

## Response

Dear Sir/Madam,

This is in response to the Article 94(3) EPC Communication.

### **Amendments (Article 123(2); Rule 137(4) EPC)**

We enclose a set of amended claims to replace those currently on file. A marked-up copy (marked with respect to the pending claims currently on file) of the amended claims is included to identify the amendments made.

Claim 1 finds basis in original claims 1, 4, 5, and 6 of the application as filed.

More specifically, claim 1 is amended to recite that the elastic means comprises an elastic band. Basis for this amendment can be found in previous claim 4. In spite of the differing use of the term 'means' and 'element', it is submitted that the skilled person would appreciate that these terms refer to the same feature and so the correction of this language is permissible. There is no reference to any other elastic element or means within the application, other than the elastic band 7. While reference numerals are not limiting on claim scope, it is submitted that the recurrent use of numeral 7 for the elastic means, element, and band indicates that these terms each refer to the same feature. It would therefore be obvious that nothing else could have been intended by the claim other than the replacement of 'element' with 'means'.

It is noted that previous claim 4 was dependent on either of claims 2 or 3. It is submitted that the skilled person would appreciate that the composition and shapes of the tiles is not related or inextricably linked to the elastic means comprising an elastic band. There is no reason for the skilled person to understand that the elastic means being an elastic band requires a certain composition or shape of the tiles.

Furthermore, the features of claim 2 are not required because paragraphs [006] and [013] of the application make it clear that the tiles may take other shapes (e.g. strips) besides those described earlier in the description. The features of claim 3 are not required in the amendment because the dependency on claim 3 is optional. Furthermore, paragraph [013] of the application makes it clear that the tiles may be made of other materials such as plastic, aluminium, or wood, and so the skilled person would appreciate that the composition of the tiles as defined in claim 3 is optional. Therefore, the disclosure justifies the isolation of the feature of previous claim 4 (GL H-V 3.2.1).

Claim 1 is further amended to recite that the attaching means comprises pulleys for guiding the elastic band. Basis for this amendment can be found in previous claim 5. Previous claim 5 is directly dependent on previous claim 4 and so the incorporation of this feature into claim 1 is derivable from the dependencies of the application as filed. The omission of the features of claims 2 and 3 is permissible for the same reasons as those given above.

Claim 1 is further amended to recite that the attaching means further comprises guiding slots in the footplate and axles of the pulleys, the axles being slidable in the guiding slots, and each axle being attached to a joint. Basis for this amendment can be found in previous claim 6. Previous claim 6 is directly dependent on previous claim 5 and so the incorporation of this feature into claim 1 is derivable from the dependencies of the application as filed. The omission of the features of claims 2 and 3 is permissible for the same reasons as those given above. The term 'sliding' has been replaced with 'slidable' to remove method language.

It is noted that previous claim 6 also recited that the attaching means comprises expansion control means. However, the skilled person would appreciate that the expansion control means is not related or inextricably linked to the attaching means having guiding slots and slidable axles. The expansion control means provides an additional function of enabling the sliding of the pulleys to be limited. This function is not related or inextricably linked to the preceding features of claim 6, which provide a different function, as discussed later in this response. Furthermore, paragraph [013] discloses that in some embodiments the expansion control means and/or the disconnecting means may be omitted and so the skilled person is taught that these features are optional. Therefore, the disclosure justifies the isolation of the former feature of previous claim 6 (GL H-V 3.2.1).

In accordance with Rule 43(1) EPC and GL F-IV 2.2, claim 1 has been re-cast into two-part form.

Claim 2 finds basis in original claim 2 of the application as filed. Basis for claim 2 being dependent on a claim containing the added features of claim 1 is present in the dependencies of the application as filed, because original claims 4, 5, and 6 were all dependent (directly or indirectly) on original claim 2, and so this combination of features was disclosed in the original claim set.

Claim 2 is amended to recite that the tile have quadrangular and/or curved triangular shapes. Basis for this amendment may be found in paragraph [006], which states that in the example shown, the tiles have a quadrangular 4 or a curved triangular 5 shape. There is therefore basis for the tiles being quadrangular or curved triangles. As mentioned above, the disclosure contemplates other shapes of the tiles ([006], [013]), and so it is submitted that the skilled person would appreciate that there is no requirement for the tiles to be both quadrangular and curved triangular.

Claim 3 finds basis in original claim 3 of the application as filed. Basis for claim 3 being dependent on a claim containing the added features of claim 1 is present in the dependencies of the application as filed, because original claims 4, 5, and 6 were all dependent (directly or indirectly) on original claim 3, and so this combination of features was disclosed in the original claim set.

