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(54) PALLET

(57) The present invention relates to a pallet (P) comprising a plurality of reliefs arranged according to a pattern (W) on a first face (1.1) of a first surface (1), configured to support a corresponding load on said pallet. The pattern present on the pallet of the present invention is configured to align and retain the load supported on the first face of the first surface mentioned.

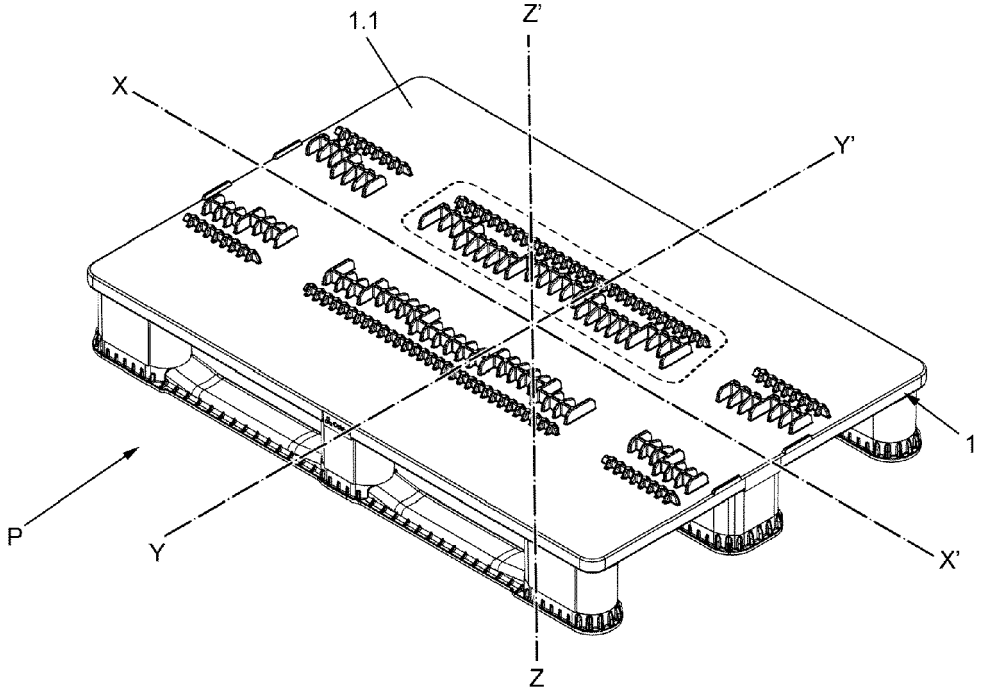

FIG.1A

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Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a pallet comprising a plurality of reliefs arranged according to a pattern on a first face of a first surface, configured to support the corresponding load on said pallet.

[0002] In particular, the pattern present on the pallet of the present invention is configured to align and retain the load supported on the first face of the first surface mentioned.

BACKGROUND OF THE INVENTION

[0003] In the technical field of pallets, solutions are currently known that allow a load to be supported on a face of an essentially flat surface of said pallet. This allows a load volume to be transported on a single support.

[0004] However, based on the geometric configuration of the load to be supported by the pallet, difficulties arise not only in placing said load on the aforementioned face of the pallet, but also in maintaining the supported load in the appropriate position, thus preventing it from being able to move or even detach from the pallet.

[0005] Currently, there are solutions such as belts, ropes or hooks, which allow the load to be specifically anchored, pressing the same against the surface that supports it so that the points of the load in contact with the surface that receive the force of these elements suffer greater friction while the points that do not receive the force transmitted by said anchoring elements can slide along the flat surface.

[0006] In this way, the load slides on the surface through the areas thereof that are not under stress, so the load moves in its entirety.

[0007] Additionally, in the event that the load support has a cylindrical configuration, the load also rolls on the surface of the pallet, causing its displacement.

[0008] This causes the load to even fall from the pallet and suffer damage, as well as possible poor stacking, transportation or use of said load when it continues to be supported by the pallet.

[0009] Likewise, in the event that the load support has a cylindrical configuration, solutions such as modular wedges are also known, which are coupled to the pallet and on the surface of which the load to be supported rests.

[0010] However, these modular wedges do not allow the simultaneous coupling of different loads, which have different diameters in their geometric configuration, which represents a problem since said solution can only be used in cases in which the loads are homogeneous.

DESCRIPTION OF THE INVENTION

[0011] The present invention makes it possible to solve the aforementioned problems, by means of a pallet that allows the load to be placed and fixed through a pattern comprising a plurality of reliefs, which forms the surface on which the load is placed on a pallet.

