



## PATENTS ACT 1977

APPLICANT	Vernon Francois
ISSUE	Whether patent application GB1305933.2 complies with Sections 1(1)(a) and 1(1)(b) of the Patents Act
HEARING OFFICER	Dr S. Brown

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### DECISION

#### Introduction

- 1 Patent application GB1305933.2 concerns a headband. The application was filed on 2<sup>nd</sup> April 2013 in the name of Vernon Francois. It was published as GB2511581 A on 10<sup>th</sup> September 2014. The application claims priority from GB1220677.7 which was filed on 16<sup>th</sup> November 2012.
- 2 During the examination process the applicant was unable to persuade the examiner that the application complied with Section 1(1)(a) 'novelty' and Section 1(1)(b) 'inventive step' of the Patents Act 1977 (the Act). The applicant's attorney, Rational IP Ltd., requested a decision on the papers on 10<sup>th</sup> May 2017.

#### The Application

- 3 The current set of claims were filed on 10th May 2017 and include 2 independent claims, claim 1 and claim 6. Claim 1 reads as follows:

*A headband comprising: a curved main portion; and two end members pivotally connected at an end of each end member to each end of said curved main portion, each end member being pivotable by wearer-adjustment according to the shape of the head of the wearer about at least one axis which is substantially parallel to a plane containing the curve of said main portion, wherein each end member is pivotable to a first extended position configured for placement on the head of the wearer wherein the end member and the curved main portion are substantially aligned and extended and to a second fitted position so that the end member is substantially perpendicular to the plane containing the curve of said main portion.*

- 4 Claim 6 is substantially the same as claim 1 except that its 'main portion' is not limited to being curved and that it specifies that *'during wearer-adjustment the end members move along the head of the wearer upwardly away from the face'*.
- 5 Figures 1-3 of the application show all the embodiments of the headband. While figures 1 & 2 show side members 102 and 103 and central member 101, page 4 of the description discloses that the side members and the central member may be integral (i.e. these elements are a single piece and do not pivot relative to one another).