Claim 3 is amended to recite that the tiles comprise two carbon fibre layers and a joint layer, the joint layer comprising a flexible plastic sheet. Basis for the tiles comprising two carbon fibre layers and a joint layer is found in paragraph [011], which explicitly recites that the tiles 4, 5 comprise at least three layers. Stating that the tiles comprise at least three layers further supports that the presence of additional layers is contemplated. Basis for the joint layer comprising a flexible plastic sheet is also found in paragraph [011], which explicitly recites that the joint layer 19 comprises a flexible plastic sheet.

Previous claims 4 and 5 are deleted.

Present claim 4 finds basis in original claim 6 of the application as filed. Present claim 4 is amended to delete the clause that has been incorporated into claim 1. Basis for the extraction of this feature has already been discussed with reference to claim 1 and so this deletion is permissible. Present claim 4 is further amended to be dependent on any preceding claim. This amendment finds basis in the original claim dependencies, since the subject matter of

previous claims 4 and 5 (upon which previous claim 6 was originally dependent, directly or indirectly) is now present in claim 1. The omission of the features of claims 2 and 3 is permissible for the same reasons as those given above.

Present claim 5 finds basis in original claim 7 of the application as filed. Claim 5 is amended to be dependent on any preceding claim. As with claim 6, this amendment finds basis in the original dependencies of the claim set, because the subject-matter of previous claim 5 (upon which previous claim 7 was optionally dependent) is now incorporated into claim 1. The omission of the features of claims 2 and 3 is permissible for the same reasons as those given above.

Claim 5 is further amended to replace 'detached' with 'detachable'. This amendment merely clarifies the structural nature of the claimed feature and does not add subject-matter. Basis for the amendment may be found in paragraph [010], which recites that the 'disconnecting means' means that the user can rapidly detach the binding (i.e. the binding is detachable).

The amendments therefore do not add subject-matter to the application as filed, in accordance with Article 123(2) EPC.

## Clarity (Article 84 EPC)

The Examiner alleges that previous claims 1 and 4 lack clarity due to the inconsistent use of elastic means 7 and elastic element 7 in claims 1 and 4. The claims have been amended to refer only to an elastic means and so this inconsistency no longer exists in the claim set. The Examiner's objection in this regard is thereby addressed.

The Examiner alleges that the phrase 'is detached' in claim 7 is unclear. Previous claim 7 (present claim 5) has been amended instead to state 'detachable' and so the method feature 'is detached' is no longer present. 'Detachable' instead refers to a structural feature, not a method feature, and so is permissible. The Examiner's objection in this regard is thereby addressed.

The claims are therefore clear in accordance with Article 84 EPC.

## Novelty (Articles 52(1) & 54 EPC)

All documents D1-D3 are citable under Article 54(2) EPC for novelty.

The subject-matter of claim 1 is novel over D1. D1 does not disclose attaching means comprising guiding slots in the footplate and axles of the pulleys, the axles being slidable in the guiding slots, and each axle being attached to a joint. The pulleys 108a,b in D1 are attached to the central tiles 104a,b (D1[004]) and may be fixed rigidly at the deck 101 (D1[006]). There is no disclosure that the pulleys have axles slidable in guiding slots in the footplate, or that the axles are attached to a joint of the foldable deck.

Therefore, claim 1 is novel over D1.

The subject-matter of claim 1 is novel over D2. D2 does not disclose attaching means for attaching the foldable deck to the footplate. D2 states that no solution could be found to attach the joints to the footplate, therefore D2 does not contain any means suitable for attaching the foldable deck to the footplate. D2 also does not disclose attaching means comprising pulleys or guiding slots. D2 contains no disclosure of pulleys or slots of any kind.

Therefore, claim 1 is novel over D2.

The subject-matter of claim 1 is novel over D3. D3 does not disclose a foldable deck or elastic means for contracting the foldable deck. D3 discloses a deck 301 and an elastic band 307, but there is no disclosure that the deck is foldable nor that the elastic band 307 is suitable for contracting the deck 301. D3 also does not disclose guiding slots in the footplate. D3 discloses slot 309, but this is in the deck 301 (D3[004]).

Therefore, claim 1 is novel over D3.

## Inventive Step (Articles 52(1) & 56 EPC)

All three documents D1-D3 are citable for inventive step under Article 56 EPC.