[0012] In this way, a first inventive aspect is a *pallet, characterised in that it comprises an essentially flat first surface, which extends along a longitudinal direction X-X', wherein said first surface comprises:*

- *a first* face, *configured to support load, and*
- *a second* face,

  wherein the first face *comprises a plurality of reliefs arranged according to a pattern, which is repeated along the longitudinal direction X-X',*
  wherein the pattern is configured by a plurality of groups of reliefs, said groups being aligned according to a first transverse direction Y-Y', perpendicular to the longitudinal direction X-X', the pattern (W) comprising:

- *a first group of reliefs which extend a certain height according to a second transverse direction Z-Z', perpendicular to the longitudinal direction X-X'* as *well* as *to the first transverse direction Y-Y', said first group of reliefs comprising:*

  ◦ *at least one first protrusion which extends along the longitudinal direction X-X', and*
  ◦ a *plurality of first projections located on each side of the first protrusion, which extend according to the first transverse direction Y-Y', and which are spaced apart from each other a predetermined distance on each side of said first protrusion,*

- *a second group of reliefs which extend a certain height according to the second transverse direction Z-Z', said height being equal to or greater than the height of the first group of reliefs, said second group of reliefs comprising:*

  ◦ *at least one second protrusion which extends along the longitudinal direction X-X', and*
  ◦ a *plurality of second projections, placed on each side of the second protrusion, which extend according to the first transverse direction Y-Y',*

  wherein the second protrusion comprises a plurality of portions alternately arranged at a predetermined distance from each other according to the first transverse direction Y-Y',
  wherein each of the portions is joined with its adjacent portions, through at least one of the second projections, and

wherein the plurality of second projections are spaced

apart from each other a predetermined distance on each side of the second protrusion and on each of the portions of said second protrusion.

[0013] In particular, the pallet according to the present invention has an essentially flat surface, which in turn comprises a first face and a second face.

[0014] The surface, and therefore its first and second face, extend along a longitudinal direction X-X' for a certain length. Likewise, they also extend along a first transverse direction Y-Y', perpendicular to the longitudinal direction X-X', thus defining their two main dimensions.

[0015] In particular, the first face of the first surface, essentially flat, is configured to support load, so that the load volume to be transported by the pallet rests on said first face.

[0016] Moreover, the second face of the first surface, also essentially flat, is configured to allow the pallet to rest, both alone and in combination with its load. For example, said second face may comprise legs or protrusions that allow the stacking of several pallets having the same dimensions and configuration.

[0017] The pallet according to the first inventive aspect is characterised in that the first face of the first surface, i.e., that face configured to support the load on the pallet, comprises a plurality of reliefs. These reliefs are arranged according to a pattern, which can be repeated a certain number of times along the entire dimension of the first face of the first surface of the pallet.

[0018] Likewise, the reliefs that make up the pattern extend according to a second transverse direction Z-Z', perpendicular to the longitudinal direction X-X' as well as to the first transverse direction Y-Y', so that their main dimension or height is defined along said second transverse direction Z-Z'.

[0019] In particular, the pattern is configured by means of a plurality of groups of reliefs, wherein said groups are arranged according to the first transverse direction Y-Y'.

[0020] In other words, each of the groups of reliefs extend a certain length along the longitudinal direction X-X', while the different groups are aligned according to the first transverse direction Y-Y'.

[0021] Advantageously, a pattern of reliefs of this type allows the load to be distributed on the first face of the first surface of the pallet in a uniform manner, and at the same time retain said load through the interaction of the relief with the surface of the load itself.

[0022] In other words, the reliefs that make up the aforementioned pattern allow the load not only to be received and distributed, but also act as stops to prevent the displacement thereof.

[0023] This is achieved through contact between the reliefs and the load supported on the pallet, which slows down its possible movement due to the surface, protruding from the first face of the first surface of the pallet, of the aforementioned reliefs.

[0024] It is possible to distinguish at least two groups of reliefs in the aforementioned pattern. Advantageously, this allows the effects to be distributed on the load, distributing a first group of reliefs intended to receive and allocate the load to be supported, and a second group of reliefs intended to retain and fix the load to the first surface of the pallet.

[0025] In this way, the pattern comprises a first group of reliefs which extend along said second transverse direction Z-Z' a predetermined height.

[0026] In a particular embodiment, the height of the reliefs that configure the first group of reliefs is equal. In this way, its dimension according to the second transverse direction Z-Z' is the same in all the reliefs that make up said group.

[0027] This first group of reliefs is configured by at least one first protrusion, which extends according to the longitudinal direction X-X'.

[0028] In a particular embodiment, said first protrusion is linear. Advantageously, this allows a better distribution of the load to be supported on same.

