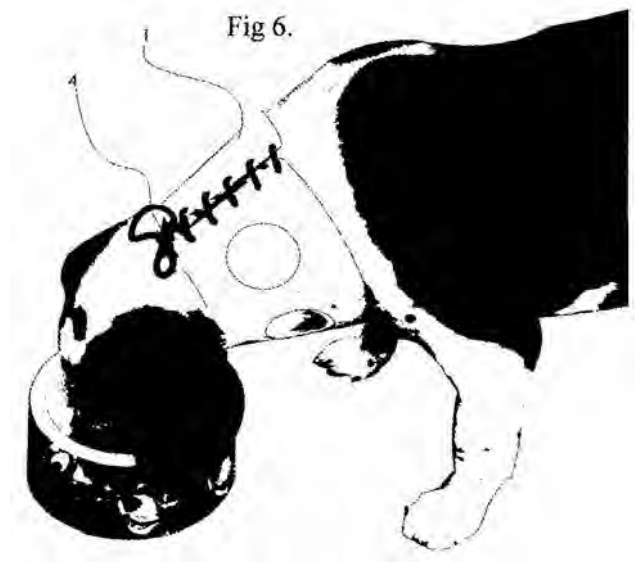




neck of the dog and extends forward around the dog's head - commonly known as "Elizabethan collars".

- 6 The collar of the invention is preferably worn in a 'reverse-Elizabethan' style wherein the cone is attached around the neck of the animal and opens/flares towards the shoulders. However, the description does anticipate it being used in the more traditional forward-facing fashion.



- 7 The collar is provided as a template which can be cut to size to fit the animal in question and attached, preferably with laces, such as to allow it to be incrementally adjusted to a comfortable fit.

### **The law**

- 8 The examiner has argued that the invention does not involve an inventive step as required by section 1(1) and that various amendments made to the application add subject matter contrary to section 76(2). The relevant sections of the Act 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) it is new*
- (b) it involves an inventive step*

....

*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.*

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).*

....

*76(2) No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed.*

9 In *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*<sup>1</sup>, the Court of Appeal formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli SPA v BDMO SA*<sup>2</sup>, where Jacob LJ reformulated the Windsurfing approach as follows:

- 1a Identify the notional “person skilled in the art”.
- 1b 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?

10 In assessing whether the invention claimed in the present application involves an inventive step, I will therefore use this *Windsurfing/Pozzoli* approach.

### **Arguments and analysis**

11 The examiner has identified the following patent documents as being relevant to the issue of inventive step:

D1: US2007199521  
D2: US5628283  
D3: US5915337  
D4: US5797354  
D5: FR2206045  
D6: US5349927  
D7: JP2005058014  
D8: JP2007007250  
D9: US3978820  
D10: US4266511  
D11: US2003150401

12 All of these documents were published before the priority date of the application and so form part of the state of the art.

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<sup>1</sup> [1985] RPC 49

<sup>2</sup> [2007] EWCA Civ 588

13 From the proposed amended claims filed on 22<sup>nd</sup> December 2010 and from the further explanation provided at the hearing, Mr Jones argues that his invention is distinguished from the prior art in the following respects:

- i) the shape of the collar
- ii) the fitting of the collar - lacing, self-adjusting, feely floating; loose fitting
- iii) rigidity of the collar - allowing it to collapse
- iv) anti-chafing lacing through holes

14 Each of these will be addressed separately:

i) the shape of the collar

15 The collar of the invention is designed in the form of a cone and is preferably fitted with “the small aperture to the head and the large aperture to the dogs shoulders” (see description page 4 referring to fig 2.1). The applicant was particularly concerned that the collar would rest “on or around the animals shoulders” (description, page 2) and be such that “the depth of the collar from chin to shoulder restricts the animal from licking or biting any area of the body which needs protecting” (original claim 4).

16 Collars that are positioned in use around the neck and which project in the direction of the shoulders of the animal are known as shown in D1, D2 and D3. All of these collars are designed with the same purpose of preventing an animal from licking a wound and operate by restricting the movement of the animal’s head towards the wounded area. Further, all of the documents show the collars extending such that they rest on or around the shoulder area of the dog.

17 In the applicant’s letter of 20<sup>th</sup> May 2011, following the hearing, the applicant argues that the shape of the invention is distinguished from D1 as it is formed from a single-layer whereas D1 has multiple layers and is provided with ribs. With respect to Mr Jones’ argument, these features are considered to relate to the structure of the collar as opposed to the shape of the collar and will be discussed separately. The shape of the collar as shown in figure 8 is considered to anticipate a shape as required by the invention which has “the small aperture to the head and the large aperture to the dogs’ shoulders”. The applicant asserts that the shape of his invention is further distinguished by being a “circular structure that supports an equal three dimensional body from a top side to a bottom side in a 360 degree buttress support”. It is accepted that this regular conical shape can be seen from figures 1, 2 and 5 of the application as filed. However, figure 6 and the description at column 6 lines 13 - 22 of document D3 specifically discloses such an equal frusto-conical shape.