Fig. 1

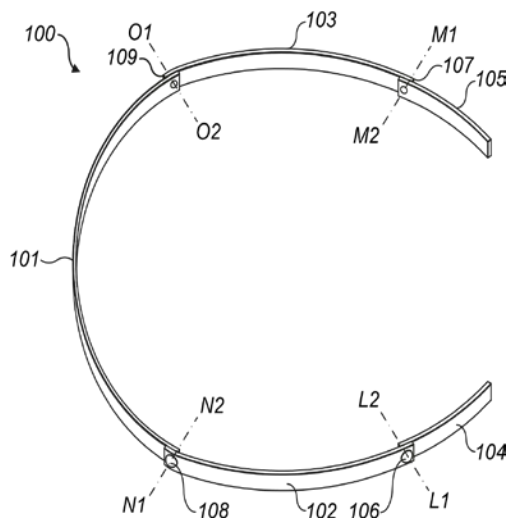


Fig. 2

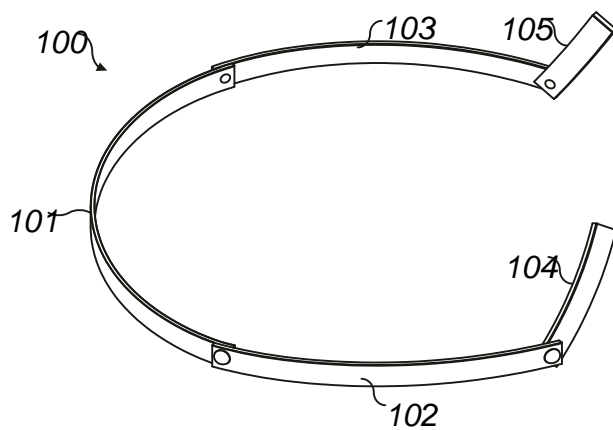
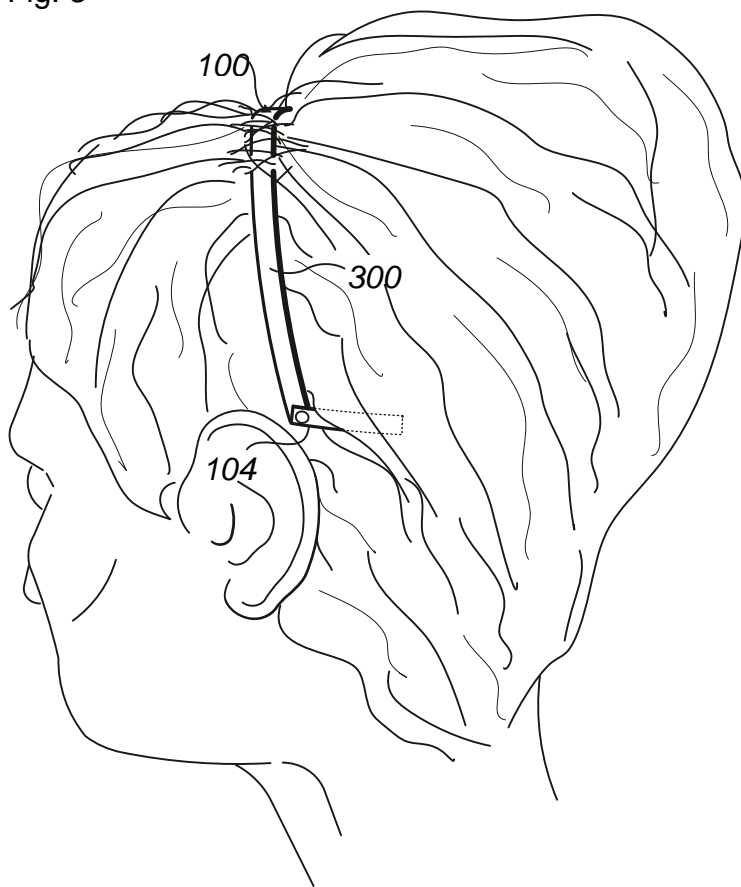


Fig. 3



### The law and its interpretation

6 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 –*

- (a) the invention is new;*
- (b) it involves an inventive step;*

7 Sections 2(1) & 2(2) of the Act read:

*An invention shall be taken to be new if it does not form part of the state of the art.*

*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 of the Act states:

*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).*

9 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*<sup>1</sup>. 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?*

10 I will now consider the issues of novelty and inventive step in turn.

### **Novelty**

11 The examiner cited three pieces of prior art, namely, WO 2011/155650A1 (JIN 1); KR 101086284B1 (JIN 2) and KR 200364464Y (KIM). Each of these documents was published before the priority date of the current application.

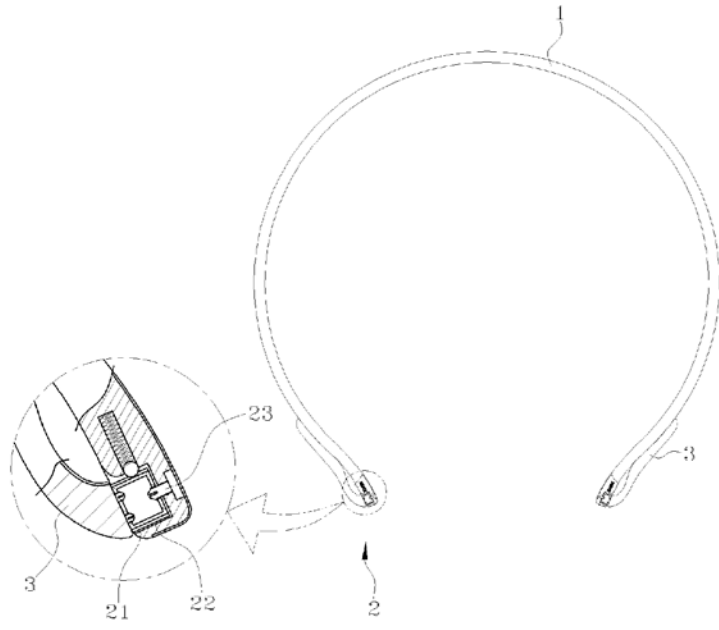
12 I note that a key word in the current claims is 'pivotable'. Using purposive construction, I believe that the skilled person would interpret this term to mean "capable of being pivoted" or "suitable for pivoting". I will now assess the aforementioned documents with this construction in mind.