[0029] Additionally, the first group of reliefs also comprises a plurality of first projections, which extend from the surface of the first protrusion and according to the first transverse direction Y-Y'. In a particular embodiment, the first projections extend on both sides of the first protrusion according to the longitudinal direction X-X'.

[0030] In a particular embodiment, the first projections are in contact with the first protrusion.

[0031] In a particular embodiment, the first projections are integral with the first protrusion. Advantageously, this allows the first group of reliefs to be robust, so that they are configured to act as a support for the load received on the pallet.

[0032] Additionally, and in the case of loads having a specific configuration, such as cylindrical loads of a coil type, the first projections assist in the incorporation of the load to the first surface of the pallet.

[0033] Moreover, the first projections are spaced apart from each other, on each side of the first protrusion, a certain distance, according to the longitudinal direction X-X'. That is, based on the configuration of the first projections according to the longitudinal direction X-X', each of said first projections on one side of the first protrusion is located at a predetermined distance from the following or preceding first projection.

[0034] In a particular embodiment, the distance between each of the first projections arranged on one of the sides of the first protrusion is constant.

[0035] In a particular embodiment, the distance between each of the first projections on both sides of the first protrusion is constant and equal. Advantageously, this allows an optimal distribution of the load to be supported by the pallet, as well as an incorporation of the load to the first surface of the equivalent pallet at each of the points of said load which make contact with the first group of reliefs.

[0036] In a particular embodiment, the plurality of the first projections of the first group of reliefs are arranged on each side of the first protrusion in a symmetrical manner. Advantageously, this allows an optimal distribution

of the load supported by the pallet.

[0037] In a particular embodiment, the length according to the first transverse direction Y-Y' of the first projections of the first group of reliefs is equal to one or both sides of the first protrusion.

[0038] Additionally, the pattern also comprises a second group of reliefs which extend along the second transverse direction Z-Z' a predetermined height. In particular, said height is equal to or greater than the height of the first group of reliefs.

[0039] In a particular embodiment, the height of at least one of the reliefs of the second group of reliefs is equal to the height of at least one of the reliefs of the first group of reliefs.

[0040] In a preferred embodiment, the minimum height of the reliefs of the second group of reliefs is greater than the maximum height of the reliefs of the first group of reliefs.

[0041] In a particular embodiment, the height of each of the reliefs of the first group of reliefs and of the second group of reliefs is equal.

[0042] Advantageously, this allows the reliefs that configure the second group to protrude in height above the reliefs of the first group, which are configured to incorporate the load into the first surface of the pallet, as well as to distribute said load in an appropriate manner.

[0043] In this way, the second group of reliefs acts as a stop or reinforcement of the load incorporated into the first surface of the pallet, and prevents its displacement, movement or sliding, thus maintaining its position.

[0044] In a particular embodiment, the height of the reliefs that configure the second group of reliefs is equal. In this way, its dimension according to the second transverse direction Z-Z' is the same in all the reliefs that make up said group. Advantageously, this allows the load to be homogeneously immobilised in its position at all the points at which said reliefs make contact with the load incorporated into the first surface of the pallet.

[0045] This second group of reliefs is configured by at least one second protrusion, which extends according to the longitudinal direction X-X'. Said second protrusion comprises, in turn, a plurality of portions so that the total length of the second protrusion is segmented into various portions which, joined to each other along the longitudinal direction X-X', configure the second protrusion.

[0046] In particular, the portions that make up the second protrusion are alternately arranged on either side of a main axis, parallel to the longitudinal direction X-X', and separated from each other from the adjacent portion by a predetermined distance according to the first transverse direction Y-Y'.

[0047] Advantageously, this allows the load to be immobilised on the first surface of the pallet to be fixed at several different points on its surface, which increases the retention area and, therefore, optimises the fixation of the load to the first surface on which it is supported.

[0048] In one embodiment, the distance according to the first transverse direction Y-Y' at which the portions that configure the second protrusion on one of the sides of the mentioned main axis are separated is constant. In a particular embodiment, it is constant on both sides.

[0049] In a particular embodiment, the length according to the longitudinal direction X-X' of each of the portions is constant. Advantageously, this allows a uniform distribution of the load and its fixation.

[0050] Additionally, the second group of reliefs also comprises a plurality of second projections, which extend from the surface of the second protrusion and according to the first transverse direction Y-Y'. In a particular embodiment, the second projections extend on both sides of the second protrusion according to the longitudinal direction X-X'.

[0051] In a particular embodiment, the second projections are in contact with the second protrusion.

[0052] In a particular embodiment, the second projections are integral with the second protrusion.