The subject-matter of claim 1 possesses an inventive step. The problem-solution approach, as set out in GL G-VII 5, will be applied.

D1, against which claim 1 is characterised, is considered to be the closest prior art because it is the one single reference which discloses the combination of features which constitutes the most promising starting point for a development leading to the invention (GL G-VII 5.1). In particular, D1 is in the same technical field as the present invention (i.e. snowshoes - D1[001]) and is related to a similar technical purpose (i.e. a snowshoe that contracts and expands to facilitate more natural walking - D1[001]; application [001]).

D1 also corresponds to a similar use and requires the minimum of structural and functional modification to arrive at the claimed invention (T606/89). That is, D1 discloses a snowshoe with a foldable deck formed of tiles, a footplate, a binding, an elastic band, and pulleys. The claim is distinguished over D1 only in the arrangement of guiding slots and the location of attachment of the pulleys.

D2 is not the closest prior art because, while it is in the same technical field (D2[001]) and has a similar technical purpose (D2[002], line 11), it requires further structural modifications to arrive at the claimed invention, since there is no disclosure of a footplate and a binding, nor of elastic means or pulleys. Therefore, D1 constitutes a more promising starting point for arriving at the invention.

D3 is not the closest prior art because, while it is in the same technical field (D3[001]) and has a similar technical purpose (D3[004], lines 17-19), it requires further structural modifications to arrive at the claimed invention, since there is no disclosure of a foldable deck, which is a fundamental part of the operation of the claimed invention. Therefore, D1 constitutes a more promising starting point for arriving at the invention.

Therefore, D1 is the closest prior art.

As described above, claim 1 differs from D1 in that claim 1 recites that the attaching means further comprises guiding slots in the footplate and axles of

the pulleys, the axles being slidable in the guiding slots, and each axle being attached to a joint (GL G-VII 5.2).

A technical effect of the above-mentioned distinguishing feature is that the attaching means allows the axles to slide in the guiding slots as the elastic band contracts and the axles move the joints to contract the foldable deck.

By way of explanation, the elastic band around the pulleys provides reversible elastic expansion and compression. As the elastic band retracts, the elastic bands pull the pulleys such that they slide along the guiding slots. The pulleys have axles that are attached to the joint of the deck, and so as the pulleys slide, they contract the foldable deck. This allows the deck to expand and contract while remaining robustly attached to the footplate. The snowshoe therefore facilitates natural walking movement while providing a robust movable attachment between the footplate and the foldable deck.

An objective technical problem is therefore to provide a snowshoe that facilitates natural walking movement with a more robust, yet movable attachment of the footplate onto the foldable deck. This technical problem is derivable from paragraph [001] and paragraph [014], lines 20-21 of the application as filed.

Starting from D1 and faced with the objective technical problem, the claimed solution would not have been obvious to the skilled person. Specifically, we submit that it cannot be said that the skilled person would have modified D1 to arrive at the claimed invention in order to solve the objective technical problem, while taking the prior art into account (GL G-VII 5.3).

### **D1 alone**

Starting from D1 alone, the skilled person seeking to solve this technical problem would not find a solution to this technical problem. D1 suffers from exactly the aforementioned technical problem. In particular, the elastic band 107 in D1 is at least partly in contact with the snow underfoot. Therefore, the continuous friction between the elastic band and the ground means that the elastic band breaks easily underfoot. Furthermore, the rear tiles 105c,d in D1 interfere with each other during walking. That is, because they are each freely movable with respect to one another, and only separated by a narrow slot (see D1, Fig. 2) they are likely to contact each other during walking. This makes them more likely to break due to repeated collision with one another.

Therefore, D1 is fundamentally not a robust snowshoe and suffers from exactly the technical problem to be solved. From D1 alone, the skilled person is not taught any way of making the snowshoe more robust. Furthermore, it would not be at all clear based on D1 alone, how guiding slots could be introduced into the footplate such that the axles of the pulleys 108a,b could be slidable in such a slot. It is, perhaps, conceivable that slots could be provided in the sides of the footplate, allowing the pulleys to slide forwards and backwards. However, no technical advantage is foreseeable based on such a modification and so the skilled person would not be incited to make such a modification in the hope of solving the objective technical problem or in expectation of some improvement or advantage (GL G-VII 5.3).

In any case, even with such slots, D1 still does not teach that the axles are attached to the joints of the deck. Modifying D1 to have the axles both slidable in slots of the footplate and attached to the joints would involve such considerable adaptation of D1 that the skilled person would have no motivation to do so, nor any teaching of how to achieve it.