13 In my view, each of the three citations clearly disclose headbands with a curved main portion and two pivotable end members. This is perhaps best illustrated by the figures in the JIN 1 document, of which three are reproduced below:

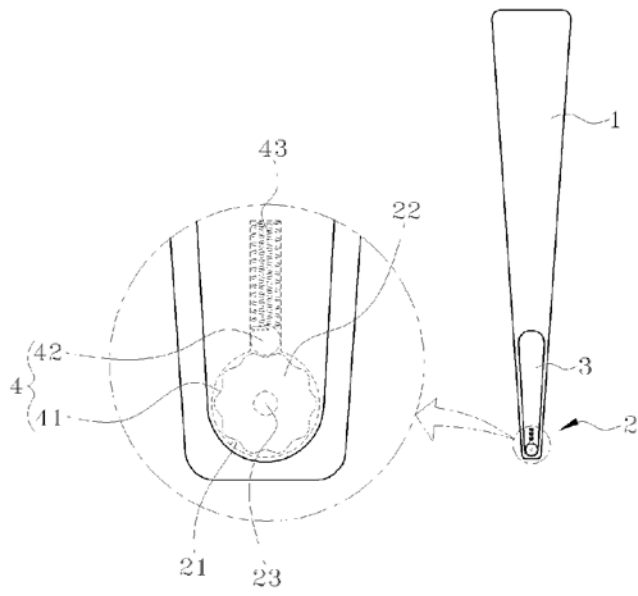
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<sup>1</sup> *Pozzoli Spa v BDMO SA & Anor* [2007] EWCA Civ 588.

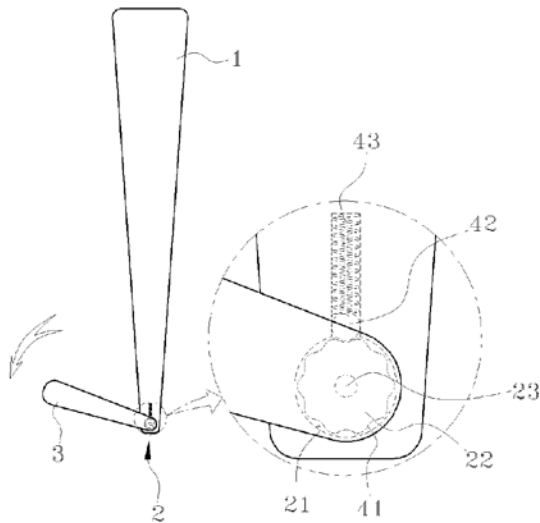
[Fig. 4]



[Fig. 6]



[Fig. 7]



- 14 One can clearly see a curved main portion 1 and two pivotable end members 3 in Figure 4. I believe that the skilled person would interpret the constructional details illustrated in this figure and in figures 6 and 7 to conclude that the end members are pivotable around 360°. Specifically, one can see that the wheel 22 has dimples disposed around its entire circumference. Thus this document discloses end members which can reside in a position (amongst many others) in which each end member could be “parallel to a plane containing the curve of the said main portion”. The end member could reside in the position shown in figure 6 or it could reside in a position 180° from this. One can also see that the end member can be rotated by 90° from this position to “a second fitted position so that the end member is substantially perpendicular to the plane containing the curve of said main portion” as illustrated in figure 7. I thus conclude that this document discloses all of the physical features of the headband of claims 1 and 6 of the current application. While there are some minor differences of construction, I similarly conclude that both JIN 2 and KIM also disclose all of the physical features of the headband of claims 1 and 6 of the current application.
- 15 In their letter of 10<sup>th</sup> May 2017 the applicant’s attorney argued that JIN 1 and JIN 2 do not disclose a headband in which the end members reside in a first ‘extended position’, i.e. where the end members and curved main portion are aligned, that is *configured for placement on the head*. Specifically, they argue that the headbands disclosed in JIN 1 & 2 could not be placed on the head with end members in such a position, rather the members would have to be in a ‘collapsed position’, i.e. with the members rotated 180° from the extended position, for placement on the head.
- 16 I agree that the headbands of JIN 1 & 2 would be most easily placed on the head when in the ‘collapsed position’, however the same is true of the headband of the current application. JIN 1 & 2 do not teach away from placing their headbands on the head when in the ‘extended position’ and, in my opinion, it would be possible to do so if their headbands are constructed of suitably resilient material. Thus if I construe the phrase *‘configured for placement on the head’* to mean ‘able to be placed on the head’ then JIN 1 & 2 anticipate claim 1.

