. The purpose of this decision is to decide whether Miss White’s application does or does not do that.

## **Arguments and analysis**

### Clarity

11 Although the issue I have to decide are whether the claimed invention is new and inventive, it is an essential requirement of patent law that the claims are clear. This is to ensure that a third party can be certain what is protected by the patent. This requirement is independent of whether the invention is new and inventive, which I consider below. The patent must include one main claim that defines all the technical features essential to the invention as it is these features that provide that certainty and distinguish the invention from what is already known. Therefore, it is claim 1 which defines all the features which are essential to the invention; the purpose of the other claims is to set out optional or non-essential features. Before considering whether the claimed invention is new and inventive, I must therefore first consider the wording of the claims to decide what they are seeking to protect.

12 The claims filed on 3 March 2016 comprise four aspects:

- claim 1 is concerned with a shoe with mounting means on the upper for a visual display and control screen with touch screen capability and for a QWERTY keyboard and a visual display on the ground engaging part of the shoe where the visual display extends all the way around the shoe.

- claims 2-3 and 13 are concerned with waterproofing the visual display and control screen on the upper and the visual display on the sole;

- claims 9 – 12, 18, 20 and 21 refer to a cavity being cut out to accommodate a screen depth; and

- claims 4-8, 14-17 and 19 refer to other optional details (solar power in claims 4 -5, on/off functions in claims 6-8, USB sockets in claims 14-17, battery light indicator in claim 17 and infrared signals in claim 19).

13 From the description, the summary of the invention states (numbers in brackets refer to the drawing filed with the description):

“This invention covers all types of footwear, comprising of a so-called Upper (1) and Ground Engaging Body (sole), (2a), for both left and right Footwear (9).

Wherein the Upper or the body (1) includes mounting means for a Visual Lcd/Led/Oled Display/Control Screen,(3) including a Touch-Screen Keyboard, (3) amongst many of its features from the menu, and below it, a Manual Keyboard (4) as a back-up to the Touch-Screen keyboard, in case of temporary malfunction, and also for user preference.

Wherein the Ground Engaging Body (Sole), (2a), is cut out to accommodate screen depth (2b), incorporates an Lcd/Led/Oled display screen (2b) that goes all the way round the Trainer (Footwear) Ground Engaging Body, (Sole), (2a), from one side of the footwear to the other and back again, (2b), as shown in the accompanying picture, in real time, and would have the options of showing words, phrases, sentences [sic], pictures, images, graphics, moving continuously all the way round the Ground Engaging Body, (Sole), (2b), or the other options of static, static flashing, flashing moving, in Ground Engaging Body (Sole) (2b).”

- 14 From the description, it would appear that the invention for which Miss White is seeking protection is an article of footwear including a mounting for a visual display/control screen and a QWERTY keyboard, and a visual display screen extending all the way around the sole, where the sole is cut out to accommodate the screen depth. However, as currently worded, claim 1 defines a shoe with only “mounting means” for a display and keyboard and thus does not specify the presence of the visual display and control screen or the QWERTY keyboard as essential technical features. I note that the description at the foot of page 3 states that the upper itself serves as the “mounting means” and that the application gives no other examples of “mounting means”. Also, claim 1 does not refer to cutting away the sole at all which the applicant asserts is essential. This feature is in dependent claims 9 – 12 and 18 as an optional feature.
- 15 There are other features which appear essential in the description such as when the description says in paragraph 6 of the summary of the invention “The left and right footwear (9), will both be solar powered” but solar power is not mentioned in the essential features of claim 1 but only in the optional features in claims 4 – 5. Therefore, it is not clear from the application as a whole which features are considered essential to the invention, which features are options and which are for information only. These major inconsistencies between the description and the claims as to what the invention is render the claims unclear but I shall do my best to understand them.
- 16 For the purposes of my consideration of novelty and inventive step, I shall therefore interpret claim 1 to protect the following invention:

An article of footwear comprising an upper, a ground engaging body and a visual display screen which extends all the way around the ground engaging body.

#### Novelty and Inventive Step

- 17 For a patent to be granted for an invention, the claims must distinguish it clearly from previously proposed inventions in a way which is both new and not obvious to someone skilled in the art of making shoes. Notwithstanding the lack of clarity of the

claims, the examiner is of the view that the content of the application, including all the claims is known or lacks an inventive step (ie is obvious). He has cited the following patent documents to support his view.

EP0773529	(SALLEY)	<i>See Figure 9A, as well as lines 10 and 11 of column 3 and line 57 of column 32 to line 24 of column 4</i>
US 2004/187184	(RUBIN)	<i>See figure 2, as well as paragraphs 7, 8, 15-18 and 21</i>
US 2008/0250672	(FORBES)	<i>See figures, as well as paragraphs 17-21</i>
WO 02/06724	(LOVITT)	<i>See figure 1, as well as page 3 lines 1-11.</i>
US2009/0288317	(FORBES)	<i>See figure 11, as well as paragraph 41</i>

