
Candidate's Answer

1. In reply to the Communication, a new set of claims 1 to 9 is hereby enclosed.

2. **Amendment**

2.1 Claim 1 has been amended to replace the term “ribbon” with “light weight flexible material”. Thus, Claim 1 has been broadened to remove an inessential limitation. However, this does not contravene Act 123(2) EPC because the requirements of Guidelines CVI 5.3.10 [from T331/87] are met. This is because the feature of “ribbon” was not explained as essential in the application as filed. This can be seen from page 3, line 5 where it is clearly indicated that ribbon is an example of a light-weight flexible material suitable for wind indicators. Hence, the person skilled in the art would clearly recognise that other suitable flexible materials (such as yarn) could be used. Furthermore, the discussion of the background art mentions yarn and ribbon as examples of such lightweight flexible material suitable for wind indicators – leading the skilled man to further believe that “ribbon” is an inessential limitation. Furthermore, “ribbon” as a particular example of lightweight flexible material is not indispensable for the function of the invention in light of the problem the invention seeks to solve (i.e. avoiding the free end of the flexible material getting stuck to the sail). It is clear from the application that any lightweight flexible material could be used to solve the problem. Furthermore, “lightweight” is perfectly clear in this context given the functional requirements of the claim. Furthermore, the replacement of “ribbon” with the broader term requires no modification of the other features of the invention. Hence, all three requirements of T331/87 are met.

In addition Claim 1 has been amended so that all the features of Claim 1 as filed are now in the pre-amble of Claim 1 as amended.

Claim 1 is now characterised by the feature of the wind indicator (1) further comprising an attachment member (4) having an inclined surface arranged such that, when the wind indicator (1) is attached to the sail (2), the inclined surface (9) is adapted to redirect wind towards the side of the flexible material (6) that is arranged to face the sail (2) in normal use.

Support for the addition of this feature can be found on page 4, paragraph 1. In particular, it is explained at page 4, lines 2 to 4 that the inclined surface (9) of the attachment member redirects wind flowing along the sail to the underside of the ribbon. The “underside” of the ribbon (and by extension the underside of the flexible material) is defined at page 3, lines 16 and 17 as being that which faces the sail in normal use. Thus, to avoid the potential unclear use of “underside” (which when the product is on the shelf in a shop could be misleading) or including a definition of “underside” in Claim 1, Claim 1 has instead been amended to clearly define which side of the flexible material wind is redirected too. This is therefore more concise and is supported by page 3, lines 16 to 17 and page 4, lines 2 to 4.

It is noted that in Claim 5 as originally filed (which is dependent on Claim 3 as originally filed) that the “inclined surface” is defined with respect to a flat lower surface [Claim 5 as originally filed], the lower surface being adapted to be glued to the sail [Claim 3 as originally filed].

Neither of these two limitations have been added to Claim 1, as it is clear from page 4, lines 7 to 9 that “other forms for the attachment member 4 may be used, provided that they include a suitably inclined surface”. This is a clear indication that all that is essential in the inclined surface is that it is suitable for redirecting wind onto the side of the flexible material that faces the sail in normal use. Hence, the skilled man would be left in no doubt that the above two structural limitations (flat lower surface glued to sail) were merely two possible ways of achieving the functional purpose of the inclined surface as set out on page 4, lines 7 to 9.

- 2.2 New claim 2 has been added to define that the flexible material is ribbon. Support for this can be found in claim 1 as originally filed.
- 2.3 Claim 3 is based on old claim 2.

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- 2.4 New claim 4 has been added. Support for this can be found at page 4, lines 1-3 (noting that this passage refers specifically to ribbon – it provides basis for the same amendment with “flexible material” by virtue of what has been discussed above in 2.1.
- 2.5 Claim 5 is based on old claim 3, with the dependency amended accordingly.
- 2.6 Claim 6 is based on old claim 4.
- 2.7 Claim 7 is based on old claim 5.
- 2.8 Claim 8 is based on old claim 6.
- 2.9 New claim 9 is supported at page 3, lines 26 and 27.

3. **Novelty**

- 3.1 D1 discloses a wind indicator comprising a ribbon 20 fixed to a rigid base 50. The base 50 provides a gap between the ribbon 20 and the sail. The base 50 has an inclined surface, but this is not arranged to redirect wind in use to the side of the ribbon that would face the sail in use. By virtue of the arrangement in D1 (see Fig. 2) there is no possibility that wind redirected from the inclined surface could flow in the way required by claim 1. This is because the ribbon in D1 is fixed to lie flat over a portion of the inclined surface.

3.2 D2 discloses a device that indicates whether airflow on a sail is laminar or turbulent. D2 discloses a cylindrical element 12 with a yarn fixed at one end of it. The element 12 is inclined relative to the sail 20, and is attached to a planar base 11. However, D2 does not disclose an attachment member that is arranged to redirect wind to the side of the yarn that faces the sail in use. Instead, all the airflow over the cylindrical element 12 will flow completely over the yarn, by virtue of its arrangement (see Fig. 2). Furthermore, the triangular support 15 (while having an inclined surface) is arranged to be less wide than the element 12 so that it does not affect the airflow in the way required by claim 1 (see page 1, lines 23 to 25 of D2). In addition, the base 11 is flat, and thus does not effect the airflow.