Therefore, the skilled person would not arrive at the claimed solution on the basis of D1 alone.

### **D1 and D2**

Although it is permissible to combine prior art documents for the purposes of inventive step (GL G-VII 6), the skilled person looking to solve this objective technical problem would not consider D2 because it is inherently incompatible with D1 (GL G-VII 6(i)).

While D2 does contemplate the technical problem of making D1 more robust (D2[002], line 13), it teaches away from making a combination with D1 due to incompatibility. As stated explicitly in paragraph [002] of D2, the authors had unsuccessfully attempted to combine the deck in D2 with the snowshoe in D1. Several attempts were made to make such a combination but all of the attempts failed. No solution was found to attach the joints of the footplate to allow the joints to move when the deck contracts and expands, and D2 states that no prior art teaches a feasible solution.

The skilled person would therefore not consider trying to combine these documents since it is known that attempts to do so are not successful and so a solution to technical problem will not be obtained. Therefore, when considering D1 and D2, the skilled person is faced with a technical prejudice that deters them from combining these documents. As indicated in GL G-VII Annex 4, when a skilled person needs to overcome a technical prejudice in order to arrive at the claimed invention, this is usually an indicator of an inventive step.

Therefore, the skilled person would not consider D2.

However, even if the skilled person did consider D2, they would find that D2 does not provide a solution to the technical problem. As already mentioned, D2 states that no solution to this incompatibility has been found. The present invention solves this by providing axles of the pulleys that are slidable in guiding slots and that are attached to the joints. There is no teaching in D2 relating to any guiding slots and, as discussed above, there is also no mention of this feature in D1. There is no teaching in D2 relating to the axles of pulleys being attached to the joints of the deck and, as discussed above, there is also no mention of this feature in D1.

Therefore, even if the skilled person did combine D1 and D2, they would still not arrive at the claimed invention due to these distinguishing features.

Therefore, the skilled person would not arrive at the claimed solution based on a combination of D1 and D2.

### **D1 and D3**

The skilled person looking to solve the objective technical problem would not consider D3 because it does not purport to teach a solution to the technical problem. D3 is concerned with providing a snowshoe with a deck that can be quickly disconnected (D3[003]) and that allows the snowshoe's centre of gravity to be adjusted to facilitate optimal and fast walking movement (D3[004], lines 17-19). While this is related to a similar technical

purpose, it is not related to the specific technical problem of providing a more robust attachment between the footplate and a foldable deck. D3 does not consider a foldable deck, or the potential lack of robustness that may arise due to the tiles in such a deck. Therefore, D3 does not relate to the technical problem and so the skilled person would not consider it relevant as providing a solution to that problem.

Therefore, the skilled person would not consider D3.

However, even if the skilled person did consider D3, they would not be motivated to modify D1 based on the teachings of D3. As already mentioned, D3 does not teach a solution to the technical problem. Instead, D3 teaches that the slot with a pulley that can slide therein allows the snowshoe's centre of gravity to change to facilitate optimal and fast walking movement. Therefore, the skilled person is not taught that the use of a guiding slot for a pulley is advantageous in providing a robust snowshoe.

Furthermore, the elastic band 307 and pulley 308 in D3 provide a completely different purpose to the pulley and elastic band in D1. In D3, these features allow the pulley to be disconnected by pulling on a handle attached to the elastic band (D3[004], lines 19-21). In contrast, in D1, the pulleys and elastic band are for contracting and expanding the foldable deck (D1[005]). Therefore, the functional purpose of these features is so distinct that the skilled person would not think of combining the arrangement of these features (e.g. introducing a guiding slot) because these features are not functionally equivalent (even though, structurally, they are pulleys and elastic bands).

In addition, the structural configurations of the snowshoe in D1 and that in D3 are so different that the skilled person would not know how to modify D1 based on D3. D1's pulleys are arranged with their axles parallel to the direction of walking, and with an elastic band extending transversely across the width of the shoe between two pulleys. In contrast, D3's pulleys are arranged with their axles perpendicular to the direction of walking, and with individual elastic bands attached separately to each respective pulley. It is therefore not clear how the arrangement of the guiding slot and the pulleys in D3 could be incorporated into the snowshoe of D1, nor what the advantage of such a combination would be.

Therefore, the skilled person would not be motivated to, nor could, combine the teachings of D1 and D3.