[0053] This advantageously allows the second projections to act as reinforcement ribs for each of the portions of the second protrusion, thus obtaining a more robust second group of reliefs.

[0054] Moreover, the second projections are spaced apart from each other, on each side of the second protrusion, a certain distance, according to the longitudinal direction X-X'. That is, based on the configuration of the second projections according to the longitudinal direction X-X', each of said second projections located on one side of the second protrusion is at a predetermined distance from the following or preceding second projection.

[0055] In a particular embodiment, the distance between each of the second projections arranged on one of the sides of the second protrusion is constant.

[0056] In a particular embodiment, the distance between each of the second projections on both sides of the second protrusion is constant and equal. Advantageously, this allows a uniform distribution of the load and the retention force exerted against same by the second group of reliefs at the points at which said reliefs make contact with said load to prevent its displacement on the first surface.

[0057] Likewise, the second group of reliefs of the present pattern is configured such that each of the portions that make up the second protrusion is joined with each of its adjacent portions (one or two portions) through at least one of the second projections. In this way, the second protrusion is continuous in its length according to the longitudinal direction X-X' due to the connection of its segments to one another.

[0058] Advantageously, this reinforces the second group of reliefs, and generates a stable and continuous resting surface for the load.

[0059] In a particular embodiment, the length according to the first transverse direction Y-Y' of the second projections configured to join each of the portions with its adjacent portions is constant.

[0060] In a particular embodiment, the first projections are perpendicular to the first protrusion. In a particular

embodiment, the second projections are perpendicular to the second protrusion.

[0061] In a particular embodiment, the first face of the first surface comprises at least two patterns, arranged:

- aligned according to the longitudinal direction X-X' and parallel to each other, and
- separated by a predetermined distance according to the first transverse direction Y-Y'.

[0062] In this way, on the first face of the first surface of a pallet, at least two patterns such as previously described are arranged, i.e., with a first and second group of reliefs each. Said at least two patterns are placed in two different areas of the first face, one being at a predetermined distance from the other according to the first transverse direction Y-Y'. In turn, each pattern extends according to the longitudinal direction X-X' a predetermined length, the at least two patterns being parallel to each other.

[0063] Advantageously, this allows the load to be supported and fixed on the first surface of the pallet at different points of the surface of the load, which gives it greater stability.

[0064] In a particular embodiment, for a load with a cylindrical configuration, a distribution of at least two patterns of this shape allows a more appropriate fixation of the position of the load, reinforcing retention at various points on the continuous surface of the load.

[0065] In a particular embodiment, at least two patterns extend along the entire length according to the longitudinal direction X-X' of the first face of the first surface of the pallet.

[0066] That is, a first pattern extends continuously along the entire length of the first face of the surface of the pallet, while, at a distance according to the first transverse direction Y-Y', at least one second pattern extends continuously along the entire length of the first face of the surface of the pallet, the first and second patterns thus being parallel to each other and covering the entire length, according to the longitudinal direction X-X', of the first face of the first surface of the pallet where the load is supported.

[0067] In a second inventive aspect, a system is defined comprising a pallet according to the first inventive aspect, and at least one coil, located on the first face of the first surface of the pallet, its position being retained on said first face by the at least one pattern.

[0068] That is, a system is defined in which, by means of a pallet such as described in the first inventive aspect, a cylindrical load is incorporated in the form of a coil. In this way, the first group of reliefs of the pattern of the pallet allows the coil to be incorporated into the first surface of the pallet, while the second group of reliefs of the pattern of said pallet allows the coil to be fixed, preventing its rotation and subsequent movement on the first surface of the pallet.

[0069] In this way, the present system advantageously allows for a more efficient fastening of loads with geometries that have greater problems when it comes to achieving a fixation and blocking of movement during their use or transport.

DESCRIPTION OF THE FIGURES

[0070] To complete the description, and for the purpose of helping to make the features of the invention more readily understandable, this description is accompanied by a set of figures constituting an integral part of the same, which by way of illustration and not limitation represents the following:

Figure 1A shows a perspective view of an exemplary embodiment of a pallet comprising a pattern.
Figure 1B shows an elevation view of the exemplary embodiment of a pallet present in Figure 1A.
Figure 1C shows a detailed view of the pattern present on the pallet of Figures 1A and 1B.
Figure 2 shows a perspective view of an exemplary embodiment of a system configured by two coils and a pallet as shown in Figures 1A - 1C.

PREFERRED EMBODIMENT OF THE INVENTION

[0071] Figure 1A shows a perspective view of a pallet (P), comprising a first flat surface (1) which extends along a longitudinal direction X-X' with a certain length, and along a first transverse direction Y-Y' a certain width.

[0072] Likewise, the pallet (P) extends a certain height according to a second transverse direction Z-Z'.