18 As such, the shape of the collar is considered to be well known.

ii) the fitting of the collar

*Lacing, self-adjusting, freely floating*

19 The applicant maintains that his invention is distinguished from the prior art in that it uses lacing to attach the collar to the animal; in particular, the lacing allows the size of the collar to be adjusted and also allows for flexibility around the animal’s neck once the collar is fitted. In amendments, this feature has been described as “self adjusting” such as to allow the collar to “freely float and variform about the neck” (amended claim 1). The amended claim also allows for “any other suitable self

adjusting means” to be used.

- 20 The use of lacing to fasten collars - particularly collars which are used to prevent animals from licking wounds and which are used in the reverse-Elizabethan style - is disclosed in D2 (see column 1 line 66 - column 2 line 3). The passage further anticipates many different forms of fastening which are designed to “provide an infinitely variable adjustment mechanism for the collar” (see column 3 lines 14 - 16). As such, this document would appear to show that the use of lacing to fasten the collar is not new.
- 21 The feature that the lace fastening allows the collar to be “self-adjusting” and to “freely float and variform about the neck” was introduced at amendment stage; the scope or meaning of these features is not particularly clear and there is no reference to this in the application as filed. However, the applicant argues that it is obvious, or implicit, from the manner in which the laces are fastened (as shown in figures 1, 5 and 6 in particular) and the description does refer to the possibility to “incrementally loosen the lace to give more space, or close it up to restrict the space” (see description page 3). From this, it is accepted that a skilled person would understand that the lacing allows for a certain degree of flexibility of the collar once fitted to the animal. However, this would appear to be an inherent feature of the use of lacing to fasten the collar and, as such, D2 would appear to anticipate this. Incremental adjustment to open and close the space by means of Velcro (RTM) fastening would appear to be disclosed in D1 in paragraph [0053]. Both of these documents further disclose the use of flexible materials to allow for comfortable movement of the animal.
- 22 As such, based on the application as filed, the use of laces to fasten the collar and provide a degree of flexibility is considered to be well known.

*Loose-fit*

- 23 The applicant argues that his invention differs from the prior art in that it is designed to be loose-fitting and not to be tight around the neck. The loose-fit allows for greater comfort of the animal and provides breathing, or air space, to help prevent over-heating. However, the prior art collars disclosed in D1, D2 and D3 also have means for adjusting the width of the collar such that they can be adjusted according to user-preference and for comfort of the animal. D2 discloses that the collar “need not be tightly adjusted” and that fitting should allow “both an adequate width of the collar with a corresponding distance from the animal’s neck and sufficient ventilation openings in the collar surface ensure good air flow without a barrier effect on humidity and heat under the collar” (see column 3 lines 5 - 14). As such, this feature is considered to be well known.

iii) rigidity

- 24 Amended claim 2, filed with the applicant’s letter of 22<sup>nd</sup> December 2010, defines a collar guard that “when formed is of the “correct” rigidity through its length from head to shoulders... but will collapse under impact stress”.
- 25 There appears to be no mention in the specification as filed to the rigidity of the collar or to the collar collapsing under certain impact stresses, so the examiner’s objection that this feature adds subject matter contrary to section 76(2) appears to be justified. However, the applicant argues that the feature is obvious or inherent from safe-

design practices and that such inherent disclosure should be taken into account. Looking again at the application as filed, the teaching of the application is toward a collar that prevents an animal from accessing certain areas of the body, which I consider would lead a skilled person to presume a structure requiring a certain degree of rigidity. There is no acknowledgement of safe design requirements or performance under impact. As such, it is considered that there is nothing explicitly or implicitly disclosed in the application that would lead a skilled reader to believe that the collar would be collapsible.

- 26 I agree with the examiner that this feature constitutes subject matter added to the application and cannot be used to form a patentable claim.

iv) anti-chafing lacing through holes

- 27 The applicant further pointed out that laces can be woven through the holes of his collar to provide both an anti-chafing and/or for decorative or advertising purposes.
- 28 The applicant's letter on 20<sup>th</sup> May 2011 asserts that it was agreed at the hearing that "the laces could be woven into my Collar Guard", and suggests that if I was prepared to agree this then I must also agree that this feature is disclosed in the application as filed. Unfortunately that is not the case: what I said at the hearing was that it would of course be possible to apply laces to the dog collar in the way shown to me by Mr Jones, but what I did not say is that I considered such a feature to be disclosed in the application as filed. I agree that there is disclosure in the application that laces can be used as an attachment means, but not that they may be used in a woven structure or for any purpose other than to adjust the fit of the collar. There is no mention of chafing, or the prevention thereof, in the application as filed.
- 29 The applicant's letter asserts that as the lacing would give comfort then this indicates that they would also stop chafing. In particular, the applicant argues that as there is a basis in the application of weaving the laces for comfort, and that the alleviation of chafing falls within these parameters. However, it is considered that there is no foundation in the application as filed for such weaving of laces. The only mention of the lacing is in relation to the fitting of the collar to give more or less space; the only relevance to comfort of this feature is to allow for movement of the head. It is considered that a skilled reader would not infer from this that the lacing would also prevent chafing. There is not considered to be any feature in the fastening of the collar by laces that would implicitly infer an anti-chafing function. Further, it is understood that the main lacing used to attach the collar is not the same as the woven lacing which is designed to prevent chafing (as shown on page 8 of the case study supplied by the applicant on 6<sup>th</sup> December 2010).
- 30 As such, there is considered to be no basis in the application as filed for the lacing to provide an anti-chafing function or to be used for decorative or advertising purposes.