#### Novelty

- 18 In his letter of 4 October 2016 the examiner explains that claim 1 is not new because figure 9A of EP0773529 “shows a display mounted on the ground engaging body of a shoe, and lines 10 and 11 of column 3 state the display wraps fully around the shoe of the user”. In her letter dated 27 November 2016 the applicant says that EP0773529 merely shows attaching a piece of strip to the shoe using Velcro<sup>RTM</sup> and differs from her invention which is concerned with a built in screen so should not have been cited.
- 19 I agree with the examiner that EP0773529 discloses a shoe comprising an upper with a screen that wraps all around the ground engaging body of the shoe. Claim 1 does not say how the screen is attached to the shoe so the examiner was correct to cite EP0773529. Claim 1 is therefore not new.
- 20 Claims 2 – 3 and 13 set out that the footwear is waterproof protected. However, as the examiner explains in his report EP0773529 sets this out, for example in line 51 of column 3 which says “The tube, when flattened, serves as a protective guard which prevents damage from water”. Therefore, in light of this, claims 2 - 3 and 13 are not new.
- 21 EP0773529 also shows an On/Off switch (see lines 49-50 of column 5) and the use of audio signal transmitters (see lines 44-47 of column 9) so claims 6-8 and 19-21 are not new.
- 22 Claims 9 – 12 and 18 refer to a cavity being cut out to accommodate a screen depth. The examiner’s report explains that Figure 9A of EP0773529 sets this out but Miss White says in her letter dated 27 November 2016 that she disagrees. However, lines 42 – 44 of column 10 of EP0773529 say “The present disclosure utilizes an

encircling slot 68 fully around and on the exterior. It has the form of a recessed groove". This feature is shown in Figure 9B. Therefore, I agree with the examiner that the claim to a cavity being cut out to accommodate the screen is known. Claims 9 – 12 and 18 are not new.

### Inventive step

- 23 As well as being new, an invention must involve an inventive step ie it must not be obvious to someone with a good knowledge and experience of the relevant technology. I shall now determine whether Miss White's invention as claimed in the remaining claims involve an inventive step. The approach I must follow is that laid down by the Court of Appeal in *Pozzoli/Windsurfing*.

### **Step 1 – Identify the person skilled in the art and the relevant common general knowledge of that person**

- 24 The skilled person is a person who has the skill and knowledge to make routine workshop developments but not exercise inventive ingenuity or think laterally. Legally, this "person" may be an individual or a team. So, for example, a maker of shoes who wished to incorporate a display screen or other electrical/electronic features into their shoes but lacked the knowledge or skill to do so, would seek out the expertise to do this.
- 25 In his report dated 4 October 2016 the examiner identifies the skilled person as a maker of shoes that have display screens on them of various sizes and shapes. This person would also be aware of common features associated with this type of shoe such as power sources (eg batteries or solar power), on/off switches, USB ports, battery power indicators, controls for the display screens, and wireless control .
- 26 In her letter dated 27 November 2016, Miss White says that she disagrees with this and that a maker of shoes would not be aware of wider technology. I disagree. In my view, the examiner's assessment of the skilled person is correct although I would qualify it by adding that this person would also be aware of fashion trends in footwear.

### **Step 2 – Identify the inventive concept of the claim in question of if that cannot readily be done, construe it**

- 27 As stated in her letter of 18 July 2016, the applicant considers the inventive step to lie in footwear having a visual display screen that extends all the way round the ground engaging body. The inventive concept identified by the examiner in his latest report is that the invention is solar powered, has an on/off function, a manual QWERTY keyboard, a USB port that can be used to re-charge a battery, a battery power indicator that can display when the battery needs to be recharged and an audio signal transmitter that can transmit a signal using infra-red signals. In my view, these statements represent extreme positions and I believe the inventive concept to be that identified by the applicant where the footwear additionally comprises one or more of the features identified by the examiner.

**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 the claim as construed**

- 28 EP0773529 shows that many aspects of the applicant’s invention are not new but does not disclose the use of solar power, the use of a USB socket, a battery power indicator or the use of an audio signal transmitter.

**Step 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?**

- 29 In his most recent letter, the examiner cited several prior art patent documents (listed above) as showing shoes (or other apparel) with display screens with additional features. US 2004/0187184 discloses the use of a wireless interface and power sources including solar and battery power. US 2008/0250672 discloses the use of different charging methods (including solar power), USB ports and a power indicator. WO 02/06724 discloses the use of battery power and US2009/0288317 discloses in paragraph 37 the use of infrared signals.
- 30 I consider these differences would be obvious to a maker of shoes with screens on them and I consider the inclusion of a manual QWERTY keyboard as a backup to the control screen is a matter of design. I therefore find that the invention claimed does not have an inventive step. As the examiner pointed out in his latest report, we are not attempting to read the minds of the inventors of the prior art documents. We are asking what the available technology was at the time you filed your application and, using those documents as a starting point, would the skilled person arrive at your invention, without having to be inventive.

**Conclusion**

- 31 I have found that the claims lack novelty and do not involve an inventive step. I have read the specification carefully but am unable to identify any saving amendment. I therefore refuse the application under section 18(3).

**Appeal**

- 32 Any appeal must be lodged within 28 days after the date of this decision. This means that the period for putting the application in order, which was due to expire on 28 December 2016, will automatically be extended to the end of the period for lodging an appeal. If no appeal is lodged, the application will be terminated.

**MRS S E CHALMERS**

Deputy Director, acting for the Comptroller