[0073] As shown in Figure 1A, the directions X-X', Y-Y' and Z-Z' are perpendicular to each other.

[0074] The first surface (1) of the pallet (P) in turn comprises a first face (1.1) and a second face (1.2), the first face (1.1) being the upper face of the pallet (P) according to the second transverse direction Z-Z'.

[0075] The second face (1.2) of the first surface (1) of the pallet (P) comprises projections acting as legs or supports of said pallet (P), while the first face (1.1) of the first surface (1) of the pallet (P) comprises a pattern (W), configured to come into contact with the load placed on the pallet (P). A boxed pattern (W) can be distinguished in Figure 1A using a dashed line.

[0076] As shown in Figure 1A, the pattern (W) is repeated six times along the first face (1.1), in particular divided in two parallel rows and separated by a specific distance from each other, according to the first transverse direction Y-Y'.

[0077] In a first row, which extends according to the longitudinal direction X-X', three patterns (W) are located, two of them having equal length, and one of them, located between the other two, having greater length extending along the longitudinal direction X-X'.

[0078] The second row, parallel to the first, is completely identical, thus showing three other patterns (W).

[0079] Figure 1B shows an elevation view of the same

exemplary embodiment of pallet (P) as in Figure 1A, so that the two central patterns (W) of the two mentioned rows are shown in more detail.

[0080] In this way, it is shown how the patterns (W) are arranged along the longitudinal direction X-X', and are separated from each other by a homogeneous distance according to the first transverse direction Y-Y'.

[0081] In particular, Figure 1B shows the two central patterns (W) of the two rows arranged on the first face (1.1) of the pallet (P), both having greater length than the other patterns (W) visible on the same first face (1.1), boxed by means of dashed lines.

[0082] Each of said patterns (W) shows a first group of reliefs (W1) and a second group of reliefs (W2), these being parallel to each other in each pattern, and parallel to each other in the entire distribution of the first face (1.1) of the pallet (P).

[0083] Figure 1C shows in detail the configuration of one of the aforementioned central patterns (W), having greater length. Said configuration is analogous for all the patterns (W) shown in Figures 1A and 1B.

[0084] In this way, as seen in Figure 1C, the first face (1.1) of the pallet (P) extends, in its main dimensions, according to the longitudinal direction X-X' and according to the first transverse direction Y-Y'.

[0085] The pattern (W) shown is composed of a first group (W1) of reliefs, arranged along the longitudinal direction X-X'. Said first group (W1) of reliefs is configured by a first protrusion (W1.1), which is linear, continuous and parallel to the longitudinal direction X-X'.

[0086] On each side of said first protrusion (W1.1), a plurality of first projections (W1.2) extend according to the first transverse direction Y-Y', symmetrically on each side and having identical lengths.

[0087] Each of said first projections (W1.2) is perpendicular to the first protrusion (W1.1) and integral therewith, so that said first group (W1) of reliefs is observed as a homogeneous distribution of a first continuous protrusion (W1.1) and a series of first projections (W1.2) perpendicular to said first protrusion (W1.1) and having equal extension on both sides, also being separated from each other by the same distance according to the longitudinal direction X-X'.

[0088] Moreover, Figure 1C also shows, as part of the pattern (W), a second group (W2) of reliefs, arranged along the longitudinal direction X-X'. Said second group (W2) of reliefs is configured by a second protrusion (W2.1), which is linear and parallel to the longitudinal direction X-X', made up of a series of portions (W2.1.1, ..., W2.1.n) joined to each other, which entirely form a second continuous protrusion (W2.1).

[0089] Each of the portions (W2.1.1, ..., W2.1.n) is offset towards one or the other side of a main axis (not shown), parallel to the longitudinal direction X-X', so that each portion is alternated at a distance to said main axis, according to the first transverse direction Y-Y'.

[0090] In this way, the second protrusion (W2.1) is made up of a series of portions (W2.1.1, ..., W2.1.n) joined to each other, which form a broken line with crests and valleys which extend according to the longitudinal direction X-X', in relation to the aforementioned main axis (not shown).

[0091] On each side of said second protrusion (W2.1), a plurality of second projections (W2.2) extend according to the first transverse direction *Y-Y',* symmetrically on each side and having identical lengths.

[0092] Second protrusions (W2.1) are also observed, having greater length according to the first transverse direction Y-Y', as a means of joining two consecutive portions (W2.1.1,..., W2.1.n) of the second protrusion (W2.1).