Finally, even if the skilled person did, somehow, combine the teachings of D1 and D3, the claimed invention would still not be achieved. D3 does not teach that the guiding slots are present in the footplate, nor that the axles are attached to any joint of a foldable deck. D3 instead teaches that the slot 309 is in the deck 301 (D3[005] and Fig. 2) and that the axle is attached to the footplate and the pulley (D3[004], lines 14-16). Therefore, a combination of D1 and D3 still does not arrive at the claimed solution.

Therefore, the skilled person would not arrive at the claimed invention based on a combination of D1 and D3.

### **D1, D2, and D3**

The Examiner notes with respect to the subject-matter of claim 6 (now present in claim 1) that all three cited documents are relevant.

Firstly, it is noted that the combination of more than one disclosure with the closest prior art can, in itself, be an indicator of the presence of an inventive step (GL G-VII 6). In this particular case, the combination of features as defined in claim 1 (in particular, the elastic means, the pulleys slidable in the guiding slot, and the axles being attached to the joints) provides a synergistic effect of producing a more robust yet movable connection of a foldable deck to a footplate. As described above, these features work together to provide a functional interaction that solves the technical problem. Therefore, these features are not a mere aggregation or juxtaposition of features and so it is not appropriate to assess the features separately in a partial problems approach (GL G-VII 7). It is therefore submitted that the requirement to combine all three documents to solve the technical problem is, in itself, an indicator of inventive step. The combination of all three documents also suffers all the same structural challenges that are discussed above with respect to each document individually.

Furthermore, even if the skilled person did combine these three documents, the claimed solution would still not be achieved. None of documents D1-D3 discloses attaching the axles to the joints of the foldable deck. D1 discloses a foldable deck but the axles of the pulleys are not attached to the joints. D2 discloses a foldable deck but does not disclose any way of securing pulleys to the deck, let alone by securing their axles to the joints. D3 does not disclose a foldable deck and so no joints are disclosed. Therefore, a combination of D1, D2, and D3 does not disclose the axles being attached to the joints of the foldable deck and so such a combination still does not arrive at the claimed invention.

Therefore, the skilled person would not arrive at the claimed invention based on a combination of D1, D2, and D3.

Therefore, claim 1 possesses an inventive step in accordance with Article 56 EPC.

## **Conclusion**

Therefore, the subject-matter of independent claim 1 is new and involves an inventive step. The subject-matter of the remaining claims is new and involves an inventive step by way of their dependencies (GL G-VII 14).

Yours faithfully,

Mr Winter

Authorised Representative

## **Amended Claims**

1. A snowshoe comprising a foldable deck (1), a footplate (2) and a binding (3), wherein the deck (1) is composed of tiles connected by joints (6) and the footplate (2) comprises elastic means (7) for contracting the foldable deck (1) and attaching means (8, 9, 10) for attaching the foldable deck (1) to the footplate (2), wherein the elastic means (7) comprises an elastic band (7), and the attaching means (8, 9, 10) comprises pulleys (8) for guiding the elastic band (7).

characterised in that the attaching means (8, 9, 10) further comprises guiding slots (9) in the footplate (2) and axles (10) of the pulleys (8), the axles (10) being slidable in the guiding slots (9), and each axle (10) being attached to a joint (6).

2. The snowshoe according to claim 1, wherein the tiles have quadrangular (4) and/or curved triangular (5) shapes.

3. The snowshoe according to claim 2, wherein the tiles (4, 5) ~~consist of~~ comprise two carbon fibre layers (20) sandwiching a joint layer (19), the joint layer (19) comprising ~~consisting of~~ a flexible plastic sheet made of a material like polyvinyl acetate and/or polyethyl acetate.

~~4. The snowshoe according to claim 2 or 3, wherein the elastic element (7) comprises an elastic band (7).~~

~~5. The snowshoe according to claim 4, wherein the attaching means (8, 9, 10) comprises pulleys (8) for guiding the elastic band (7).~~

~~4.6.~~ The snowshoe according to any of claims 1-3 ~~claim 5~~, wherein the attaching means (8, 9, 10) further comprises guiding slots (9) in the footplate (2) and axles (10) of the pulleys (8) sliding in the guiding slots (9), each axle (10) being attached to a joint (6); and wherein the attaching means (8, 9, 10) comprises expansion control means (17) for limiting the sliding of the pulleys (8) in the guiding slots (9), such that the expansion of the foldable deck (1) is limited.

~~5.7.~~ The snowshoe according to any preceding claim 5 or 6, wherein the binding (3) is ~~detached~~ detachable from the footplate (2) by means of disconnecting means (18) and pivoting means (12).