- 17 Claim 6 has the additional limitation that *'during wearer-adjustment the end members move along the head of the wearer upwardly away from the face'*. As discussed above, the end members of the headbands in JIN 1 & 2 can be rotated through 360°. They are thus *capable* of being adjusted in the required manner by a wearer. I believe that this is enough for JIN 1 & 2 to anticipate this extra feature of claim 6. To construe this additional feature as any more limiting would, in my view, be to treat it as a method of adjusting a headband. I do not believe that such a method is patentable and so I will not construe the feature in this way. I thus conclude that JIN 1 & 2 anticipate claim 6, again, if I construe the phrase *'configured for placement on the head'* to mean *'able to be placed on the head'*.
- 18 I can however see another, narrower, construction of *'configured for placement on the head'*. Namely, that the applicant is using these words to indicate that the curvature and length of the headband, as a whole, and of the end members, in particular, is such that when in the *'extended position'* the headband can *easily* be placed on the head without the need for significant flexing of its shape. If I adopt this construction then I am forced to conclude that JIN 1 & 2 do not fully anticipate claims 1 & 6 as their headbands, when in the extended position, would not allow easy placement on the head given the size of the resultant gap between their end members. Rather than spend any more time over which construction a skilled person would be most likely to adopt, I will instead accept the narrower construction *for the sake of argument* and see where it leads me.

### **Inventive step**

- 19 It is my view that the "person skilled in the art" in this case would be someone who designs and/or makes headbands. Their common general knowledge would include a wide variety of known headband shapes, materials and features. As discussed above, the inventive concept of claims 1 & 6 is a headband with end members which can be pivoted between a fitted position and an extended position in which the headband is *'configured for placement on the head'*.
- 20 If I accept the narrow construction of *'configured for placement on the head'* then the only difference between claims 1 & 6 and the state of the art, as disclosed in either JIN 1 or JIN 2, is the exact curvature and length of the headband, as a whole, and of the end members, in particular. Namely, that these features are chosen to leave a substantial gap between the two end members when in the extended position.
- 21 I believe that the person skilled in the art would know that different shapes, lengths, curvatures, and resultant gaps are possible in headband design. How big a gap is left is simply a matter of the nature of the material, the intended snugness of the fit, and aesthetic considerations. It would be a simple workshop choice to design the headbands in JIN 1 & 2 with bigger gaps. I thus conclude that claims 1 & 6 are at least obvious no matter what construction of *'configured for placement on the head'* I adopt.
- 22 It is common general knowledge for headbands to be made of metal, hard plastic, or other resilient material. Thus claims 2 & 3 also lack the required inventive step. Similarly, it is well known in headband design to include comb teeth to engage with

the wearer's hair. Thus Claim 5 is obvious. Finally, both JIN 1 & 2 disclose end members which are curved. These curves lie in the same plane as the curve of their respective main portions when the end members are in the 'extended position'. I therefore conclude that claim 4 is obvious too.

- 23 As I have found that all of the claims lack an inventive step, no matter how I construe the key phrase discussed above, I will not consider the issues of claim construction or novelty any further.

### **Possible amendment**

- 24 As discussed above, figures 1-3 of the current application show side members 102 and 103 and a central member 101. The description discloses that the side members and the central member may pivot relative to one another. If such a feature were imported into the claims it is possible that it might render them inventive. However, the priority application, GB1220677.7, claiming exactly this feature was granted as GB2495643 on 18<sup>th</sup> September 2013. Thus if this feature were added to the claims of the current application it is my opinion that they would clearly conflict with the earlier granted patent. I can see nothing else that could be reasonably expected to form the basis of a valid claim in the current application.

### **Decision**

- 25 I have found that claims 1-6 of the application lack the required inventive step and thus that they are contrary to section 1(1)(b) of the Patents Act. I therefore refuse this application under section 18(3).

### **Appeal**

- 26 Any appeal must be lodged within 28 days after the date of this decision.

**Dr S. Brown**

**Deputy Director, acting for the Comptroller**