[0093] Each of said second projections (W2.2) is, as seen in Figure 1C, perpendicular to the second protrusion (W2.1) and integral therewith, so that said second group (W2) of reliefs is observed as a homogeneous distribution of a second continuous protrusion (W2.1) based on a trajectory defined by a broken line, and a series of second projections (W2.2) perpendicular to said second protrusion (W2.1) and having equal extension on both sides with respect to said second protrusion (W2.1), further being separated from each other by the same distance according to the longitudinal direction X-X'.

[0094] Moreover, the second projections (W2.2) that act as joining elements of the pairs of consecutive portions (W2.1.1,..., W2.1.n) of the second protrusion (W2.1) are of a greater length than the rest of the aforementioned second projections (W2.2), in order to obtain the offset of the portions (W2.1.1, ..., W2.1.n) of the second protrusion (W2.1), thus obtaining its path according to the mentioned broken line.

[0095] Figure 2 shows a system (S), configured by a pallet (P) such as the one shown in figures 1A - 1C, on which two coils (B) are positioned on the first face (1.1) of the pallet (P), one after the other, according to the longitudinal direction X-X'.

[0096] In this way, the coils (B) configure a cylindrical load, distributed over the first face (1.1) of the pallet (P), and retained by the distribution of patterns (W).

[0097] In particular, each coil (B) is retained by two rows of patterns (W), which prevent its movement according to the first transverse direction Y-Y', thus preventing its displacement and fall. Likewise, the patterns (W) also prevent their displacement according to the longitudinal direction X-X', thus distributing the load in a uniform manner on the first side (1.1) of the pallet (P) and preventing the displacement of the load also in this direction which allows the pallet (P) to support the intended load in a safe and uniform manner, resulting in less damage to the load (B) during transport.

Claims

1. A pallet (P), **characterised in that** it comprises an essentially flat first surface (1), which extends along a longitudinal direction X-X', wherein said first sur-

face (1) comprises:

- a first face (1.1), configured to support load, and
- a second face (1.2),

wherein the first face (1.1) comprises a plurality of reliefs arranged according to a pattern (W), which is repeated along the longitudinal direction X-X',
wherein the pattern (W) is configured by a plurality of groups of reliefs, said groups being aligned according to a first transverse direction Y-Y', perpendicular to the longitudinal direction X-X', the pattern (W) comprising:

- a first group (W1) of reliefs which extend a certain height according to a second transverse direction Z-Z', perpendicular to the longitudinal direction X-X' as well as to the first transverse direction Y-Y', said first group (W1) of reliefs comprising:

◦ at least one first protrusion (W1.1) which extends according to the longitudinal direction X-X', and
◦ a plurality of first projections (W1.2) located on each side of the first protrusion (W1.1), which extend according to the first transverse direction Y-Y', and which are spaced apart from each other a predetermined distance on each side of said first protrusion (W1.1),

- a second group (W2) of reliefs which extend a certain height according to the second transverse direction Z-Z', said height being equal to or greater than the height of the first group (W1) of reliefs, said second group (W2) of reliefs comprising:

◦ at least one second protrusion (W2.1) which extends according to the longitudinal direction X-X', and
◦ a plurality of second projections (W2.2), located on each side of the second protrusion (W2.1), which extend according to the first transverse direction Y-Y',

wherein the second protrusion (W2.1) comprises a plurality of portions (W2.1.1, W2.1.2,..., W2.1.n) alternately arranged at a predetermined distance from each other according to the first transverse direction Y-Y',
wherein each of the portions (W2.1.1, W2.1.2, ..., W2.1.n) is joined with its adjacent portions, through at least one of the second projections (W2.2), and
wherein the plurality of second projections (W2.2) are spaced apart from each other a predetermined distance on each side of the second protrusion (W2.1) and on each of the portions (W2.1.1, W2.1.2, ..., W2.1.n) of said second protrusion (W2.1).

2. The pallet (P) according to claim 1, **characterised in that** the height of the reliefs of the first group (W1) of reliefs and/or the height of the reliefs of the second group (W2) of reliefs are equal to each other.

3. The pallet (P) according to claim 2, **characterised in that** the height of the reliefs of the first group (W1) of reliefs and the height of the reliefs of the second group (W2) of reliefs are equal to each other.

4. The pallet (P) according to any of the preceding claims, **characterised in that** the first protrusion (W1.1) is linear.

5. The pallet (P) according to any of the preceding claims, **characterised in that** the plurality of the first projections (W1.2) of the first group (W1) of reliefs are arranged on each side of the first protrusion (W1.1) in a symmetrical manner.

6. The pallet (P) according to any of the preceding claims, **characterised in that** the distance at which each of the first projections (W1.2) of the first group (W1) of reliefs and/or the second projections (W2.2) of the second group (W2) of reliefs is spaced apart from each other is constant.