3.3 Hence, neither D1 nor D2 discloses all the features of claim 1. Hence claim 1 is novel over both D1 and D2.

3.4 Since claims 2 to 9 are dependent on claim 1 and include all its features, these claims are also novel over D1 and D2.

4. **Inventive Step**

4.1 Document D2 may be taken to be the closest prior art because it is in the same technical field as the present invention. Although, page 1, lines 1 to 2 of D2 indicate that it relates to a device that indicates whether the airflow on a sail is laminar or turbulent it is clear from both the description of D2 and page 1, paragraph 4 of the present application that a device that indicates whether the airflow on a sail is laminar or turbulent is indicating exactly the same thing as whether a sail is optimally oriented with respect to the wind direction. Hence, D2 and the present invention are in the same technical field – i.e. wind indicators for sails.

D2 has the features of a support member (element 12) and an attachment member (base 11 – but this does not have the required inclined surface). Furthermore, D2 is directed to the same general purpose of the present invention, i.e. trying to avoid wet flexible material sticking to the sail. Hence, as D2 would require the fewest structural modifications to arrive at the claimed invention [T606/89], D2 is considered to be the closest prior art.

- 4.2 The difference between D2 and the invention of claim 1 is that D2 does not disclose an attachment member with an inclined surface adapted to redirect wind towards the side of the flexible material that is arranged to face the sail in normal use.
- 4.3 The technical effect of this difference is that the redirected wind onto the side of the flexible material that normally faces the sail keeps the flexible material away from the sail in use. Hence, the characterising portion of claim 1 provides for a quicker detachment of the wet flexible material that has stuck to the sail and prevents it from sticking again – even in light winds.

The objective technical problem associated with D2 is therefore how to provide quicker detachment of the wet flexible material from the sail once it has become stuck.

- 4.4 Claim 1 solves this problem by providing the inclined surface on the attachment member as discussed above.
- 4.5 It would not be obvious to arrive at this solution from D2 alone as there is no suggestion that the flat attachment member (base 11) could be replaced by an inclined surface with the functional characteristics of claim 1. In fact, D2 teaches away from this by disclosing that the element 12 is designed to minimise airflow along the sail 20 (see page 1, lines 15 and 16). Furthermore, the triangular support 15 is dimensioned so as to be smaller than the element 12 and thus not have an effect on airflow. Hence, D2 teaches that all the elements of the device should have a minimal effect on airflow. Hence, the skilled man has no motivation in D2 to modify its disclosure to arrive at the claimed invention.

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- 4.6 Furthermore, starting with D2 and faced with this problem, the skilled man would not look to D1 to find the solution. This is because D1 is a disclosure of a wind deflector indicator that is similar in many ways to the device of D2. The skilled man would not look to D1 as it suffers from the same problem as D2 and therefore offers no pointer to the solution.
- 4.7 Furthermore, even if the skilled man were to try to combine D2 with D1, he would not arrive at the claimed subject matter because there is no disclosure or suggestion in D1 of an inclined surface that redirects wind onto the side of the flexible material that normally faces the sail in use. D1 discloses an inclined surface, but as discussed above in 3.1 in relation to novelty, it does fulfil the functional requirement of claim 1 – as there is no possibility of air being redirected from it onto the appropriate surface of the flexible material.
- 4.8 At item 4 of the communication the Examiner suggests that replacing the base 11 of D2 with the wedge-shaped attachment member 50 of D1 would arrive at the present invention. However, the skilled man has no motivation in either D2 or D1 to perform such a combination. Combining D2 with D1 in this way would go against the teaching of D2 (as this discloses minimising the effect on air flow). Hence, it is submitted that just because the skilled man could combine the documents in this way, for the above reasons he would not. Hence, claim 1 is inventive over the prior art either alone or in combination.
5. Oral proceedings are hereby requested in lieu of a decision to refuse the application.

Yours faithfully,

Cannon, Carrie.

Claims

1. Wind indicator (1) for a sail (2) comprising:
a wind indicating light-weight flexible material (6), the flexible material (6) having a fixed end (6a) and a free end (6b); and a spacing member (5) to which the fixed end (6a) of the flexible material (6) is fixed, such that, when the wind indicator (1) is attached to the sail (2), the spacing member (5) keeps the flexible material (6) spaced from the sail (2), characterised by further comprising an attachment member (4) having an inclined surface (9) arranged such that, when the wind indicator (1) is attached to the sail (2), the inclined surface (9) is adapted to redirect wind towards the side of the flexible material (6) that is arranged to face the sail (2) in normal use.
2. Wind indicator (1) according to claim 1, wherein the flexible material (6) is a ribbon.
3. Wind indicator (1) according to claim 1 or 2, wherein the spacing member (5) is an arm.
4. Wind indicator (1) according to claim 3, wherein the width of the inclined surface (9) is greater than the width of the arm and greater than the width of the flexible material (6).
5. Wind indicator (1) according to any preceding claim, wherein the attachment member (4) comprises a flat lower surface (7) which is adapted to be glued on to the sail (2).
6. Wind indicator (1) according to claim 5, wherein the spacing member (5) and the attachment member (4) are formed as one piece.
7. Wind indicator (1) according to claim 5 or 6, wherein the inclined surface is inclined with respect to the flat lower surface (7).
8. Wind indicator (1) according to claim 5, wherein the attachment member (4) is wedge shaped.
9. Wind indicator (1) according to claim 5, wherein the inclined surface (9) is planar or curved.