v) other features

- 31 In addition to the specific features of the collar addressed by Mr Jones at the hearing, there are a number of other features disclosed in the application which are worth discussing. These features were considered by the examiner during examination of the application:
- a) *Single layer construction*: single layer protective collars for animals are known

as shown for example in D4, D5, D6, D7 and D8. These specific collars are used in an “Elizabethan style” as opposed to the “reverse-Elizabethan style” of the present invention. Further, the collar of D3 used in the reverse-style is formed from a single layer of interconnected frame-structures.

- c) *Template cut-outs*: it is known to produce Elizabethan-type collars by cutting the collar to size using a template. This is evidenced in D7 and D8. Further, it is known from D2 (see column 3 lines 31 - 37) to produce a collar that fits in the reverse-style that is adjustable in length via means of perforations or the like. The examiner has been unable to identify any prior disclosure of a template version of a reverse Elizabethan dog collar.
- d) *Aerated collar constructions*: D1, D2, D3, D5, D6, D7 and D8 all show collars that are provided with ventilation holes to help keep the wearer cool.

32 The examiner accepts that there is no single disclosure of a dog collar having all of the features set out in the application as filed before the priority date of the application. Instead, the examiner argues that the features supported by the application as filed were all known separately before the priority date of the application and that the combination of these known features would be obvious to a person skilled in the art. It is suggested that the only difference that exists between such an obvious combination of known features is the use of a template cut-out to produce an Elizabethan-type collar, which the examiner argues would require no degree of invention by a person skilled in the art before the priority date of the application.

33 The question of obviousness in respect of a combination of known features was specifically addressed by the House of Lords in *Sabaf Spa v MFI Furniture Centres Ltd*<sup>3</sup>, and the approach I must follow is summarised at para. 26:

“If the two integers interact upon each other, if there is synergy between them, they constitute a single invention having a combined effect and one applies section 3 to the idea of combining them. If each integer "performs its own proper function independently of any of the others", then each is for the purposes of section 3 a separate invention and it has to be applied to each one separately. That, in my opinion, is what Laddie J meant by the law of collocation.”

34 The first issue for me to consider is whether there is any interaction or synergy between the features of the dog collar described above and contained in the application as filed, namely the shape of the collar, the fastening of the collar, its loose-fit around the neck, its single layer construction, the template cut-out and the aerated collar constructions. In my view, there is no such interaction: the benefit provided by the aggregation of these features is no different to the sum of the benefit provided by the individual features. The benefit derived from the fastening of the collar is not affected in any way by the shape of the collar or the way in which the collar can be made from a template cut-out. The benefit derived from the loose-fitting arrangement is not affected in any way by the single-layer construction or the aerated collar construction. The benefit derived from the template cut-out is not affected in any way by the lace fastening or the aerated holes. And so on. Whichever way one looks at this, the conclusion I come to is that all of these features provide

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<sup>3</sup> [2004] UKHL 45

their own independent benefits to the capability of the dog collar and that there is no interaction between any of them.

35 I have already found that all of the features bar the use of a template cut-out to produce a reverse Elizabethan-style collar were known before the priority date of the application. Documents D7 and D8 show that it was known to produce Elizabethan-style collars from template cut-outs before the priority date of the application. Documents D1 and D3 show that it was known to use dog collars in the reverse Elizabethan arrangement before the priority date of the application. In view of the state of the art, I believe that the manufacture of reverse Elizabethan collars from template cut-outs would have been obvious to the person skilled in the art before the priority date of the application and would require no degree of invention.

36 In accordance with the guidance from the House of Lords in *Sabal*, the combination of known or obvious features in such a way that provides no interaction or synergy between them means that the applicant's dog collar cannot be regarded as involving an inventive step.

### **Conclusion**

37 I have found that the dog collar described in the application as filed does not involve an inventive step and so I refuse the application under section 18(3). I have also found that various amendments made to the application after the filing date add subject matter contrary to section 76.

### **Appeal**

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

**H Jones**

Deputy Director acting for the Comptroller