7. The pallet (P) according to any of the preceding claims, **characterised in that** the length according to the longitudinal direction X-X' of each of the portions (W2.1.1, W2.1.2, ..., W2.1.n) is constant.

8. The pallet (P) according to any of the preceding claims, **characterised in that** the length according to the first transverse direction Y-Y' of the second projections (W2.2) configured to join each of the portions (W2.1.1, W2.1.2, ..., W2.1.n) with its adjacent portions is constant.

9. The pallet (P) according to any of the preceding claims, **characterised in that** the length according to the first transverse direction Y-Y' of the first projections (W1.2) of the first group (W1) of reliefs is equal on one or both sides of the first protrusion (W1.1).

10. The pallet (P) according to any of the preceding claims, **characterised in that** the first projections (W1.2) are perpendicular to the first protrusion

(W1.1) and/or the second projections (W2.2) are perpendicular to the second protrusion (W2.1).

11. The pallet (P) according to any of the preceding claims, **characterised in that** the first face (1.1) of the first surface (1) comprises at least two patterns (W), arranged:

- aligned according to the longitudinal direction X-X' and parallel to each other, and
- separated by a predetermined distance according to the first transverse direction Y-Y'.

12. The pallet (P) according to claim 10, **characterised in that** at least two patterns (W) extend along the entire length of the first face (1.1) of the first surface (1) of the pallet (P).

13. A system (S) comprising a pallet (P) according to any of claims 1 - 9 and at least one coil (B), placed on the first face (1.1) of the first surface (1) of the pallet (P), its position being retained on said first face (1.1) by means of the at least one pattern (W).

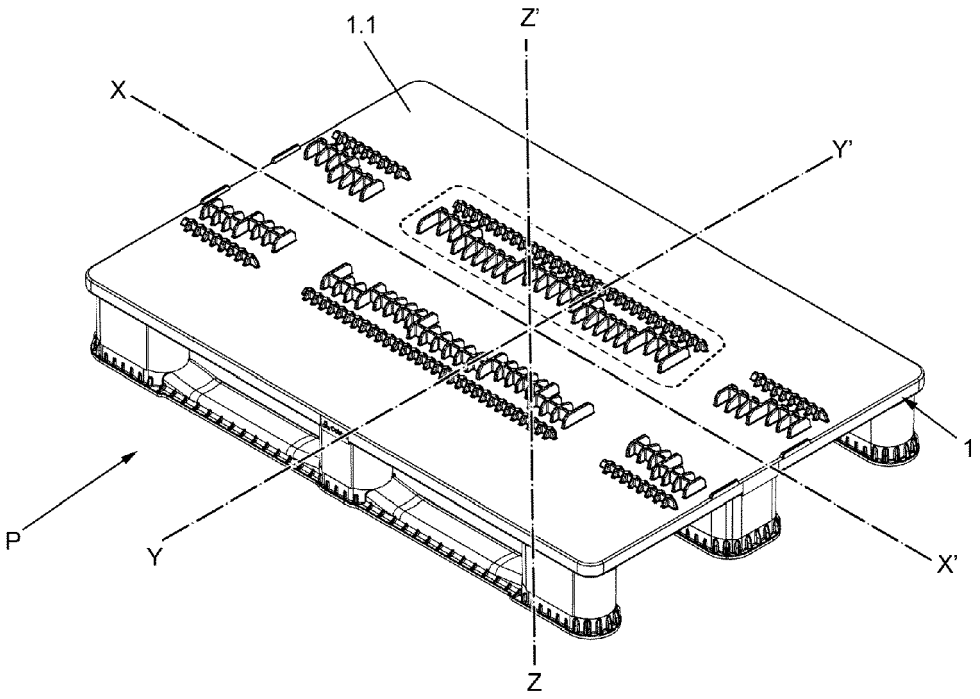

FIG.1A

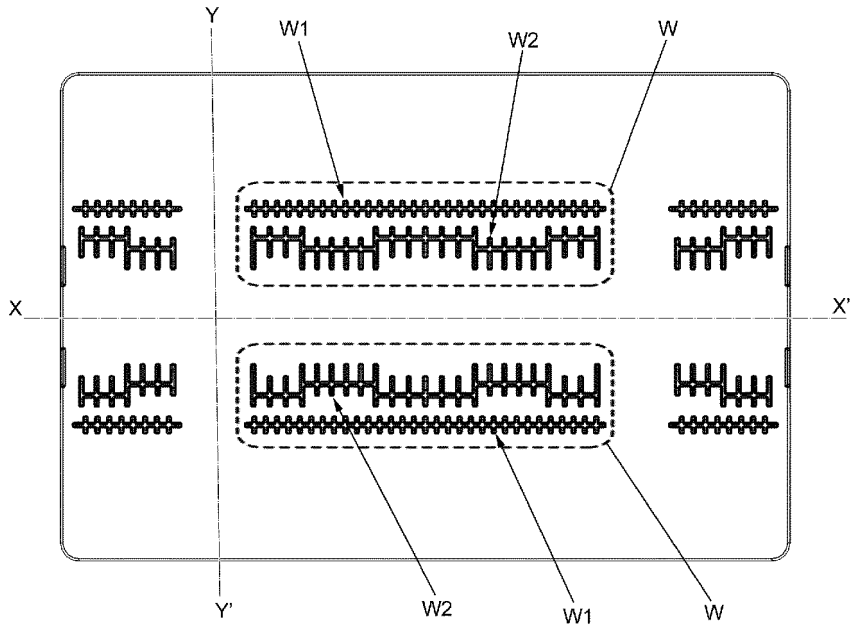
Y
W1
W2
W
X
X'
Y'
W2
W1
W

FIG.1B

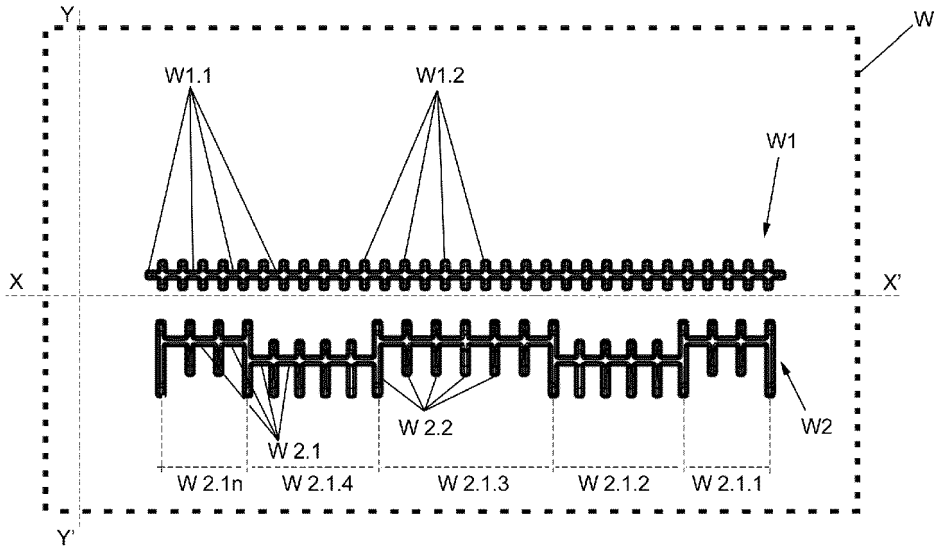
Y
W
W1.1
W1.2
W1
X
X'
W 2.2
W2
W 2.1
W 2.1n
W 2.1.4
W 2.1.3
W 2.1.2
W 2.1.1
Y'

FIG.1C

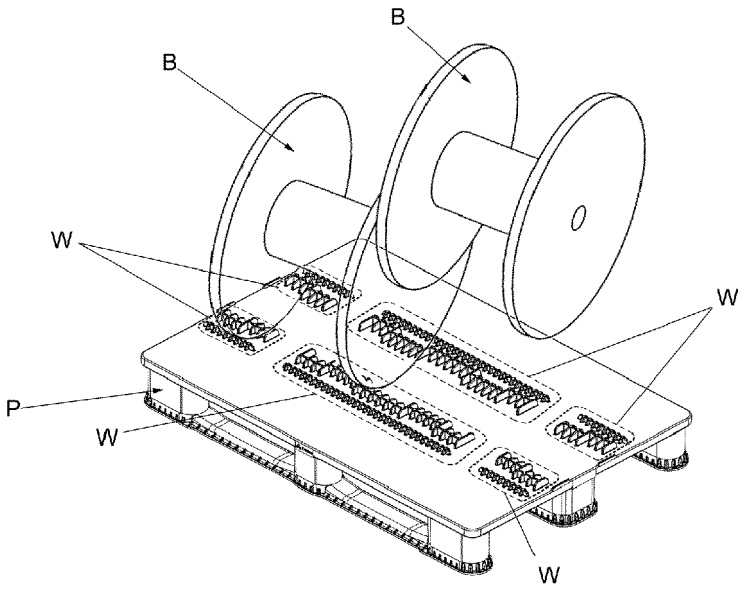

FIG.2

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EUROPEAN SEARCH REPORT

Application Number
EP 24 15 0082

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B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	15 May 2024	Fitterer, Johann

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